

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 lists 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.

Mr. M. A. Carleton, late assistant in the Bontani cal 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,

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 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 dairy test.

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. 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.

The Melbourne Australasian states that the trial shipment of Australian frozen pork, shipped from Victoria and sold in Old London at $4\frac{1}{2}d$. 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 $2\frac{1}{6}d$. 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 e paid as a sinking fund for the redemption of the loan. The advances will be made, not by the Minis-try, 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 ⁷/₈d. 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 ¿d., 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 id. freight, and then goes out to suit his own convenience, he will not allowed to again participate in the reduced freig except with the sanction of the shipowners.

Summer and Fall Fairs of 1894.

The Travelling Dairy Work.

Nothing but words of praise and satisfaction are heard regarding the three travelling dairy outfits now giving practical object lessons throughout the Province on the modern methods of making giltedged butter. Mr. Ruddick, in Southern Manitoba, continues to meet with enthusiastic receptions, people coming thirty miles and attending all the four sessions. The local outfit, now under Messrs. Scott and Herbeson's management, is also meeting good audiences in the Red River Valley. Mr. Hetler, M. P. P., while in charge of this dairy, reports splendid meetings along the Northern Pacific, great interest being taken in the Babcock tests. Very large gatherings at Wawanesa, Belmont and Miami, and also a good meeting at Morris. The same encouraging word comes from the

The same encouraging word comes from the dairy under Messrs. McEwan and Zufelt, on the C. P. R. Main Line. Good meetings are reported all along, and great interest taken. Mr. Angus McKay, of the Indian Head Experimental Farm, assisted at several meetings in the Territories, and we clip the following report of his address at Regina from The Leader: "Mr. Angus McKay, manager of the Experimental Farm at Indian Head, who was present, delivered a very interesting and practical address, which contained much useful information regarding mixed farming. He said that the present season was very similar to that of 1885. The experience of the settler for the past ten years was that something else must be done besides raising wheat or the soil would become exhausted in a few years. He believed that the Indian Head district is one of the best in the Territories for wheat raising, but that those farmers who were raising from 25 to 35 bushels of wheat per acre would not be able, in ten years from now, to raise more than from 8 to 10 if they continued cropping their land year after year as they had done in the past.

The hope of the country is in mixed farming, and especially dairying, and, in order that this may be successful, there are two conditions necessary. These were: (1) Good cows. (2) Good fodder. All breeds of cows were good up to a certain point, and each breed had good and bad cows. His experience on the Experimental Farm went to show that the Holstein gave the largest quantity of milk, but they consume more fodder than is required by the other breeds. The Polled-Angus gave the richest milk, but the quantity was small. The Durham gave the best results, but there were some poor milkers among them. He recommended the grade cow crossed with Shorthorn bulls.

The native grasses could not be depended on to furnish sufficient succulent food to produce a paying flow of milk, and of the imported grasses only one at the Experimental Farm had proved a complete success. This was the Bronus-inermis brought from Austria, a specimen bunch of which—over two feet long—he exhibited. It starts early in the spring and ripens three or four weeks ahead of any other grass. It also produces a good growth of aftermath. He had sown it in the spring with barley or rye, and the result had always been satisfactory. The seed was scarce, but he recommended every farmer to try and procure some of it to test for themselves. The yield last year was three tons, 1,200 lbs. peracre."

The outfit under Mr. McEwan, after completing the first programme at Virden on July 4th, will hold meetings at the following places on the dates named :

be ght	Fleming, N.W.T. Thursday, July 5th Wapella, "Grenfell, "Grenfell, "The Saturday, "7th Gladstone, Man. Wednesday and Thursday, a.m.
	Neepawa, " Friday and Satuaday, July 13th
	Minnedosa // Monday and Tuesday, July 16th
	After which he will proceed through North- western Manitoba, probably as far as Yorkton. A list of places and dates will be published at an early date.
	Mr. Ruddick's outfit, after finishing the first list of places at Boissevain on July 6th, will travel over
	the Glenboro Branch, holding meetings as follows: Glenboro, ManMonday p.m. and Tuesday,
	Cypress River, Man. Wednesday p.m. and Thursday, July 11th and 12th
	Holland, ManFriday p.m. and Saturday, July 13th and 14th
	Treherne "
0	Carman "
irș	And will then spend the week from Monday to

and the second

 $\mathbf{258}$

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 best use of food fed. Those confined and fed grass and grass made more rapid gain than those fed graun dische. Those fed grass alone made too slow growth to be profitable.

Brandon, Man., July 11, 12 and 13. Calgary, July 16 to 19. Portage la Prairie, Man., July 19 and 20. Winnipeg Industrial, July 23 to 28. Meadow Lea, Oct. 2. Pilot Mound, Man., Oct. 2 and 3. Springfield, Man., Oct. 3 and 4. Souris, Man., Oct. 3 and 4. Killarney, Oct. 4 and 5. Gartmore, Man., Oct. 4. Manitou, Man., Oct. 4 and 5. Minnedosa, Man., Oct. 5. Virden, Oct. 5 and 6. Baldur, Oct. 5 and 6. Wapella, Oct. 9. Neepawa, Oct. 10 and 11. Regina, Oct. 9 and 10. Russell, Oct. 10 Oak Lake, Oct. 11 and 12. Austin, Man., Oct. 3. Red Deer, Alba., Oct. 11. Secretaries are requested to send in dates of fair to the FARMER'S ADVOCATE.

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. Friday, July 23rd to 27th, at the Winnipeg Industrial Exhibition, where instruction will be given in one of the buildings, which is to be set aside for that purpose.

The same progromme of instruction, etc., will be carried out at all these meetings as that published in the ADVOCATE, page 222, June 5th.

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.

JULY 5, 1894

5, 1894

tion are outfits

out the ng gilt-

nitoba,

eptions,

all the

Messrs.

neeting

dairy,

orthern Babcock

a, Bel-Morris.

om the

the C. rted all McKay, isted at

clip the

a from

ager of ho was

ractical

mation present The ex-

rs was

raising

a few

district

at rais-

g from be able,

om 8 to r after

ng,and

nay be

essary

r. All

nt, and

erience

at the lk, but

ed by

e rich-

urham

e poor grade

on to a pay-es only

mplete

rought

ertwo

spring

other

math.

or rye, . The

armer

selves. acre."

leting

h, will

dates

ly 5th

6th

7th

a.m. 1 12th

7 13th

d 14th

7 16th

d 17th

North-

n. A

early

st list

lover

lows:

esday,

d 10th

rsday,

d 12th

ırday,

d 14th

esday, d 17th

, July d 20th

ay to

ndus-

ven in le for

vill be

lished

from

since

llege,

xperi

ettled

n the

uilt a

f the

h him

farm

Mr.

THE FARMER'S ADVOCATE.

THE FARMER'S ADVOCATE & HOME MAGAZINE

THE LEADING AGRICULTURAL JOURNAL IN THE DOMINION.

PUBLISHED BY

THE WILLIAM WELD COMPANY (LIMITED). LONDON, ONT., and WINNIPEG. MAN.

1. The Farmer's Advocate is published on the fifth and twentieth of each month.

It is impartial and independent of all cliques or parties, handsomely illustrated with original engravings, and furnishes the most profitable, practical and reliable information for farmers, dairymen, gardeners and stockmen, of any publication in Canada.

- Terms of Subscription—\$1.00 per year in advance: \$1.25 if in arrears; sample copy free. European subscription, 6s. or \$1.50. New subscriptions can commence with any month.
- Advertising Rates—Single insertion, 15 cents per line. Contract rates furnished on application.
- 4. Discontinuances—Remember that the publisher must be notified by letter or post card when a subscriber wishes his paper stopped. All arrearages must be paid. Returning your paper will not enable us to discontinue it, as we cannot find your name on our books unless your Post Office address is given.
- 5. The Law is, that all subscribers to newspapers are held responsible until all arrearages are paid, and their paper ordered to be discontinued.
- 6. Remittances should be made direct to this office, either by Registered Letter or Money Order, which will be at our risk. When made otherwise we cannot be responsible.
- 7. The Advocate is sent to subscribers until an explicit order is received for its discontinuance. All payments of arrearages must be made as required by law.
- 8. Always give the Name of the Post Office to which your paper is sent. Your name cannot be found on our books unless is sent. You this is done.
- 9. The Date on your Label shows to what time your subscription is paid.
- 10. Subscribers failing to receive their paper promptly and regularly will confer a favor by reporting the fact at once.
- 11. We invite Farmers to write us on any agricultural topic. We are always pleased to receive practical articles. For such as we consider valuable we will pay ten cents per inch printed matter. Criticisms of Articles, Suggestions How to Improve the ADVOCATE, Descriptions of New Grains, Roots or Vegetables not generally known, Particulars of Experi-ments Tried, or Improved Methods of Cultivation are each and all welcome, Contributions sent us must not be furnished other papers until after they have appeared in our columns. Rejected matter will be returned on receipt of postage.
- 12. Replies to circulars and letters of enquiry sent from this office will not be paid for as provided above.
- 13. No anonymous communications or enquiries will receive ttention
- 14. Letters intended for publication should be written on one side of the paper only.
- 15. All communications in reference to any matter connected with this paper should be addressed as below, and not to any individual connected with the paper. Address-

THE FARMER'S ADVOCATE, or THE WILLIAM WELD CO.,

WINNIPEG, MAN.

CONTENTS.

257-Illustration. 258-Summer and Fall Fairs of 1894; The Travelling Dairy Work. 259-The Big Cheese Analyzed ; Horse-Breeding Viewed from a Farmer's Standpoint; Bath and West of England Show, 260-Polled-Durhams; Chatty Stock Letter from the States · Avrehiro July-No. 2; Feeding Fat Into Milk; First Prize Essay on "Noxious Weeds, and How to Destroy Them." 262-Farmers Institues, 263-Questions and Answers-Veterinary ; Farmers, Beware! An Ice House; English Farm Prospects; First Prize Essay-How to Make a Success of Winter Farm Dairying in Manitoba or the Territories. 264-Dentition and Dental Diseases of Farm Animals. 265-Summer Care of Poultry on the Farm; Abortion in Cattle; The Cultivation of Corn. FAMILY CIRCLE: -265. QUIET HOUR :-- 266. UNCLE TOM :- 267. NOTICES : - 269 and 273. STOCK GOSSIP:-268, 269. Advertisements :--268 to 276.

Horse-Breeding Viewed from a Farmer's A horse that moves nicely at a natural pare is, as Standpoint.

BY "CLAUGHBANE."

In Manitoba, horses are at present a drug in the market, and there is consequently a very strong tendency on the part of farmers to stop breeding their mares, and this being the case, no doubt some of the knowing ones will endeavor to raise as many colts as possible, for if we look back we find that most of the different farm products have at some time had a boom followed by a reaction which again reacted, causing a brisk demand with good prices, and there were then but few farmers in a position to take advantage of them. For some three or four years back farmers in Manitoba have had horses of their own raising to sell, but it is a wellknown fact that their neighbors in need of horses bought from the dealers instead of from their brother farmers. If this had not been the case there would probably now be a healthy demand for good horses. The horses that have been raised in Manitoba have been, on the whole, a pretty scrubby lot; some very good farm horses have been raised, but, generally speaking, the Manitoba-bred colts have been of a very nondescript character, and as for an A 1 horse, fit for export, they are just about as few and far between as hen's teeth. It may be unred that no one was trying to mise horses fit for urged that no one was trying to raise horses fit for export. All I can say to this is, they should have been doing so, as the present overstocking of farm horses proves. In breeding now, farmers should do so with a view to raising horses fit for export, and, as there will be a great many failures in raising these classes of horses, there will be quite a number of colts that will be fit for farm work. I now prepare to give my views on how these horses fit for export should be bred.

The first thing to be considered is the mares that the farmer owns ; what class of horses are each of them suitable for raising, and are there not one or more of them that are not likely to raise a profitable colt of any kind, for the too common custom of breeding all the mares to one horse so as to get a reduction in the service fees must be given up if success is to be attained.

The next consideration is what breed should be used as a sire to mate with each of these mares, for, of course, nothing but a pure-bred sire should be used, and is there a suitable specimen of the breed whose services can be obtained ?

In breeding with a view to export, horses may be divided into two classes—light horses, comprising hunters, hacks, etc., and draught horse, which are suitable for heavy city draying. In the former class there are stallions of several breeds that are suitable for mating with the different styles of mares owned in the Province. These are the thoroughbred or blood horse, the Hackney and the Coach horse (Cleveland Bay and Yorkshire Coach stud books). It will be observed that I do not include the standard-bred trotter among these sires, and before I go further it will be well if I explain what the blood horse is, for it is common to hear farmers speak of the standard-bred trotter as a blood horse. The blood horse, or thoroughbred, is the English race horse; he is descended from the Arabian, and is the oldest established breed of horses that we have. They have been bred for generation after generation for that great speed which tries to the uttermost the bone, muscle and constitution of a horse. This has had the effect of making the thoroughbred an animal which may be said to be composed of the best possible material, and this al most invariably put up in exceedingly handsome form. The standard-bred trotter, which so many farmers confound with the blood horse, is quite a different animal, although a great many of them have a good deal of the blood of the thoroughbred in them. These horses may be standard-bred by breeding, which means that they are out of a standard-bred mare by a standard-bred horse, although the animals themselves may not be fast, or they may be standard-bred by performance, which means that they can trot a mile within a prescribed time, regardless of their breeding. Now, there are a very large number of trotting horses in Manitoba some standard-bred, but the most of them may be termed mongrel trotters, they having trotting blood in them, but at the same time they are not eligible for registration. These stallions are travelled, and farmers breed their mares to them, and if asked what they have bred a certain mare to, will tell you to a blood horse, although the horse, whether standard-bred or not, has no right to the name. How can farmers be expected to breed horses successfully when they do not know one breed from another? There are but a few thoroughbred stallions in Manitoba, while trotting stallions are plentiful enough, and I am convinced that farmers are making a great mistake in breed ing their mares to them, for, not only will their get be unprofitable to them, but it will hurt the reputation of the Province's horseflesh. This will no doubt appear to some a strong statement, and so I will endeavor to give the reason why I arrive at this The standard-bred trotter, of which the unregistered trotting horse may be said to be an inferior specimen, is bred for a special purpose, and that is to trot a mile in the least possible time. Now the gait of the American trotting horse is an artificial pace, for, in order to get the greatest speed out of them, their heads are drawn up with one bit and pulled down with another; they are toeout many kinds of weeds, and it- a good way to get weighted, booted and strapped in various ways, and consequently have a very unnatural appearance. making.

a rule, a good-looking horse, but this in matters movement seems to call for a horse of a period conformation, and, if we may judge by the interaction tions of the fastest trotters, this conformation is anything but handsome. Comparing the trotting horse with a specimen of equine beauty through no doubt to trotting men trotting horses are thing of beauty—they have generally some, if not all, of the following faults : Fiddle heads, ewe necks and almost invariably thick necks, upright shoulders, ong backs, sloping rumps and cut hams. If a horse has all these faults, it takes a man who is educated to it to see any beauty in him, and while I should be sorry to say that there are no handsome trotting horses, for there are, I think I am safe in saying that they are rather the exception than the rule. [TO BE CONTINUED.]

Bath and West of England Show.

The Annual Show of this excellent Society, which was held in Guildford from May 30 to June 4, was a decided success. All branches of live stock, except hogs, were out in good form and numbers.

In the Agricultural horse classes Shires made the greatest showing, although the few Clydesdales were of superb quality. In Hunters and Hacks there was a fair representation. Hackneys and ponies also filled a conspicuous place in the stables. CATTLE.

The Bath and West of England Show is always looked forward to with an anticipation of seeing a splendid show of the rosy reds in the form of Devons, and this year was no exception, as these juicy red plumbs were out in strong numbers and excellent quality; the best that has been seen for many years.

Shorthorns.-These were well represented in nearly every direction. Herefords were also out in good force. Many deserving animals were comgood force. Many deserving annuals were to pelled to go away with barren honors, so keen was the competition. The Sussex classes were well filled, being near their native home. Aberdeen: Angus heretofore have not been given a place at the Bath show, but this year the Society allotted them a place which how by a fairly good therein. them a place, which brought a fairly good showing of the bonnie blacks out for competition. Kerries and Dexters were not very numerous, the latter exceeding their black sisters in point of numbers. There was a very large turnout of Jerseys at Guildford, and on the whole the quility was good. The Guernseys, too, were a good lot, much improved from what they were a few years ago, both in form and shape of udder.

SHEEP.

