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# The Farming World 

# For Farmers and Stockmen 

## Voln NRI.

OCTOBER $21 \mathrm{st}, 1902$

No. 17

## The Useless Dog Nuisance



HE useless dog question is always with us. livery week or two we hear of some sheep worrying or other depredations by useless dogs and it is surprising that some effective remedy is not forthcoming that will help to lessen the evil. There should be some way of regulating the nuisance so that it will not prove a menace to the development of one of our most important industries, that of sheep taising

In Germany, in the cities and large towns, dogs are required to be muscled whenever they are on the street or in public places. In the city of Berlin every dog is subject to a tax of $\$ 4.76$ per annum. When this tax is paid, the dog is registered and the owner receives a stnall brass disk bearing the rugistered number of the animal, which must be henceforth wort on the collar. A dog not wearing a stamped collar is immediately seized by officers of the law. The effect of this has been to practically exterminate stray and usciess dogs and to restrict the dogs actually kept to the very best lor hunting or for useful purposes. As a result of this care, hydrophobia is practically unhnown in Germany.

There may be a hint in the above tor Canadians. However, a tax of nearly $\$ 5.00$ each seems more than threequarters of the dogs kept in this country are worth. It would certainly go a long way towards getting rid of the dog nuisance. But such a measure would hardly be accepted as a remedy in Canada.

## A Western College to Teach Agriculture

I'wo weeks ago our Western correspondent stated that Wesley College, Winnipeg, had outlined a special course in Agriculture in this season's curriculum. This is a somewhat new departure in connection with a denominational college. Heretofore, on this contivent at least, with a few exceptions, agricultural teaching has been the especial care of governments. Both denominational and private institutions of learning have made it their special care to look after the professional man and the fellow perfecting his knowledge of the so-called higher arts, while the agriculturist was left to plow his furrow unaided and alone in so far as these institutions were concerned. But fortunately for the great agricultural interests of this
continent the governments of the various states and provinces stepped into the breach and made the teaching of agriculture the special object of their care and munificence. To-day there are in every state in the Union, under government control, well-equipped colleges devoted to the education and training of the farmer for his work, and in Ontario we have the best of the lot, an agricultural college that has more than a contmental reputation for good and effective train"ig. in practical agriculture.
For someti:ne, agricultural colleges under government control have been talked of for the Maritime Provinces and for Manitoba, but as yet no definite move has been made toward making these institutions a reality. Recognizing the need for better training in agriculture for the farmer of the West, Wesley College has come to the rescue, and the Manitoba farmer now has the opportunity of supplementing his practical eraining by a wider knowledge of those branches of agriculture that help to make his business more pleasant and profitable. This opportunity should be taken advantage of to a large extent the coming winter. The tuition fee, we understand, is not high and the only large outlay will be for board in the city. The college, in addition to its own staff, has secured the services of several practical farmers, experts in their departments, to give the lectures bearing upon general farming, fruit and live stock.

In establishing this special course Wesley College recognizes the great importance of the agricultural interests of the West and places them on a par with the professional in matters social and educational.

## Teach Agriculture in High Schools

Dr. James Mills delivered a most interesting address on Friday of last week to the Canadian Club of this city upon "The Ontario Agricultural College, its aims and equipment." His description of the college and what it is doing to promote better agriculture in Canada was listened to most attentively by the members. If the people in the cities could hear more addresses of a similar nature upon agricultural topics they would have a higher appreciation of our agricultural resources and more faith in the better education of the farmer with a view to increasing still further the profits and products from the farm. Canada is, more than anything else, an agricultural country and all classes of our citi-
ectis should be imbued with the importance of providing better methods of production, better methods of transportation and better facilities for conveging the po ducts of the farm to the consumer in the best possible condition. In cidentally Dr. Mills referred to the need of more attention to the teaching of agriculture in the rural high schools. The time has come when the Minister of Education should be asked to set apart at least one high school in each county for the teaching of agriculture and the fitting of boys and girls for life and work on the farm.

We quite concur in this view. While a great deal has been written and said about the introduction ot the teaching of agriculture into the rural schools of this province, nothing is seemingly being done to make this teaching effective or to direct attention to its importance. We question if many of the teachers, even in our rural schools, give very much time or attention to the subject. If a high school in each county were set apart especially for the teaching of agriculture and kindred topics it would do much to promote an interest in this work and to stimulate a desire for an education along agricultural lines among the boys and girls of the farm.

## Cost of Rural Free Delivery in the United States

A good idea of the growth of the rural free delivery system in the United States may be gathered from the estimates for the next fiscal year recently framed at Washington: They aggregate $\$ 12$, 655,800 , a net increase of $\$ 5,126$, 400 over the appropriations made for the currect year. The estimates include the following items Pay of letter-carriers, $\$ 12,000,000$, an increase of $\$ 5,000,000 ; 10$ division superintendents at $\$ 2,500$ each per annum in place of seven special agents in charge of divisions; four special agents at $\$_{1}, 800$ each (a new grade); 30 special agents, $\$ 1$, 600, an increase of 15 in number; 15 special agents at $\$ 1,400 ; 15$ special agents at $\$ 1,300$ each; 56 route inspectors at $\$_{1}, 200$, aggregating $\$ 67,200$, a decrease of $\$ 21$, 6oo; per diem for 79 special agents and 56 route inspectors, increase of $\$ 1$ per diem for route inspectors, $\$ 169,000$, increase $\$ 29,500$; incidental expenses of division superintendents, special agents, route inspectors, livery hire, etc., $\$ 25,000$ incidental expenses including letter boxes, furniture, straps, badges, etc., $\$ 200,000$; clerks in divisions headquarters, $\$ 51,400$.

## Our Western Letter

## Cattle Versus sheep Kanches-Western Catile go via U.is. - More Elour Mills in the West.

## Winnipeg, Oct. 13th, 1902.

the catide and sucepmen of the territories have never hauiged is ahy such open hosthaties as Hald wequentiy uagraned the otates allu betatolas hatimenatedy acruas the mitermationat buandary, oht blete hads been muth unpieasdintiess and ath Uncasionat outbieak of ameenimg tholig men, who, had ally mol, ma dofthadten, engagen in amerent ofallates of stoca rabsimg wouts nave nved on the most amscavie terms. 1 hat there have beell no muruers, no wholesale staugnter os sacep, add no otaer resorts to tawtess methous is a tridute to our system of governmeat and the Britsal respect tor law and order; it dues aut mdicate any tack oi graevances, reat or fancied, on either shae. In the early dajs, the Domimon Government passed an vider. ith-councri, at the anstigation of m suential Latgary ranchers, placing sheep ranchang under practically prombitive rescrictions the the serdituries. thas manlest mjustice to ath important industry was corrected by Oruers-m-Lounch at later dates setting assde certain reserves tor sheep tanching. it might be thought that all dificuities were thus disposed of. But no. The government were ill-advised enough to issue leases to cattle ranchers within these sheep reserves. they were diso somewhat lax in restricting the sheep men to their legal bounds. This buth parties considered was in lact a license to pasture when and where they chose, and things went almost to that length. Cattle, being tree rangers, ted at will, and sheepmen, moving their flocks in the speargrass season, spent considerably more time on the cattle tanges than necessity demanded. Both sides, therefore, called for a government arbitration of the whole question. The cattle men called for a restriction of the sheep ranges to a smaller area and a stricter enforcement of regulations regarding moving the flocks between reserves. Mr. Stewart of the Department of the Interior was commissioned to investigate, and has spent the past summer looking into the matters in dispute.

A meeting was held on the evening of October 1st at Medicine Hat which was attended by some thirty of the most influential ranchers, representing both interests, the Medicine Hat Exhibition having been selected as a most opportune date for the meeting. The question was discussed with the commissioner and resolutions passed approving the report which he submitted to the meeting. Mr. Stewart's report will restrict several of the sheep reserves and abolish others, a new reserve will also be set aside for sheep outside the spear grass district. Altogether
the cattlemen would seem to have got the Dest of the dispute, as the movement of shecp over sathe ranges is to be strictily seguated, and the sheep reserves seem to nave beell consderabiy decreased in ared. dite report of the commassaoner thus approved by the parties anterested wain uoubtiess de embuured in an Urder-m-Councal by the wovernment.

Among those present at the above mentioned meeting, who took part in the discussion were dessta. Lhos. IWeed, W. A. timay, -4.1...s., dies. shaw, Lhas. Bian, Gordon guicn, das. Hargrave, $d$. U. sissuns.

The rapid advancement of sheep rancang, and the phenomenal msprovement in the oreeding stock employed were well mustiated at the hast exhabition of the territuthat 1 'ure-bred sheep Breeders Association, hedi on the 1st mst. In comnection with the dedicme Hat Agricuturad sair. the town ot dedicine liat is well situated tot the convenience of territorial exhsbitors of sheep, and will doubtless, atter the successiul issue of the present ehort, become the permanent docation of the sheep breeders Annual Eximbilion. Lae Association clam that more sheep were shown than have ever belore been seen at all exhibition west of Lake superior, and with the exception of the Whmpeg ladustrial, their claim is undoubtediy justatasle. sheep are proving a paying investment in Western Assimbola and the other districts in the derritories where sheep ranching has been conducted on busmess promeples and further rapid advance is looked for. The breeds best represented were the Shropshires, Uxtords and Rambouiliets. The honors in the Oxford classes were won by D. McKerracher, Medicine Hat, and John A. Turner, Calgary; in Shropshires by John A. Turner, Jas. Miclaig, Lethbridge, and C. W. Peterson, Regina; in Rambouillets by P. Robertson, Medicine Hat. Great interest in the work of the judges was manifested by those present. The educational aspect of the Exhibition was emphasized by the Association, and it is beyond question that the demonstrations given by Messrs. Wm. Sharman, of Souris, Man., and J. A. Paisley, of Lacombe, Alta., will materially benefit those privileged to listen to and observe them. These judges were appointed by the Territorial Department of Agriculture, a system that has met with the approval of all classes interested in the improvement of the Agricultural Fair. Aside from the sheep exhibition the Medicine Hat Fair was itself a notable success.

The Shropshire breeders have every cause to be pleased with the
sale of pure bred rams held on the and Uctober at Medacme Hat, and those who entered western-bred stock especially so. Not that othes breeds were not well received, but that the shrops were in particularly strong demand. The highest price paiu was $\$ 46$ tor the cnampronship shropshire ram, an imported ammal entered by Kobt. shiller, of stoutvalle. The total number of sales was tor and the average price $\$ 15.62$. Seven shropshire rams brea by J. A. Iurner, Lalgary, averaged slightly over $\geqslant 18$ atthough some very young animals were included in this lot, 30 other shrops sold by turner averaged \$io. Twenty-one shropshires bred by J. A. ACLatg, \&etisbridge, brought an average price ol \$13. Twenty Oxiords nom Turner's flock brought an average of 17. The largesc buyers were $J$. W. Farres, A. J. Mcintosh, W. B. Dixon, J. Kimber and 1. Beattie, ot Maple Creek; w. Carr, Nimeartn; Peter McLean, Namaka; J. A. Paisley and C. M. Smith, Lacombe; Jno. A. Turner, Calgary; Jas. Morran, Walsh; C. W. Peterson, Re gina. A feature of the sale was the keen competition for home-bred animals, owing to the fact that such animals are better suited to the climatic conditions of the western ranches.

Western Canadian cattle are now going torward via United States railways and ports in increasing numbers. This is due in a certain extent to the better shipping tacilities at Boston than at Montreal At the latter port, the shippers say, there is frequentiy consider. able delay in securing space on the cattle boats. Another lactor in diverting this trade is the better tates given by the American railroads. One large firm say that they can save $\$ 1.00$ per head on cattle shipped by this route, as compared with the Montreal route.

Weather continues perfect throughout the West. Threshing and marketing are progressing as rapidly as the limited supply of laborers at command will permit. Many of the first comers among the harvest excursionists are now returning east which does not improve matters, from our point of view at least. In the towns men are equally as scarce as in the country, no one who wishes for work is idle.

More flour mills in Western Canada. The Lake of the Woods MilImg Co., one of our largest milling concerns will shortly erect another mammoth flour mill. Their present mills at Keewatin, Ont., and elsewhere are among the finest in the world, and the Keewatin mill is one of the largest, but the new mill will be still larger. The exact location is not yet decided upon, but as the company are determined to build where they can secure the advantage of competition in freight rates it is probable that Winnipeg will be the point selected.


A Bit of Nice Country Road

## Natural Flesh in Live Stock

Under this heading Prof. John A. Craig contributes a most valuable article in a recent issue of the Chicago Live Stock Report. It touches upon several important points in connection with the handling of beef cattle and we republish it in full for the benefit of Canadian breeders and feeders:

The use of this term in this connection is only justified by the fect that excessive fat is an unnatural condition in animal life. Natural flesh in this construction means muscle; though as an indication of the greatest thrift, there should be a proper blending of fat and muscle. Fat, however, is a feature which may be added to a healthy animal quickly, and the more unnatural the conditions, the quicker it accumulates. On the other hand, muscle, or lean meat, development is apparently a quality of more direct inheritance, and in its development it is slower. The market calls for a blending of both. In the past the producer has verged too much towards excessive fatness, while the present markets are apparently overcrowded with thin stock. It is proper to observe here, however, that because an animal is not fat, it does not necessarily follow that it is thin. Therein lies the distinction between natural flesh and thinness. I have handled market stock that had well covered backs, ribs, and full quarters, that were not fat in the sense of having much of this constituent on them, as this covering was made up largely of natural flesh. When a breeder secures the quality of natural flesh in his herd, he has as a foundation one of the most desirable attributes, in my estimation, not only considering the influence it carries to market stock, but also its bearing on the success of the herd or flock.

