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One pair of Andalasixns.
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## FARMING

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TOPICS FOR THE WEEK


Professor Craig's Successor,
Mr W. T. Macoun has been appuinted horth culturist at the Central Experimental Farm, O.ta wa, to succeed Prof. Craig lately resigned. Mr Macoun is a son of Prof. Macoun of the Gcolob' cal Survey, and has been a member of the Expen mental Farm staff for many years, having had charge of the experimental plots under Dr. Saunders' special direction. In this departonent he gave special attention to experimental work in horticulture and more particuiarls in wnaction with small fruits, which should enable hom to do cffective work as l'rof. Craig's successur

## A Butter Bonus.

At Ottawa last week a motion was presented to the House of Commons asking that the Gur. ernment grant a honus of one cent per lb ., to be paid to the farmers diract, upon a specified quantity of creamery butter to be exported to Great Britain while fresh and in a condition to make a name for $i$ 'self All expenditures of money, which have for their object the development of an 1 m portant industry are to be commended, hut when it comes to granting money in the way of a bunus the development of the industry is put upon a wrong basis. There is no more need for a bonus to develop our export butter trade than there is for one to develop the trade with the Klondike. If our creameries turn out a good quality of butter, and every facility is provided in the way of cold storage on board the car and hoat for transporting it direct from the producer to the British consumer, there is not the least need of a bunus in order to develop the trade. True, a bonus might serve to stimulate the export butter trade for a while, but as it could not be continued for many years, the reaction when it was removed would be disastrous. Its effect would be akin to that pro-
duced on some" "bi in "inwn after the homa has crised
If our export butter trade cannot lie develuped without the atd of a bonus it would be better not to attempt to develop it at all. Our cheese tade develiped from an almost obscure begmonig to tts present large extent without the add of a bonus, and thete in no reasun why the butter trade should nut do the same thing if properly managed Besides. $\because$ ere is nut the keast pround fur alarm in egard to tis growth Our exp irt butter trade h.is made rapd pupters dunng the past three years, having almost trehled in that time, and the pros pects are that the present year will witness a wonderful expanson of this trade. If the quality is ripht and shipments are regularly made the trade is hound to grow. Then why talk about a bonus.

## The Ontario Minister of Agriculture.

Nuw that the result of the clection in Russtll County has made it certan that the present Government will reman in power for the next four sears, there can be no two opmons as to who should be Mimster of Agriculture. We believe that we are vorcing the wishes of the large majurity of the farmers of this province when we state that the present incumbent of that office, the tion. John Dryden, should be retained. It is a matter of deep regret that an clement of doubt has ansen in regard to the matter as a result of the uncer tainties of a general elicton, but the Covermment has it winhin its power to open up a constituericy for him, and we helieve that it is due to the in portant agri ultural interests of this pruvince that it shmuld do so if Mr Dryden is willing to remain in office.

The Hon Juhn Iryden has served has natue province faithfully and well, and se have no hest tation in stating that no une in Omaric has dune more for the advancement of our apricultural interests than he Beang a practical and successful farmer, as well as a thorough business man, he has combned hiberality and antmanate knuwiedge of every branch of the work in his management of the leepartment of Agticulture. Ihis has enabled him to deal generuusly with its various branches, and at the same tane to expend wisely and effectarcly the moneys alloted to his deparament.
In luohning urer the legislation of the past tew years in the interest of agriculture, we find his guiding hand in cvery portoon of it. Among the auts of legislation intruduced by him may be men tioned an act for the prevention of yelluws in peaches, and of black knot in clictrtes and plums; an aut for the prevention of the spraying of fruit trees while in full bluom, in the interests of bee kecepers, an aut for the protection of truit trees frum the S.an luse scale, passed at the last session. In addition lic bas by amendacent mpruved many of the acts on the statute books relatug to agticulture, the whole tending towards more effectiveness and greater cunsulidation. Mr. Uryden has during has administration been instrumental in greatly enlatging the scope of work at the Ontario Agricultural Cullege, and making it mure effective. He has given evers encouragement to the dary industry by grants to the various darry associawuns, by maugurating the travellang dary, and by establishing successful dary schuvis at Guelph, Strathroy, and Kingston Hc has established twelve frut experimental stations in the prowince, and organized a spraying outfit to give the frutgrowers practical lessons on the advantages of spraying. Other acts of his, wortty of note, are the appuintment of a Provincial Road Instructur, the umprovement of the Farmers' Institute system and piacing it in charge of a permanent supern-
tendent, the develuparat of Nurthwestern Ontario and the establishment of the livineer Darry Farm at Wabigoun, the distribution of more reports on agricultural subjects among the farmers, and the assistance rendered IIon. Mr. Fisher in removing the quarantune regulations between Canada and the U'inted States. All these acts will be of lasting benefit to the Ontano farmer