The Leicester and Cotswolds were very meagre in point of numbers, but of admirable quality. Southdowns and Shropshires made a magnificent display, the latter excelling the former both in numbers and preparation. The Oxford-Downs prizes were all captured by one breeder, which shows that they are not so general as some others. Summerset and Dorset-Horned sheep were well shown. Hampshire-Downs were not very numerous, but superior specimens could be seen among them. A few pretty little Exmores and other mountain sheep were also exhibited.

PIG8.

Unfortunately, the prevalence of swine fever necessitated the council—upon the advice of the Society's veterinary inspector—to cancel all the entries that had been made in the pig classes.

The Big Cheese Analyzed.

A representative sample of the Canadian mammoth cheese taken from the block of 70 pounds, as returned from England, was found on careful analysis to have the following composition :

Watan	Percentage.
Water	32.06
muteriat	31.13
Curd (casein and albumen)	28.00
Ash, salt, milk, sugar, etc.	5.51
	100.00

Prof. Shutt, of Ottawa, who made this analysis, reports that the cheese was perfectly sound, and that the relative proportions of fat and curd, upon which palatibility and digestibility depend, was eminently satisfactory.

If your pigs have not a pasture to run over, give them a daily supply of green feed. They will

It was with sore regret that it had to be done, owing to the fact that it was the largest entry of pigs that the Society had ever had ; but it was felt that no other course could be safely pursued.

POULTRY.

Poultry, as usual, formed an attractive feature of the show. Although the entries fell a little below those of last year, the quality was good, and some of the classes were particularly strong.

IMPLEMENTS.

The implement department was of a very repre sentative character, and formed both to the general and practical visitor a most attractive feature of the show. Every class of agricultural machinery was well represented.

WORKING DAIRY AND DAIRY PRODUCTS.

The dairy always appears to have formed an special feature in the labors of the Bath and West of England Society. We may safely say that no other English exhibition at the present day can at all compare with it in the excellent uniform display of cheese, butter, or cream. A vast improvement has taken place within the last nine or ten years, which, there can be no doubt, is owing to lessons that have been learned in the working dairy, many dairies of cheese that in former years were only saleable at a very low price being now nearly double in value, owing to the greater skill used in manipulation. Many dairies in butter are also very much increased in value. In going through the various classes of dairy produce, it can be noticed how, from year to year, in many instances the same names and farms continue to hold their position, showing their method of manufacture has become a certainty, and that guess or chance work is a thing of the past. The working dairy was a scene of great activity within and of interest without, churning the whole of its working hours. The chief business, however, going on were the lectures. and illustrations in the improved methods of butter-

FARMER'S ADVOCATE. THE

JULY 5, 1894

Polled-Durhams.

260

The accompanying illustration, together with the front page engraving, represent typical specimens of that valuable new breed known as "Polled-Durhams." The bull "Red Duke," is a very superior animal, weighing, at four years old, 2,360 lbs. He is registered in the American Shorthorn Herd Book, No. 105051, and No. 28 in the Herd Book for Polled-Durhams. He is owned by J. F. & A. E. Burleigh, Mazon, Grundy Co., Ills., and was a World's Fair premium winner.

The cow "Daisy," No. 2, A. P. D. H. B., bred and owned by Messrs. Burleigh, is a noble animal, with splendid dairy qualities, having a record of 24 quarts per day, and is an easy keeper. She traces back on the dam's side through successive generations of Polled cows bred to Shorthorn sires to a Polled native muley in 1860. Her progeny are easy keepers and good feeders; young bulls weighing, at one year, from 800 to 1,000 lbs., and 2,000 lbs. at maturity. She is 14 years of age, and dropped, in 1893, a very fine Polled heifer calf, from Red Duke. The herd to which these animals belong were successful in capturing many of the World's Fair premiums, many of the cows being quite as good as any Shorthorns shown.

Mr. Burleigh, who is probably the oldest breeder of Polled-Durhams, has kindly favored us with a short history of the breed. Mr. Burleigh says he commenced breeding the horns off the Shorthorns generations polled on the dams' side, and over five badly damaged by drouth. top crosses Shorthorn blood, making them practically as good as the pure blood. Since 1881 nothing shippers of sheep by sending them via Montreal to regarded it in that way.

but Polled sires have been used on the herd, and the object has been to breed for both beef and milk. No cross of any other established polled breed is allowed to go on record. We mention this to correct the statement that has frequently been made that the breed took their polled qualities from a cross of Aberdeen-Angus; but this is incorrect, as this breed was started before the Aberdeen-Angus cattle were imported into America. About 1881 there occurred a "sport" or "freak" in the recorded Shorthorn cattle of the Guinne and Duke line, in the form of twin heifer calves. In 1883 the same cow dropped a polled bull calf. These are all recorded in the American Shorthorn Herd Book, and from these have sprung a class of pure blood Polled-Durhams, eligible to entry in both the Polled-Durham and Shorthorn Herd Books. Messrs. Burleigh have been breeding this class of Polled-Durhams for about four years, and had seven pure blood Durhams in their herd of 13 head of Polled-Durhams on exhibiChatty Stock Letter from the States. FROM OUR CHICAGO CORRESPONDENT.

Late June prices for top grades of live stock at Chicago : Beef steers, \$4.75, against \$5.10 two weeks ago and \$5.60 a year ago. Hogs, \$5.15, against \$4.90 two weeks ago and \$6.90 a year ago. Sheep, \$3.85, against \$4.50 two weeks ago and \$5.25 a year ago.

Hot weather has again interfered with the market for very heavy cattle, and fat little 700-lb. yearlings have been selling for as much per 100 lbs. as some pretty good beeves weighing more than twice as much. The main cause of this discrimination against ripe, heavy beeves was the falling off in the export demand. When the condition of foreign markets does not justify shipments of heavy cattle, it makes a very serious difference to the farmers of the States.

People over here feel that the charges abroad that Canadian cattle are debarred free entry on account of disease are utterly groundless, and, worse than that, dishonest.

Good grades of fed Texas cattle, averaging 1,000 and 1,200 lbs., have lately sold at \$3.60 and \$1.00, while inferior to fair grass Texas steers sold at \$1.75 and \$2.25. The bulk of the grass Texas steers so far have sold at \$2.50 and \$3.00. A good many very thin cattle were sent in from drouthy regions.

The demand for stock and feeding cattle at this season is generally light, but it is uncommonly so now. In a majority of the cattle-feeding sections or Durhams about 1860, and has now over eight of the West the pasturage has lately been very

Some money has lately been made by Chicago



At the principal live stock exhibitions held in Canada last fall, Ayrshire's were shown in greater numbers than any other kind of cattle, notwith-standing the fact that many of the best animals were away at the World's Fair.

Within the last few years the popularity of this breed in this part of the country has been wonderfully increased, doubtless because experienced dairymen have found that for their special purpose they are of all known breeds the most economical. The dairymen who supply the inhabitants of Montreal with milk have long been notable for shrewdness, and after fair trial of the various breeds, they seem to have come to this conclusion.

Their highest ideal in this matter is a low-set cow, with a broad posterior, deep flank, and widepread, capacious udder. It is noticeable, however, that cows of this description generally possess in large degree all the other less important points characteristic of the best dairy cow, the body tapering from the rear towards a fine neck and head. along with light crops, straight back, thin skin, slender tail, and fine horns. Great coarse horns never grow on a well-bred Ayrshire; they grow only on a thick skinned, coarse-haired, long-legged race of cattle. At several Ontario county fairs a herd of cattle said to be Ayrshires were exhibited, but the length of their legs, the narrowness of their rear ends, the coarseness of their horns, and the smallness of their milk vessels precluded the belief that they were in any way related to the Ayrshire breed.

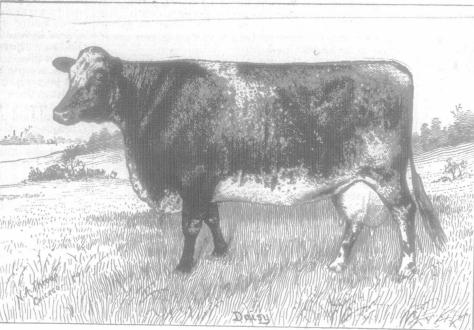
The bull which headed the herd was built some-what like a buffalo, with his head seemingly on the wrong end of his body. The herd, on the whole, was a scandal on the breed, and the judges seem to have

In the Scotch standard scale of points the udder counts 33 per cent. yet no good judge would award first place to an old broken down cow, merely because her udder is of extraordinary size. I have seen cows with large, fleshy udders, which were not profitable producers.

Ayrshires generally are good and true breeders, yet there are exceptional cases in which an animal fails to breed, perhaps from the effects of over-feeding.

I have seen on the show ground an excellent specimen of an Ayrshire cow, perfect in many respects, but which, apparently, had not had a calf for several years, consequently her udder was shrunken to small dimensions, giving no indication of ever again producing milk; yet the exhibitor found fault with the judges because they did not award her a prize. I have never known a judge or set of judges who could give entire satisfaction to every exhibitor.

We have now in Canada about a dozen breeds of cattle bred specially for dairy purposes, and yet we are to have another, to be called the Quebecers. Some call them by another name, but it is not calculated to create respect for them. They are certainly not indigenous, but, like other estab-



POLLED-DURHAM COW "DAISY,"

BRED AND OWNED BY J. F. & A. E. BURLEIGH, MAZON, GRUNDY CO., ILLS.

one. These pure bloods are very scarce, probably not 50 bulls of them in the world. A few other breeders are now breeding in this line. A short time ago these gentlemen purchased two bulls and a heifer bred from a "sport" occuring in the Craggs Renick, Rose of Sharon and Young Mary tribes of Shorthorns; these will be used as an out-cross in breeding. In Messrs. Burleigh's old line of breeding, the potency of the polled quality has been so fully established that young bulls bred by them got all their calves hornless from horned cows. In the pure line of breeding, polled bulls bred from horned cows get from 50 to 75 per cent. of their get hornless from horned cows, and from 90 to 100 per cent. from polled dams. These gentlemen are practising the utmost skill in breeding, and the demand for their stock has been so great that all young stock are purchased before old enough to breed, except specially reserved, and at much better prices than horned cattle are selling of equal merit.

Dehorning appears to be on the increase, but since many have their objections to that practice, the breeding of polled cattle is certainly an easy way out of the difficulty. Under these circumstances, such a grand general-utility breed as the Polled-Durhams should make friends for themselves and grow in popularity.

See that your pigs have all the pure water they want to drink.

and a confident feeling that you can succeed as well as old hands in the business.

tion at the World's Fair-all their breeding except | Glasgow. Reports from the Northwest indicate favorable season for sheep on the open ranges. Grass is good and sheep are doing well. Dealers are already loading up the supplies for filling the feed lots next fall. The sheep market got on the toboggan slide again and went down with a rush. The big drop in prices checked the run again, and the latest reports on good grades are a little better. On one day an exporter purchased 450 head at \$3.85, which was the top of the market. Choice lambs reached \$5, which makes them about 75c. higher than a week ago. The medium and common grades of lambs sold no better, and sellers complained that the market was slow. Sales included some good 87-lb. Texas sheep at \$2.75, and a thousand head to a feeder, averaging 69 lbs., at \$1.40. Most of the natives sold at \$2.25 and \$3.25, and lambs largely at \$4 and \$4.75.

The best heavy hogs are now selling 15c. higher that best light, while a year ago at this time light were at a premium of 20c.

June marketing of hogs was liberal, but the demand was good, and packers bought with a freedom that indicated light stocks and a good consumptive demand, despite trade depression.

The summer dullness in the horse trade is on, and dealers are finding it difficult to get rid of ordinary stock. Good, smooth blocks seem to be in fair demand at prices ranging from \$45 to \$75, according to weight and quality. Draft horses are low, and not bringing \$15 to \$20 what they were three weeks ago. Expressers are only in fair demand, and the buyers do not seem very anxious for them at prices over \$100. Carriage teams and fancy A dairy writer says that you had better begin drivers are in a little more demand than most any dairy writer says that you had better legin arivers are in a note those definite that they do not gone thoroughly learn the business, than with ten cows over \$150 to \$175 lately. Many horses come to and a strong definite the strong definit the st market that have not been properly broken, and, of course, they have to be sacrificed.

breeds, are a mixture of several varieties.

At the Montreal exhibition a number of specimen cows of this kind were shown, but I cannot describe them, because individuals differed so much in size, contour and general appearance. Beauty, however, is not one of their characteristics, but that does not necessarily affect their productiveness, and no doubt some of them are fairly good producers.

I do not know what general advantages they may possess, as compared with other dairy breeds. An exhibitor said they can endure, without injury to their constitutions, more exposure to cold weather, and thrive longer and better on rye straw than any other kind of cattle.

There is no saying what they may prove to be; probably they are well suited for a certain class of farmers in some localities which we know little about.

At the Montreal exhibition prizes were also given for Ayrshire grade cows, and among the large number of this class shown were many apparently first rate dairy-business cows. I have, however, good reason to believe that the best of them were fairly well-bred Ayrshires.

It seems that for improving the common dairy cattle of the country, there is no breed giving more satisfactory results than the Ayrshires.

I would favor the giving of prizes for the best dairy cows of any breed or mixture of breeds, but I think offering prizes for grade cows is a mistake, because it leads to the retrogressive practice of breeding from mongrel bulls.

The only persons whom I have known to decry the Ayrshires are they who are trying to boom some other breed, and some who have been disappointed in not obtaining a very large yield on starvation rations; and I doubt whether cows of any other breed will come nearer fulfilling their expectations.

Many years ago some Ayrshire cows had small teats; now, however, they are generally about the

most desirable size. Very large teats are nearly always on flabby, narrow, deep-hanging bags, which are detested by experienced dairymen. Such vessels are never seen on Ayrshire cows; they are always neat and trim. It is a mistake to suppose, as some do, that large teats are an indication of great productiveness. Large teats are readily injured, and in keeping them clean there is much trouble.

The ordinary life of man is too short for individuals to be experimenting with many different breeds of dairy cattle: hence, methinks, parties engaging in the dairy business should be guided largely by the experience of others.

Timely Notes for July-No. 2. THE PATRONS' CANDIDATES.

Having attended one of the Patrons' of Industry conventions to nominate candidates for the Dominion House, I was grieved and surprised to hear so ion House, I was grieved and surprised to near so many delegates expressing doubts and fears, desir-ing to delay the choice of a candidate, postpone-ment—anything, apparently, but the object they were sent there to advocate. Several of these timor-ous speakers were personally known to me, and were considered regular fire-eaters in their own lodges. If they were not prepared to stand by their colors they should have stayed at home, and not stultify themselves and their cause by their weak-kneed support. We did not want them there to throw cold water on the convention, and to tell us of all the lions in the path before us. However, three strong men have been nominated in Postleth-waite, Braithwaite and Fisher, and the Patrons of their respective constituencies will be false to them-selves, their vows and their country, if they allow any Grit or Tory nominee to secure a single one of their votes. What is the use of meeting solemnly together in your lodges, passing strong resolutions condemning the present state of affairs, and then meekly going to the polls on election day and voting for its continuance? Is this the Patronism you are so fond of parading at home? Is it Patriotic? Is it manly? "Let us then be up and doing

Let us then be up and doing, With a heart on triumph set, Still achieving, still pursuing, Learn to labor, and to wait." THE SUMMER-FALLOW.

It is now considered an established fact that to ensure a crop of wheat in almost any season a well-ploughed summer-fallow is the safest plan. The middle of June to the middle of July, according to the season, state of the weeds, etc., is the best time to plough, putting on all the available manure, and dragging the weeds into the furrow with a chain. Harrow well after each day's ploughing, and then keep the harrow going at short intervals until about the middle of August, when sow very thinly some clean wheat, oats or rape seed. Turn the farm stock on the land after the prairie grass is spoilt by frost, and you will have a firm, mellow, rich and clean seed bed for next year's wheat crop.

GENERAL.

It is a healthy sign when we find so many articles in the press, agricultural and otherwise, on rearing stock from a producer's and breeder's standpoint. We have had articles ad nauseam from pork packers, bankers, grain dealers, etc., advocating their own pet theory or particular brand of goods. How would they like us to tell them they should, for instance, only enforce four per cent. interest on their loans, that being the amount they are willing to allow depositors in their banks; when you want to borrow from them it is fifteen per cent

First Prize Essay on "Noxious Weeds, and How to Destroy Them."

[Prize of \$25.00 awarded by the Government of Manitoba.] WON BY EDMOND DRURY, OF RAPID CITY, MAN.