In discussing its importance to the breeder, I am very clearly reminded of two bulls that I had the opportunity of studying daily. They were of different breeds, and both the same age, but they differed markedly in the degree to which they possessed what I have termed
natural flesh. The one, when in working condition, was very muscular, the shoulder being well covered with muscles, the back swathed in them, and the hind quarters always full and muscular down to the thigh. This muscular development was most noticeable when in thin condition; as a matter of fact, the bull never seemed out of condition. He took on flesh readily, and when fitted was as smooth as an animal could be. His companion was quite different. When down in condition, he was apparently loosely constructed, with seemingly no muscle to hold him together. He took on flesh readily, but it was harder to hold. Both of the bulls were excellent in disposition, but quite different in form. They could be made to weigh within a few pounds of each other; but when it came to estimating their weights on their appearance I never knew anyone that would put the muscular bull within a hundred pounds of the other. The bull with the muscle seemed to weigh like lead; while the other one, apparently much larger, would usually only come up to expectations. The handling of the muscular bull, when he was ripe for show, was very fine; while that of the other one, though deep in covering, did not seem so firm nor so smooth. In vigor, however, the chief difference between the bulls asserted itself. The muscular bull


Rural Oniario.
was a first-class breeder, while the other was very slow. The calves from the two showed the same difference that existed between the bulls. Those from the muscular sire always came smooth, with splendid backs, and they stood up in a way to please any herdsman, as soon as they could get on their legs. The other also got good calves, but they did not seem to invariably have a good covering of natural flesh when dropped. Thus for vigor and constitution, I believe the characteristic of possessing natural flesh is worthy of the consideration of any breeder, considering only his own view-point.
In the instance of stock intended for fattening, the possession of natural flesh is of equal importance, and this, outside of the preference of the market for mixed meat. Of course, it may be a different proposition to the feeder, who may wish to buy his stock as thin as possible that he may have full advantage of the rapid increase through fattening; but 1 have in mind the requirements of the feeder who rears his own stock. I have noticed in a flock that all the lusty, thick and naturally fleshed lambs come from some ram that has this quality. I have in mind one of several that handled in the way peculiar to this condition. He always was round and smooth in form. No matter how thin he might become his back was always covered and smooth, while there were others, though they carried considerable fat, their backbones could be felt from shoulder to hind quarter. Now, lambs from the muscular rams seldom seem to go wrong. They are born with a good covering of natural flesh, and this they seem to maintain throughout their career, if given a chance. Contrariwise, the other lamb is very apt to go to pieces. He may do extra well while on the mother's milk, but as soon as it has to depend on other sources a collapse takes place. It seems easy for a lamb or a calf to attain a high degree of natural flesh if this feature has been considered in its breeding. It is possible to select for it, because I believe it is possible by the handling to come to a correct conclusion as to the character of the flesh.
I must confess to having been somewhat sceptical regarding the ability some have claimed to distinguish between the different classes of meat on an animal. It appeared reasonably certain in the instance of cattle; but sheep seemed to originate the most uncertainty because of the fleece of wool, and the fact that the form cannot be seen accurately while the wool is on. From some time past, I have tried to follow this point; and at the last International, in judging the class of fat sheep, I kept it in mind throughout. When through, I think I could have described the handling of every sheep for a time when other characteristics had passed out of my mind. There were two prize animals that
surpassed in handling any that I had ever touched before. The one was Richard Gibson's prize-winner and the other the lamb that won a prize for the Minnesota Station. As this lamb afterwards won in the carcass competition, tet me describe the nature of the handling, especially that of the bach. The lamb was well covered over all regions, but it was on the back that the best indications of well mixed meat were found. When you pressed your tingers down o" the back, they seemed to go steadily in, meeting with no solid opposition, yet being gradually stopped. The flesh followed your ;resslle back in the same gradual was. Now, there were others there with backs as hard and firm as a talle. top, and others with backs quive:ing at a touch on account of fat, but there were no others like these two. The handling of the Gibson sheep was the same, with an universal depth of flesh. Now, suct sheep, 1 an sure, inherited this from a sire possessed of abundance of natural flech: and this characteristic was further strengthened by management and feeding.

As natural flesh means muscle or at least this as a foundation, exercise is necessaty to secure the development. There is nothing clearer in animal development than that exercise builds up muscle. It used to nonplus me to think of the
strength of wild animals, when they were not known to take systematic courses in physical culture; but since learning more about their habits, it became evident that they, too, were constantly active and taking exercise to develop their muscle. In breeding stock, the proper amount of exercise is not only necessary for their individual thrift, but I am of the beliel that this exerise is advisable for its muscle making qualities. In the instance of stock intended for slaughtet this exercise should come in the early days of life, for then it is possible to give it with the most economical management. During the process of fattening it cannot be done with the most conomy, further than to keep the anmmals in the best of health. Feed. ing will undoubtedly contribute it. There are muscle-making, bonebuilding foods, just as there are fattening foods. Corn is undoubtedly the premier fattening grain, and just on that ascount it should form the chief portion of the fattening ration, and the minor one of the growing and musele-building ration. Peas, oats, beans, and kindred foods are valuable for breeding stoch, or for young animals, for they meet the needs of the systen:. repleted by the breaking down and repairing of muscle in exersice.

## Territorial Ram Sale

The first atcition sale of rams ever held in the ferritories took place at Medicine Hat under the auspices of the Territorial Sheep Breeders Association on Oce. 2nd. Every convenience was offered both buyers and sellers under the rules of sale adopted by the association. A uniform fee of 50 cents was chatged for transporting sheep to the sale and upon payment of a sinilar fee the purchaser was enabled to have the animals delivered to his nearest railroad station west of Moose Jaw. The association admitted rams bred by Manitoba and Ontario breeders upon the same basis as those entered locali. The association realizes that the annual sale of purebred cattle at Calgary has almost doubled the production of purebred bulls and, therefore, entertains the hope that by providing a convenient cash market for rams every year the smaller ranchers and farmers throughout the Territories will consider it in their interests to acquire purebred flooks for the purpose of supplying the ranchers with rams. It is, however, considered advisable, as there are not less than a dozen breeders of purebred sheep in the Territories, to leave the door wide open at present for the entrv at these sales of eastern bred rams. Doubtless the sale will open the eves of western farmers to the valuable field which exists in the ranching districts for the disposal of acclimated and purebred rams of the proper tupe.
the purebred watte sate at Cabgaty conveyed many usetul pointers and the concensus of opinion was that the ram sate was equally iruitful in that resper:. The bid. ding was spirited for animals of a high degree of metit, of which the sale of the championship Shrop--hire ratu contributed by Robert Miller, Stoufiville, Ont., was ample evidence and while the financial result to some of the exhibitors may be disappointing, it is satisfactory to note that sheep of only medium qualits could scarcely be sold at ary price. This is decidedly the proper attitude for ranchers to take and it augurs well for the sheep industry of the West that buvers should excersise such dis-- rimination in their selection. Of course, the usual weakness for highly fitted animals was in evidence, and a good many strong, vigorous rams that would do useful work on the range were sold at small prices.
On the whole the sale was a decided success and it is sincerely to be hoped that the enterprising promoters of this convenient method of buving and selling that class of live stock will feel encouraged to continue their efforts in this direction in order that the Territorial ram sale may become an annual event. Great credit is due anctioneer Paisley, of Lacombe, who always wields the hammer for the live stock associations on such ocasions, for the success of the sale. The highest average at the sale
was obtained for Shropshires contributed by John A. Turner, of Calgary, who sold 37 at an average of \$17.07. 20 Oxford Down rams by the same contributor averaged $\$ 16.65$. D. McKerracher's Oxford Downs averaged $\$ 16.75$. Jas. McCaig, of Lethbridge, sold 21 Shropshires at an average of $\$ 12.86$. The total number of sale was no8, which averaged $\$ 15.62$. While most of the rams were bought to be delivered between Medicine Hat and Swift's Current, purchases were made to be delivered as far north as Strathcona, west as far as British Columbia, and east as far as Gainsborough in south eastern Assimiboia. The principal buyers were the Canadian Land and Ranch Co., J. Wilson, Forres, A. J. McIntosh, W. B. Dixon, J. Kimber, I.. J. Beattic, ©. W. Quick, all of Maple Creek, W. Kert, Kincarth, Peter McIean, Namaka, S. W. Paisley and C.'. M. Smith, of lacombe, and wthers. The record sale of the day was that of the championship Shropshite ram for $\$_{43}$ to John A. Turner, of Calgary, and C. W. Deterson, Dep. Minister of Agricuiture. James Mortan, of Walsh, secured four excellent Shrops at an average of $\$ 25$ per head, and two sheep of high merit were bought for Lord Aberdeen's ranch at Vernon, B.C. C. M. Smith, of Lacombe, obtained one of the best Oxford Down rams in the building and a splendid Manseld Shropshire ram, tipping the scales at 375 ths . and recently imported from England, will head the tlock of S. W. Paisley, Lacombe.
A revelation to onlookers was the heen competition and decided preference for home bred rams. J. A. Turner's contribution consisted of seven fine, upstanding fellows averaged above $\$ 18$ per head in spite of the fact that some were lanibs, a class of rams not favorably entertained by the Western flockmasters.

## No Pea Weevil or Potato Bugs in Algoma

Mr. R. A. Burriss, Canadian Gov. ernment Agent, Port Arthur, Ont. writes: "The West Algoma Agricultural Fair closed on October 2nd, and proved a great success. Last spring I asked the C.P.R. to ship us free of charge, one hundred bushels of seed peas. This they kindly did and these peas were sold to the settlers at cost price in the east. We propose to help new settlers procure the best seeds in like manner from year to year. I feel confident that New Ontario will be recognized as one of our best farming districts within a few years, for failures of crops are practically unknown. We are free from the ravages of potato and other bugs which injure crops in the east."
"What seems to be the matter with him?" asked the doctor, approaching the bedside of the mat swathed in handages.
"He found out where the gas leaked," briefly explained the nurse.


A GoodiType of Ozford Down Sheep

## Preventing Hog Cholera

The following article will be found of interest, and also of value in view of the recent outbreak of hog cholera in Western Ontario. Cures for hog cholera are made known from time to time, but the experience of those who have had the most to do with this disease is that, no sure cure is to be had once the cholera gets a good grip of his swineship. Preventive measures are the only ones advocated by the best authorities. These are well described in the following article by A. S. Alexander, V.S., in Live Stock Report, which we publish in full:
"That dread season of the year when cholera is at any moment apt to decimate or annihilate the herd of swine on everv breeder's farm is fast drawing near and it will pay to 'look a leedle oudt.' It will also pay to look a good deal in! Introspection is profitable employment at any time, especialIv so when year after year cholera has descended upon the herd and ravaged its ranks. Why is it that Jones' hogs escape when Smith's are taken? There is but a fence between the farm; the hogs are of the same breed; the owners are both 'just' men. The disease falls upon the just and the unjust alike! To be sure; but then there is a way of fooling the germ so that he passes over, and hits where he finds congenial surroundings and a fertile soil. A man may be perfectly just, but at the same time wrong in his methods of management, and such a man is the one that is sure a man is the one that is sure to suffer when the cholera germ is out and about. And the germ is here and there and everywhere during the fall and early winter months. These can be no question of this. Hogs have been kept for generations in the agricultural districts. The germ annually shows up here and there in these districts. The supply of germs never wholly dies out. Some hogs suffer; others escape. Why? The hogs attacked are susceptible
to the discase owing to their condition of blood and body. The ones that escape have been exposed to the germ, but they are in a bodily condition not conducive to the entrance and proliferation of the disease germ. Can it be denied that all of us occasionally drink water in which are the germs of typhoid fever, eat fruit similarly tainted, rub up against persons coming down with this or other diseases, yet escape? Individuals contract typhoid fever and die; hundreds similarly exposed fail to contract the disease. This individual offers a suitable germinating place for the disease germ; the other does not. Arguing from this standpoint, it is our belief, founded upon experience and the facts, that hogs in an ideal state of constitution, vigor and health are not prone to become afflicted with cholera and kindred diseases. Man undermines the constitution of his swine by misguided management or fails to build up a strong constitution. He undermines by surrounding the animals with an unhealthy environment. He fails to build up constitution in that he frequently breeds in and in, or too closely, and so feeds the sire, the pregnant sow and the suckling and weaned pig that the requirements of each for a complete ration are not provided.
"As to the first proposition-en-vironment-it may be stated that animals cannot be kept year after year in the same place without rendering that place a fitting habitat and breeding-bed for germs. Cleanliness is, therefore, requisite, and that means, also, destruction of the matter in which germs lodge and grow. Destruction cannot well be brought about by mere cleansing. Disinfectants must be freely used every day and the whitewash brush should follow in the wake of the disinfecting can. Lime wash serves as a trade-mark for the principle of cleanliness and once a man adopts it he will never willingly give it up. Yards and
fields cannot be disinfected or whitewashed. They become beds for germ proliferation. They must be dealt with. Plowing, eeeding and occasional occupancy by swine instead of continuous use for that purpose are available methods of rendering the environment healthy. Ancient wallows that have also a fish-like smell and are filled with all the horrors of putrid sink holes cannot be disinfected and must be abandoned and filled up. Sluggish streams and creeks should be avoided and ponds are not to be used as drinking places. Streams are the most prolific source of infection. Statistics have shown, in :ome instances at least, that where cholera is common and deadly the disease decreases gradually and surely in prevalence and virulence as we leave the river behind. Water for hogs should always come from a deep, pure well; never from surface ponds or rivers.
"But cleanliness will not suffice We must have the hardy, healthy constitution referred to above. This cannot proceed from sluggish, in-bred parents, nor from feeding that conduces to sluggishness and unhealth. Fresh blood should be frequently infused into the veins of the hogs. Fresh boars should be used instead of continuing year after year to use the same blood, raised in the same locality. Buv boars from a different altitude and geological formation, and of a diferent family unless the animals are pedigreed. Vitality and constitution and conformation are the chief considerations in purchasing a boar for the begetting of feeding animals; pedigree comes as a secondary consideration. Immature sires and dams habitually bred from cannot but reduce the stamina of the entire herd. Mature animals used for breeding purposes will be likely to beget stronger, better boned and muscled hogs than can immature parents. Further, the mature animal has surviv. ed the trials of immature life; hence, is a survival of the fittest, and these are natural progenitors of their race. A mature animal is not, however, merely the result of age. He is still immature at an old age if he has never been fed a complete ration supplying from the first all the requirements of the body. If a boar's dam and sire were habitually fed corn; if the dam ate corn as a well-nigh exclusive ration during pregnancy and during the lactation period; if the pig was early used to eat $\cot n$ and given corn instead of a nitrogenous or mixed ration from weaning time to apparent maturity, the boar in question could not possibly become at maturity anything but a "corn product." His bone would be deficient in earthy salts, his tissues flabby and fat, his constitution delicate, his blood sluggish, his temperament phlegmatic. Like begets like. Such a boar could, from sows of like character, beget nothing other than his own likeness; such 'likenesses' similarly fed and managed in time would become gradually weaker. It is hogs
bred and fed in this wav that the cholera germ is looking for It is such hogs i...at annually succtub to the dread disease. It is hogs of the opposite kind that escape. No amount of medicine, no special nostrum,-not all the wood ashes, and sulphur and charred corn-cobs and stone coal on earth-will ant!dote hereditary evils, and such things are needless for healthy begotten, fed and exerised hogs hept in sanitary surroundings.

When cholera is prevalent in the district stay at home. Don't rush over to the neighbor's for the sake of giving him an antiquated cholera remeds of sage advice. Stav at home and keep him off the place and allow no visiting by members of his family. Be unsociable during cholera times. Don't visit other folks' swine pens of yards and don't allow them to visit yours. Keep neighbors' dogs off the farm, and set your own dog on the fellow who comes to yon with never-failing remedy or preven-
tive of cholera. How do you know that his boots and pants are not cholera tainted? Cholera is his 'meat;' the place of outbreak is his pasture green. Shun him as vou would a man stricken with smallpox. Quarantine all fresh purchases for thirty days. Hogs Irom other herds should not be introduced among the home animals unth thev are proved free from dis. case. Have your local health officers prevent the hauling of dead hogs to soap factories; have them prosecute the man that throws a dead hog into a running stream or ships exposed hogs to market to save their lises by having them slaughtered in a hurry. Finafly, use disinfectants in the pens, upon the hogs and in their feed. Manage hogs with all of the above things constantly in view and cholera will become less common and the business more profitable and pleasant -except that fellow with the chol-era-inferted boots!