Inerefure, lakug every thing intu consideration, It would be a serivas mistake to deprive the provmine of Mr. Dryden's services at thas juncture If they can be had, when there is su much more to be accumphished in developing its agneultural resources. A new man would be at a decided dis advantage thll he had become thoroughly familar whth the various branches of the work which would requare a year or two, and meanwhile the farmers' miterests would suffer. Our agricultural uterests are of the utmost importance, and we thehere it tu be the duty of the Government, now that it has a new lease of power to make a spectal effort to retain the present Minister. Mr. Dryden is as yet a comparatively young man and capable of carrying on the good work he has been doing, fur many years to come His wisdom and excellent judgnent not only enable him to inaugurate legislation, but to carry it to a successful issue.

There is much more that we could say, but we have sad sufficient to show our views in regad to the matter and which we beleeve to be the vews of every unbiased person who has the interests of Ontario agriculture at heart. We have nu axes to grind nor favors to ask in taking this vew of the sttuation, and only take the stand we do because we have the best miterests of the farming community uppermost in our thought. We have no political leanugs in the matter, whatever, and had the Opposition been returned to power we would bave felt just as free to advise appontung the best man the pariy could furnish as we are now free to advise retaming Mr. Dryden, whom we consider to be the very best man for the pusition on the Guverninent side of the House.

## Farming in New Brunswick.

## By Cor D McCraz, Guelph. Ont.

It is difficult in a hurficd winter visil to form a soud idea of the farmang capabilities of such a prutince as New Brunswick. The mornings are baken up with a run on the train ur a drive ma sleigh. The fields are deeply cuvered with snuw, su deeply sumetuncs that the fences are covered. Afternuons and cevenings are devoted to farmers. mectings, and une finds there from the discussions that the modes of farming in the pruvince by the sed differ from thuse in vogue in western Ontario. The land is hilly and rolling, the amber small, and the ciearings have not recently been much cxtendicd. There is stul a large part of the province uncleared. Of the serenteen million acres unly some ten millions ate ciamed and much of thas uwned by lambermen. About seven million acres are still in the hauds of the Crown. The country is mote after the styie of Muskoka than of any ulher part of Ontario, just about as hinlly but with fewer vutcrops of rock. Much of the suil is very goud, clay luams and sandy loams, the forn.er not jet thoroughly drained. While there is in some paris much guod land, it is olten in small fields uroken by hills and valleys. There is much beauiful sconery-it is a land of evergicens. Many kinds of spruce, fir and pine abound, and they grow readily everywhere.

With many tarmers, farming is unly a part of their work. Formerly wooden shijs were built on almost every creek. It was a paying trade, and
many farmers worked at this employment. This has become a trade of the past. Lumbermg is still active. Last year there was more lumber cut than ever lefore in the province. Fishong takes up part of the thane of those on the coast and along the rivets. larmmg, with those who have kept steadngy at 11 , has done well tor them. It has not done so well tor the math who was lisherman and lumterman when he could get employment, and who only farmed when the could get nuthing else to do. The land has been setled for a long thme. At few meetings would any farmers be found who had come from Brtam, or who had become familar with the best modern British farmmg liney have no such emyration of famers sueh as we have almost yearly in western Ontario, and we seldom thank how much benefit this is to our agriculture.