The farmers of Manitoba, as a whole, have not as yet been much troubled by noxious weeds, but as settlement and cultivation increases, the weed pest will increase in proportion. In the older settle-ments in the eastern part of the Province the weed question has become so serious that unless prompt measures are taken to curtail the evil it is doubtful whether grain crops can be grown in many dis-tricts. The rich soil of our prairies, so admirably adapted to the operation of the agriculturist, is equally favorable for a rank weed growth. Opinions differ as to what constitutes a noxious weed. Theoretically, a weed is simply a plant out of its place. Any plant, under certain conditions, is liable to assume the proportions of a weed, but for practical purposes a line must be drawn between those which can easily be kept in check, and those which cannot. A noxious weed may be defined as one incapable of being turned to account, or which cannot be easily eradicated from land on which it has become established. Scarcely any of Manito has become established. Scarcery siny of man-toba's indigenous plants come under this definition. The danger to agriculture lies in those that have been, or may be, imported from outside sources. It is needless to dwell on the harm done by weeds on cultivated land, by choking and robbing the pro-fitable crop of that plant food which should go to nourish it, as it is presumed every farmer is acquainted with that. Weeds sometimes, when allowed to multiply uncherked, have rendered cultivation impossible, as what is known as the Russian thistle is reported to have done in some parts in Russia, and some places in Dakota; and here is a great loss every year in Canada from the Canadian thistle and other weeds, besides the extra labor entailed keeping them under. Before any weed can be mastered itshabits must be first studied Before any for a method successful in one instance might encourage a weed of a different nature. Annuals encourage a weed of a different nature. Annuals complete their growth, ripen seed, and then die, all in one season. The majority of plants belong to this class; they produce abundance of seed, which is their only means of propagation, so the main thing is to prevent seed ripening. Biennials take two seasons to complete their growth, and ripen seed the second season. There are also some kinds propagated by suckers and offsets from the roots, and become perennial. Perennials may take either one, two or more years to perfect seed in the first instance, but, unlike the previous classes, live for a number of years, often maturing seed each season. They are generally propagated by the roots or underground stems, which produce fresh plants at each joint. These are the most troublesome to get rid of, as the root, as well as the seeds, must be prevented from forming. Annuals can be overcome by giving surface cultivation to sprout the seed, and then killing the successive crops of weeds as they appear; when all the seed in that layer of soil has grown, a crop can be raised, after-wards plowed deeper, and the next layer cleaned by the same means, and so on till the seed is worked out of the land.

Biennials are generally easier vanquished; a simple ploughing before they bloom is often all that is required.

These perennials propagated by the roots are killed by preventing leaves from forming during the growing season. This is accomplished by persistent surface cultivation, followed either by a second ploughing, or a crop grown for fodder; in the latter case the land should be ploughed after harvest and seeded next spring. In writing on Manitoba weeds, there is one which

appear harrow again to kill them. If there is no further appearance by the middle of next May, oats or barley could be sown, but if weeds still appear in the spring, give more surface cultivation, then summer-fallow. Should the land be full of seed before remedial measures are taken, nothing but a persistent course of cultivation will eradicate it, and then not for a few years will all be destroyed. The seed is so small that, unless near the surface, it will not grow, and it will germinate after being buried for several years. On foul land the best start is to cultivate early in the fall with disk harrow or cultivator, then, before winter, harrow to kill those sprouted. Give another harrowing in the spring, then summer-fallow, not going very deep, then harrow as often as wanted to kill and start the weeds next spring ; drill in the grain, and if weeds appear with it, which is improbable if the previous treatment has been thorough, a light harrowing will finish them and not harm the grain. After the crop is harvested the land should be again ploughed and worked in preparation for oats or barley, to be sown the next spring. If the land is barley, to be sown the next spring. If the land is strong and otherwise clean the grain might be drilled in without ploughing, but whichever plan is tried, a harrowing atter the grain is up will be a benefit. The following year should be a summer fallow, ploughing deeper than before so as to clean another layer, and so on till the land is clean, which will be in longer or shorter time, according to the judgment used in the process, together with the care taken to prevent contamination from other places, and hand pulling any stray plants seen. A well-known member of the same family is

"WILD MUSTARD."

"Sinapis Arvensis"-The "Charlock" of Eng-"Sinapis Arvensis"—The "Charlock" of Eng-land. It is an annual growing from one to four feet in height, according to soil and situation, and sometimes very branching; the stalks are hairy until near maturity. It has a profusion of yellow flowers similar to those of turnip, and others of the "Crucifara." The seed pods are long and contain a number of seeds each. The whole plant bears a striking resemblance to the cultivated variety. In common with all the members of the Mustard and common with all the members of the Mustard and Oress family, the skin of the seed contains an oil which prevents decay for a long time, and will remain in the ground for years till the conditions are favorable, when it will grow with unabated vigor. It takes longer to mature than French Weed, but will ripen if pulled up after the seed is fully formed. Within the last few years it has gained ground in many parts of the Province, being brought in with grain and grass seed. The writer brought in with grain and grass seed. The writer had a little experience in 1890 with mustard that came from Minnesota in oats. They were cleaned before offered for sale, and not suspecting or thinking of strange weeds, were not fanned a second time (a very foolish thing to begin with, for if looked for, it is easy to discover the seed among oats); however, the crop was nicely sprinkled with the bright yellow flowers. The field was taken strip by strip, and the mustard hand pulled three times, so that none was allowed to seed. The next year it was summer-fallowed with previous treat-ment like that for French weed; a few plants ment like that for French weed; a few plants appeared after ploughing, no doubt from seed buried too deeply the year before; they were allowed to remain till the harrow would not pull them out, and preparations were made to plough again, when the cattle found the spot, and they cleared every leaf. Some maintain the seed is injurious to them. That may be, but the plant appears not; it was eaten greedily as turnips, and o ill effect seen. no ill effect seen. Since then not a plant has been found on the place. As this is a plant readily distinguished when growing, it can be hand pulled on its first appearance. When in the land a similar process to that described for French weed will ex-terminate it in time. The greatest danger of its appearance is among millet, Hungarian grass, rape, turnips, or other similar seeds from which mustard seed is hardly distinguishable.

Can any one tell why bran is as dear this year, with wheat 45 cents, as it was when wheat was 65 cents

Barley is 50 cents a bushel now-was slow sale at 20 cents five months ago-a large margin for someone.

Wheat is almost stationary; oats rise and fall a

cent or two every week, never getting beyond 34c. Pigs are so cheap and hard to sell that the profit is "less than oil" for the grower, while bacon, etc., remain about the same price they were when pigs were seven or eight cents. Who gets the profit? The farmer, of course ! INVICTA.

Feeding Fat Into Milk.

Hoard's Dairyman of June 22nd records the facts of an interesting experiment, conducted in Schoharie Four cows were treated to find out County, N. Y. whether fat fed influenced the fat of milk. Before the experiment commenced, cow No. 1 weighed 1,189 pounds, and made fourteen pounds of butter per week. Cow No. 2 weighed 1,130 pounds, and made twelve pounds of butter in a week. Cow No. 3 weighed 1,168 pounds, and gave eight and a-half pounds in seven days. No. 4 weighed 1,000 pounds, and gave thirteen pounds one ounce butter in seven days. On an average 22 pounds of milk were required days. On an average 23 pounds of milk were required to make one pound of butter. The previous feeding was, per day, 40 pounds ensilage and twelve pounds of a mixture of wheat bran, cotton-seed meal and corn meal. The skim milk was also fed back to the cows. When the experiment began one-quarter of a pound of tallow was shaved and mixed with the ration twice a day, increased to two pounds per day in two weeks. The following is the result :--Cow No. 1 made 20 pounds of butter in seven days; cows No. 2 gave 17¹ pounds; No. 3, 16 pounds 14 ounces: and No. 4, 17 pounds and 1 ounce in seven days. Just 184 pounds of milk was necessary to produce one pound of butter. The quality was so near like that made before the experiment, that no difference could be detected by customers who regularly received the butter.

comes to mind as the worst at present here, viz.:-

FRENCH WEED.

"Thlaspi Arvense"—"Stinking Weed," "Mith-ridate Mustard," "Laviolette" of the Red River Valley; "Pennycress" of Britain—is annual or biennial, according to circumstances. Plants that grow too late to mature before winter will bloom and ripen seed the following spring. It is about one foot in height, though sometimes more, bright, green leaves, oblong in shape, toothed at the edges, surface smooth, very small white flowers, seed pods round and flat, from a quarter to half an inch in diameter, including the broad margin of wing which surrounds the seed sac, with the exception of a portion of top. The pods when ripe are light yellow in color; they produce an enormous quantity of seed, which is very minute. Besides being one of the farmer's worst enemies, it is detrimental to the grazier and dairyman, for the plant has a disagreeable smell and flavor, which is detected in the beef and milk of cattle pastured where it is abundanteven spoiling the milk for the making of first-class butter, though it is affirmed that cattle kept from access to it for a few weeks before slaughtering are free from the taint. In the case of isolated specimens, they should be pulled and burnt if there is the slightest sign of seed in the pods, for, in common with others of the Cress and Mustard family, it will mature seed sufficiently to grow under the most unfavorable conditions. On the first appearance of the pest, if the field is too extensive, or the weeds too numerous for hand pulling, it will be cheapest in the end to summer-fallow, or if the seed is near maturity, mow and burn, or, if possible, burn without mowing. Should the seed drop, do not plow, but harrow lightly as soon as possible to make them germinate, then when the young plants

CANADA THISTLE,

"Cirsium Arvense" is not indigenous to America, but was so called from its first appearance in America being in Eastern Canada, likely imported from Europe, where it is the common corn thistle of Britain and France. It is not to be confused of Britain and France. It is not to be confused with *Clanceolatus*, the native American thistle usually found growing on the edges of the fields or anywhere imperfectly cultivated, a coarse-look-ing plant, comparatively harmless. The Canada thistle is propagated by seed, which the wind scatters far and near, assisted by the downy cover-ing and by the perspectation of stalks which give ing, and by the perennial root stalks, which give the most trouble, as there is a latent bud at every joint of the stalks which spread horizontally, some times to a distance of seven or eight feet from the parent root. The seed is not so tenacious of life as parent root. The seed is not so tenacious of life as those of the annuals, and beyond that dropped the previous season will give little trouble. In land infested a good plan is to cultivate the surface in the fall or early spring to start the seeds, then when coming into bloom run the mower over the field before ploughing, so that every leaf will be perfectly covered. The ploughing should not be deep, as the horizontal roots must not be turned up, the main unright root only being cut. Harrow and the main upright root only being cut. Harrow and roll at once. Some advise sowing a fodder crop now, but it is best to leave the land clear, so that any plants appearing could be killed at once by the disk harrow [ED.—A disk harrow is a poor tool for this purpose; a stiff-legged, broad-toothed cultivator would be better.], for it is imperative that leaves be keptfromforming any timeduring the balance of the

growing season. If this is done most of the roots will die, virtually for want of breath, as plants require air just as much as animals, and they absorb it by means of their leaves. Most of the others, being much weakened, will succumb to the winter, for it is found that the roots are not so vigorous here as in the East. Next spring drill in oats or barley. If there is any sign of the thistle starting first, give astroke of the disk harrow to keep them down. If done just before seeding, the grain will get a start and ripen before the thistle. If any should happen to come afterwards, it would be an advantage to delay seeding till well on in May if thistles appear in the spring. If there was no sign of growth, wheat might be risked ; in that case the disking should be omitted. After the crop is reaped, if thistles have grown in it, plough and harrow; if clean, seed the next spring with drill, without ploughing. The third season summerfallow would again be in order, and it will now be seen whether the treatment has been successful or not. If any appear, reap the fallow, if not sow a crop for fodder, such as late oats, Hungarian grass or rye; or for grain, such assix-rowed barley, ploughing a fairly deep furrow. By methods similar to the foregoing, seed will be prevented from ripening, and if not entirely eradicated, the thistles will at least be kept under, so that good crops can be raised.

262

WILD OATS.

"Avena Fatua" is an annual closely related to the cultivated variety, which it much resembles, only the panicle is more straggling, and the leaves generally have a more yellow tinge than the latter. The seed has brown hulls covered at the base with hair, and a long awn, much twisted, which uncoils when dampened, whence it is called "animated oats." In England, where it is indigenous and a troublesome weed, there are records of the seed growing after being buried a century. If discovered before ripening, the crop should be cut for fodder. If the plants seed, do no plough; cultivate the surface, harrow again in the spring very early, then plough and sow barley the end of May, but it would be safer to summer-fallow. This would be effectual if the first appearance of the pest, but where it is established it will be a more difficult task to get rid of it, as fresh seed will be constantly turned up. As in French weed and other annuals, the object is to clean in the one season the layer of soil on which the next one or two crops are to be grown. This can be accomplished by following the treatment given for French weed as to surface cultivation. Oats should not be grown until the land is clear, for any wild ones could not be distinguished and pulled out as they could from wheat or barley. Six-rowed barley or a fodder crop would be good, for they could be cut before wild oats ripen. Any feed grain suspected to have wild oats in it should be ground fine or boiled before being fed.

WILD BUCKWHEAT.

"Polygonum Convolvulus" is an annual which spreads in all directions over the ground, clinging to and climbing up anything which grows near it, and when numerous, forming a complete mat, smothering out all other plants. It has bright green, heart-shaped leaves, a small spike of insignificant pink and white flowers, succeeded by three-sided seeds, the outer husk brown, the inner black. Though supposed by many to be indigenous to the soil, appearing after brought into cultivation, it is doubtful, as it never comes in some fields. Whatever its origin, the actual occurence must be dealt with, Though most harmful among crops, it need unorougn summer fallow will conquer the worst cases. Surface cultivation should be given in the spring to start the seed, then plough a fairly deep furrow the end of June or first part of July, while the buckwheat is not very tangled. If thick a good rolling-coulter will be needed on the plow. Be careful to leave none sticking out at the furrow edges, as such will mature seed as well as ever. Follow with the harrow, and job is completed, with the exception of such harrowing afterwards as may be needed to start a fresh crop of weeds. As the seed is large, compared with the other annual weeds, they will germinate from a much greater depth, and will come up soon after the ploughing. If there are cattle in the locality, they can be depended on to clear the last growth, for they will stick to the young buckwheat as if it were a turnip patch, and not leave a leaf.

it right out. This may not be suitable in all cases, as where the land is full of weed seeds and requires a summer-fallow, it should then be ploughed in June, and well harrowed, and then ploughed a little deeper in August. This is not the best mode of ploughing twice for this country, as the second ploughing should be shallower, but will be best for Couch grass, as the roots will not trouble by getting on the edge of the share. Defective cultivation is mainly responsible for Couch grass ; such as growing two or more crops on the same land without ploughing when it is unfit for that course, and in ploughing turning a wider furrow than the share cuts, so leaving an inch or two uncut, sufficient to give the grass a hold. This fault is very prevalent when the share is partly worn, as many plows make a nicer looking job on the surface when turning their widest furrow. In all cases the draft should be set to take no more land than the share will cut clean.

[Ed.—The essayist omits to mention SWEET GRASS ("Hierochloa borealis"), which is the "Couch grass" of many districts in Manitoba, and may be treated as above, only should be ploughed earlier.]

RUSSIAN THISTLE.

"Salsola Kal-Tragus," also called Russian Cactus, is in reality a Salwort, brought to South Dakota by Mennonitesfrom Russia, where it is a native. Fortunately there has none been noticed, so far, in Manitoba. and it is to be hoped never will. It is annual, growing from two to five feet high, and forms a bush as much in diameter when fully grown. When young the leaves are downy and tender; as it advances towards maturity the plant becomes more woody and the leaves bristly, till they resemble in some respect miniature fir trees inverted. At this stage it has strong thorns or spines at certain distances along the stalks, then it is unmanageable, for horses can scarcely be driven through it. After ripening in the fall, the plant breaks off at the ground, and is driven before the wind for miles, scattering seed as it goes, till stopped by some obstruction. The seed is not so tenacious of life as the other annuals here. Very few retain their germinating powers more than one year. Not being personally acquainted with the plant, it is harder to advise on the treatment for its extermination than in the case of Manitoba weeds, but from its habits and nature the treatment given for French weed should be successful in this case ; only it is important that the fallowing be done in June before the plants grow strong, and that none are allowed to grow afterwards, even if a second ploughing is necessary. It naturally pre-fers a dry soil, and it is said that sheep are very fond of it. Another plant that of late years has appeared in many places in the western portion of the Province and very troublesome in Assiniboia is what is known as

TUMBLE WEED.