# Shallow Cultivation and Rotation 

By J. H. Grisdale, Agriculturist, Central Experimental Farm, Ottawa

Live stock farming, the system making the smallest demands on soil fertility, is rapidly supplanting grain growing. Parts of nearly everv farm are now much better in condition than they were a few years ago; and, further, such is nature's wonderful recuperative power, since the partial cessation of the tremendous drain of grain exportation, the average crop returns for Eastern Canada have gone up very considerably. But, as every farmer knows, even live stock farming long continued means a gradual loss of fertility unless considerable food other than that produced on the farm is fed to stock and the manure properly cared for and utilized.

This fact has led to a study of the methods for cheaply restoring lost fertility and profitably cultivating soils so that "improved," rather than "impoverished," may be the annual verdict.
It is impossible to discuss the subject exhaustively in such an article as this, but one plan of cultivation found to give good results is whe he meadow or pasture is plow August, the sod being turned to a depth of $31 / 2$ or 4 inches only. Immediately after plowing, if in a dry time, the land is rolled, then harrowed with a light harrow. It is then left untouched until grass and weeds start to grow when it is again harrowed, care being exercised to prevent the sod being disturbed. The harrowing or cultivating process is continued at intervals (as the weed seeds germinate) until October, when by means of a (three-plow gang) double mould-board plow the surface soil to be a depth of about 4 inches is put into drills about 22 inches apart and 8 to 10 inches high. This is found to be a most
satisfactorv preparation of the soil for corn, roots or grain. Where grain is sown, the soil is ready for seeding at a considerably earlier date than where late fall plowing is practised.

If along with this system of shatSow cultivation a proper rotation is adopted, most excellent results are sure to follow. As clover is the only crop which, while giving a profitable harvest, still serves to enrich rather than to impoverish the soil, it is evident that clover should take a prominent place in August rotations in this country.

With this fact in mind, a few rotations suitable for the improving of our lands may be offered as follows:
Three Year Rotation-(1) grain, (2) clover hay, (3) pasture.

Three Year Rotation.-(i) corn and roots, (2) grain, (3) clover hay.

Four Year Rotation-(1) corn and roots or pease, (2) grain, (3) clover hay, (4) hay or pasture.
Five Year Rotation-(1) grain with 10 tbs . clover seed to plough down for fertilizers, (2) corn and roots, (3) grain, (4) clover hay, $\left.{ }^{1} 5\right)$ hay or pasture.
Six Year Rotation-Same as 5 year but left one year longer in pasture.
The reason for surface cultivation and the use of such short rotations as given above is to increase the quantity of and place properly the chief factor making for soil fertility.
Dead vegetable matter exposed to moisture and warmih soon breaks down to a form called humus or black earth, the factors above mentioned. Our prairie and newly cleared soils contain immense quantities of this material. Exposure to heat and the intermix-
ture of earthy matter serve to waste. Thus, repeated s rain cropping with deep plowing provide the conditions best claculated to dissipate this matter most rapidly and most effectively.

The functions of this common, yet easily lost substance, are varied and important. Being, as anyone can find out for himself, of the nature of a sponge, it retains the moisture in a dry time, but will allow all superfluous water to rapidly and harmlessly percolate to the lower soil layers.
It holds loose, porous soils together, and so otherwise loose sands become staple and provide a good root hold for plants. It renders dense, impermeable soils open and porous permitting the iree circulation of air and water and allowing the weak rootlets to penetrate the erstwhile impenetrable space in search of food. In brief, it is the chief requirement of good physical condition in our soils. It contains much plant food, since it is really vegetable matter, and a large percentage of this food is in available forms. It aids also in the conversion of the non-available forms of the elements of fertility into available forms. Further, it retains near the surface the dissolved plant food which must otherwise have sunk into the sub-soil.
The most important sources of farmyard manure and crop resihumus on the average farm are dues. Upon the proper application or use of these materials depends the future of Canadian agriculture.
Where the supply of humus is limited its location becomes a very important consideration. Now, most of our crops draw the greatest part of their food from the sur. face soil, for, while some roots of most plants penetrate to a considerable depth, most roots of all plants are near the surface. Plants of nearly all descriptions thrive best where the surface soil is mellow and rich in humus. The great crops produced by newly cleared fields and prairie lands exemplify this, as does also the rank growth of plants in our forests, where the subsoil is never stirred, or where the annuals and smaller perennials must depend for their nourishment upon the surface soil almost exclusively. It would, therefore, seem to be clear that available plant food should be near the surface of our fields and that our surface soil should be in particularly good physical condition of tilth.

## How to secure these two require-

 ments of rapid, rank and desirable plant growth must, therefore, be the first consideration of every would-be successful farmer. Experiment and long practice seem to prove that shallow cultivation and some rotation, more especially the 3 year or the 4 year in dry districts, and the 5 year in rainy districts, are most serviceable in increasing the humus in the surface soil, and so "improving the physical condition"; which means "increasing the productivity" of our
## The Sugar Beet World

# Devoted to Sugar Beet Culture in Canada and Allied Industries. Specially Representing the Farmers' Interests 

Edited by James Fowler

## Seasonable Advice

BY C. W. REKOWSKI, AGRICULTURAL SU'ERINTENDENT OF DRESDEN sugar company
The conservative and experienced agricultural superintendent, who has been successiul during the past season in preparing his contractors for a small average tonnage of sugar beets, will be in minority, owing to the comparative newness of the beet sugar industry in Ontasio and Michigan, and to the scarcity of persons well qualified for agricultural positions. It is all the more necessary to acquaint the farmers with the real state of affairs, as most farmers are filled with such an abundance of misleading information, by well-meaning but inexperienced sugar beet enthusiasts, that when, in an extraordinarily unfavorable year, the estimated tonnage is reduced to one-third of what was expected for instance, instead of the "wonderiul" 20 tons, only 7 tons), there will be some farmers who will not acknowledge the superiority of the sugar beet, which has thrived in Ontario and certain sections of Michigan under the most extraordinary weather conditions that caused the hay to rot on the ground, the grain to sprout in the ear, that drowned out the corn and made a total failure of the vegetable crop for the canning factories (especially tomatoes, sweet corn and peas).
The constant rains throughout the whole season kept the sky almost continuously clouded and the soil cold and unfavorable to root development, while the leaves everywhere showed an extraordinary and abundant growth, and, therefore, the average tonnage would have been only a moderate one, even in a very favorable September. But this very favorable September we have not had; instead a cloudy sky, and, for the last two weeks, continuous and heavy rains. Beets have, therefore, but little matured and tests show lower sugar percentage than is usual at this time of the growing season.
The average harvest, therefore, will not exceed eight tons per acre, but even that amount will pay well where work was done according to instructions, and consequently at reasonable cost.
The main difficulty still to overcome is to get the farmer to really fully understand the beet crop and how to work it cheapest, before he raises a larger acreage, in the cultivation of which he will have to employ extra help, and further to get this help so well acquainted with the work that the good wages paid them are also conscientiously earned. For the present it is more advisable to grow two to five acres

## of beets in accordance with the

 help available on the farm, without hiring outside help, as this will give the individual farmer a better chance to study the practical part of the cultivation and enable him to judge as to how much work should be done for a certain amount of money when he increases hiis beet acreage and has to hire outside help for the work.Much disappointment would be thus averted, especially as the sugar beet, even in the most adverse sears, such as the present, for instance, will pay for the work which has been wisely and conscientiously bestowed on it, providing that its vital conditions as to quality and quantity of seed, fertile soil and its mechanical preparation have been fulfilled.

The Ontario Sugar Company has prepared a very interesting circular from which we take the following:

According to Professor Jaffa, 16 tons sugar beets will take from the ground:

| Koots, , the | aves, the. |
| :---: | :---: |
| Potash ........ ........ ... 26 | 167.5 |
| lime ........ ........ ...... 8 | 104 |
| Phosphoric acid .......... 18 | 40 |

itrogen ...... ...... ...... $20 \quad 66.5$
Since sugar beets are deep feeders, and since nearly all of which they take from the soil and atmosphere is returned to the soil by leaving the crowns and leaves on the field, they are not an exhaustive crop. In our soil the crop is not injured by excessive rain, nor by drouth, where surface cultivation is not neglected.

## Beet Tops

Our readers are aware of the fact that the tops or necks of beets decrease in size with an increase in the sugar percentage of the roots to which they belong. The superior beet has a top growing well under ground, while beets containing 5 or 6 per cent. of sugar have tops weighing nearly as much as the beet itself and containing a high percentage of salt and very little sugar. This difference also applies to rich beets, and for that reason topping is always necessary, as the manufacturer could not profitably work the tops at the factory. A very startling discovery has recently been made, which is certain contradiction of all previous observations of leading authorities. It is claimed that if the necks of a superior beet growing well under ground has its surrounding earth removed it will after sevcral weeks' growth increase its sugar percentage and contain nearly as much sugar as the beet itself(?) Just what the explanation is would be difficult to decide. A well known authority declares that by exposing a hitherto covered neck to the air there follows a certain
evaporation or wilting, which tends to comparatively increase the sugar percentage, owing to its reduction in weight. The advice generally given to farmers when cultivating beets is to keep the necks or tops well covered; but if the new theory proves correct it may be desirable at a certain period of the beets' development to uncover the rops and leave them exposed to the sun's rays. The subject is of sufficient importance to be thorough1 v investigates by some of our experimental stations.-Sugar Beet.

## The Culture of Ginseng

a keliable authority exposes some of its fallacies
We have had a few inquiries lateIy from parties wishing to know something about ginseng. The most extravagant statements are frequently published about this plant and its wealth-producing powers, and many are lead to believe that if they can succeed in growing a comparatively small area of this plant for a few years, they will become independently rich. But it is a false illusion. Where conditions are suitable, ginseng is a protitable crop. The fallacy of some of the claims for this plant are well set forth by Harlan P. Kelsey, Boston, Mass., in the following, which he has kindly sent us for publication:
"The subject of growing ginseng has recently received so much attention from the agricultural press of the country and from circulars and pamphlets sent broadcast throughout the country by dealers, that hundreds of people are being induced to try its culture.
"Many of the articles are written by people who have no personal knowledge of the best way to grow it, or of the profits to be derived thereby. Others are written by dealers who have seeds and plants to sell, and in both instances, as a rule, the information is second hand and unreliable. The most extravagant figures are given showing enormous yields produced on a given acreage and Monte Cristo fortunes to be made out of a paltry investment, while one loafs in the back yard watching the gold dollars sprouting.
"Certain dealers have sent out figures informing the public that $\$_{5}$ invested in their seeds and plants will show a value of $\mathbf{\$}_{44}$,340 , the fifteenth vear.
"A million dollar bed in twelve years from a $\$_{1,000}$ investment is advertised on another page. A value which cannot be obtained, except, perhaps, in small quantities, is placed on the seeds and voung plants, and the ratio of in-
crease and loss is given wo acurately and more extravagantly on paper. Call ata of these versatile writers please inform us how many turnips dall be grown on a $\$ 5$ investment in twelse sears, the price the roots athl soeds will bring each year and how rich a man will be at the end of that period? Cer. tainly not, and information pre tending to figure : ant would be absolute nonsense

In article on gimeng. entitled, "Valuable Farm Land, appeared in the St. I.onis Kepublic a short time ago, and was extensively copied by other papers in the South and southeret. Among other wild statements, the writer said that seens hring tise rents each anothet wriket says there is unlimited demand at iwents-five cents each) and varling roots 20 cents each; that the eiwht war an acre hould produce, , w, wom
seeds, which sell at ine unts giving an annual income :o the fortunate grower of $S_{10,},+(x)$ from the seeds alone. He further states: 'Say that a full crop of seed from one acte is available for planting. That will be : $: 120,000$ seeds. Allow for the lose athd failute to generate or $1,120,000$ seds. This will leave $2,06 x, 0.0$ seds that ate practically sure to genetate and create $2,000,0$, ronts. In eigh teen months these roots will be ready for matket, and can be sold direct to consmmers, the present price being so sents eash, or a total of 5 from the ginseng crop, in eighteen months. This crop of $2,000,000$ roots would require a space of approximately forty acres. One a.re should produce 52,000 roots, which at the market price of 20 ents each hould, after eighteen monthe. bring a riturn of $510,4 \mathrm{co}$
"Could anything be more baldly ridiculous? Let us suppose that only 1,000 gardeners had the above success as to vield. This would mean over three billion seeds put on the market each year, which, at five cents each, would require $\$_{150}$. 000,000 annually to pay for them. not to mention the value of the roots.
"Suppose, further, that the ratio, of increase, both in yield of crops and number of growers continued the same for twents-five years there would not be money enough in the world to buy a single year's crop. China, the sourse of demand for ginseng, would bave used all their wealth in its purchase long before the period of twenty-five years had elapsed. Notwithstanding these air castles, there is an enormous profit in growing the plant, but it depends on the individual grower as in any other crop. The right conditions for its culture must be supplied, either naturally or artificially and intelligent cultivation given. There will probably al ways be a good demand for the root at high prices, and it is an article commanding cash at all times.
"These conditions for growing are readily found in nearly all the

States of the Tnion, of can be proluced at reasonable cost of labor and material. They may be stated in a few words: A rich, deep, well-drained, and moist soil, con taining abundant decayed vegetable matter and not too heavy or clay

Humus or vegetable mold, obtained he using deaved torest leaves is extremeh beneticial, as is also thoroughly rotted compost. Shade sufficient to keep ofl the ditect rays of the sim is almost nee. essary, particularls in sections where the heat is excessive. Add to this areful altivation and von have the sectet, if there really be ams, of growing gimeng stacombly 1. Lath covers ate perhaps the beet artificial shade and apple trees have been found good to keep the ground protected from the sun. At maturity the roots must be carefulls and propetly prepared for market and the extra care tak (13 10 produce a tine article, clean well graded and perfectly dey, is mote that repaid by the much higher price such toots will bring

The writer who has had mans cars of experience prowing this root will be glad to give fuller in formation s. .6. the best modes to be aned is it ultivation, hont would warn the :code axainse the wildly extravagem: atticles that
appear from time to time and which will damage rather than help an industry that really does promise most unusual returns for the labor and expense necessary to cultivate it successfully.

## The Power of Wind

Dr. Hyatt, of the U. S. Signal Service, announces the following calendar of effects resulting from wind traveling at various velocitics at hour
Less than one mile--A calm-no visible hotiontal motion to inanimate matter.
1 to 2 mile - - i, ight breezecallses smoke to move from the vertical.

5 miles-Gentle breesmoves leaves of trees.
6 to it miles-Fresh breezemoves small branches and blows up dust.

## $\therefore$ miles-Brisk wind-

 makes pood sailing and whitecaps. 25 to 39 miles-High wind-sways trees and breaks small branches. to to 59 miles-Gale-Blows over chimnevs and endangers sailing vessels.(6.) to ;9 miles-Storm-prostrates trees and frail honses.
So miles and greater-Hurricane destrative of everything.

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# The Agricultural Gazette 

The Official Bulletin of the Dominion Cattle, Sheep and Swine Breeders' Association, and of the Farmers' Institute System of the Province of Ontario.

## THE DOMINION CATTLE, SHEEP, AND SWINE BREEDERS' ASSOCIATIONS.

 BENEFITS OF MEMBERSHIP.