The farm homes are built of wood; often shingled on all sides and neatly pauted. 'They are small, comfortable, and nicaly furnished homes. The people are very hosputable. The barns are small and laid out without much regard for economy in handling feed. Bank barms are few. Stables are low and dark. Many have their catte in places where the only light is admitted when the door is opened. Sherp are few, and mostly of the long-taded breed. Cattle are mostly of the dairy breeds; the natives resemble the Quebec cante, and some of them are good dairy ammals. leew feed well enough or with due regard to economy. Mash or meral hay, with or without meal, is the chief winter feed. There has been of late sears an advance in dairying, and farmers are paymg more altention to the feeding of their stock. Excellent roots can be grown ; turnips, mangolds, and carrots are of the very best quality. The development of root-growing and catle-feeding will do much for farming in New Brunswick. There are few seed drills used. The grain is all sown broadcast. Five to seven bushels of oats in some places are sown to the acre. Self-binders are almost unknown. Many farmers take in their grain loose. They thresh with small machines and market the grain often when poorly cleaned. With all this the land is rich enough to give as much as fifty bushels of wheat per acre and as heavy as sixty six lbs. per bushel. There is a future for New Brunswick in farming when they adopt the best modern methods.

## The Chair of Natural History at the Ontario Agricultural College.

The chair of Natural History and Geology at the Ontario Agricultural College has not yet been filled. It is surcly about ume that the Covernment were taking steps to fill the vacancy. We understand that there are a number of applicants for the position, and among them one or two quite capable of filling it. There need, therefore, be no delay for the want of good material to choose from, and the sooner the appoiniment is made the better if the students of the present gear are to get any benefit from it.
Why should there be any hesitation in regard to the matter? The Governments duty is quite clear. Only a man of scholarship and experience is competent to fill the position, and when such a man can be secured there is not the last excuse for delay. The position is one of the most important connected with the college and demands a man of mature judgnent, ripe scholarshp and experience. These qualtites were well marked in the late Professor Panton, and has successor should be one possessing them to a large degree in order that he may creditably follow in the footsteps of his predecessor. Aside from the work of lecturng to the students, which is in itself important, the professor of Natural History will have to deal with many problems affecting the interests of the agriculturist, and especially those of the frutgrower. Only a person having a wide training ard an intimate knowledge of the work would be competent to deal with these problems satisfactonly.

We believe that among the applicants are a number of recent graduates of the college who
have given the subject of Natural History and Geology more or less specal attention. IVe do not wish to lay down the principle that no. ap pointments to vacant protessorships should be made from among the graduates of the college. A large number of tine present members of the staff are old graduates and are rendering excellent service buth to the college and to the country. But there are always exceptions to every rule and we beteve that the present instance is one of them. None of the graduates who are applicants for the present vacancy possess in any marked degree the qualificatoons necessary for liling the charr of Natural History and Geology acceptably. If such be the case the appointment should go to someone outside of the college and its graduates. A graduate in the Natural Sctences from one of our leading universities with a wide practical training in the branches be has to teach is none too good for the position, and if such an individual can be secured the people would heartily support the Government in making the appointment. Such a person would be a source of power to the college and would strengthen tis position as one of the leading anricultural mstitutions of learning on the continent.
If what we hear is true, the tactics employed in some quarters to get a favorite into the position are to be deplored. We would not have taken the strong stand that we do in regard to the affair had we not felt that the best interests of the college and of agriculture were likely to be sac. rificed to the selfish motives of a certain section of the community who pppear to be taking advantage of the present unsettled condition of the Government to elevate to the vacant chair a young graduate of the college, who, whatever his other qualifications may be, has not the experience nor the scholarship necessary to fit him for the position. We therefore sincerely hope that the Government will not be influenced in making the appointment by any other motives than those which would be in the best intertsts of the college and of agriculture gencrally.

The Poultry Industry of Canada.
by Thusas A. Durr, Toronto, Ont.

## (Continued from last week.)

How TO SET a HEN.

Perhaps some of the readers of this article will say that it is quite unnecessary to write anything upon this subject, but I submit that it is of great importance, and many mistakes are made by those who do not stop to consider the matter.

When a hen steals her nest, it almost invariably follows that she brings home a far greater number of chickens than if she were set in the poultry house and a nest made for it. For this reason, I prefer to conform to nature as murh as possible. I would recommend that some sods be cut in the fall before the ground is frozen, and stored away for spring use. When you have a broody hen, take a box and put one of these sods into the bottom of it. If it is very dry, I would moisten t. Put the grass side down. On top of this place some fine hay; put a couple of chona eggs (which should be first warmed) into the nest and then set your hen upon them Leave her there for twenty-four hours, and if she is comfortable and has the appearance of being willing to reman for the three weeks, I would give her the eggs Before setung her, however, I would rerommend that she be thoroughly dusted with insect powder and again about two weeks before the hatch is due. During the process of incubation, I would feed her upon whole corn, and be sure that plenty of water is within reach, otherwise if she gets very thirsty, she might eat the eggs in order to quench her thirst.