"Sisymbrium Sinapistrum," a native of Europe, is an annual here, though biennial in some instances elsewhere. Its seeds retain their germinating powers in the same way as wild mustard (to which family it belongs) and apparently for as long a period. It grows from two to four feet in height and very branchy; the flower is smaller than that of mustard. The quantity of seed produced is enormous; one plant gave nearly six ounces, or about one million and a-half seeds, which are much smaller than those of timothy and dark-red in color. It ripens about the middle of August and then dies, afterwards the wind blows the plant over the prairie in the same way as the Russian thistle. The best plan is to treat it like French weed or mustard, but as long as it in the locality there is always danger of a fresh invasion ; therefore, concerted action among all the farmers in the affected district, so that none is allowed to ripen, is the only way to meet the diffi-culty. The modes of destroying the weeds here given are such as could be practised by a farmer who makes grain raising his exclusive or main dependence, as at present the majority of Manitoba farmers do. At the same time, there can be no question that in many instances weeds could be more easily and profitably destroyed by making the land, instead of lying in a naked fallow, produce heavy crops of fodder or pasture for the live stock. hat should hold an equal place with grain raising in the operations of every farmer. There are many plants that could be grown in the manner on summer-fallow that would leave the land in better condition for the following crop than to have it bare. Rape or turnips are suitable for any fallow, as green pasture in the fall, except where a second ploughing is needed. For a crop to be cut green for hay, one should be chosen that is fit for cutting at any stage of growth, so that if it was seen there was danger of weeds seeding, it could be mowed at once. Rye is good for this purpose, and makes a first-class hay; also oats, barley and peas, only they should be left a little longer before cutting. As to permanent pasture, the native grasses will probably be the best. "Agropyrum Tenerum" (Western rye grass) Austrian Brome Grass, "Bromus Inermus," seems to be good. However, the wisdom of such a course in dealing with noxious weeds is doubtful. Whenever the land is broken again they will appear, so it is in reality a mode of preserving, rather than destroying the worst kind of weeds. All small patches of weeds can be easily destroyed by grow ing roots, corn for fodder, etc., providing the cultivating is thoroughly done. A disk harrow used before or after ploughing weedy land will frequently save a second ploughing. To kill weeds harrow when in the seed leaf. To keep free from weeds, never feed the seeds to your stock without

it right out. This may not be suitable in all cases, as where the land is full of weed seeds and requires a summer-fallow, it should then be ploughed in June, and well harrowed, and then ploughed a little deeper in August. This is not the best mode of ploughing twice for this country, as the second ploughing should be shallower, but will be best for Couch grass, as the roots will not trouble by getting on the edge of the share. Defective cultivation is

Observe the provisions of the Noxious Weed Act. and assist the Inspectors by having none on your own farm, and informing of weeds growing on adjacent lands; better still, take the liberty of pulling or cutting any isolated specimens yourself-if not for the benefit of the community, as a measure ofself-protection. A farm cannot be kept entirely free as long as weeds are allowed to ripen near by. The seeds are carried by the wind, birds and animals. In short, make yourself a weed inspector or the surrounding section, and see that the law is enforced; delinquents have no right to poison another man's land by allowing weeds to ripen. The country is large and the regular inspectors cannot explore every corner. Many of the worst weeds first appear along railway grades, and the law should be strictly enforced against them. The future of agriculture may deend on whether the weeds are kept down or not. Let everyone write as against a common enemy and the result can not be in doubt; but to succeed there must be no backsliding, and farmers, inspectors, pathmasters etc., must remember that "eternal vigilance is the price of safety,"

Farmers' Institutes.

VIRDEN.

At the annual meeting of the above Institute the following officers were elected : Jas. Elder, President; P. McDonald, Vice-President; C. E. Ivens, W. Stephen, W. Whiteford, J. Wells, J. Caldwell and J. Cooper, Directors; Geo. Moir and W. H. Hall, Auditors; Geo. H. Healey, Sec.-Treas., and P. McDonald, Assistant Secretary. Mr. C. E. Ivens was appointed delegate to the Central Institute. Arrangements were made for the Travelling Dairy, and the following resolution was carried : "Moved by C. E. Ivens, seconded by P. Mc-Donald, that in view of the prevalence of tuberculosis in different parts of the country, the Dennis Farmers' Institute, No. 1, considers it advisable to caution farmers and others against bringing cattle, pigs or sheep into this district from other parts of the country."

GLENBORO.

The following officers were elected for Glenboro Institute for the ensuing year: Geo. Steele, President; J. Dale. Vice-President; F. Obee, Secretary and Treasurer; W. McKenzie, W. Lyall, W. Cox, J. Davidson, J. Atkinson, J. Christie, Directors; D. Steele and R. S. Thompson, Auditors. F. Obee was appointed delegate to the Central Convention. The following resolution was then carried: "That the delegate to the Central Institute be instructed to bring to the attention of the meeting the necessity of increasing the grant to the Central Institute, and to S. A. Bedford, for travelling expenses to the local institutes. Carried.

ELKHORN.

The election of officers for 1894 resulted as follows: W. Wood, President; Geo. A President; A. M. Bradford, Secretary and Treasurer; G. Freeman, C. Freeman, E. Ives, J. Montgomery, J. Middleton and W. Bailey, Directors; Rev. R. G. Stevenson and W. M. Cushing, Auditors. We take the following from the Elkhorn Advocate: "After the election of officers, Mr.S.A. Bedford, of the Brandon Experimental Farm, delivered an address on 'How to farm with profit, under existing circumstances.' Among other things, he urged the use of the best varieties of grain for seed, stating that in five years an improved variety of wheat had averaged considerably more than a common variety, and also with oats. He said that the difference in the crop. Spring plowing on the Ex-perimental Farm, Brandon, always gave better results than fall plowing. He also urged the early sowing of grain, as late sown grain would yield con-siderably less than that sown at the proper period siderably less than that sown at the proper period. He was strongly in favor of summer-fallowing, and stated that by summer-fallowing two years' moisture could be saved for use by one crop. He spoke on the rotation of crops, and advised the growing of peas, as they had sold and were still selling at a good price. He also spoke on sowing grass seed, either timothy or some of the native varieties. He advocated poultry raising as a profitable business, and thought the farmers should raise more of them. He then spoke briefly on tree planting, and said that every person should endeavor to decorate their homes by planting a few trees. Parties writing to him could get seed or slips.'

JULY 5, 1894

COUCH GRASS.

"Agropyrum Glaucum," also known as Twitch grass or Scutch and Quack grass, but for its habit of growth, and the difficulty of getting it out of cultivated land, would be a valuable pasture grass. It is perennial, propagated by seed, but mainly by its root stalks, which possess a bud at every joint, each of which forms a new plant, thus the land becomes in time a mass of tangled roots, and forms a perfect sod. The plan followed elsewhere of trying to drag the roots out of the ground is needless labor here, according to the experience of the writer and others in this country. A plan which succeeds perfectly is to plough five or six inches deep as late in the spring as possible, and seed at once with some quick-growing crop, such as oats, barley, rye or Hungarian grass. Oats are very good, and being of strong growth, seem to smother the grass of strong growth, seem to smother the grass well. This treatment may be laughed at by some who believe in the old methods, but fields which showed a perfect sward of grass have been almost cleared in one season, and the same repeated the next year will clear

Cows should be milked in the stable the year round. In summer it saves much annoyance from the flies, and then the cows always stand better, too. It is neither pleasant nor profitable to be kicked over in the barnyard with a pail of milk, and all trouble of hooking and fighting will be avoided by putting the cows in the stable. And should spraying for hornflies be necessary, it can be done very easily in the stable.

OUESTIONS AND ANSWERS.

Veterinary.

RUSTY OATS.

R. G. DRYDEN, St. Agathe :- "Will rusted oats affect the health of the horse? My horses are down in condition; I do not know the cause; I feed five quarts of oats three times a day to each horse, and good fresh green prairie hay twice a week; I give cut hay and chopped oats, twelve quarts, mixed, at night. My oats were considerably rusted when harvested last fall."

[Rust is a vegetable fungus or mushroom, of the same family as ergot, mould and mildew; and though not in a high degree poisonous, as some of those fungoid plants are, we have had ample oppor-tunity of observing that it, in a large measure, depreciates the value of oats as food for the horse. It makes grain less digestible and less nutritive. It may be better to feed rusty oats than no oats at all. but, if possible, the feeding of such oats should be alternated with rations of other grain, such as chopped barley, boiled wheat, bran mash, etc.] W. A. DUNBAR, V. S., Winnipeg.

OBSTRUCTED TEATS.

J. A. M., Springbank :-- "In July of '93 I bought a valuable registered Shorthorn cow. The man bought her from told me that she only gave milk from three teats. She calved a few days ago, and the quarter of her udder that was blind seemed gorged and full of milk. I at once concluded that some slight obstruction in the teat or udder was the Unfortunately, I had no milking tube, and cause. instead I picked up a small hen's feather, which I oiled and put in the teat; I put it up quite a ways, and after a time the milk came quite freely. I put my hand on her teat twice, and, to my dismay, the feather went up her teat entirely, and there it remains. Will you please inform me what I shall do; do you think it will injure her, or how am I to get it out

[Throw the cow down, so that the teat containing the feather is uppermost; draw the upper hind leg well forward by a rope attached first above the hoof, while the other end is made fast by a hitch taken through between the forelegs and around the neck just in front of the shoulders. Have the head held down by an assistant ; provide yourself with a small dissecting forceps and a very narrow bladed, sharp knife; endeavor, by external manipulation, to bring the feather as near as possible to the end of the teat; grasp the teat firmly with your hand; introduce the forceps, and by exercising a little patience, care and skill, you may be able to seize the offending body and draw it out. If you cannot reach the feather in the way mentioned, it will be necessary either to enlarge the passage or make an incision in the side of the teat. I was going to describe the manner of further operating, but I think, as your cow is valuable, if you are within a reasonable distance of a veterinary surgeon, you should by all means secure his services.] W. A. DUNBAR, V. S.

INDIGESTION IN LAMBS.

P. B. MCLAREN, Clearwater, Man .: -- "There is a disease among my lambs; I have lost quite a num-ber. When they take it first they appear dull, and stop nursing. As the disease increases they pant for a while, and then give a long breath; they hang the head when standing; live four or five days. Please let me know what is the trouble?" days.

The few symptons you have mentioned would ate a form of indigestion. In the lamb and other young ruminants the abomasum, "rennet," frequently becomes overloaded with a mass of curd. This occurs in certain states of the stomach when the digestive juices become overcharged with acid, or when the milk taken into the stomach contains too much acid. If you notice the ailment at its earliest stage, try the following drench, every six hours, until three or four doses have been given : Epsom salts, half-an-ounce; bicarbonate of soda, one drachm; carbonate of ammonia, thirty grains; dissolve in a small teacupful of warm water, and add a tablespoonful of treacle.] W. A. DUNBAR, V.S.

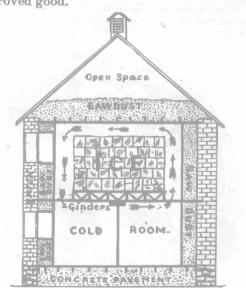
competition of such a vile ' bosh ' as this. A State law should be secured in the interests of the purchasing public, classing the new compound with adulter-ations and forbidding its sale."-Country Gentleman.

We would caution dairy farmers, or those about to embark in that line of farming, to be on their guard against bogus butter in any shape or form. Thanks to persistent exposure, "black pepsin" Thanks to persistent exposure, "black pepsin" seems to have been squelched, but the trouble is seems to have been squelched, but the trouble is these things do not stay squelched. They are con-stantly cropping out in new forms, designed to catch the unwary. A scheme whereby it is claim-ed that two or three times the quantity of butter can be got out of milk is a glittering bait compared with the returns from orthodox buttermaking; and the abave are provided to the scheme return the scheme returns are scheme are schem the above paragraph indicates that some who are either not very well informed or not very scrup. ulous may imagine that there are "millions in it." Dearly bought experience will teach them their mistake. It is the duty of dairymen to guard against the inroads of all such projects. Sooner or later, somebody is deceived and wronged by them. The private consumer pays for what he thinks is butter, but which is something else. Severe penalties are being meted out in the United States to restaurant-keepers and others who serve their guests with "oleo," etc., instead of butter, without having placards publicly exposed to that effect, as the law requires. That these schemes are detrimental to legitimate dairying is obvious, and to our readers everywhere we say, give them a wide berth, no matter under what name or guise they may make their appearance.

An Ice House.

BY W. N. REID.

I see by the April 5th number of the ADVOCATE you offer a prize for the best plan of an ice house, with cold chamber attached. I submit one which has proved good.



The building is 25 feet square, inside measurement, and 22 feet from the floor of the cold room to the ceiling over the ice. The outside wall is of brick, 13 inches thick. The walls should have solid stone foundation, and the floor of the ice house, which is over the cool room, must be well supported by solid posts in the cold room. To prevent drip into the cold room the ice is stored on tight, V-shaped troughs, which carry off the water. The floor of the cool room is best made of concrete. The doors must be double or triple, perfectly tight, and two of them must never be open at the same time. The cool room is 9 feet high, and the ice room 12 The window in cool room has three sashes feet. with air spaces between. Inside of the brick wall, and 16 or 18 inches from it, there is a board partition, and the space is filled with sawdust. The ice is cut square and packed solid in the ice room, leaving a space all around the ice. By this plan there is ne-sawdust in contact with the ice, and the air of the room circulates all around and over the ice. On the floor above the ice room there should be 21 feet of well-packed sawdust.

FIRST PRIZE ESSAY.

How to Make a Success of Winter Farm Dairying in Manitoba or the Territories.

BY A. BEGG, ROSEISLE, MANITOBA.

This subject is such an important one that I am doubtful if I shall be able to do justice to it in this essay, although I have spent my entire life on the farm, where dairy cows were constantly kept. All I shall endeavor to do is to give my experience and observation of forty years on a farm, in Canada. The main object of this article is to draw the atten-tion of the Canadian farmers to the great advantage tion of the Canadian farmers to the great advantage of dairying on a Manitoba farm, and the advantage of winter dairying as a remunerative employment during the winter season. We are often told by those who profess to know that the cause of the present depression and hard times amongst farmers is due to carelessness, idleness, laziness, or extravais due to carelessness, idleness, laziness, or extrava-gance. Now, I believe that there is a good deal of truth in that, but there are other reasons; for in-stance, we all know or should know that the Mani-toba farmers have gone too extensively into wheat-growing. It was all right as long as the prices were good, but when the price came down below the actual cost of production in many cases, it is quite a different thing; it then becomes a serious question to the wheat-growing farmer. As a rule, exclusive to the wheat-growing farmer. As a rule, exclusive wheat farmers have no remunerative employment on the farm for themselves or their hired help. In the winter season, by adopting winter dairying, farmers will be able to give employment to more farmers will be able to give employment to more men during the winter, and to pay better wages. Another advantage is that they can retain their men for a whole year, which I consider much the better way whenever practicable, because we very often have to pay nearly as much wages for eight months in summer and fall as it would cost for the full year. And another thing, we sometimes lose the services of a faithful servant altogether by not being able to give him employment all the year not being able to give him employment all the year round. I claim that farming without keeping domestic stock is wasting an excellent opportunity of making money, when we look at the success that has attended the dairying industry in other countries not nearly so favorably situated or adapted for that business as Manitoba or the Territories. I believe that as soon as our farmers go more extensively into stock and dairying it will be a powerful lever by which he may raise himself from his depressed condition. I claim that, to farm from his depressed condition. I claim that, to farm profitably, the revenue of the farm must be derived from more than one source, if we expect to succeed. Dairying, and especially winter dairying, can be wrought successfully in connection with other branches of farming, and with profit. So, then, the wisdom of us farmers pursuing such a course is very apparent. One of the first and most impor-tant things to consider in the dairying business is to obtain the most suitable kind of a cow, Care-ful breeding of stock is now of the greatest imful breeding of stock is now of the greatest im-portance, whether intended for beef or the dairy. We all know that the best dairy breeds are either We all know that the test dairy breeds are either Ayrshires, Holsteins, or Jerseys, and we also know that Shorthorns are the best adapted for beef, but I claim that by crossing pure-bred sires of any of the above breeds with our grade cows—that is, with our best milkers—we may expect to obtain the best and most suitable dairy cow for the use of the Manitoba and N. W. farmer. The dairy men of this country cannot expect to go in for a pure-bred herd of dairy cows, on account of cost, but pure-bred bulls can be obtained by almost any farmer at moderate prices. I may say that my exfarmer at moderate prices. I may say that my ex-perience in raising a general-purpose cow that is a good milker, and also a cow of fair size, has been accomplished by breeding my best milking grade cows to pure-bred Shorthorn bulls. In that way I have obtained prime milkers, and in that way the general farmer, especially if he follows winter dairying and wants large, growthy calves that will make good veals or fine steers to feed, can procure suitable stock. He certainly cannot get them from the small, ill-shaped cattle often them from the small, ill-shaped cattle often seen in dairies. And the value of the little extra feed it takes to maintain the large, thrifty cow, such as the grade cow just referred to, is very much overbalanced by the value of the calves from such cows, and the large quantity of milk that she will give. When we get a cow capable of digesting a large quantity of food and turning it into milk, and at the same time producing fine, growthy calves, I claim that is the most profitable kind of a cow for winter dairying. After making the choice of your cows for dairying purposes, the next impor-tant consideration is feeding, and abundant supply of good, succulent food is necessary. For winter dairying, we require to procure a good supply of good, well-saved hay, cut early in July. Wild vetches are fine food if well cured. Every dairyman should have an acre or so of rape each year, also turnips and mangolds. Some may desire a more substantial, and at all times more available fodder, and I don't see any way of securing this without a silo. I believe that is the cheapest way of getting good, succulent food. But to those who may not be able to have a silo and ensilage, a good substitute is oats, cut on the green side and bound into sheaves, and cut with a straw cutter as required, and, mixed with about two pounds of bran, fed twice a day. But to those who can have none of the above kinds of feed, but must depend upon the native hay for their milk cows, four pounds of ground grain (barley and oats), with two pounds of bran, will be found a great advantage. Dairy cows

Farmers, Beware!