Each member receires a free copy of cach publication issued by the Asucfation to which he trelongs during the sear in which he is a member. it the case of the swise Breeders' Asociation this include. a copy of the Swithe fieqord.
Amember of the swine Breeders' Association is allowed to register pigs at Doe. per head; non nembers are charged 81.00 ber hend.
A member of the sheep Breeders Aswociation is allowed to fogister sheep at 50c, per head, whis. on-members are charged 8100 .
The name and addrisof each member, and the stock he has for sade are published once a month. Oed each Experiment shation in Canadanad the Enited states, also to prominent breeders and protable buyers resident in Catada. the United states and elsewhere
A member of ath Asoociation will only be allowed to ailvertise stock corresponding to the Asseia数 to advertive cattle he must be a member of the Dominion Cattlo Breeders Asociation, to advertise sheep he must be a member of the Domimion sheep Breeders Asuiciation, and to advertise swine he must be a member of the Dominion swine Breeders' Assochation.
The list of cattle, sheep, and swine for sule will be published in the third isue of each month, Members having stock for sale, in order that they may be included in the Gazette, are required to notify he undersigned by letter on or before the phy of each month, of the number, breed, age and bex of the animals should a member fail to do

List of Stock for Sale.
dominion cattle breeders' association.

Graham, J. 1., Vandeleur.-2 young bulls.
Scott, F. W., Highgate. -3 cows, 2 vearling heifers, 3 heifer calves.
Snell, R. P., Suelgrove..-1 bull, to months.
Trestain \& Son, Strathburn.-15 cows, 4 heifers, 2 years; 4 yearlings 8 heifer calves, 9 bulls 2 to 26 months.

## Devons.

Harper, Samuel, Cobourg.-Cattle, both sexes, all ages.

## Aberdeen Angus

Sharp, James, Rocksile.-- Young bulls and females.

> Holsteins.

Honey, R., Brickley.-2 bull calves $:$ to 3 months, 1 cow.
Richardson, Matt. \& Son, Caledonia -10 bull calves, 4 to 10 months.

## Ayrshires.

Raynor, T. G., Rose Hall.-1 bull, 4 years.
Taylor, F. W., Wellman's Corners. -6 bull calves.
Yuill, J. \& Sons, Carleton Place. -10 bull calves under to months, temales all ages.
dominion sheep breeders' association.

## Leicesters

Armstrong, Gco. B., Teeswater.Shearling rams, ram lambs, aged ewes and ewe lambs.
Harper, Samuel, Cobourg.-Rams, ram lambs, ewes and ewe lambs.

## ahropathires.

Wren, C., Uxbridge.-1 aged ram, ram lambs, ewes all ages.
Yuill, J. \& Sons, Carleton Place. -1 ram, 2 shears, 1 ram, 1 shear, 2 ram lambs, ewes all ages.

## Dorsete.

Hunter, John, Wyoming.-2 shearling rams, 5 ram lambs, ewes, different ages.

Oxford Downs
Jull, J. H., Burford.-1 ram 2 years, 15 yearling rams, 20 ram lambs.
bosinion swine breeders' associaTION.

## Berkshires.

Brander, G., Northport, N. S.-. boat, a number of sows, 5 o foung pigs.
Yuill, I. \& Sons, Carleton Place. --I boat, 6 months, sows all ages. Chister whis.
Brandes, G., Northport.- boars. number sows, so young pigs.
limes. R., Brickley.-16 sows from a to $t$ months, if boars, 2 to 6 months, 1 yearling boar

Hurles, Jno. \& Son, Belleville.-.. $s$ boars, 6 months, 5 sows, 6 months, 25 boars and sows, 2 months.

Turkeys
Ford, Tas. \& Sons, Drumquin.35 bronze turkey cockerels, 30 bronze turkes pullets.

## PARM HELP EXCHANGE.

The Farm Help Exchange has been started with the object of bringing together employers of farm and domestic lator and the employees. Any permon wishing to obte in a position on a farm or
dairy, or any person wishing to employ help for dairy, or any person wish to forwand his or her name and fuil particulars to A. P. Westervelt. secretary, Live Stock Associations, In the case et persuns wishing to employ help the following, should te given: particulars as to the kenent, wages ote. In the case of persons wishing employment the following should be gi-en: experience and references, nge, particular department of farm. work in which a position is desired, wages expected and where last employed.
These names when received together with parnculars wiul be published FREE in the two follow-
ing issues of the "Agricultural Gazette" and will anterwaris be kept on file. Upon a request being received the particulais only will be published, the names beltig kept on file.
Every effort will be made to give all poemible ansistance. Withe end that suitable workers, male or remale, may be obtained. Every unemployed
person wishlng to engage in farm or dairy wert person wishing to engage in this oyportualty

## Help Wanted.

Wanted.-A good man who is accustomed to the dairy and feeding cattle for the winter or by the year. Farm situated in Peterborough County. No. 145 .
Wanted.-A man to work on a 250 acre farm in Ohio, U. S. In addition to milking and caring for stock there is general farm work. Good wages to energetic and willing man. No. 144.

Wanted.-A man and wife or single man to work on a farm in Muskoka. Man must be sober, trustworthy, reliable and capable of looking after the work, do general farm work, look after the horses and help with the milking, a good ploughman required and one with some experience of farm machinery preferred. Wages $\$ 17$ per month or $\$ 200$ a year board imhtuded. Wife to help with house work for board. Three of a family. No. 128 . b.

## Domestic Help Wantea

Wanted-A strong reliable person in help with farm house work. A somall from 18 to 60 ; would give - good home to an elderly woman "ho could work. Xo outside work. Ni. 143.

Situations Wanted
Wanted a position on a farm by - yotng man 18 years of age caring for horses and cattle; has not had much experience in farm work lut is willing to learn. No. 612. a.
A position wanted by a married man with three children. Does not use tobacco nor liquor and can give the best of references. Has had yeats of experience and understands the care of horses and farming in all its branches. Has been foreman on a milk farm for 7 years. House required. No. 605. b.

## N. B. Where no dame as men.

 tioned in the advertisement, spply to A. P Westervelt, Parliament Buildings, Toronto, giving number of advertiseman*
## Farmers' Institutes.

Under twis head the Superintendent of Farmon Inatitutes will cach week publish matter relating to Institute work. This will include instruction
to secretaries and other officers, general informat to secretaries and other oflices, , veneral informa-
ton atout Institutes and Institute work, sugges-
tions todelegates, etc He vill also from time to
 perimeats conducted at the sarious Akricultural Collcgessand Experiment stations of Cauadn and the United states. In this way he hopes to give tustitite members some valuable ag:icultural information which they might not cherwise re ceive, on account of not having access to the
original publications, If any memberat any time desircs further information along any of the lines discussed. by applying to the superntendent he whil be put in direct communication with the liatitution that has carried on the work.

Surmerintandent Farmers' Instituue

## lastitute inferings

As the subjects of one of the speakers were not received in time for publication in the last issue of the Gazette, we publish below Division 1 revised.-

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$$

T. G. Raynor, Rosehall-"Feeds and Feeding" (illustrated); "How to Build up a Herd or Flock'; "Soiling Stock"; "Dairying as it Applies to the Producer"; "Some Common Diseases Affecting Stock" "The Plant and the Soil"; "Two Important Crops-Corn and Clover"; "The Production of Pork"; "The Uses of Concrete." Evening subjects: "Mistakes in Farming"; "Agricultural Development."

Miss Ida Hunter, Toronto, Ont."Selection and Preparation of Food"; "Education of Our Girls": "Domestic science" with practical illustrations.

1. Desboro Township Hall),
North Grey, Nov. 27th.
2. Kilsyth Township

Hall),
North Grey, Nov. 28th.
3. Annan (Grange Hall), North Gres, afternoon), Nos. 2yth.
4 Leith Hall), North Gey (creting), Nov. 29th.
5. Bognor (Hall), North (irey, Dec. 1st.
b. Snyder's School house, North Grev, Dec. 2nd.

Holland Centre (Price's Hall), Centre Grey, Dec. 3 rd.
8. Kimberly Union Hall), Ceatre Grey, Dec. 4 th.
9. Feversham (Orange Hall), Centre Grey, Dec. 5th.
D.a. Priceville (Watson's Hall), Centre Grey, Dec. 6th.

## Muskoka Women's Institute

The South Muskoka Women's Institute began it's second series of winter meetings on Oct, 1th. Owing to illness and threshing machines, the programme could not be cartied out as published. In the absence of the lady who promised to give the much desired information of "How to keep husbands good-tempered" the president read a newspaper cutting on "How to manage a man."
The discussion that followed provoked muh merriment. The general opinion seemed to be that men are not quite so tractable as the writer represented. No doubt it is because newspapers are conducted by men that we read so often of the wife's duts to greet her husband always with a sweet smile, a pretty ribbon and a good dimer, but not a word of how he should conduct himself when the clothesline breaks or other domestic disasters occur.
The secretary read an essay written by an absent member on "How to select, preserve and cool eggs." Various methods were given of testing eggs for freshness, of preserving them in good condition and a number of well-chosen recipes for serving them as in omelets, etc. Frying is the poorest way of serving them and overcooked eggs are not fit to eat. The discussion that followed showed that the women have learned better wass of cooking eggs in the shell than by keeping them in fast boiling water for three minutes or more. They should either be put on in cold water and taken out when it reaches boiling point, or put in an earthware dish, pour boiling water over them, cover and set down on front of the stove for nine minutes.
The next address was on "How to make time to read." The speaker advised having floors painted so that they could be kept clean with less labor. Although partial to well-ironed clothes, it is better for the busy woman to leave towels and underclothes unironed. Be siles, authorities on hygiene de-
clare them to be more wholesome than when ironed. Some women might well be warned against spending too much time on fancy needlework, but that did not apply to present company. Perhaps most of us could get along with less fancy cooking. Bread and butter with fruit, cream, eggs, cheese, velery, etc., each in their separate natural form, cannot be surpassed by ath conglomeration of these thing. Much time may be saved if the house is built with a view to convenience, many of them are wo-men-killers. But after all, most of the farmers' wives are working close to the margin of necessary labor with no time for recreation. The question goes deeper than the woman's management. The trouble is that farmers are too inert to see to their own interests in legislative matters. They allow themwhes to be the prey of greedy tusts, combines, railroad companies, etc. Take, for example, the attle gnard trouble! The railroad - mpanies set law at defiance de. cros thousands of dollars worth of tarmers' stock without recompense and our legislators passively look on while the farmer and his wife toil and economise to the last cent to make up for the loss. Then there is the high tariff on every. thing the farmer uses which compels him and his family to labor messantly for the benefit of the manufacturers who are alwavs damoring for more protection. It has been said that "He who takes a kick deserves it." Is not this true? There are farmers enough to control parliament, vet they are practicallv without representation and the fault is entirely their own. --Alive Hollingworth, Sec'y.

## As Others See Us.

INTERVIEW WITH MR. W. A. MACKIS NON, CHIEF OF FRUIT DIVISION, ottawa
From the Free Press, Aberdeen, Scotland.
The popularity of Canadian fruit is well known, particularly the suc, wlent apple, for which the Dominion has acquired a well-deserved reputation. The care, however, that is necessary to secure that the fruit shall be placed on the markets of Great Britain in the very best possible condition is not so generally known. Indeed the remarkably well-preserved appearance of the fruit that was shown at Glasgow Exhibition last year in the Canadian section was the subject of general wonder. In the whole of the great Exhibition there was probably no section that was more favorably received than the Canadian, and in it there was nothing that approached the interest taken in the fruit. The account of an interview that a representative of the "Aberdeen Free Press" had yesterday with Mr. W. A. MacKinnon, chief of the Fruit Division of the Department of Agriculture of the Dominion, will help to show the great care that is taken to foster the trade in Canadian fruits,
and explain how it is that it can be sold in this country in such good condition. In the first place, it may be pointed out that the Dominion Department of Agriculture looks after the interest of the agricultural classes in a very thorough manner. Under the Department there are appointed various heads of sections whose business it is to foster the trade of the partisular branch under their cate. For instance, there is a chief of the Iive Stock Department, a chief of the Poultry Department, a chief of the Dairy Department, and so on. The work of these gentlemen is to improve the trade of their own particular line, and this they do by finding out in what manuer the supply of the provisions is best appreciated and in perfecting the means of transit.
The work that Mr. MacKinnon, the head of the Fruit Department, is meantime engaged in, is that of touring Great Britain in order to find out how wholesale dealers and retailers wish to have the fruit sup. plied, that he may be able to inform the producers on his own side of the Atlantic. His work up to this point, he explained, had been that of visiting the wholesale dealers and retailers, and then when the supply of the present vear's crop of fruit begins to arrive he will watch the ports of debarkation to find in what condition the shipments are landed. When in Aberdeen yesterday he made a tour of a number of the principal shops, and found that the merchants wished to have their supplies of fruit delivered in smaller parcels than has hitherto been common. The ordinary package has been a barrel which the merchants say is in many cases too large. Parcels of 40 ths., they say, would suit much better, as many customers would then take a whole box at a time, while in addition, the consignments would be much more easily handled. Coming to the general question of the Canadian iruit trade, Mr. MacKinnon said, there was an immense and increasing business done in apples, pears, and peaches. This year the crop of apples in the Dominion is very large and the quality unusually good. As a consequence, it is ex. pected that there will be big consignments to Great Britain, which is the principal export market. Pears, also, are a good crop, and one thing that Mr. MacKinnon pointed out as a great advantage that the Canadian crop possesses over the French or Californian, is that it is firmer and stands out much better. Mr. MacKinnon is enthusiastic as to the quality of all kinds of Canadian fruits, maintaining that they are quite fit to compete with any in the world.
Turning next to the care taken in exportation, he detailed the measures that the Canadian Government had put in force for the benefit of producers and exporters. "We produce," he said, "too much for our own consumption, and the Government, to improve the trade,
is doing everything that it can to expand the market. The great essentials are that the best varieties shall be produced; that they shall be placed upon the market here in the very best condition and in the most suitable pachages for the trade." With regard to the varities, the Dominion Department of Agriculture is giving instruction throughout the country based upon reports as to what varities are most acceptable in the markets here. As to proper packing, there have been many complaints about parcels being sent across in which fruit of good quality was placed on the top, while underneath the quality was inferior. This gave the trade a bad name, and in order to check the practice, the Dominion Parliament passed the Fruit Marks Act of 1901. Under this Act, it is a punishable offence to pack any fruit in such a way that the "face" gives a false impression of the contents. Every shipper is required to put his name and address on all packages, so that it is perfectly easy to trace any defalcator. These are the essential provisions of this Act, and it is enforced by a dozen inspectors working directly under the superintendence of Professor James W. Robertson, the Commissioner of Agriculture for Canada, and Mr. MacKinnon added, a Scotsman who has done splendid work for agriculture in the Dominion. In fact, he was recently invited to go to South Africa in order to put the agricultural industry there on a good basis. This legislation by the Dominion, which may be said to be almost wholly in the interests of the consumer in this country, although, of course, it will also improve the name of Canadian products, is enforced with the greatest strictness; and it is desired that if there is cause for complaint with regard to any shipments, complaint should at once be made to the representative of the Dominion. Such complaints will, if desired, be treated as confidential. The co-operation of traders in this country on this matter is earnestly wished by Canada.
As to care in transit across the Atlantic, the Government has secured the introduction, by nearly all the steamship lines, of a system of forced ventilation. Then, of course, the steamers are fitted with cold storage chambers so essential for the proper preservation of fruit. In these chambers there is placed a thermotograph, inaccessible to anyone on board, so that at the end of the voyage there is provided a table of the variations in temperature from day to day during the voyage. This shows exactly under what conditions the fruit has been transported, and it is eminently satisfactory to note that so well have the arrangements been made that last year one cargo of pears from Montreal to Glasgow had an average temperature of 38 degrees, with a variation of less than two degrees. On this side of the Atlantic the Canadian Gov-
ernment has agents placed at London, Liverpool, Bristol, and Glasgow, whose duty it is to examine all cargoes of fruit on their arrival and see that the packages are carefully handled. One result of this has been that there is a great improvement in the manner of handling the delicacies. The packing of the fruit is an important matter, and one in which great care is taken. Mr. MacKinnon says that he has not yet seen any of the varieties arriving in this country from Canada, but he saw a shipment of pears from California. The California shipments have acquired a reputation for careful packing, and Mr. MacKinnon says that the cargoes he has seen leaving Canada were certainly in better condition than the Californians were when they arrived. Before he leaves he will see the Canadian shipments coming in, and he will then be able to compare the two; but he is confident, with the excellent arrangements now made for shipping, that Canada will have no difficulty in competing with and even beating any other country. $t$ the close of his tour in this country he will present a report, stating what varieties of the various fruits are wanted and how best to put them on the market. He is confident the Dominion has a great future before it in the fruit industry, which can be fostered by carefully supplying exactly what is wanted. There is no wish, he remarks, to cram down the throats of anyone what is not wished. The whole desire is to find out exactly what is wanted and supply it.

## Territorial Autumn Pure-Bred Sheep Show

The largest number of sheep ever collected for show purposes west of Lake Superior was to be seen at the Autumn Purebred Sheep Show which was held under the auspices of the Territorial Purebred Sheep Breeders' Association, in conjunction with the Medicine Hat Agricultural Exhibition at Medicine Hat on Oct. ist. Some 250 sheep of Shropshires, Oxford Downs and Rambouillet breeds were on exhibition, many of which competed for the prizes offered by the Association, which were valued at $\$ 456$. The principal exhibitors were John A. Turner, of Calgary, C. W. Peterson, Deputy Commissioner of Agriculture, D. McKerracher, Medicine Hat, James McCaig, Lethbridge, and P. Robinson, of Medicine Hat. The judging was performed by Messrs. Wm. Sherman, of Souris, Man., and S. W. Paisley, of Lacombe, who were appointed by the Territorial Department of Agriculture. An attempt had been made to bring a judge up from Eastern Canada, but at the last moment it was found impossible to make the necessary arrangements and Messrs. Sherman and Paisley kindly consented to act, and the concensus of opinion was that the awards were very satisfactorily placed, in spite of the fact that competition was very keen and the
task of judging was an exceedingly difficult one.
Very considerable interest was taken in the judging by the visiting sheepmen. This feature of a live stock show is one that the various territorial live stock associations are pushing for all it is worth on the principle that whatever educational value attaches to agricultural exhibitions of all kinds centres almost entirely in the placing of the awards by competent and disinterested judges, and every effort was consequently made by the association to bring a crowd out to witness the judging and with most satisfactory results. The highest place for Shropshire rams was gained by John A. Turner with a magnificent shearling ram, the like of which has probably never been seen in the West. British Columbia buyers will patronize the sale, but it is hoped this grand sheep will remain in the territories and become the sire of prize winners at future shows. The championship honors in the open class for Shropshire ewes was captured by C. W. Peterson, Deputy Commissioner of Agriculture, with a two shear ewe of exceedingly fine quality which won the admiration of every onlooker. This ewe was only exhibited and is not intended for the auction sale.
The keenest interest was naturally exhibited in the championship classes. D. McKerracher carried off this coveted honor in the open class for rams and ewes of the Oxford Down breed. The championship ram is a good strong sheep and will doubtless give a good account of himself at the auction sale for which he is destined.
Nearly all the sheep that were entered for the show were auctioned off according to programme.

[^1]
## Do You Want A Farm ? ? ?

If so, you can obtain one on very easy terms in some one of the various districts of :

## NEW ONTARIO

Write for particulars to the Bureau of Colonization, or to

HON. E. J. DAVIS
Commissioner of Crown Lands TOROATSO

## The Farm Home

## If We Knew

Could we but draw back the curtains
That surrount eah other's lives. See their naked heart and spirit.
Know what spur the action gives. Often we should tind $n$ better.
Purer than we judge we shouldWe should tose each other better, Lf we only understood

Could we judge all deeds by motives,
See the good and bad within.
Often we should love the simner.
All the while we loathe the sin.
Could we know the powers working
To overthrow integntey.
We should judge eah other's errors
With more paticnt harity.
If we knes the cate and trials, Knew the effort all in vain,
And the bitter disappomtment, Understood the loss and gain.
Would the grim external roughness Seem, I wonder, just the same?
Wouk we help, whete now we hinder?
Would we pity whete we blame?
Ah! We jutue ea h other harshly, Knowing toe bife - hidden force:
Knowing not the fonnt of action Is less turlid at its somre.
Seeing not amid the evil All the golden grains of good: Oh! we'd love each other better. If we only understood.

\author{

- Mrs. C. H. Taintor.
}


## Making Fish

by t.AURA ROSE, PICION COUNT, NONA scotia

Have vou ever, in passing a grocery store, paused to look at the grey, triangular shape of the dried cod and wonder what humiliating process that finely-proportioned fish must have undergone to be transformed into such a withered salt-saturated object?
It is always interesting to see and hear about such things right on the spot where the work is done. A little while ago, down by the sea, I watched some men, busy at what they called "making fish." On each side of the wharf and high up on the rocky banks of the shore were long rows of fish "tlakes" and on these the men were spreading the fish to dry. The flakes are never made according to rule, but are put together in a most zig-zag, unconventional manner. They stand two or three feet from the ground and are made of long side pieces with slats placed across a little distance apart to form a table Who does not like the smell of these old decrepid-looking fish flakes? Even when free of fish, they give to the salt breezes that play over them a fragrance found nowhere else-a fragrance vastly different from that which you en-
counter in a city fish market.
Fishermen in places, often quite temote from the fish-curing establishments, catch the cod-hake and haddock $\rightarrow$ be varions methods. One way is to dasten :0 stakes a long. heave rope, from which dangles hundreds of short lines whth bated hooks. Aiter the rope has been set some time it is hauled up and the $f$ sh removed.
The cod ate the mose highly prized and bring on the market, when drided, a couple of cents more a pound than the other varieties of tish.
The distinguishing tratures are: A cod has small spot, over it. a hake has a coarser skin without the spots, while a haddock has two large dark spots and a stripe down each side. Thete is a little tradition ahout the tark marks just behini the hoad of the haddock.
Satan, it seemei, one day, took a desire fo: tish, and aiter several vain attemple. oncolat in cath. :as once temarking as he did so: "Ha! Dick. I have von now." and the finger matks of his Satanic majesty have eve: remained on this species ot the finns tribe.
After being caught, the fish are taken ashore and the heads and "inwards" removed. The fish is then split down and a portion of the back takenout. After a washing, they are heavily salted and put into punchons. On large fishing smacks the process of dressing and salting is often done, while out at sea. The liters are thrown in. to barrels, and much oil comes from them. The swim bladders or sounds, are saved and dried to be manufactured into gelatine or glue. Fried fresh sounds and cod's tongues are considered a very dainty dish.
The salted fish are brought to the drying stations and there weighed and sold. Here they are first resalted and then made into piles six by four feet, and left for seven or eight days to have the moisture pressed from them. After this, they are spread on the flakes -an expert can throw a cod many feet and never miss putting it in its proper place on the flake. In the evening the fish are piled three or four deep, skin side up, in case of rain, and next morning are again spread out. Three or four days of windy, sunny weather will draw from the fish its last drop of mois ture. When the drying process is finished, they are taken in wheel barrows to the sheds, where they are made into large solid piles and allowed to sweat for a week. On a bright day they are once again laid on the flakes to receive the final airing and drying and are then tied into bundles or pressed into boxes or barrels ready for shipment. A good deal of cod is consumed in this continent, but by far the larger portion goes to the West Indies.

## The Pessimist

I: Ben hing
Nothing to do but work, Nothing to eat but food, Nothing to wear but cothes To keep us from going nude.
Nothing to breathe but air, Quick as a fla 1 h 'tis gone: Nowhere to fall but off. Nowhere to stand but on.

Sothing to comb but har. Nowhere to sleep but in bed.
Nothing to weep but tears. Nothing to bury but dead.
Nothing to sing but songs, Ah, well, alas! alack!
Nowhere to go but out;
Nowhere to come but back.
Nothing to see but sights.
Nothing to quench but thirst. Nothing to have but what we'vo got;
Thus thro' life we ate cursed.
Nothing to strike but a gait:
Feverything moves that goes,
Nothing at all but common sense Ca: cint withstand these woes.

## Waffles

Mix one pint of flour, two level teaspoons of baking powder, and one-half of a teaspoon of salt. Add one and one-fourth cups of milk. three well beaten egg yolks, two tablespoons of melted bitter, and the whites of the three cggs beaten stiff. Cook then on a hot, greased waflle-iron. Put the waf-fle-iron over the fire, and there should be room enough to swing it over. In greasing it, put a bit of clear fat pork on a fork, or put a small piece of butter on a clean cloth and rub over both griddles. The heat will melt the butter, and let just enough of it go through the cloth. Close the griddles and turn them that the fat may run evenly over them. Pour the batter into the centre and let it run two-thirds of the way; when the cover is dropped into place the mixture will spread to the edge. Cook about one minute on one side, then invert the irons and cook a little longer on the other. If you are sure the iron is clean and smooth, and thorougny hot, you may cook them without any greasing. A colored cook in the South says she never greases her waffleiron, and I have recently found that these delicious cakes can be perfectly baked without the annoyance of sizzling, smoking fat. Frequently, merely the first greasing is sufficient for the cooking of the whole amount.

Mistress.-Bridget, I told you five times to have muffins for breakfast. Haven't you any intellect?

Bridget.-No, mum; there's none in the house.-New England Grocer.

Hints by May Manton.
woman's plain shirt walst, with $v$. SHAPED NECK, $\downarrow 191$
To be Made with Elbow or Long Sleeves.
Simple waists with slightly open necks and "ping pong" collars are in great demand and much liked for the hours of sport and of work. The freedom at the throat is a welcome relief and does away with the annoyance of the high stock while there is not the least sense of negligee. The very pretty waist shown is made with elbow sleeves and is peculiarly well adapted to handling the racquet and the golf sticks, but can be made with sleeves to the wrists when desired. The original is made of light weight waist cloth or albatross in blue and white, stitched with corticelli silk, but all waisting materials, silk, flannel, linen and cotton are appropriate.

The wast is simply ont with


4191 Plain Shirt waist, 32 to 41 bust.
fronts and back only and is fitted by means of shoulder and underarm seams. The back is gathered at the waist line where it is stayed with a band, but the fronts can be gathered or left iree to be adjusted to the figure as preferred. The closing is in shirt waist style and is effected by means of but. tons and buttonboles worked in the box plait. The sleeves are one seamed and can be finished at the elbows with roll-over flare cuffs, or at the wrists with narrow cuffs buttoned over into place. The neck is cut away to form a $V$ and is finished with a roll over collar seamed to the edge.
To cut this waist in the medium size $3^{1 / 4}$ yards of material 27 inches wide, $2 \frac{1}{4}$ yards 32 inches wide or 2 yards 44 inches will be required. The pattern 4191 is cut in sizes for a 32, 34, 36, 38, 40, and 42 inch bust measure.

The price of the above pat. sern post-paid is only 10 ots. Send orders to The Farming world. Confoderation Life Bulding, Toronto, giving nige wante

## Fruit Wafers

Into one cup of cold sweet cream stir three cups of Ciraham flour or enough whole wheat flour to make a stift dough. Knead it thoroughly and divide in halves. Roll each part quite thin. On one spread a thick layer of chopped figs, lay the other portion on top, and press them together by rolling slightly with the rolling-pin. Cut in small squares and bake quickly. These are nice for the children's lunches and are more wholesome than the rich egg and butter cookies often given them. Thes mav be varied by using a mixture of figs and dates, of figs and walnuts, or figs and prunes which have first been slightly cooked so the stones may be removed easily.

## Apples for Sleeplessness

The apple is such a common fruit that very few persons are familiar with its remarkably efficacious medicinal properties. Everybody ought to know that the very best thing thes can do is to eat apples just before retiring for the night. Persons uninitiated in the mysteries of the fruit are liable to throw up their hands in horror at the visions of dyspepsia which such a suggestion may summon up, but no harm can come even to a delicate system by the eating of ripe and juice apples before going to bed The apple is excellent brain food, because it has more phosphoric acid in easily digested shape than anv other fruits. It excites the action of the liver, promotes sound and healthy sleep, and thoroughly disinfects the month. This is not all: the apple 1 vevent, indigestion .thd throat Aivares-Popular scin: News.

## Afie'd in October

(From Country Life in America.) Bob White! Bob White! Thy challenge rings
Across the stubble brown.
Bob White! Bob White! The north wind brings
The challoage into town.
The littered pages on my desk Do rustle in the wind
Is if of crisp Octoher leaves
They fain would me remind.
Thes whisper me of copse and wood;
Of sumac's flaming red;
of field and meadow brown and sete
Since gentle summer fled. They whisper me-Ah, who can fail To take the challenge of the quail!
"And now," said Mrs. Windig, after handing her husband a onesided heart-to-heart talk of thirtythree minutes' duration, "I must go to the dentist's and have a tooth filled."
"My dear," rejoined the patient but long-suffering freight-payer of the combination, "I wish you would have him fill the rest of your mouth while he is at it."

## Thoroughness.

Prof. W. Hodgson Ellis, Official Analyst to the Dominion Government, states that "Sunlight Soap has " a thorough cleansing power, with" out danger to the clothing or skin." Women who want washing done thoroughly cannot use better than Sunlight Soap-Octagon Bar. Unlike common soaps, there is no damake to the clothing, and no danger to the skin : hence the saying: Sunlight Soap reduces expense. Try Sunlight Soap-Octagon Barnext wash day, and you will see thet Prof. Ellis is right. He shou! know.

is a guard against all skin troubles in children. It cleanses, softens, soothes and prevents chafing and sores.
1T 18 AS GOOD FOR THE OLD AS THE YOUNG. ALBERT TOILET SOAP CO., MFRB. montheal.

Tell your neighbor about THE FARMING WORLD. It will pay you and help him. Sample copy free. Write us.