"A NEW BOGUS BUTTER."

"In Illinois, where they have no end of fine dairy cattle and abunbance of pasture, they have recently been reviving an old scheme of making a sort of cheese-butter or butter-cheese, by subjecting the milk to a high temperature and taking from it both the cream and the curds, so making nearly four times the amount of 'butter' than could be made by the old process. Of course, it is not butter, but neither is it a sophistication of 'butter and other substances not the product of pure butter or milk." The Commissioner of Internal Revenue has been appealed to in vain, he deciding that the new compound was not a violation of the law. Many of the manufacturers of the Fox River and other dairy districts are said to have engaged extensively in the new process, and their product has been put upon the Chicago market, where it competes with oleo and the lower grades of dairy butter, When quite fresh, it is not particularly objectionable, but it is said to require a certain doctoring to give it any keeping quality. Certainly dairy butter is low enough now without being compelled to suffer the day.

English Farm Prospects.

According to late reports, the agricultural outlook at the present time is not particularly bright. The prospect in the early part of May was very good, but a severe frost a few weeks ago has done considerable damage. Potatoes have, in some localities, been so badly cut down that they cannot recover sufficiently to produce a crop. Bean and pea blossom has also been ruined in many places. The hay crop, although fairly heavy, has been seriously damaged by rain after being cut. In some parts continued rain has hindered all hay cutting, and has done considerable damage to low lying and undrained lands.

The English Jersey Cattle Societies' butter test at the Royal Jersey Society's Show, held at St. Helens, proved the best cow's capacity to be able to produce 2 pounds 34 ounces in one day, another 2 pounds 14 ounces. Twelve animals yielded an average of 1 pound 15 ounces of butter each for the

JULY 5, 1894

should have a plentiful supply of good pure water and free access to salt at all times. I nee's scarcely say that, along with good breeding and good feeding, it is absolutely necessary that our dairy cows should have comfortable, well-ventilated stables, and without these a man should not go into winter dairying in Manitoba. In conclusion, I claim that winter dairying is just as pleasant and more profitable than summer dairying on a farm in Mavitoba. In winter we have no rain-storms or mud to contend with, and there are no flies or mosquitoes to molest the cows, and the calves, as a rule, are better cared for, and go out to grass in good condition. And, then, we get from twenty to twenty-five cents per pound for the butter, while in summer we only get, as a rule, from fifteen to twenty cents per pound, and often in warm weather it is not worth ten all the milking and assist in churning, which is a great help to the overworked farmer's wife or daughters. I could say a great deal more in favor of winter dairying, but must close, as this article is now too lengthy.

now too lengthy. Norm — If a farmer would make a success of winter farm dairying, it must not be a mere sideplease style, but it should be managed as though the farm were run for that special purpose. In the selection of a bull, the dairy qualities of his managed as though be taken into account, for if he be of a beefy type from a beefy strain, his in origin will follow suit. With Mr. Begg's idea be of a beefy type from a beefy strain, his in origin will follow suit. With Mr. Begg's idea in a state of be of a beefy type from a beefy strain, his in origin will be to preserve the beef tendency and milk tendency in a state of balance as it were. Where a farm is run specially or dairy purpose, it will be found necessary to make them profitable. Both the quantity and quality of the milk must be taken into account. It is not merely the percentage of fat in a cow's milk that measures her capacity but the *pounds* of *fat* hat measures her capacity to observe it making a must be observed, not only in regard to the feeding must be observed, not only in regard to the feeding must be observed, not only in regard to the feeding must be observed, not only in regard to the feeding must be observed, not only in regard to the feeding must be observed, not only in regard to the feeding must be observed, not only in regard to the feeding must be observed, not only in regard to the feeding must be observed, not only in regard to the feeding must be observed, not only in regard to the feeding must be observed, not only in regard to the feeding must be observed, not only in regard to the feeding must be observed, not only in regard to the feeding must be observed, not only in regard to the feeding must be observed, into the quality of the butter will be for many dirt. All milk vessels must be kept infer, and there will be loss in selling. In the must place, the milk must be skimmed "clean," or in other words, this creaming must be exhaustive; will be loss enough in churning to spoil the pr

Dentition and Dental Diseases of Farm Animals.

BY DR. MOLE, M. R. C. V. S., TORONTO. (Continued from page 49.)

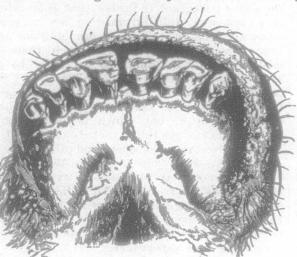
In ruminants, as already mentioned, there are thirty-two permanent teeth, eight incisors, and twenty-four molars, but forty-four is said to be the typical number. There are three kinds—the incisors, which are chisel shaped, for cutting ; the canines, for tearing, absent in the ox, and molars, for grinding.

The incisors are smallest in the insectivora, larger in the carnivora, and of great strength in the herbivora, and always somewhat loose, the table inclined forward and border sharp ; these sharp teeth become more and more blunt and narrow, until in old age they are reduced to very small stumps, standing out quite free from each other. When the enamel is worn from the table, which takes place about the tenth year, the entire crowns of the teeth wear down until in extreme old age only the necks are left. Molar teeth are named and numbered according to their position; in the temporary set there are three molars on each side of the upper and lower jaw, and in the adult these teeth are changed for permanent, while the three additional teeth, the fourth, fifth and sixth in position, all of which are permanent teeth from the first, making the full set of permanent teeth—six on each side of the upper and lower jaw. At birth the temporary molar and incisors are all so advanced that they may be seen in outline; frequently the cutting edge of incisors is quite through, as seen in figure 14.

teeth proceeds rapidly, and at one month the temporary incisors are all in view, and the temporary molars can be seen on inspection. As the jaw enlarges the teeth are less crowded, and the fourth molar appears at six months as a permanent tooth, although its posterior surface will be still covered with the gums. Between six and twelve months the temporary

Between six and twelve months the temporary incisors become worn, the space between them enlarging in preparation for the permanent teeth. It is difficult to estimate the age in months of a calf; up to one year butchers take notice of the growth of horn.

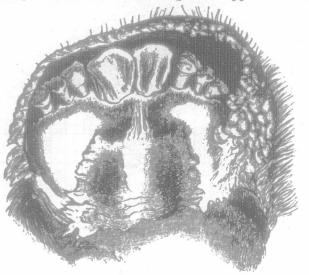
The figure No. 15 will give a pretty accurate description of the incisor teeth at one year; the fifth molar will also guide the opinion, which is very



[Figure 15-Incisors of steer at 1 year.]

much like the fourth molar in appearance at six months. No change occurs in the incisors except that which is caused by the wear of the teeth and the growth of the jaw. At the age of one year and and nine months the two central become loose, and the first broad teeth begin to project through the gums. The figure No. 16 shows the teeth of a heifer at

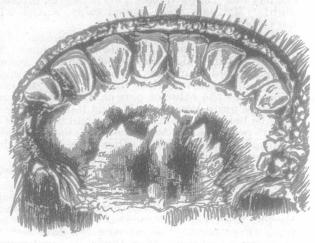
the age of one year and ten months, which may be accepted as indicative of the general appearance of



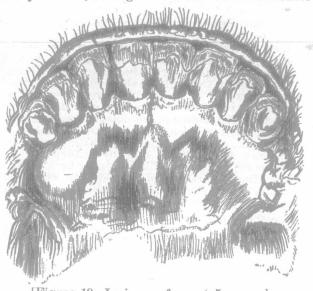
[Figure 16—Incisors of heifer at 1 year and 10 months.] the incisors at that age; while the incisors are advancing, the sixth and last permanent molar makes its appearance, and in position at two years old.

Shortly after the first and second molars are cut, third makes its appearance. The animal at the age of three years will have three anterior molars cut and level with the other teeth, but showing very little signs of wear. The third pair of permanent incisors may occur at any time between two years and six months and three years of age.

and six months and three years of age. The fourth pair of broad incisors are the corners, and show more variation in the time of cutting than any of the others in the figure No. 18. The



[Figure 18—Incisors of ox at 3 years and 3 months.] state of the incisor teeth at three years and three months is depicted. The eruption of the corner permanent incisors; the fourth pair of broad teeth completes the permanent dentition of the ox, and after this period the changes in form, which are due to wear, will somewhat assist the examiner in forming an opinion of the age, but no exact estimate can be based on such evidence. At five years old, see figure No. 19. A considerable



[Figure 19—Incisors of ox at 5 years.] amount of worn surface is apparent, and as the years increase the difficulty of judging the age by the appearance of the teeth is not diminished. It is not usually a matter of importance whether an ox is five, six or seven years old, and there are no well defined marks other than the rings on the horns: some men add two to the base and countal

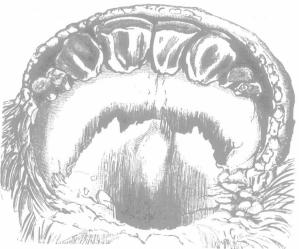
It is not usually a matter of importance whether an ox is five, six or seven years old, and there are no well defined marks other than the rings on the horns; some men add two to the base, and count all the rings. We prefer to count all the rings, and add three for apex. Both ways are correct, but there seems to be less liability to error by counting the apex as three years; for the first, second and third years rings can hardly be defined. The teeth become narrower and more widely separated from each other year by year; the pegs are only visible, whilst some of the central ones are quite level with the gums in figure No. 20.



[Figure 14—Incisors of calf at birth.] As soon as the calf is on its legs, the advance of

The first and second permanent molar replace the temporary about a month or six weeks later. It often happens that young cattle are entered as under two years old at agricultural shows, but when they show four broad teeth well developed, there need be no hesitation in saying that their teeth show the animal to be above that age.

From two years and three months to two years and six months the second pair of broad teeth replace the temporary; from mal-nutrition or disease,



[Figure 17—Incisors of ox at 2 years and 6 months.] it may be delayed until three years, but the variation is never on the earlier side. We have been referee in many disputes from this cause. On one occasion we remember to have withdrawn our original opinion; the corroborative evidence of certificates was in favor of the animal, yet he was over two years old, because he had four broad teeth and the sixth molar well in wear.



[Figure 20—Incisors of ox at 10 years.] The mouth of the ox at ten' years of age is shown, but, as we have before stated, there is not the same change resulting from regular wear as may be seen in the horse, so that no definite opinion can be advanced.

THE FARMER'S ADVOCATE.

21

Summer Care of Poultry on the Farm. BY MRS. IDA E. TILSON, WEST SALEM, WIS.

Poultry need far less food in warm weather, but I practice giving some grain. The sun stews so much moisture out of stock, that the water supply is especially important. From our large ice-box a tube carries the waste water out into an iron dish, which, when necessary, I shade with a few boards. This is the favorite drinking place for one flock. because cold, running water of the purest kindwhich reminded me that I once had a neighbor with chronic bowel complaint, cured by drinking, for over a year, no other water than melted ice. The other hen-house, farther away, has to depend on my frequent refilling of dishes from the cool tank close by. A grass run is, of course, the best provider of green food. A man being asked whether he raised chickens and vegetable, said he raised the chickens, and they razed his vegetables. My father planned to put a wire-netting fence across our garden this summer, but if high and in good shape, it would cost \$1 a rod, or about \$12, and we calculate our otherwise well-fed hens will take several years to do that much damage to a farm garden. The village fowl or the neglected hen, which never saw a vegetable, is the one that eats all before her. like a hungry boy at a picnic. In spite of some unsightly holes and my father's mournful prophecies, our rows of peas, etc., come up every year, green, straight. and free from insects. I try to sooth him with soft words, make a great pretense of "shooing" them away, and boil potatoes and chop beets and onions into May. We use many cranberries in the family, so last winter I saved and boiled all the poor ones with the hens' potatoes, and they liked them. I used so much clover chaff then that my fowls came out neither spring-poor nor hungry. Barn sweepings were not enough, therefore my father threshed more with a flail. As we shall probably have only timothy next year, I have some barrels of the clover chaff put away in a dry place. Last summer I saw two yards with soil packed too hard for mere claws, and seeming as though nothing short of a spade could break it up. Portions of the spaces were occupied by plantains gone to seed, which I have seen fowls eat, and such a covert would attract insects, but part of the greenery mowed would have given new, tender eating. The roosting places adjoining those neglected yards had quantities of droppings to poison the hot, damp air. When fowls are confined, lawn clippings are relished, if young and fresh. Be careful about throwing out grass roots, large pieces o bacon rind, or raw vegetable, as such may be jammed down by the horny beak and bony throat, but fail to be pushed on out of the elastic crop. A crop-bound hen often pulls or twists her neck in eating, but that is not a sure sign, because roupy, sorethroated fowls do likewise. When a hen has been crop-bound so often or long that her crop becomes stretched, some old, decaying food remains in the sag, below level of outlet. Her breath will be foul, and eggs apt to taste bad, even though she con tinue to keep flesh and lay. Having read about a little girl who, before she gave them any supper, always felt the crops of her flock, presumably a small, tame company, and, admiring her research, I have noticed such things more, and opened the crop of a chick I killed last spring with cornmeal. The swelled and sticky mass was a good lecture on the effects of clear cornneal. Some kernels of shrunken wheat were also found, increased to full size, which emphasized the lesson that whatever is going to swell does so inside, if it has no chance outside, and due allowance must be made. The passage from crop seemed large enough for a full-size kernel, so I continued my shrunken wheat with success. I am sure bowel trouble is constitutional, because I have seen it go down several generations in certain lines of fowls. Do not set eggs from such a hen, nor used her for a brooder, as repeated observation has taught me her brood are apt to get the same trouble, perhaps through getting some of her droppings on them, and finally into them. A neighbor lately asked me how cracker crumbs compare with bread. They are harder to crumble, and if wet go to slop. The bread itself should be stale, and I have read about one man who got, at hotels and restaurants, quantities of pieces, which he spread and dried on his attic floor. Three neighbors of mine have each adopted this plan, one of our three hotels keeping a box there for table scraps. I am so afraid of bones that I would have to sort the mess somewhat, hence I prefer the good graces of the butcher who has contracted my poultry again, and gives me liver, because he says he wants those chickens nice. This season I had my first experi-ence with Brown Leghorn chicks. I knew they were hatching very promptly, but intended taking them off the twenty-first day, like all my more phlegmatic kinds. When feeding their mother, the twentieth day, some of her chicks came out and took monthful that and have here been unsuitable took mouthfuls that would not have been unsuitable for a child. Then I took them off (not waiting 24

100km

hours before I fed them, either), and they are eating and growing yet. The Brown Leghorn is probably most like the original wild hen, and a breaker of rules and precedents.

I once had a clucker lift up her little slat yard on her strong neck, and go out free. This year two have learned to dig out, when the yard is on sand instead of turf. One was bright enough to squeeze in again when she saw a storm coming. A neighbor has built a detached shed-like structure, which two men could move. Its front also is boarded, but has three large windows. There are simple doors in back, and the interior is divided into three little yards, with a coop in each. The broods within got considerable sunshine, and needed no attention in wind or rain. All such things are convenient for shade and shelter throughout the season. Riding out a stormy day last fall I saw several fowls very sensibly betake themselves to a small natural cave in the bank along the creek. A neighbor, while living in Dakota and before she got poultry conveniences, set half a dozen hens successfully in a pile of stones gathered off their pasture, and piled near the house. The climate there is dry, and a good dog kept marauders away.

Abortion in Cattle.

At a recent meeting of the English Royal Agricultural Society a report from the Special Committee on Abortion was submitted. So far as the inquiry had extended, the Committee believed that they were justified in making the following recommendations:-

"(1) For practical purposes, and with a view to the adoption of the necessary precautions, the disease should be deemed to be contagious; (2) for the purposes of prevention, strict sanitary precautions, including habitual cleansing and disinfection of places where breeding cows are kept, should be insisted on, and particular attention should be paid to the character of the food and the water with which the animals are supplied; (3) the treatment by the aid of antiseptics is certainly to be recommended, and the evidence which has been already furnished in favor of the use of a solution of bichloride of mercury appears to the Committee to justify the advocacy of its general employment in every case where the disease presents itself in a herd. It may be advisable to state that in viwe of its poisonous nature, it is necessary to guard against any injurious consequences arising to pigs or poultry from the careless disposal of the sweepings from the sheds in which this disinfectant has been used; (4) on the question of experiments for the purpose of proving whether or not the disease is of a contagious character, the Committee do not feel justified in advising the Society to expend a large sum of money in this direction. At the same time, it is impossible not to realize that a decision on this point is a matter of very considerable importance, and the Committee recommend that an additional sum of £200 be placed at the disposal of the Veter-inary Committee for the purpose of further scientific investigations into the causes of abortion in cattle.

The Cultivation of Corn.

It is not many years since it was thought



265

THE STORY.

Over the Edge of the World. "Some of you must remember Graham." "Stout man with a pretty daughter ?"

<text>

"When I first knew Graham," began the gray man, "he was a grif at Allahabad, as good-looking, cheeky, high-spirited ayoung competition wallah as ever passed an examination only fit for bookworms. How the Government of India can ex-

"Point, sir, point," murmured the Major. "Point, sir, point," murmured the Major. "I beg your pardon ; well, how he managed to have kept up such an absorbing interest in the formation of his white ties or such a keen appetite for all things digestible or indigestible in the whole solar system was even then a mystery to me. For, although I was but a few years older, I already wore spectacles and feit myself circumscribed by the Penal Code Graham, on the other hand, was absolutely untrammelied, except, perhaps, by good nature, and he was coming near the inevitable smash when typhoid fever stepped in between him and the dogs. To be brief, he fell out of the hands of a bad woman into the hands of a good one, who nursed him as she had nursed many another homeless boy through the valley of the shadow.

<text><text><text><text><text>

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.

Wash out the swill barrel in which you mix your pig feed, and do not allow the swill to become decomposed or mouldy, for even a pig cannot make healthy growth out of rotten food.

266

<text>

<text><text><text><text><text>

that night, and be back by dawn, if poor Graham was to find decent Christian burial. The doctor, too, was anxious to be off, knowing that he might be required elsewhere at any moment. Just as we were starting, a thought struck me, and I went once more into the room where the dead man lay. The chicks had been tied up, and the four faintly-glimmering squares of the windows only served to show the dark beyond. Night had fallen, and the heavy clouds seemed to smother all breath of life in the world. The only thing really visible was the hard, rigid square of the sheeted bed. A curious feeling that I was de-serting a comrade came over me as I turned to seek for the tele-graph form on which poor Graham had scrawled his last wish. It might, I thought, have a melancholy interest for his wife, and I wished to secure it from chance of loss. To my surprise, it was nowhere to be seen, and after diligent search. I was forced to accept Elahi Baksh's explanation, that in all proba-bility it had gone with the other forms for desnatch. "The bearer is a fool," he said, "fear hath made his brain dissolve. Nevertheless, the schib need not be alarmed; I will watch, and no harm shall come to my master in your honor's absence."

Somehow, I felt inclined to trust the man, and it was a relief as I rode away to see his still, impassible figure crouched beside the oil chiragh in the verandah. The night was dark as death itself, and I remember wondering how the feeble flicker of the oil lamp, which scarcely showed the darkness around it, could shine so far into the night. I must have been a good half mile away when I turned to look for it the last time, and there it was, like a star. The rain came down in torrents; altogether a night to be remembered, with its ghastly rousing of carpenters and grave-diggers, and dreary, dreary preparations. Through it all the flicker of that oil hamp seemed to light up one corner in my tired brain-that which held the memory of the dead man lying all alone. In the darkness, charged and temporarily scattered a dismal little procession carrying the roughly-made coffin on a string bed, I drew bridle in front of the resthouse once more, and dismissed the wearied beast to find its own stable. The glimmering dawn whitened the bare outlines of the bungalow, and showed me Elahi Baksh still crouched beside the oil lamp. "Haven net slope to one is which held box in the first buch on his shoulder he stood up alert." Somehow, I felt inclined to trust the man, and it was

Then came the thought, urgently, persistent. Whose hand had guided him back ? Whose care had come to his aid when friends forsook him ? In my heart I knew, but I set the know-ledge aside impatiently. Elahi Baksh still stood outside with folded arms. Him I would confront and question; there could be no mystery-nothing beyond explanation. So I went to him and asked him when this thing happened. "What thing, my lord," he answered. "Don't look like a boiled ow!." I cried; you know quite well the sahib is alive-the danger is past-he will recover." "God be praised !" was the reply. Shall I make tea for the mem; she must be tired. "There is no mem sahib !" I cried, angrily; you have been asleep and dreaming." "Before heaven. I have not slept ? How could I? The mem came so often, crying: 'Elahi Baksh ! Elahi Baksh !"" Then I spoke quietly to him, for I saw he believed what he was saying, and told hi n he was mistaken; but he show his

Then I spoke quictly to him, for I saw he believed what he was saying, and told hi n he was mistaken; but he shook his head. "She came just after you left, sahib," he insisted. "I was sitting by the light, and when I looked up she stood there where you stand, and her voice was so kind and soft as she said: 'Elahi Baksh, your master is not dead; his soul is dreaming by the gate of life. I have come to let him in, for the gate of death is ajar for me. Bring fire to warm the empty house.' So I brought fire. Sometimes when I looked up she was there, and sometimes she was not there. She came and went, calling: 'Elahi Baksh ! Elahi Baksh !' And everything she bid me do, or bring, I did. She must have come a long way to nurse the sahib; she looked so pale and tired. God grant her and her children long lives." "And when did you see her last ?' I asked. He put his hand to his head in confused thought. "The night was so long, sahib, and she came so often, call-ing: 'Elahi Baksh ! Elahi Baksh ! At the false dawn, sahib, she touched me on the shoulder. I must have been drowsy. She was so white, and her hand cold as ice. The jackals were slinking away. I saw two by the pillar yonder. 'The door is open, 'ane said, 'bring food to welcome the master home.' So I brought it." "And when you went into the room, was the sahib alive ?" Again he passed his had once his foorhead and hereited

brought it." "And when you went into the room, was the sahib alive ?" Again he passed his hand over his forehead, and hesitated. "I was not in the room, my lord. There was no light— nothing but the mem sahib standing where you stand, and call-ing to me: 'Elaki Baksh ! Elaki Baksh.' Her voice was so soft, like the voice of some one far off.-very far off." I walked up and down the verandah several times before I asked him if he had ever seen this mem sahib or anyone like her.

He shook his head. "I have seen few mem sahibs. I do

Her.
He shook his head. "I have seen few mem sahibs. I do no know the face of my mistress; doubtless it was she."
Well, Graham recove: ed, but returning health brought him no memory of anything between the time of his trying to write the telegram and his awakening next morning; nor did I think it wise to tell him Elahi Baksh's strange story. I hinted at it to the doctor, but he was in a furious rage at the loss of his bottle of elixir, which he had left behind him in Graham's room by mistake, and which was not to be found next day. He declared that Elahi Baksh had tried its effleacy on his master, and finding it succeed, had stolen the remainder, enough to have made him—the doctor—famous for life. "Twas an old beast of a fakir gave it to me; what the divyle was in it, I don't know; but Graham was as dead as a doornail, and now he is as fit as a fiddle. And the elixir's gone. What do you say to that? except that I was a fool not to try it myself." It seemed reasonable; more reasonable than Elahi Baksh's story, till time brought a curious confirmation of the latter.
Coming home three weeks after, I found Graham at his writing table. He lifted a pained, set face as I entered, and pushing the letter, over which he had been leaning, towards me, said:

me, said: "There is bad news. The mem sahib is dead." I glanced at the letter, scarce seeing the words. "It would not have been so hard," he said, after a while, "if there had been any message, any thought; but there was

"Perhaps there was a message;" I began. "No; read it. There was no time. It was sosudden at the

last." She had been found late one morning dead at her writing table, her head resting on her clasped hands, beneath which lay a telegraph form on which was traced an illegible scrawl. Whether, feeling ill in the night, she had risen, intending to telegraph for her husband, who was away at the time, or whether she had fallen asleep forever as she sat writing late into the night, as was her wont, no one could say. Nor could any one decipher the secret of the telegram. It was an Indian form, but as others of the same sort were found in her desk, even this clue was lost.

I put my hand on Graham's shoulder, feeling, as it lay there, he long-drawn breath of a strong man's grief. "Graham," I said, "there was more than a thought—more than a message. She kept her promise and came to you when you sent for her." Then I told him Elahi Baksh's story. And he was com-She

There was a pause. Then the young doctor spoke. "A clear case, as I said, of suspended animation. It is not in the

THE QUIET HOUR.

My Lambs.

I loved them so, That when the Elder Shepherd of the fold Came, covered with the storm, and pale and cold, And begged for one of my sweet lambs to hold, l bade him go.

He claimed the pet — A little fondling thing, that to by Breast Clung always, either in quiet or unrest. I thought of all the lambs I loved him best, And yet-and yet-

I laid him down

In those white shrouded arms, with bitter tears; For some voice to'd me that, in after years, He should know naught of passion, grief or fears, As I had known As I had known.

And yet again

That Elder Shepherd came ; my heart grew faint : He claimed another lamb, with adder plaint,— Another ! She, who, gentle as a saint, No'er gray me rain Ne'er gave me pain.

Aghast! I turned away. There sat she, lovely as an angel's dream, Her golden locks with sunlight all agleam, Her holy eyes with heaven in their beam,— I knelt to pray.

Is it Thy will?

My Father, say, must this pet lamb be given ? Oh ! Thou hast many such, dear Lord. in heaven. And a soft voice said: "Nobly hast thou striven ; But,—peace be still."

Oh! how I wept, And clasped her to my bosom with a wild And yearning love—my lamb, my pleasant child; Her, too, I gave. The little angel smiled And slept.

"Go, go," I cried, For once again that Shepherd laid His hand Upon the noblest of our household band. Like a pale spectre, then, He took His stand Close to his side.

- And yet how wond'rous sweet The look with which He heard my passionate cry : "Touch not my lamb, for him, oh ! let me die !" " A little while," He said, with smile and sigh, " Again to meet."

Ay ! it is well— Well with my lamb³, and with their earthly guide ; There, pleasant rivers wander they beside, Or strike sweet harps upon its silver tide—

He Shail Gather the Lambs.

There was a poor mother standing by a very little grave and weeping as if her heart would break. Then there came to her an old man, who said: "My child, my daughter, listen! There was a Shepherd, and He had a flock, and in the flock was one sheep with a very little lamb by its side. Do you listen? Now, the sheep loved the lamb very dearly, and followed wherever it went, straying away after the lamb far from the fold. Then the Shepherd, who saw that the sheep might be lost, and the lamb too in some pit or on some wild and the lamb, too, in some pit or on some wild moor, caught up and carried the lamb in his arms away to the fold. And the sheep came meekly and patiently by His side. It followed the Shepherd then, for He had the lamb, too.

Jesus Called a Little Child Unto Him.

Oh! ye angels, ye who flutter Whitest wings, unstained w Ye who endless praises utter,

JULY 5, 1894

neglected his promise. "Before heaven, my great lord!" he answered, gently, "I have not slept all night; I have watched. If your honor doubts his slave's word, let him ask the mem sahib." Involuntarily I asked: "What mem sahib?" The dazed look became stronger. "How should a poor man know? I mean the mem who came after your honor left."

""Came! after I left! Why !--where is she now ?" "With the *sahib*," he replied; "or stay! she is coming out.

out." He pointed to the door, and, as I live, something—the wind of dawn, perhaps—swayed the chick, turning it to one side as if an invisible presence were passing through it. For a moment I hesitated; then reason rose in wrath against my fear, and I entered the room. All seemed the same as when I had left it, and the low bed with its white covering still gleamed, the only distinct object amid the pale shadows of dawn. Suddenly I felt a rush of blood to my heart, and heard a cry. I must have uttered it, but I was unconscious of every sense and function save sight, as I strained my eves with an awful eagerness to the outline of the sheet. Surely—sumething moved ! Rising and falling—rising and falling. A great horror seized me, and I could have fled from the fear of life as I had never fled from the dread of death. Slowly I forced myself to ap-proach the bed, and turn back the sheet from the still face. My friend was dead, I told myself ; what could disturb his rest ? It was a trick of fancy ? a wavering shadow? Yet nov had shook, my feet failed me. A moment after, the know-ledge that what I reared was true removed my terror. I found myself looking down on Graham's sleeping face with perfect calm; for it needed but a glance to show me that this was sleep, not death. Life, with all its possibilities, lay in the even, regular breathing, the quiet, painless face. He pointed to the door, and, as I live, something-the wind

"But how about the telegram," asked the gray man; and the various replies lasted till the dinner-bell rang.—The Eng-lish Illustrated Magazine.

A prize of \$2.00 will be given for the best essay on "Women in the Light of History." All communications to be in our office by August 3rd.

MINNIE MAY.

"No more glorious victory can be gained over another than this, that when the injury begins on his part, the kindness should begin on ours." Fillotson.

Lighten Home Work.

Have a stool of the right height, so that you can sit down when doing the family ironing; you will be able to get through a big basket of clothes much more easily, especially if you have the board in a cool room, say the dinning room. The exertion of rising to change the irons will not be great.

rising to change the irons will not be great. Even the washing can be done very comfortably by a woman not over strong physically, if she will not fret about it, but will go to work the right way. The white clothes should, of course, be placed in The white clothes should, of course be placed in warm water and soap at night, and by morning they will easily rub clean. Into the boiling water should be poured a teaspoonful or a trifle more of kerosene, which will whiten the clothes.

And then carpets ! There are still a great many carpets used in modest homes, where the care of them is wearing out the housewife. Even soft pine floors can be prettily stained and varnished, after the cracks have been filled in with putty, and the pretty, cleanly method of laying rugs about will give the room the wholesomeness of our grandmother's days and do away with the principal bother of house-cleaning time, to say nothing of the labor of frequent sweeping. The soft, long-handled brush will remove most of the daily accumulation of dust.-Home Queen.

Wherefore bore ye him away?

Wherefore? That his soul may be Cleansed from all impurity. Wherefore? That his opening mind Wisdom's only spring may find. Wherefore? That his heart be filled All with love from God distilled; That his body never know Throb of pain, or pang, or woe, But all beautiful and wise In the Resurrection rise. In the Resurrection rise.

Oh! ye angels, ye who flutter Whitest wings, unstained with clay, Ye who endless praises utter, Whither bore ye him away?

Whither? To a world so bright That its darknesses are light! Whither? To a life so blest That its weariness is rest. Whither? To a Home so fair, Praises, only, form a prayer. There the little children meet, Gathered round the Saviour's Feet. There the little children rest On the tender Saviour's Breast; There the little children dwell In His love ineffable; Far from earthly care and woe Far from earthly care and woe Suffer thou *this* one to go; Far from tears and eyesight dim, Let him closer be to Him; To His glory, free from blot, Spare him, and "forbid it not."

Baby's Bed.

So straight and narrow is the quiet bed In which my precious little darling sleeps, I could not leave her there, in peace, alone, Without the knowing—God doth mark His own, And keeps safe watch o'er all these little beds Which cast short shadows in the morning sun, Ended their pilgrimage ere day begun, And throws soft coverlet of summer's sheen, Bordered with daisies and grasses green, Or winter's pure white sheet of drifted snow Above the dreamless form that slumbers low. And so, I could not leave my tender lamb alone, Without the knowing—God doth mark his own.

THE FARMER'S ADVOCATE.

UNCLE TOM'S DEPARTMENT.

MY DEAR NEPHEWS AND NIECES :---

"Once upon a time," as the fairy tales begin, the pupils of a certain school were called upon, each one to write a stanza of original poetry, and this is what one boy wrote :

"Of all the glad words that tongue can speak, The gladdest are these: 'No school next week.'"

And now these words seem very appropriate as the hot, sultry weather is beginning, and I am sure the hot, suitry weather is beginning, and I am sure you all agree with him, do you not? Well do I remember with what longing we counted the weeks, and near the last, the days that preceded the much-loved vacation; even the approaching ex-amination lost half its terror in the anticipation of the freedom we were so soon to enjoy. Although I had to do my share of weeding as soon as school closed, I generally managed to have a pretty good time, and can yet recall many a pleasant ramble we had berry-picking, and enjoying our-selves in our own fashion.