## The Farming World.

A PAPER FOR FARMERS AND STUCKMEN.
D. T. Mcainsh, - - Publishen

The Parming Wortd is a a puper for farmen athd stockinet, published weekly, with ilitus
trationtis The sularipetion price is one dollar trations The subseription price is one dollar Postage is prepent by the 1 whisher for ail sub, scription- in Cunath athe the Inited state
Forallother conntries in the Postai I nion add fifty cents for ; ostage.
Change of Address - When a change of aidress is ordered, both the new and the old addresses must be kiven. The notice shoukd be ent
week before the change is to take effect.
Recelpts are only sent utwn request. The date oplosite the nathe on the address lated indocacesthe the the change of tate is sufficient pain, and the change of date is sufficient change is not made promptiy notify us.
Discontinuances - Following thegeneral desire of our readers, nosubw riber's copy of The Farm-
is.i $W$ orbip is dianntinued until that effect is given. All arrears must be paid
Now to Remit.-Remittances should twe sent by mones order, mayble toorder of THE FARMIN Wonlid. Cusi should te sent it registeren
letter.
Advertising Rates on application,
Cattere should be addreswid;
THE FARMINA WORTD,
Confedehation Liffe Buildin.
 QUESTIONS AND ANSWERS

Mare With Swollen Leg.
I. F. C. writes: "I have a mare whose hind legs swell very badly every time 1 drive her. Sometimes they swell up to the knees and sometimes higher. I drove her ten miles the other day and the next morning one fore foot was swelled up. She is molined to scour badly but is all right otherwise. Please tell me what to do for her."
Give one of the following powders three times dails in oats: P'ulverized nux vomica, three ounces; pulverized nitrate potash, three ounces; pulverized resin, two ounces; arsenic, twenty-four grains; mix, and divide into twenty-four powders. See that she gets exercise daily. Bandage the legs with a derby bandage moderately tight after each exercise and allow them to stay on two hours. Take them oft and hand rub the legs thoroughly, and apply the following liniment: Distilled extract witchhazel, four ounces; tincture arnica, four ounces; aqua ammonia, four ounces; water, enough to make one pint; mix.

## Preventing Potato Rot

Though the late potato blight or rot cannot be cured it can be prevented. After it makes its appearance and the leaves turn brown and dry up it is too late to save the crop. It does little, if any good to apply remedies after the blight appears. The remedy then is to apply the Bordeaux mixture during the time when the blight is likelv to come on the plant. Spraying will be good for the potato plant even if the rot does not come upon it. The early blight is almost sure to appear whether the late
blight appears or not. It may be prevented by spraying. The early bight causes brown dead spots on the leaves, which are marked by concentric rings. For this disease, as for the late blight, Bordeaux mixture is an almost perfect prerentative
While Bordeanx mixture is not poisonous to insects it is distastefill to them, and Paris green combined with it can be more evenly distributed by the spraver than in any other way. In this way flea beetles as well as the ordinary potato beetles can hardly attack the leaves without being poisoned. When applied with the Bordeaux mixture Paris green will not burn the foliage as it often does when applied in a powder or in water.
The Bordeaux mixture for use in potatoes should be made as fol-

## Poultry and Eggs

Advortisements wndev this head one cent a woo Cash must accommany all onders under $\$ 2.00$. No
display type or cuss allowed. Each initial and uam ber counts as one word.

BUFF ORPINGTONS, imported this season from England, 8 birds costing $\$ 125$. Sulid buff eggs $\$ 3$ per 13. Also breeder of Brown Leghorns, contin uous layers Barred Rocks, E. B. Thompson's Whit
Wyandotes, Indian Games, Wyandottes, Indian Games, true blicky type for ex Ontari) and Brantford shows. Incubator eggs $\$ 2.50$ per 100. J. W. Clark, Importer and Breeder,

Onandaga, Ont.

## Brawn $^{\text {Leghorns, Prolific early layers; Strain }}$ won at Pan-Aınerican. Stock for sale--Minor Rocks, Choicest Strains, Eegs in seazon IOHN B. PETTIT, Fruitland, Ont.

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BUFF ORPINGTONS-For sale, choice breeding stock. Prices on application. Al o Co.kerels of value to breed with ordinary farm fowl, especially Barred Rocks. Price $\$ 150$ each
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## TOLTON'S No. I Double Root Cutter



Points of Merit :

1. To change from pulping to slicing is but the work of a moment.
2. There are two separate wheels, one for pulping and the other for slicing.
3. The united fnrce of both wheels is always used in doing the work in either capacity.
4. The hopper is between the wheels, and does not choke.
The Oaly Double Reot Cutter Manulactured.
Pitted with Roller Beariage, Steol Shafting, and all that is latest and best in principlo,
lows:-Take six pounds of copper sulphate (blue vitriol) and tie it up in a piece of thin cloth-an or dinary salt bag will answer wellthen suspend it from a stick laid across the top of a coal oil or other barrel half filled with clean water, so that the bag mav be just beneath the surface of the water, when the copper sulphate will dissolve in an hour or two. in another vessel slake four pounds of fresh lime in sufficient water to make a thin whitewash. Strain this through a fine sieve or sack to remove all lumps. When the copper sulphate has all dissolved, pour the lime wash into a barrel slowly stirring the mixture all the time Now fill up the barrel to the top with water, and the mixture is ready for use.

To apply this mixture to the foliage the best and cheapest way is to use a proper spraying pump and nozzle; but if these be not on hand good results may be obtained by applying the mixture with watering cans supplied with fine roses.
A great advantage of this mixture is that Paris green, the only practical remedy for the Colorado potato beetle, can be applied at the same time. To do this Dr. James Fletcher, the Dominion Entomologist, advises mixing from a quarter to half a pound of Paris green with a little water so as to make a thick paste, and then adling this to the forty-five gallons of Bordeaux mixture, which renders the poison of exactly the same strength as when used with plain water.
These mixtures must be kept constantly stirred while being used, as both the lime in the Bordeaux mixture and the Paris green quickly sink to the bottom of any mixture if left undisturbed.
It must be remembered, however, that the Bordeaux mixture is a preventative remedy and the time to apply it is just before the blights usually appear. This for Ontario and Quebec is generally the end of June and the beginning of July for the early blight and August for the late blight or rot. Spraying should therefore be begun early in July and be repeated every two weeks until the second week in September. Three applications of Bordeaux mixture and Paris green may suffice.

## Cold Storage of Fruit.

The Ontario Department of Agriculture has recently issued a timely bulletin on this subject. It is compiled by Professors Reynolds and Hutt of the Ontario Agricultural College and gives the results of a series of experiments begun in the autumn of 1901 on the keeping of fruit in cold storage. These conditions were chosen for experiment: (a) different temperatures; (b) different sizes of fruit; (c) different styles of packing. The following is a condensed summary of the bulletin:

1. Apples and pears keep best when wrapped singly in paper, and packed in a shallow box not larger

# ...NW F FAMM BOISS... 

HERSOIT: Its Nature, Relations and Fundamental Principles of Manage ment. By F. H. King, Professor of Agricultural Physics in the University of Wis consin.

303 Pages- 45 Illustrations- 75 Cents.
"Agnew rook of first importance to aery farmer. Jis importance cannot be overest,mated."

F
RRTILIZERS : The Source, Character and Composition of Natural, Home-Made and Manufactured Fertilizers; and Suggestions as to Their Use for Different Crops and Conditions. By Edward B. Voorhees, Director of the New Jersey Experiment Stations, and Profes:or of Agriculture in Rutgers C illege.

Second Edition-335 Pages-\$1.00.
This bock discu,res the difficult questions of ferilizers in such plain and untechnical lang uage that those who are wholly unlearned in ctenisty can use it. There are no elaborate tables. The book instructs upon the fundemental prir ciples or the use or armer is able, when he readisers, tut tells simply and directly what the tuth is respecting their
advo cate for commencial fertilize value.

$\mathrm{T}^{\mathrm{E}}$
PIT PRUNING BOOK: A Monograph of the Pruning and Training of Plants as Applied to American Conditions. By L. H. Builey, Professor of Horticulture in the Cornell University.
Third Edition-545 Pages 331 Illustrations-\$1.50.
Until the appearance of this bock, there had teen no corrplete and consistent discussion of pruning. Protes or Bailes considers fully the philosc phy of the subject, showing why we should p une. with such statements of experience and observation as will en lighten the reader. It states principles; and then the various practices of pruning are considered in foll dicain, and
of car efully collected daidy


ILIK AND ITS PRODUCTS : A Treatise upon the Nature and Qualities of Dairy Milk, and the Manufacture of Butter and Cheese. By Henry H. Wing, Assistant Professor of Dairy Husbandry in the Cornell University.

## Third Edition-311 Pages-33 Illustrations-81.00.

In this volume the whole field of dairying is intelligently considered. The production and character of the lacteal fluid are frist discussed, and then in order are taken up the marketing of $\mathrm{m} i \mathrm{k}$, the production and handirg of butrer, cheere the book is up to cate in its science, The illustrations servel to point he this.
CHE FERTILLTTY OF THE IAND: A Summary Sketch of the Relationship of Farm-Practice to the Maintaining and Increasing of the Productivity of the Soil. By I. P. Roberts, Director of the College of Agriculture, Cornell University.
Third Edition-421 Pages-45 Illustrations-\$1.25.
This work. writuen by one who nas been termed "the wisest farmer in America," takes up the treatment of the soil from the standpoint of the farmer ratber than that or the scientist ines em bodies the results of years of careful experimentation and obsetvation aiong pracinalines, and mill be found belpful and inspirisg to a maiked de gree. No ether ing series of talks-for Professor recommended to the urcgestrive
Roberts seems to be personally addressing the reader.
$\square$
IR PRINCIPLES OF FRUIT-GROWING. By_L. H. Bailey Professor of Horticulture in the Cornell Universily.
Third Edition-516 Pages-120 Illustrations-\$1.26.
There bave been manuals and treatuse on fruit gr wing, but thi. volume is the first consintent presentation of the underlsing principles affecting the growth cf the various fiuits. It is
it thus unique, and it occupies a field of the greatest imporiance. It joins science and proctice, fors. not only discusses the reasons for cerrain op rations, It appeale especially to the horticulturist
ga bered from the successful fruit grc wers of America ga hered from the successful fruit gre wers ond and supplement the work of his hands, and to acquire a
who is willing to have his brain direct and who is willing to have his brain direct anemoppdum of their application.


ARDENTMAEING: Suggestions for the Utilizing of Home Grounds. By L. H. Bailey, aided by L. R. Taft, F. A. Waugh, and Ernest Walker. Fourth Edition-417 Pages-256 Inustrations-\$1.00.
Here is a book literally "for the million" who in broad America have some love for growing things. "Every family can have a gaiden. If ihere is not a foot of fand, there are porches or
window. Wherever there is sunlight, plants may be made to grow ; and one plant in a un- can windows. Where ver there is aunlight, piants may be madid graw ; whole acre of lawn and fowers
may be a more helppul and inspring garden to some mind than a


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Contideration Llife Bulliling,
TORONTO

THE FARMING WORLD
than a bushel. They ship best when, in addition, they are packed in layers with excelsior between.
2. Apples keep better at a temperature of 31 degrees than at higher temperature. Our experiments do not show what is the best temperature fo: pears.
3. Cold storage cannot make bad fruit good; neither can it keep had fruit from becoming worse Only good specimens will keep for ani length of time in cold storage, or will pay for storage.
4. For long storage, it pavs to select the best fruit and to pack it in the best manner known. The extra labor and the cost of material are more than repaid in the greater quantity and better quality of fruit left at the end of the stor. age period.
5. With apples and pears at least and, it seems likely, for most kinds of íruit, the fruit should be picked and stored in advance of dead tipeness. The maturing jrocess goes on more slowly in cild storage than on the tree or bush.
6. With two kinds of fruic trivi, apples and pears, the medium sizes of fruit keep longer than the largest, all being perfect specimens and picked at the same time. It wonld, therefote, be an advantage, especially with pears and peaches, to pick the larger specimens first and leave the smaller to mature later.
7. Fruit, on being removed from cold storage, should be allowed to warm gradually, and moisture should not be allowed to deposst upon it. But if the wetting camnot be prevented, then the fruit should be spread out and dried as quickly as possible.
8. With all kinds of iruit, there is a time limit beyond which it is unprofitable to hold the fruit in cold storage, or anywhere else. That limit for sound fruit is dead ripeness. Duchess pears can be kept profitable until late in December; Fameuse, or Snow apples, until warch or April. The time limit has to be determined for each kind of fruit.

## Bureau of Farm Help

The immigration branch of the Ontario Bureau of Colonization has opened an office in the Arcade of the Union Station, Totonto, where it is intended to write applications for help from farmers, and as far as possible to fill such applications with immigrants from England. This new office will virtually be an employment agency for farm help. We are sure this new move on the part of the Bureáu of Colonization will be appreciated by our farmers.

## Can Any Canadian Poultryman Beat This?

Near Goulburn, Australia, on August 9th, Coronation Day, the hens belonging to a local farmer showed their appreciation of the importance of the day by laying purple eggs. From Australia also comes the report that a New South Wales farmer has a hen which lays 480 eggs a year.

D porter mad Breeder of Gelloway Catile, Clydeadale Horses, and Cotswold Sheep. Coice animals for sale.

## JOHN DRYDEN

BROOKLIN, ONTARIO
BREEDER OF
CRUICKSHANK SHORTHORNS and CHOICE SHROPSHIRE SHEEP
Choice Young Bulls and Ram Lambs tor sale. Write for prices.

## QUEENS TON HEIGHTS SHORTHORNS.

Scotch and Scotch-topped choice young cows and heifers for sale at moderate prices.

HUDSON USHER,
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BRAITTS OXPORD DOWI SHEEP


Have 15 Extra Gcod
Yearling Rams will
offer cheap. 20 Ram offer cheap. ${ }^{20} \mathrm{Ram}^{20}$
Lambs, a few Ewe Lambs and Ewes at very reasonable
prices. prices.
H. Breeders and

Importer
Burtord, Ont.

## SCOTCH SHORTHORNS

Imported and Canadian bred bulls, cows and heifers, including such families as Village Maids, Fairy Queens, Broadhooks, Golden Rose, and other Scotch sorts. Herd headed by Bapton Chancellor. Imp. and the Lovat bred bull, Viceroy.


The following celebrated families are represented : For further information address -
Manager,
JOS. W. BARNETT.

## FOR SALE.

Large English Yo:kshices. Bears fit for service: Sows ready to breed; Boars and sows 8 weeks to 3 montus old from imported and Canadian bred sowa. Write JAS. A. RUSSELL,

Precious Corners, Ont.

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Scotch Shorthorns, Choice Milking Strains, Prize Winning Leicesters, Young Stock for sale-imported and home bred.
A. W. SMITH, Maple Lodge P.O., Ont.


HOOK BAET for horses and cattle, in ton and car lots. Toronto Salt Forks, Terente

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C. R. DECKER, Chesterfield, Ont.

LARGE WHITB YORISSIRES
A choice lot of Boars ready for service from imported stock. Also irported and Canadian bred sows in pig to imported boars. Young pigs from six weeks to four months old. Pairs supplied not akin.

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Importer and Breeder of Scotch Shorthurns and Large White Yorkshires.
ALVA FARI GUERNSEYS

# Pine Grove Shorthorns and Shropshires 



Miseles, Momparolle, Brawith Bade, Orange Blossome, Briterfigs, Lanoecters
Headed by the famous Marquis of Zindan 157854, own brother to the $\$ 6,000$ Mart imported Missie 153, assisted by Sittyton Champion 1660076, Lord of the Manor 160069, and Village Champion (by Scottish Champion). Our new Catalogue will be sent to all applicants. Our flock of Shropshires is a large one, and choicely bred. We have on hand and for sale a grand lot of rams, also a few ewes, all bred from imported stock.
W. C. EDWARDS © Co .

Rockland, Ont.

## PURE-BRED STOCK

## NOTES AND NEWS FROM THE BREEDERS

These columas are set apart exciustvely for the wse of breeders of pure-bred stock and positry. Ang information as to importations made, the sale and pur hase of stock and the condition of derds nod focks that is not in the nature of an advertisement will be welcomed. Our desire is to make this the medium for conveying information as to the transfer of pure-bred animals and sine condition of live stock throughout the country. The co-operation of all brgeders is carmestly solledted in making this department as mseful and as interesting as posstble. The editor reserves the ripht io eliminate any matter that he may consider better swited to owr advertising columins.

## rattio

Mr. Wm. Linton, Aurora, Ont., has returned home from Great Britain where he went to purchase Shorthorns for Sir Wm. Mulock's farm at Aurora, and also for himself. He has been in England nearly four months during which time he inspected all the leading herds in the old land. He had some trouble in securing animals just suited to his purpose. He, however, was successful in securing ten very fine cattle which are now in quarantine at Point Levis, Que.
The following are the names of the parties from whom the cattle were purchased in the old country: One male and one female of the most fashionable Shorthorn family in England, from King Edward VII.'s herd; one female from the Right Hon. Lord Polworth, of St. Boswell's; two females from Rev. G. S. Smith of Boyle, Ireland; four females from Mr. Hornsby, of Hovenham Spa, also a female from Mr. Green of Colchester. In addition to the above he brought over a ram for Whitlaw Bros., of Guelph; two Berkshire sows, which were purchased from King Edward VII, for Mair Bros., of Oak Ridges, also one sow for himself which was purchased from King Edward VII; a Berkshire hog which was purchased from His Royal Highness Prince Christian, near Windsor Castle, for Mair Bros.
He also brought a trio of game fowls and a pair of black ducks. Mr. Linton returned, along with the stock, on the steamer Alcides of the Donaldson line of steamships of Montreal.
During the period from Sept. ist to Oct. 6th, 1902, the Supt. of Advanced Registry for the American Holstein-Friesian Association has received the records of twenty-four cows which have been approved: one for forty-two days, five for thirty days each, three for fourteen days each, and twenty-four for seven days each. Four cows exceeded sixteen pounds of butter fat in the seven-day records.
The twelve seven-day records in full-age class averaged, age $6 y .6$ m. $11 \mathrm{~d} .$, days after calving 25 , milk 448.6 lbs ., fat 15.057 tbs ., equivalent to 18 mbs .13 .1 oz . butter 80 per cent. fat, or 17 lbs 9 oz . 85.7 per cent. fat-the three in the four-year class averaged, age 4 y . 5 m .12 d ., days after calving 30 , milk 424.2 ths., fat 13.46 I tbs., equivalent to 16 tbs .13 .2 oz . butter 80 per cent. fat, or 15 ths. 11.3 oz. 85.7 per cent. fat-the two in the three-year class averaged, age 3 y. 9 m .19 d ., days after calving 14, milk 360.9 ths., fat 11.410 ths., equivalent to 14 ths .4 .2 oz . butter

So per rent. fat, or 13 lbs. 5 oz . S5.7 per cent. fat-the seven in the two-year class averaged, age 2 y . n m. 4 d., days after calving $3^{8}$, milk 316.8 lbs ., fat 9.58 o tbs., equivalent to 11 lbs .15 .6 oz . butter 80 per cent. fat, or 11 tbs .2 .8 oz . ${ }^{5} .7$ per cent. lat.
Mr. Henry Wade, Registrar of live Stock, Toronto, donated two :pecial prizes for Shorthorns at the Port Hope fall show this year. These prizes were awarded as follows:
His special prize for best Shorthorn femaie any age was awarded to Sailor's Beauty-39268- exhibited by Thos. Coyte \& Son, Port Hope. She was bred by Thomas Redmond, Millbrook, and got by Sailor Champion-27235-, a buil whose pedigree contains the blood of some of the most noted Scotch sires. Her dam is Marigold's Pride -20432-, by The Kinellar Ruby Hill bull, Oxford Lad -7483 -grand-dam Marigold -17502-, by the noted prize winner and sire of winners, Challenge -2933-
His special prize for best Shorthorn bull any age was awarded to Prince Royal 2nd -40583-, a red and white bull bred by Arthur Johnston, Greenwood, and exhibited by A. E. Meadows, Port Hope. He is grandly bred as he belongs to the celebrated Princess Royal family. His sire Merryman (imp.) $-32075-(77263)$ (of the favorite Magazine or Matilda tribe) was got by Reveller (71359), bred by Wm. Duthie, and a noted sire. Prince Royal 2nd's dam was Princess Thule ard (imp), by the Cruickshank Lovely bull Buchan Hero (65200).

## Ergotism

During the present season, owing to the heavy rainfall or other climatic conditions, there has been developed upon wild rye and other similar grasses a fungus known as ergot," commonly called "spurred rye." Within the past few weeks a number of complaints have been received at the Kansas Experiment Station from the eastern and central parts of the State indicating that injurious and fatal results have occurred among stock from eating this fungus.

Ergotism is a disease of animals caused by eating ergot either on pasture grasses or hay. Ergot is a parasitic fungus (Claviceps purpura) that develops on the heads of wild ye, redtop, and similar grasses. This fungus replaces the ordinary seed or grain with a black or brown-black grain, much longer than the ordinary rye grain, cylin-


A Safe, Speedy and Positive cure for allments of HORSES and CATTLE.
 mantim, Mprains, Sore Throsat, ete., it
 per bottie sold by drackist: or cent by ez. use send lor descriptive circuiars, testimo, etc. Address
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or 21 Fromt street West, Toromtc Owf.

strengthens the digestion and invigorates the whole system so that the nutriment is all drawn from the fod. It takes just the same trouble to care fir a cow when she gives three quarts as when ohe gives a pail. Dick's Blood Purifier will pay back its cost with good interest in a few weeks. 50 cents a package.
Leeming, Milles \& Co., Agente, MONTREAL
Write for Book on Horses and Cattle free.


OITITRIO YBTBRIMERI COLLEGB,

## Temperamee st., Teronto, Cana.

[^2]drical, pointed, and slightly curved The number of grains of ergot in a single head of rye or grass will vary from one to a dozen or more. The grains of ergot can be easily recognized by their shape and color There is no dust or smut upc. the heads of grain as there is with some fungi. Ergot does not attack corn or sorghum.

Outbreaks of ergotism occur nearly all over the world and often cause heavy losses among cattle and horses. Serious losses from ergot in this State have not occurred since $188_{4}$, but it is possible that owing to the abundance of ergot upon grasses the present season, serious loss may follow unless care is exercised to prevent feeding a large amount of ergot. Cold weather and a limited supply of drinking water seem to favor the developments of ergotism.
Symptoms.-The symptoms of ergotism may occur at once after eating the fungus, provided the animal gets a sufficient quantity; or they may occur only after the animal has eaten the fungus for some time. Ergot lessens the blood supply, especially in the extremi-ties-feet, tail and ears-the affected parts swell, get cold, a well-defined line usually forms about the part, below which the tissue dies and sloughs off. When the feet are attacked the animal becomes very lame. Ergot causes abortion in pregnant animals, but this must not be confounded with contagious abortion among cattle. Ergot also affects the nervous system, causing trembling of the muscles, weakness, staggering gait, and sometimes convulsions. The digestive system is often affected and there may be purging, indigestion and abdominal pain. Cattle are more seriously affected by ergot than horses.
Treatment.-To prevent the disease, do not feed animals hay or grass containing ergot, and when the disease occurs ergot should be withheld at once. A purge of one pound of epsom salts for adult cattle, or a quart of raw linseed oil for horses, should be given. Give sloppy, nutritious foods with plen$t y$ of drinking water. Bathe affected parts, feet, etc., with hot water, rubbing to stimulate circulation, and apply antiseptics such as a five per cent. solution of carbolic acid.
Suspected apecimens of ergot may be sent to the Botanical or Veterinary Department, Agricultural College, Mánhattan, Kansas, for identification. Hay that has been cut early is less apt to contain ergot than late-cut hay.
N. S. Mayo.

Manhattan, Kan., Sept. 18, 1902.

Canvasser--Can I take your name for a patent egg-beater?
Mr. Knczxthowskovitch. - My Mr . Knczxthowskovitch. - My
name for an egg-beater? I would gladly lend it to you, but one of my neighbors is using it to-day to shell corn with.

## Unreserved Sale of Pedigreed and Registered Shire Horses



Comprising Five Stallions, Twelve Mares and Fillies in foal, and Three Colts,
At the Stables of the Proprietors, on Thursday, Nor. 13th, 1902, at 2 p.m.

A number of these horses have been prize-winners in England, at Toronto Spring Show, Toronto Industrial and London Shows.
Catalogues furnished on application which will give full particulass of sale. pedigree of horses, and information how to reach Fonthill.

MORRIS \& WELLIMGTON, Proprietors, : : : Fonthill, Welland Co., Unh,


Our importation of Clydesdale and Shire Stallions and Spanish Jacks arrived Sept 4 th in fine condition. The Jacks range in age from 2 to 4 years old. The Stallions are bred from the best Sires and Dams of Scotland. We pay cash for our stock; that enables us to buy where we can buy the cheapest. We import larger numbers than any firm in Canada, therefore can save you money by seeing our stock before you buy.
Our Jacks range in height from $141 / 2$ to $151 / 2$ hands high. H. H. COLISTER, Manager and
alesman, Sarnia, Ont. I amprepared to make terms to suit purchasers. alesman, Sarnia, Ont. 1 am prepared to make terms to suit purchasers.

Mention Farming World when you write.


## ERED. RICHARDSON of SIIITH \& RICHARDSON <br> Columbus, One.

Will return from Scotland about August $20^{\prime} h$ with six Clydesdale Stallions, including "Hopewell" ( 11375 ), full brother of the great Glasgow winner, "Hiawaiha," and "Lavender" (11349), out of the same mare as "Royal Cairnton," the Chicago three-year old winner in 1901 and "Pioneer" (11131), sired by "Sir Arthur," owned by Whitby Clydesdale Association, and a pair of young mares for Mr. George Gormley, Unionville.

## WESTON EERD Improved Large Yorkshires

Special low prices for extra choice young pigs from mature imported and home breds tock of highest quality and most fashionable breeding. Pairs and trios not akin; boars fit for service; sows ready to bieed and in farrow. Satisfaction guaranteed.

I. ROGERS, Weaton, Ontarlo

## OAK LODGE YORKSHIRES



Years of CAREFUL BREEDING have made the OAK LODGE YORKSHIRES the Standard of Quality for IDEAL BACON HOGS.
The champlonship against all breeds has been won by this herd for 4 years at the Provineial Winter Falr, on foot and in dressed carcase competition.

Prices are peasonable.
$\qquad$ Brethour. Burtord, Ont

## Market Review and Forecast

Utlice of The Farming World, Confederation Life Bldg.
Toronto, Uct. 20til, 1902.
Business is fairly active in the wholesale lines and trade prospects generally speaking are good. Some improvement is snown in the stock markets. Though money is still very tught ou caul the general mercantile communty have as yet lelt no inconvenience, the discount rates being about as usual or 6 to 7 per cent, the demand tor call loans is tar in excess of the supply, brokers finding it hard to meet the requirements of the banks.

## Wrabe

Generally there is a steadier lee, ing in wheat and cable reports are armer and higher espectally tor spot Mantoba hard. The world's supply in sight continues to increase and is now only about 10,000,000 bushels behind what it was last year at this time. Kussia and the Danubran provinces will have larger surpluses than last year to export and wheat consuming Europe may not be so dependent upon America for supplies. The United States Government crop report for Oct. ist estimates a shortage of 125,000,000 bushels as compared with the yield of 1901. 1his has influenced speculation somewhat, but otherwise it carries little weight, as the decrease is estimated wheat is counterbalanced by the large increase of over 800,000,000 bushels in the estimated yield of corn for 1902.

Locally the market has ruled steady with an upward tendency in Manitoba, No. I hard having changed hands at Winnipeg at $70{ }_{2}^{2} \mathrm{C}$ to $71 / 2 \mathrm{c}$ and No. 1 Northern at $68^{1 / 2} \mathrm{c}$ to $69 / 2 \mathrm{c}$. There is a tirmer feeling here at $66^{1} / 2 \mathrm{c}$ to $67^{1} / 2 \mathrm{c}$ for red and white, 64 c for goose, and 66 c tor spring east. On Toronto farmers' market red and, white bring 69c to Foc, goose 64 c to $65^{1 / 2}$, and spring life 67 c to $67 / 2 \mathrm{c}$ a bushel.

## Vate ane merny

The combined oat crop of Canada and the United States is estimated at $1,000,000,000$ bushels. In spite of this big crop in prospect the market during the week has undergone a sharp advance which, however, is believed to be of only temporary character. Farmers are inclined to hold their oats for a higher market. The English market for Canadian is higher and prices at Montreal have advanced $1 / \mathrm{c}$ to $3 / 4 \mathrm{c}$ per bushel during the week. Here oats are quoted at 3 Ic to 32 c outside. On the farmers' market they bring 35c a bushel.

The barley market is firm at 48 c to $48 \frac{1}{2} \mathrm{c}$ afloat Montreal and $40 c$ to $4.3 / 2 \mathrm{c}$ here as to quality and place of shipment. On Toronto farmers' market barley brings 42 c to $44 \frac{1}{2} \mathrm{c}$ a bushel.

The pes market is steady at about last week's quotations or

goc to 7 tc tor choice milling peas and 67 c for export outside.

The corn market rules tirm. Car lots at Montreal are quoted at 72 c . Canadian yellow is quoted here at $03 \% \mathrm{c}$ west and American yellow at joe on track loronto.

## Bran acus anur.0

Ontario bran is selling in bulk at Montreal at $>14.00$ to $\$ 15.00$ and Manitoba bran in bags at $\$ 15.00$ to $\$ 15.50$ both in car luts and shorts at $\$ 19.00$ to $\$ 20.00$. City mills here sell bran at $\$ 14.00$ and shorts at \$18.50 in car lots loob. Toron$t 0$.

## Potatoes and Beans.

At Muntreal potatoes are easier at 55 c to boe per bag of yo tbs. in car lots. The market here is steady at 70 c to 78 c a bag in car lots on track Toronto. Un Toronto farmers' market potatoes bring yoc to $\$ 1.00$ a bag.

The bean market tules strong though buyers are very cautious about buying in large quantities ahead. The recent steep advance seems to have checked the demand Primes are quoted at Montreal at $\$ 2.05$ to $\$ 2.10$ per bushel in large lots and $\$ 2.15$ to $\$ 2.25$ in smaller lots.