Many a time we returned from the "berry patch " almost too tired to move, but the next time a crowd was going we forgot all about the past weariness, and started off as merrily as ever. Times may be changing, but one thing seems inalterable— the spirits of our Canadian children, and may it be ever so! While I admire a manly man, I also like to see a childish child.

I hope that during the past term my boys and girls have made much progress, and that the examinations now pending

hold no fears for them. I think you must all have been applying yourselves very closely to studies or other work, formy supply of letters has greatly diminished, a fact I am truly sorry to admit. Those who have been sending answers very rarely have their work in in time for publication. Now, as we are commencing a new half-year, I wish very much that you would try to be more punctual; so much de pends on the habit of punctuality, that it well deserves to be ranked among the cardinal virtues, and is most worthy of cultivation.

I am not satisfied with the number of contributors. What is the matter? Do not the present arrangements for prizegiving meet with your approval? If so, why not offer some suggestions as to how we may make them more agreeable? 1 shall be always

Wild Boars in the Forest of Fontainebleau. FROM THE ORIGINAL PAINTING BY GIUSEPPE PALIZZI.

(ETCHED BY PETER MORAN.) Associated most intimately with the romantic history of some of the famous palaces and cas'les of Europe are the noble forests which form a part of their ample domains. Confining our attention to France, the palaces of Fontainebleau, St. Cloud, and to a certain extent, Versailles, may be cited as among the most familiar examples. Here, side by side with the utmost refinements in architecture and decoration, with exquisite floral and landscape gardening, are stretches of venerable forests almost primeval in their wildness, their grandeur, their solemn, mysterious beauty. And these gloomy recesses have been the theatre of the exciting chase, of scenes of gallantry, of treachery, of blood. Concerning the forest of Fontainebleau, one of the finest and most picturesque in France, an appreciative writer says : "The forest of Fontainebleau is full of mystery, of noises, of by-ways, of light, of obscurity; there are profound caverns, there are little paths which sweetly wind beneath the shade upon the flowery turf; there are waves of sand which escape from the half-opened rock; there is a drop of dew which falls with a soft murmur from an inert hill; there are a thousand strange forms, as there must have been many on the earth after the

Puzzles.

1-ENIGMA. In Italy and sunny Spain I'm the centre of attraction; In Africa, o'er many a plain, I'm surely proud in action.

In France and Asia I am known, So my origin now trace ; In America 'tis plainly shown I hold a leading place.

In India, China and Japan I'm certain to be found; In Switzerland and Austria, And Canada I'll be bound, What am I? FAIRBROTHER.

2-RIDDLE. Upon the grocery counter, In any store I'm found; And also in the river With the fishes I abound.

The urchin eyes the tempting fruit, By me he gains the prize; Thus in the different forms of life, Step by step I rise.

By me a hundred miles is shown To be an inch in length, But only those who know me well, Can estimate my strength.

CHARLIE S. EDWARDS.

3-ENIGMA. A man one day went fishing, Without a line or hook, He did not spear, nor did he troll, Yet all the fish he took Unto his wife-did make her stare. "Where got he them I' you say. "Where got he them I' you say. An instrument of music name, The mystery 'I fade away. ADA ARMAND. 4-SQUARE WORD.

My FIRST a curling tail displays, My SECOND is a tail al-Ways, My WHOLE'S a tail of other days.

Oriental Justice.

Semi-barbaric law is sometimes more just than that of more civilized countries. A story is told of an aged man who once appeared before the Cadi at Damascus. He was in distress. "What can I do for

you this morning ? asked the Cadi.

"Hassan, the rich merchant, has done mydaughter, Fatima, a grievous injury. She was engaged to be married to a young man whom she loved She was as lovely as the rose, but Hassan spread evil reports abouther, and he who was to have married her has abandoned her in consequence of these false reports. She is now broken in health and spirits, and longs for death. Justice! oh, Cadi! let

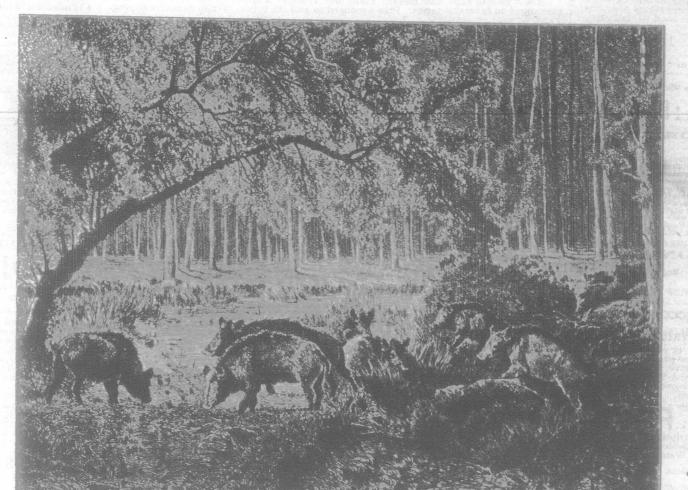
> revail The Cadi wrote out

a capias, placed it in

the hands of his

deputy, and in a short

time Hassan was



pleased to receive suggestions for the benefit of our department, and whenever practicable to carry them out. I hope all

our old puzzlers will begin again, and not only that, but let each one try to induce one or more of his friends to contribute also, and thus our family will be once more what it formerly was-a delight and pride to us all.

I have been thinking of all who helped to brighten our circle during the past year, and regret that so many have absented themselves lately; so at the conclusion of this letter I will give the roll-call of the absentees, and hope that next month almost all will be prepared to answer "present."

To those who contribute puzzles, or wish to do so, I must again say that it is not necessary that they should all be in rhyme, for, while they sound pleasanter, many of our best puzzles have been in prose. I would be pleased to have more variety also. Why not try some old-fashioned cross-word or numerical enigmas, diamonds, half squares, transpositions, etc. Charades are very good indeed, but we have had so many lately that perhaps our readers are becoming tired of them. I would be very glad to receive any new styles of puzzles that are not too difficult of solution. Now for our roll-call: A. R. Borrowman, H. McKim, I. Irvine Devitt, Agenthe Berghammer, J. Umbech Oliver Snider Agatha Prudhomme, J. Umbach, Oliver Snider, Addison Snider, M. Rodgers, Lily Day, Fred Hall, Amos Howkins, Henry Bobier, Edith Fairbrother, Henry Beck, Ernest Richardson, Elsie Hammond, Percy Graz Willie Hunter Mar Marigen Clara Percy Gray, Willie Hunter, Mary Morrison, Clara Rilance, A. B. Pickett, Lizzie Miller, Morley Smith-son, George Rogers, Jessie Sutherland, Minnie Moore, G. Garside, Irene M. Craig, Minnie Harley, Jessie Gordon, J. W. Moore, Alice Anderson, and Ada and Beatrice Fowler.

Your return, my dear nephews and nieces, accompanied by a long letter from each of you, will greatly cheer your old UNCLE TOM.

WILD BOARS IN THE FOREST OF FONTAINEBLEAU.

the effect of which is all-powerful. The artists, the poets, the romancers, the lovers-those great poets -have, from time immemorial, made the forest of Fontainebleau the empire of their dreams. It is composed of nearly forty thousand acres of ancient and majestic trees; it is bounded on the west by the Seine, on the south by the Canal de Briare, and is no less than sixty miles in circumference.

Oh ! what terrible and touching histories this aged forest has covered with its shadow,—an ancient, silent, profound shadow, reached by no other noise than the stag braving, the bird singing, the horn resounding through the wood."

Our artist has pictured one of the many picturesque openings in the old forest, in which nestles an emerald pool known as "La Mare Verte." The remote loneliness of the spot is suggested by the presence of the wild boars who range here undisturbed.

Giuseppe Palizzi was born at Lanciano in 1813. He at first studied jurisprudence, but abandoned that profession in 1836 for that of painting, which he studied in the Academy of Naples. In 1844 he went to Paris, where he had Troyon for a master. Most of his art life has been spent in France. As a painter of landerspece figures and animals he holds painter of landscapes, figures and animals, he holds high rank. He is Chevalier of the Legion of Honor.

Joys come to us like blossoms, and we think we have them; and then, when, like blossoms, they fall, we think we have lost them, although the seed or shadow is left; but they are not gone because they have passed through a particular period of their development.

deluge, when the waters had disfigured at pleasure everything in creation. At each step you take in these mysteries, you meet some of these novelties, in which he confessed that he was a liar and a slanderer.

The court took the case under advisement. Next day the decision was rendered.

"Hassan, stand up," said the Cadi. "You have done this unfortunate girl a great injury. You have robbed her of her good name, which was all she had. The slightest punishment for robbery is the loss of your ears. The executioner will cut off your ears, to remind you that you must not cut off the reputation of others." the reputation of others.

At the given signal, the public executioner lopped off both of Hassan's ears. "I am not done with you yet, Hassan," said the

Cadi.

"Mercy! Mercy!" pleaded the unfortunate man; "have I not restored the girl's reputation by my public retraction ?"

Yes, you have restored her reputation, after a fashion, and now I propose to restore your ears, after a fashion. The executioner will proceed to sew on your ears again.'

And it was done.

-Home Queen.

A sweet girl graduate, says an exchange, thus A sweet girl graduate, says an exchange, thus describes the manner in which a goat butted a boy out of a front yard : "He hurried the previous end of his anatomy against the boy's afterward with an earnestness and velocity which, backed by the ponderosity of the goat's avoirdupois, imparted a momentum that was not relaxed until he landed on terra firma beyond the pale of the goat's jurisdic-tion." tion.

STOCK GOSSIP.

JULY 5, 1894

H. O. Ayearst, DeClare, Man., called at our office recently. He has been looking about the Winnipeg district for a suitable place to locate his fine Shorthorn herd, so as to secure all the advantages of markets and railroad facili ies obtainable by proximity to Winnipeg. He re-ports his herd as being in fine condition, and he says he will make a good showing at the Industrial. His herd bull President (imp.) = = has greatly improved since last year, and he says Crimson Gem, that winsome heifer forward at the last Indu trial, has more than fulfilled her promise, and has developed into a right

Says Crimeon Green, takes with a subscription for wird at the last inductrial, has more than fulfilled her promise, and has developed into a right good one.
J. Oughton, Crystal City, Man., in a letter to our office of recent date, reports the loss of a very promising five months'old Yorkshire boar, which he was fitting for the Winnipeg Industrial, he having been killed by a kick from a horse. His weight dead was 247 lbs., at five months'old Yorkshire boar, on the season. A daughter of Lincoln Lass littered fourteen in her first litter, thirteen of which are now six weeks old and choice pigs. Lincoln Lass herself had fifteen strong pigs in her last batch. A young Gladiator sow, out of Lady Laundress, bred by J. E. Brethour, Burford, Ont., has also a fine litter of pigs. The demand for Yorkshires us that he recently purchased from Thos. Russell, Exeter, Ont., after visiting nearly all the lead ing breeders, a handsome roan Shorthorn bull calf, Sultan's Hero-19338= sired by Sultan Salim being Cumberland (46144), the sire of Sultan Salim being Cumberland (46144), the sire of Autor Sultan Salim being Cumberland (46144), the sire of a sultan Salim being Cumberland (46144), the sire of sultan Salim being Cum

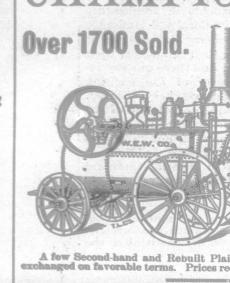
strain, from the herd of John Millar & Sons, Brougham, Ont. On the twenty-fifth of June, S. Coxworth, Claremont, started for Brandon Show with as fine a lot of Berkshire swine and Cotswolds as has for many years left Ontario for foreign show yards. The specimens to be shown are not in very high flesh, but are even in quality and pure-bred. Among them are two young boars farrowed last October, each of which gained a little over 43 lbs. in eighteen days. Mr. Coxworth is an honorable, straightforward man, and a successful breeder of fine stock We wish him every success in this venture. Under present conditions, it is an enterprising and fearless man who will undertake a trip of nearly three thousand miles, in order to show distant customers just what sort of stock he can supply them. His car contains thirty Cotswolds, and thirty Berkshires, of various ages.

AUCTION SALE Owing to poor health and want of help, I have decided to sell by Public Auction, on

WEDNESDAY, JULY 25 My whole herd of choicely-bred Scotch Short-My whole herd of choicely-bred Scotch Short-horn Cattle, consisting of thirty cows and heifers, twelve bull calves and the grand stock and show bull, Perfection =9100=. There are also a number of fine show cattle of both sexes in the herd. The stock is all in good breeding condition, and all females old enough are in calf. Perfection =9100= is a pure Cruickshank Bull, got by Barmpton Hero =325= ; dam imp. Lovely 19th = 306=. Eight months' credit will be given. Send for Catalogues. Farm, half mile from Ethel Station, G. T. R., Huron Co. 13-om DAVID MILNE. Ethel. Ontario.

DAVID MILNE, Ethel, Ontario. 13-om

"RAVENSCRAIG" STOCK FARM



Dr. Warnock's

FOR SORES.

Send 10c. for large sample and Dr. Warnock's reatment of Wounds, to A. E. WELDON &

Treatment of CO.. Calgary.

ERKURE

With their perfect water spark arrester, simplicity and ease of management, thoroughly reliable construction, are still the FAVORITE with FARMER and THRESHER. We build two styles of Horizontal Boilers -"Return Tubular" (same as cut) and the Economic, the latest and best portable boiler built.Consultyourown interest.

Females of all ages, also young bulls for sale

Calgary, May 1st. "Ulcerkure has wonderful healing proper-ies. J. R. SUTHERLAND."

200 applications, in a bottle, for \$1. Sold by dealers, or mailed on receipt of price.

SHIN DISEASES.

re Gure

for Barb Wire Cuts. Galls, Scratches, Cuts, Burns and

A few Second-hand and Rebuilt Plain and Traction Engines in stock ; will be sold or hanged on favorable terms. Prices reduced to suit the times. Write us before buying.



GROWN SOAP HAS NO EQUAL!

Winnipeg.

52-y-m

POR HORSES.

Pharmacists,

May we send you our

ADDRESS

Wholesale

ROYAL

268

Beautiful Picture for 25 Wrappers

ROYAL SOAP CO'Y,



MONDAY TO FRIDAY, JULY 23rd to 27th. PEG **\$15,000 I** PRI N

 OPPOCOLS
 Second Particles

 And Particles
 And Particles

 And Particles</

W. B. SCARTH, President.

J. K. STRACHAN, See, Treas., and Manager, Winnipeg,

1894

at our ut the

locate all the

He re-ind he

nd he

ward

lfilled

right

ter to

ter to s of a boar, indus-com a t five ghton, th his ter of litter, d and

d and ifteen 70ung ed by a fine s, Mr.

s that

13sell, e lead

n bull ultan

ruickultan of A. Mr.

well

nd at

drew

niota, ender

Sons.

orth, th as ds as reign

n are ality

oung Mr.

man, We Inder

and

ip of show

k he

hirty

rious

E S

have

25

hort-

and stock

e are exes

ding calf. hank

imp.

d for Cthel

io.

RM

oba.

ork-

May Cor-

-y-m

s bī

sion

cing and

ning Part

ot or ores.) A Y dian

VG-Cup,

heir nian e of

tral ged, ariff

s of

ates

g.

THE FARMER'S ADVOCATE.

Bronze Turkeys, Mammoth Pekin Ducks,

Barred Plymouth Rocks, White and Laced Wyandottes.

Furkeys-Young tom, 29 lbs., 11 months o'd; hens, 19 to 22 lbs.; \$3 per 10 eggs. White Wyandottes-Cockerel "Windsor White," score 94; hens, 93; to 95; \$2 per 13 eggs. Plymouth Rocks-Cockerel "Hero," 93; points; hens, 91 to 93; \$2 per 13 eggs. Yard No. 2-All good Hens and Pitkin Cockerel; \$1.50 for 13 eggs. Pekin Ducks, 10 to 11 lbs; eggs, \$1 (10 eggs). Hard-times prices. Write and send cash. Orders filled promptly. A few choice birds for sale.

M. MAW, Winnipeg. Man.

JAMES BRAY, Oak Grove Farm, PORTAGE LA PRAIRIE, Man HILIPPIA HUGO A.J.C.C. (68336) choice Boar (Improved Yorkshire from imp. sow and boar, Gladiator (13). A few high-bred Jersey Bulls and Heifers at reasonable prices. Correspondence solicited. 50-2-y-m FOR SALE -A THOROUGHBRED -Shorthorn Bull (A BEAUTY). ALSO A NUMBER OF **IMPROVED YORKSHIRE PIGS.** ----0-THOS. GREENWAY. 13-tf-m Crystal City, Manitoba. " ROYAL DON (IMP) (64717)." THOMAS SPEERS, Lake View Farm, Oak Lake, breeder and importer of Scotch Short-horn Cattle and Large Berkshire Pigs, offers for sale at moderate prices some exceedingly well-bred cows, bull calves and young heifers; also some choice young Berkshire Pigs. Oak Lake Station and P. O. on C. P. R. Visitors welcome. No business, no harm. Write for particulars. 13-1-y-m

JOHN

FOR SALE-

----: HAS :-----

ROSSER, - MANITOBA.

/ted my

ins,

61-y-m



STOCK GOSSIP.

269

AT In writing to advertisers please mention the Farmer's Advocate.

Two hundred and twenty boys from Dr. Barnardo's Home started from London and Liverpool for Canada this morning, June 28.

A case of Anthrax occurred at Sivillington Yorks, where a bullock, which was supposed to have died from that disease, was found, on the inspection of the veterinary inspector, to have died from Anthrax. The usual stringent measures were adopted.

measures were adopted. John Thornton & Co., 7 Princess St., Hanover Square, London W., Eng., announce the fol-lowing sales of Shorthorn cattle:--" Mr. T. Halford's, at Castle Hill, July 3rd; executors of the Duke of Manchester, Kimbalton, July 5th; executors of the Earl of Bectine, Underley Farm, Kirby, Lonsdale, July 12th."

SPECIAL BERKSHIRE PREMIUMS.

<text><section-header>

NOTICE.

500 NORTHWEST FARMS FOR SALE.

600 NORTHWEST FARMS FOR SALE. Attention is directed to the fact that some 600 farms located in that fine South Sas-ance Colony have been placed upon the market. They comprise the choicest of land, farming, and are near the flourishing town of Saskatoon. D. Blackley & Sons write as follows: "We came here in 1884; have farmed here ever since. We have a high opinion of the country. The soil is for the greater part and oats are remarkable. The climate is singularly healthy. There is a never failing mattention to the fact that cattle do well, and are raised very cheaply compared with Ontario. Note the advertisement elsewhere of these lands offered by Mr. C. Powell, tornto, or Osler, Hammond & Nanton, Winnipeg.



THE FARMER'S ADVOCATE.

BEEKSHIRES THAT Association of Manitoba.

D



JOHN A. ROSS, BUTTERFIELD, MAN.

I can supply now a few of different ages of excellent pedigree. Booking orders for spring delivery. Write for what you want 62-y-m

Not spring denvery. Write for what you want. 62-ym
A T WINNIPEG INDUSTRIAL EXHIBI-function of the second state of t

MCCLURE'S POULTRY YARDS

White Leghorns and Light Brahmas.

CET OUR CATALOCUE AND PRICE LIST FOR 1894.

63-m J. McCLURE, 448 Carey-St., Winnipeg

Eggs for Hatching From Barred and White Ply-mouth Rocks, Silver, Gold and White Wyandottes, Light Brahmas, Langshans, Bronze Turkeys and Pekin Ducks. Eggs after June 10th, \$1 per setting. A few choice birds and rabbits for sale. Write S. LING, Proprietor, Winnipeg, Man 10-y-m

BOUNDARY : ST. : POULTRY : YARDS.

FORT ROUGE POULTRY YARDS

Under the authority of Secs. 8 19, 20, 22 and 26 of the Veterinary Association Act, 1890 (53 Vic., Chap. 60) the following persons ONLY are entitled to practice as Veterinary Surgeons in the Province of Manitoba, or to collect fees for Fisher, Peter M. Hinman, Willet J. Hopkins, Arthur George. Henderson, W. S. Irwin, John James. Melita. Winnipeg. Hartney. Carberry Stonewa Holland. J. H. ttle, Charles. ttle, William Winnipeg Boissevai ittle,

 Little, William
 Boissevain.

 Little, Michael
 Pilot Mound.

 Livingston, Archibald M. Melita.
 McFadden, D. H.

 McFadden, D. H.
 Emerson.

 McMillan, Adam
 Oak Lake.

 McNaught, David
 Rapid City.

 Morrison, Wm. McLeod
 Glenboro.

 Murray, George P.
 Morden.

 McLoughrey, R. A.
 Elkhorn.

 Poole, John Wesley
 Carman.

 Rutherford, John Gunion.
 Portage la Prairie.

 Shoults, Wm, A.
 Gladstone.

 Smith, Henry D.
 Winnipeg.

 Spiers, John.
 Virden.

 Sweet, T. J.
 Morden.

 Taylor, William Ralph
 Portage la Prairie.

 Thompson, S. J.
 Carberry.

 Torrance, Frederick.
 Brandon.

 Walker, J. St. Clair.
 Boissevain.

 Young, M.
 Manitou.

 The practice of the veterinary profession in Manitoba by any other person is in direct con

 Manitoba by any other person is in direct con

 For prosecution.
 W. J. HINMAN Registrer

 Pilot Mound. Melita. ittle, Michael

for prosecution. W. J. HINMAN, Registrar. 9-e-m

TWO WEEKS ONLY Fine Ceylon For Choice Indian u 0 ▶ Splendid Japan ₽ U Send and get a sample of these extra values. Freight prepaid on all 20 lb. lots. J. E. ACTON, 13-a-m 220 McDermott St., WINNIPEG.



NORTHWEST. THE

HOMESTEAD REGULATIONS.

All even-numbered sections of Dominion Lands in Manitoba or the Northwest Terri-tories, excepting 8 and 26, which have not been homesteaded, reserved to provide wood lots for settlers, or for other purposes, may be home-st aded by any person who is the sole head of a family, or any male over eighteen years of age, to the extent of one quarter-section, of 160 acres. more or less. acres, more or less.

ENTRY.

ENTRY. Entry may be made personally at the local land office for the District in which the land to be taken is situate, or if the homesteader desires he may, on application to the Minister of the Interior, Ottawa, or the Commissioner of Dominion Lands, Winnipeg, receive authority for some one to make the entry for him. A fee of \$10 is charged for an ordinary homestead entry; but for lands which have been occupied, an additional fee of \$10 is chargeable to meet inspection and cancellation expenses. expenses.

HOMESTEAD DUTIES.

Under the present law homestead duties must be performed in the following way, namely, by three years' cultivation and residence, during which the settler may not be absent more than six months in any one year without forfeiting the entry.

APPLICATION FOR PATENT

may be made at the end of the three years, be-fore the local agent, or the homestead inspector. Before making application for patent, the set-tler must give six months' notice in writing to the Commissioner of Dominion Lands of his intention to do so. When, for convenience of the settler, application for patent is made be-fore a homestead inspector, a fee of \$5 is chargeable chargeable.

INFORMATION.

Newly arrived immigrants will receive, at any Dominion Lands Office in Manitoba or the Northwest Territories, information as to the lands that are open for entry, and from the effective in charge free for entry. lands that are open for entry, and from the officers in charge, free of expense, advice and assistance in securing lands to suit them; and full information respecting the land, timber, coal and mineral laws, and copies of these Regulations, as well as those respecting Dominion Lands in the Railway Belt in British Columbia, may be obtained upon application to the Secretary of the Department of the Interior (Immigration Branch) Ottawa; the Commissioner of Dominion Lands, Winnipeg, Manitoba, or to any of the Dominion Lands Manitoba, or to any of the Dominion Lands Agents in Manitoba or the Northwest Territories.





RAT TO H ת ()



JULY 5, 1804

ab out \$1,500. Pumping Aermotors for pastures, town water-works, market gardens, land aeragating, etc., cost from \$100 up. Geared Aermotors erected on farm barns to pump water, saw wood, grind feed cut hay and straw, elevate grain, turn the fanning mill, grindstone and churn. Also Rice's Frost Proof Force Pump and the above Aermotors for sale. Green bones ground and for sale for poulfry feed, and custom work of of this kind done at moderate prices. GEORGEE RICE, Aermotor Mill, Main St. N Winnipeg. 60-Winnipeg.

En

L

Al

Ar

Ma

Ag

th

Ye

on

du

ra M

us

0



5, 1804

AR

nipeg.

egraph

25-2-y-m

R.A.

OWEC

figure. 9-y-m

d for

strated

alogue

).,

PEG.

ILL

rain

eight nehun-ds, or tenth tice's our for read, te and (the on the Every ality, illage, e one e class Cost. ,500.

water

rected

grind

rn the Rice's

above

d and ork of

p<mark>rices.</mark> St. N

AY.

UND.

TG

ch is blow heap, /ICA

's and

PEG.

DT,

Cal

Suits of first-class goods v l and examine stock and chasing elsewhere. It will work North Willow the

you.

60-.

IS

N,

THE FARMER'S ADVOCATE.

DRTHERN

MAIN LINE.

STATIONS.

READ UP.

NORTH BOUND.

Frei No. Dail St. J Ex. Dail Mil(Wil

1.20p 1.05p

12.42p

11.31a

11.07a

10.03a 9.23a

8.00a

WANTS. One insertion of six lines in this column, \$1; three insertions, \$2.50, in advance. Contracts not made for more than three consecutive

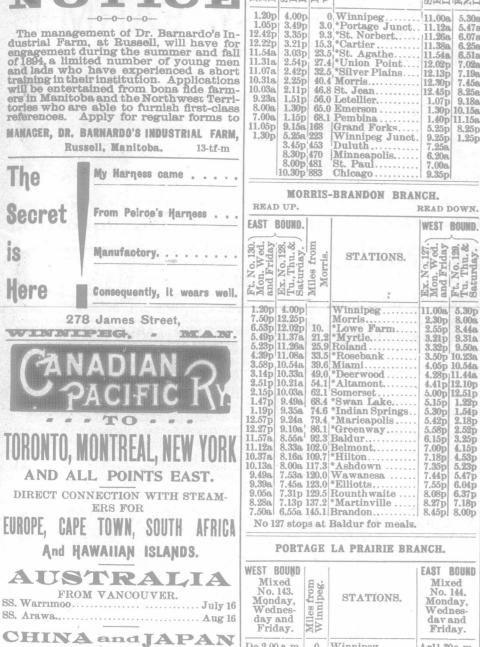
insertions. WANTS two black and tan collie bitch winnipeg trained stock, whelped June 1st; price to suit times. Apply to B. V. Milleye, st. John's, Winnipeg.

PURCHASER for Farm (160 acres) near to city of Win-nipeg; will sell on very liberal terms. Apply nipeg; will sell on v Box 214, Winnipeg.



-0-0-0-0-The management of Dr. Barnardo's In-dustrial Farm, at Russell, will have for engagement during the summer and fall of 1894, a limited number of young men and lads who have experienced a short training in their institution. Applications will be entertained from bona fide farm-ers in Manitoba and the Northwest Terri-tories who are able to furnish first-class references. Apply for regular forms to MANAGER, DR. BARNARDO'S INDUSTRIAL FARM. Russell, Manitoba. The

FROM VANCOUVER.





and imported Reporter and Cavalier, also

some extra good Cows and Heifers.



CASSEL, ONT.

12-y-om

19-y-om

271



JULY 5, 1894



272



JULY 5. 1894

1894

7-1-1

ES

nt.

ge

m

THE FARMER'S ADVOCATE.

HAS

YOU CAN'T AFFORD IT!

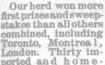
TO LET A VALUABLE ANIMAL BECOME SICK MAUD S" CONDITION POWDER AND LOSE FLESH . A WONDERFULLY GOOD EFFECT

ONTARIO'S CENTRAL HERD OF CHESTER WHITES AND DUROC-JERSEYS



We have recently added to our herd an importation of the finest specimens of Chester Whites and Duroc-Jer-







A SUSTRIAL CO

vited.



OUR BOOK TABLE.

We have received a copy of the Dominion Experimental Farm's report, which contains an enormous amount of very valuable informa-tion. All branches of agricultural research have been carefully and exhaustively investi-gated, and conclusive results are given in good form. All who wish copies can receive them by applying to the Dominion Department of Agriculture, Ottawa.







RE

L,

ve and EDich imted

Her

bt m

in

on

nt, er

With Unbreakable Arles and Unbreakable ARMS The Best Made on Harth-so Sald the JUDGES ON VEHICLES AT THE WOORLO'S FAIR WHO AWARDED US A COLO - MEDDAL - AND - DIPLOMA AGAIN - AND - DIPLOMA COLO - MEDDAL - AND - DIPLOMA OF the heads of numerous old and extensive builders in the United States and Canada. The axis are unbreakable, because MALLEMAN AND - DIPLOMA AGAIN - AND - DIPLOMA AGAIN - AND - DIPLOMA MALLEMAN - AND - DIPLOMA MALLEMAN - AND - DIPLOMA MALLEMAN - AND - DIPLOMA AND - DIPLOMA MALLEMAN - AND - DIPLOMAN MALLEMAN - AND - DIPLOMAN MA
Send in your orders early. CHATHAM, Feb. 9th, 1894. Torms and Prices Liberal. CHATHAM, Feb. 9th, 1894.

Do Not Insure

Until you have seen the Double Maturity Policy of the Manufacturers' Life. Ordinary prudence suggests that you should carry some life insurance, if ever so little, and it is as well to know LU. where the best is to be had, both for security and profit. Life insurance creates an immediate capital at a trifling outlay, which returns, as a rich and ample investment to a man's family or himself at its period of maturity You should find out about this Double Maturity we speak of.

MANUFACTURERS COMPANY, 63 Yonge Street, Cor. Colborne, restrictions of any kind. Prices moderate; Toronto, Ont. 13-1-y-om CANADA SHIPPING COMPANY. BEAVER LINE OF STEAMSHIPS. SAILING WEEKLY BETWEEN MONTREAL AND LIVERPOOL DIRECT. From Montreal every Wednesday at daybreak. From Liverpool every Saturday. These Steamers have First-class Accommoda-tion for Saloon, Second Cabin and Steerage Passe RATES OF PASSAGE MONTREAL TO LIVERPOOL:

RAILS OF PASSAGE MONTREAL TO LIVERPOOL: SALOON, \$40, \$50 and \$60; Round Trip, \$90, \$90 and \$110, according to accommodation. The \$40 Single and \$30 Return per Lake Nepigon and Lake Winnipeg only SECOND CABIN, \$30; Return, \$65; STRERACK, \$24. Each steamer carries a duly qualified sur-geon and experienced stewardess. The altention of Importers of Horses and live Stock generally is directed to the fact that these steamers have the highest record for the successful carriage of the same, and a trial shipment is solicited. For freight or passage, apply to R. W. ROBERTS. H. E. MURDAY R. W. ROBERTS, Manager, 21 Water St., 8-L-om Liverpool. H. E. MURRAY. General Manager Montreal. DA



THREE DISTINCT SERVICES FROM MONTREAL WEEKLY. Mail Service to Liverpool, via Quebec, Rimousk and Derry, or via Portland & Hallfax in Winter, DIRECT SERVICE MONTREAL TO GLASGOW Direct Service Montreal to London.

These steamers are of most recent construction; are of the highest class, and their record for the safe carriage of cattle is uncrcelled. Special attention paid to the best methods of stowing and carrying cheese, apples and other of passage or other informaton, apply to 18-y-om H. & A. ALLAN, Montreal.

FOR SALE THREE EXCELLENT FARMS.

THREE EXCELLENT FARMS. No. 1 is "Walnut Hill," a first-class stock and grain farm in the County of Peel, near Toron to, contains 200 acres improved, excepting 45 acres of unculled bush; soil, a very productive clay loam. Farm is well fonced in, fields of convenient size, with gates and lanes leading to the buildings, which are an ple for all stock and crop requirements. There is a windmill pum and good water supply, large orchard of fine fruit, farm is thoroughly drained. There is a splendid brick residence, containing 12 rooms and every convenience. This farm joins the corporation of Streatsville, where there are the best railway and other facilities. No.2 is a grand dairy from on the River Sc. Lawrence, comprising 20° acres, on the front in a Township of Pittsburg; A theick residence, in the Township of Pittsburg; is heick residence and two barns and stone stabiling; hand all im proved. No. 3. 160 acres, is a prime barley and her

And two barns and stone statening, remarking in proved. No. 3, 160 acres, is a prime barley and hay farm on the Bay of Quinte, in the Township of South Fredericksburg, four miles west from Bath. The bost of land and No. 1 buildings, also a herd of 20 Holstein cattle in lots to suit pur-chasers. Write for particulars to

9 f om HUGH McCAUGHERTY, Streetsville, Ont.

CHRISTIE & CO., 62-y-m Lombard St., WINNIPEG.

GODERICH ORGAN High grade, fine tone. Send for Catalogue. Made at Goderich, Ontario. 1-y-om



8 f-0

ADVERTISE IN THE ADVOCATE

Send for circular to

7-h-om

SYMMES HAY CAP CO.,

Sawyerville, P. Q