## Beeds.

At Montreal quotations are $\$ 14$ to $\$ 17.00$ per 100 tbs. tor alsike. $\$ 10.00$ to $\$ 10.50$ for red clover and $\$ 4.50$ to $\$ 6.00$ per cwt. for timothy..

## way and Strem.

Quebec is the hay centre of Canada. There has been considerable active buying there lately and the outlook for disposing of this year's big crop at satisfactory prices good. New York and Boston buyers are still in the field while a Liverpool buyer made his appearance last week. There is more active buying than a week ago. The scarcity of cars is hindering matte 's somewhat. Prices are reported firm with an upward tendency. Choice timothy being quoted at $\$ 7.00$ to $\$ 7.50$ f.o.b. at country points. Montreal quotations are $\$ 9.00$ for No. 1 timothy, $\$ 8.00$ to $\$ 8.50$ for No. 2 and $\$ 7.00$ to $\$ 7.50$ for clover in car lots. The demand here is good at $\$ 9.50$ for No. I timothy in car lots. On track baled straw is worth $\$ 5.50$ in car lots.

On Toronto farmers' market timothy hay brings $\$ 12.00$ to $\$ 14.00$, clover or mixed $\$ 0.00$ to $\$ 9.00$ sheat straw $\$ 12.00$ and loose straw $\$ 8.00$ per ton.

> ease .us Poultiy

The egg market is firmer and higher at Montreal at $16 / 2 \mathrm{c}$ to 17 c tor good sized lots of iresh eggs and 17 c to 10 c lor candled stock. There is more enquiry trom lingtand and higher pises othered. The price pand lor fresh gathered rules steady here at 17 c to 18 c in case dots. On 'Toronto farmers' market new land bring $20 c$ to 22 c and held stock 15 c to 17 c a dozen.

There is some movement in the export poultry trade. The supply of turkeys will be light and contracts have been made at ic to sc a lb . tive weight at country points tor future delivery, is steamer sailed for South Airica last week with $10,000 \mathrm{lbs}$. of young chickens from Canada. Englisn buyers are arriving for the purpose of making contracts tor their winter supply and prices especially tor turkeys will likely rule high. At Montreal young turkeys have sold to jobbers at 13 c to 15 c and chickens at loc a lo. There was a big demand here for turkeys and geese for Thanksgiving and prices went up to a high pitch. Chickens and ducks rule firm at 40 c to 700 a pair tor dressed and 45 c to boc for live and $40 c$ to 45 c for hens. On 'Toronto farmers' market chickens sell at 60 c to $\$_{1} .00$ and ducks at boc to $\$ 1.00$ a pair and turkeys at 12 c to 15 c and geese at 8 c to loc a tb.

Until further notice the Toronto Poultry and Produce Co., 470

## 100,000

CHICKENS, DUCKS and TURKEYS wanted for local and foreign market, We pay highest price, supply crates and remit promptly by P.O.O. Correspond. ence solicited

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> TORONTO
longe street, Toronto, will for poultry and eggs pay the following loob. at shipping point:
Chickens (this year's) per th. 7 c chickens (last year's) per $\mathrm{Ib} .4 \mathrm{c}_{\text {, }}$ turkeys (this year's) per lb .9 c , ducks per tb .7 c , geese 5 c per tb ., eggs per doz. 16c f.o.b. Eimpty crates, egg cases and butter boxes are supplied free of charge, the outgoing charges being paid. The net express charges are paic on butter and eggs.

## frut.

Generally speaking where the quality has been good Canadian apples have sold well in Britain this season netting a good profit to the shipper. There are a great many fall apples being put upon the local Canadian markets just now which do not command high prices. At Montreal last week ap ples sold by auction in large lots at from goc to $\$ 2.60$ per bbl. as to quality. On Toronto fruit market apples sell at $\$ 1.00$ to $\$ 1.50$ per bbl., peaches 20 c to 30 c , pears 30 c to 35 c a basket, and grapes at 30 c to 50 c per large basket as to quality and name.

## Cheose

The cheese market continues on its march upward and prices during the week advanced from $/ 8 \mathrm{c}$ to ${ }_{4}^{1} \mathrm{c}$ per 1 tb . At Montreal finest westerns are quoted at from $1 I^{1} / \mathrm{c}$ to $11^{1 / 2} \mathrm{c}$, finest easterns at $11_{1 / 8 \mathrm{c}}^{1 / \mathrm{c}}$ to $11 / 4 \mathrm{c}$ and undergrades at $10 \frac{1}{2} \mathrm{c}$ to ${ }^{11} 1_{4}^{1} \mathrm{c}$. At the local cheese boards in the country, prices have ruled at from IIc to $11_{4}^{1} \mathrm{c}$ with some factories holding for higher values. The English market is reported strong under a good consumptive demand.

## Butter

The butter market though quiet has a strong under current of firmness. Creamery butter at 20 c to $20 / 2 \mathrm{c}$ per tb . is considered good proor dealers. The Trade Bulletin of last week has this to say on the situation:
"Although the volume of new business on spot has been small during the past few days, there has been a little more doing at country points induced by the slightlv lower prices. On the whole, however, the market has ruled quiet. At Bediord, P. Q., yesterday creamery sold at $201 / 8 \mathrm{c}$ to $20^{1 / 4} \mathrm{c}$, and $201 / 2 \mathrm{c}$ was paid in this market to-day by an exporter for a lot of choice Eastern Townships creamery. In our table of exports the SS. "Philadelphian" to London with 12,345 pkgs on board is not included in our table of exports this week, as we only ascertained the information just before going to press. The manifest of this steamer, however, will appear in our next issue. The New York market is firmer and higher, best grades of creamery having sold at $23 \frac{1}{2} \mathrm{c}$ to 24 c ."

Though offerings of butter are large here only a small percentage of the dairy butter coming in is of choice quality. There is a keen demand for good pound rolls which are firm, the top grades sell readily at 17 c . Creamery is firm with
a ready sale for prints. Quotations are: Choice creamery $19 \frac{1}{2} \mathrm{C}$ to $20 \frac{1}{2 \mathrm{c}}$ tor prints and 18 c to 200 for solids and daity 15 c to 1 bc for tubs and pails and 16 c to $1 ; \mathrm{c}$ for prints in a jobbing way. On Toronto farmers' market pound rolls bring ise to 200 each.

The cattle situation is about the same though a steadier tecling at most American markets is reported. Dealing with the Chicago market for beet steers last week Clay Robinson \& Co. say:
"Arrivals Wednesday numbered 21,671 , including 7,000 rangers. There was quite a sprinkling of good to choice cattle. The cream of the supply sold at steady rates but everything else was io to 20 cts. lower and very slow sale. Choice to extra prime steers bring $\$ 8.00$ to $\$ 8.75$ and good to choice, $\$ 7.00$ to $\$ 8.00$ per cwt. With 10 , 500 on sale Thursday trading was slow at generally loc to 15 c decline, or fully 25 c lower than Monday.
"A year ago to-day we quoted extra prime beeves at $\$ 6.75$ to $\$ 6.90$, with bulk of the good to choice dressed beef, shipping and export steers at $\$ 5.70$ to $\$ 6.75$, and common to medium grades at $\$ 3.50$ to $\$ 5.25$.'
The receipts of live stock at Toronto cattle market on Friday comprised 750 cattle, 3,000 hogs, 1,100 sheep and lambs with 40 calves. Too many rough and unfinished cattle are being offered. Trade was fair considering the number of common to medium stuff offered. There was no improvement in prices over earlier in the week. Well bred feeders and stockers are in fair demand. The decline in the price of shipping cattle is affecting the market for feeders, farmers seemingly are not as anxious to buy as they were sometime ago. Calves are firm under a limited supply.
Export Cattle.-Choice loads of heavy shippers are worth from $\$ 5.00$ to $\$ 5.30$ per cwt., medium exporters $\$ 4.65$ to $\$ 5.00$. Heavy export bulls sold at $\$ 4.00$ to $\$ 4.25$ and light ones at $\$ 3.75$ to $\$ 4.00$ per cwt.
Butchers' Cattle.-Choice picked lots of these, equal in quality to the best exporters, weighing $\mathrm{i}, 075$ to $1,150 \mathrm{lbs}$. each sold at $\$ 4.60$ to $\$ 5.00$ per cwt. Choice picked lots of butchers' heifers and steers, 950 to $1,055 \mathrm{lbs}$. each, sold at $\$ 4.25$ to $\$ 4.00$, good cattle at $\$_{3.65}$ to $\$_{2.25}$ medium at $\$ 3.25$ to $\$ 3.60$ and inferior to common at $\$ 2.50$ to $\$ 3.00$ per cwt. Loads of butchers' and exporters' mixed sold at $\$ 4.20$ to $\$ 4.30$ per cwt .

Feeders.-Steers, 1, roo to $\mathrm{t}, 100 \mathrm{tbs}$. each, are worth $\$ 4.25$ to 8.50 per cwt., and light feeders, 800 to 900 ths. each, $\$ 3.75$ to $\$ 4.00$ per cwt.

Stockers.-Well bred you is steers weighing 500 to 700 tbs . ench, are worth $\$ 3.25$ to $\$ 3.50$ and off colors and those of inferior quality at $\$ 2.50$ to $\$ 2.75$ per cwt.

Calves.-At Toronto market good
to choice calves bring $\$ 3.50 \mathrm{t} 0$ $\$ 5.00$ per cwt. and $\$ 3.00$ to $\$ 10.04$ each.

Mhh Cows.-These sold at $\$ 36$ to $35+$ each.

## Oneep and Lambe

Lambs were a little firmer on Friday at $>3 . \mathrm{S}_{5}$, sheep were steady at $\$ 3.25$ to $\$ 3.40$ per cwt. Hor ewes and $\$ 2.50$ to $\$ 2.75$ lor bucks. In their weekly circular of Thursday last, Eirick Bros., East Buthalo, deal with the market for Canada lambs as follows
"The supply has been very moderate all week, still the trade weakened on Monday in sympathy with the heavy run of natives seliing at $\$ 5.35$ to $\$ 5.50-$ generally $>5 \cdot 50$ lor the good ones. Buck lambs are selling according to weights at $\$ 4.75$ to 5 c . 1 look for a tair supply the balance of the week, but not for any lower values, masmuch as we, no doubt, will have very short supplies of natives.

It is the handier weight lambs that are being sought now, those weighing around so to 85 lbs .; the heavier grades, weighing yo lbs. and upwards, are very dull, espechally just at present. As the season advances and the weather gets colder these heavy lambs will be commanding a premium."

At Toronto market select bacon hogs ruled steady all week at $\$ 0.25$ per cwt. till Friday when, owing to the large supply, the price dropped to $\$ 6.12 \frac{1}{2}$ for selects and $55.57 / 2$ for lights and fats.
For the week ending Oct. 25 th, The Wm. Davies Co., Toronto, will pay $\$ 6.10$ for select bacon hogs, $\$ 5.85$ for lights and $\$ 5.8_{5}$ for overweights.
The Montreal Market is easier. Packers there are paying $\$ 6.00$ to \$6.25 per cwt. for bacon hogs.
The Trade Bulletin's London cable of Oct. 15th, re Canadian bacon, reads thus:

The market is weak and is lower, Canadian being quoted at 63 s to 67 s .'

Kevp your uyen opon and bs sues that When you aik for Perry Davis' Painkiller you get
just that and nothing elve. Use just that and nothing else. Use it promptly to cure summer.

In washing woollens and flannels, Lever's Dry Soap (a powder) will be found very satisfactory.


Mollable Men in every locality throughout Canada to introduce
our goods, tacking up spicuous places alse fences, along roads sand all conspicuous places, also distributing small advertising matter. Commission or salary $\$ 00.00$ per month and
expenses, not to exceed $\$ 2.50$ per expenses, not to exceed $\$ 2.50$ per day. Steady
employment to good, honest peliable men experience , inedfold Wrive for foll marticulars.

We have not advanced the price of our tobaccos. Amber smoking tobacco. Bobs. Cur. rency and Fair Play chowing tobaccos are the eame sime and price to the consumer as form. erly. We have also extended the time for the redemption of Snowshoe tagg to January igt.
1904. THE GMPIE TOBACCO 1904. THIE

The big sale of range horses including some very well bred high grade Percherons and Shires at Grand's last week came off very well. A couple of hundred were sold including sucklings to old mares. It was a clearing out sale and therefore high averages were not to be expected. The highest price was $\$ 335$ paid for a pair of matched bays 5 and 6 years old, ands high and weighing about 2,650 ths. This pair was well broken. Many of the others offered were not hroken. Sucklings and unbranded horses were in greatest demand. The sucklings were considered the most profitable to buy, as thev could be trained and broken as desired. Thev sold at from \$15 to $53-50$ each. There were some well bred ones in the lot. Prices for the others ranged from $\boldsymbol{S}_{4}$ o to Sioo each. The demand for unbranded sucklings and fillies is so good that another shipment composed entirely of these will be sent down from the West at once by the same parties who sent last week's shipment.

## Preventing Pea Weevil

A couple of weeks ago we publish some information in reference to the pea weevil. Dr. James Fletcher, Entomologist, Central Experimental Farm, Ottawa, is endeavoring to stir up farmers to do something to prevent the enormons loss every vear from pea weevil. What will doubtless be a most interesting and useful public meeting. is to be held on the afternoon of the 29th inst., at Iondon, Ont., in the rooms of the Entomological Society of Ontario, in the Y.M.C.A. huilding, when addresses will be delivered on the subject by Dr. Fletcher, of Ottawa, Prof Lochhead, of Guelph, and others. It is hoped that members of some of the large seed houses mav also be present. The whole question will be discussed to see if anvthing can be done to prevent or reduce appreciably the annual loss from this $\mathbf{i n}$ sect. Dr. Fletcher takes the optimistic view that if all farmers and seedsmen would follow the well known directions for the destruction of the pea weevil this insect could in a verv short time be entirelv stamped ont in Canada.

Charlie-"Ain't fathers queer?" Auntie-"How dear?" Charlie"Why, when a little boy does anything for his father he doesn't get anything: but if somebody else's boy does it he gets a penny."

A Corner in Eggs.-"That old hen just seems to be bursting with pride," remarked the farmer's dog.
"Pride? Nothing of the sort. It's eags," replied the Leghorn rooster. "She thinks she's a financier, and she's trying to stop laying until there's a rise in price."-Philadelphja Press.

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tob's innocency.
JOB 23, 24, 25, 26.

## Judgment for the wicked.

 B.C. 1530 . clothing, and they take away the sheaf
## CHAPTER 23.

THEN Job answered and said,
2 Even to day is my complaint bitter: my stroke is heavier than my groaning. aim! that I might come even to his eat! that 1 might come even to his eat!
4 I would order my cause before him and fill my mouth with arguments. WI Would know the words which he
would answer me, and understand what he woald say unto me.
$6{ }^{6}$ Will he plead against me with his great power? No; but he would put
strenoth in me, strenth in me.
${ }^{\text {st }} 7$ rength in me. There the righteous might dispute with him; so should 1 be delivered for ever from my judge.
there: and backward, but, but he is not there; and backward, but I cannot per-
9 On the left hand, where he doth work.

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