## feeding young chicks.

After the chickens are hatched, do not remove them from the nest for twenty-four hours. You may then safely put them into a coop, constructed in such a manner that the chicks may run outside at will, while the hen will be obliged to
remain within the coop. I would recommend a coop built as follows: Size $2 \times 21 / 2$ feet, with a light roof, removable boltom,and a wire front, one inch mesh, with a duor in front or side that can be rased high enough for the hen to come out, or just enough to allow the litle chicks out. The first day they are kept confined; then for the next few days, after the dew has dried off, the litte fellows are allowed to come outside if the weather permits. In case of rainy weather, the projection in front is to keep the rain from beating in. Be sure the floor is aiways ciry. Treat the hen and chicks every ten days for lice, dustung them thoroughly with some kind of insect powder. I would recommend Dr. Hess' "Instant Lice Killer." The coops should be whitewashed both inside and out frequently.

For chicks, when first batched, the best lood is hard boiled eggs and bread crumbs, rubbed up fine and mostened with a little milk. The chicks should be ied often, but given little at a time. After a few days crushed wheat, granulated ontmeal or cracked corn could be given. Milk is preferable to water, and food or drink must always be suppled in scrupulously clean vessels. Place the coop with the brood on fresh ground, in a place sheltered from wind, keeping the hen confined for about ten days before allowing her to wander off with the chicks. It she be allowed her liberty earher, the strength of the chicks will be overtaxed, and they are likely to be exposed to wet, and the danger from hawks is moreased. Keep on hand several coops for the use of the broods as you take them from the nests. A very generous quantity of food must be given from the time they leave the nest unth the tail and wing feathers are grown, as feathering is a great drain upon the system, and it requires plenty of food to sustain it. After the clincks have got their feathers, see that they are well supplied with plenty of grain. A soft food, composed of bran, shorts, oat chop and barley meal should be given once a day, and twice a day all the grain they will eat up clean. Change the diet often, however. Be sure to see that the chicks have plenty of green food.

A convenient arrangement for feeding chicks is to have a coop four feet square, made of lath, or, if preferred, it may be covered. Leave an opening at the lower part so that the chicks can run in and out, and keep a feed hopper full of feed in the coop all the time. The object is to have feed where the chicks can reach it at any lime, but beyond the hens. It is an excellent contrivance for yards that contain both hens and chicks, as the chicks will be in no danger of being interfered with by the larger fowls.

Give the chicks plenty of ground green hone. It makes more flesh, and stronger, healither chicks than any other feed.

## Health on the Farm.

The following extract from an address by Mr. G. C. Creelman, and which is contained in the report of the Agricultural and Experimental Unios for 1897, corroborates what we said in Farming for March 1 gth upon the above subject:
Beang now engaged in the insurance busaness, I come across pranted proceedings of meetings of insurance inspect-
ors and medical men who are interested in the work of in ors and medical men who are interested in the work of insurance. In a list of what they constdered the best risks for life msurance, I was very much surpursed to find that they placed the farmer very low on the list. We hear at all umes the claim made that has profession is the most independent of all and the heallurest. I have heard that since I was large enough to hear. Emtering into discussion with a physician, he explained why he constdered larmers not as good nosks as others. He said:
(1) That the farmer paid soo litule attention to the sanitary conditions of the house. They had low rooms without half enough air.
(2) Their rooms are very poorly ventiated; the windows are low and small, and often placed directly opposite the dour; when open there was a draught; when closed no good means of ventilation could be had.
(3) In many cases the farm buildings were situated too close to the house. Nearly all cases of iever, especially of ty. phoid lever, could be traced to the influence of streams coming from the stables. In case of sickness the pautent was frequently put into the smallest room, and the room off the kttchen where it was supposed to be the warmest. In this way they select the poorest sooin in the house. It would be
better to go upstai's. By putting the patient in the little room off the kitchen the disease would have the very best chance of killing the farmer. The house is often too small There are sometimes two or three in the same roont, and frequently in the same bed. People that live in the city o town, although they have rent to pay, never thith of crowding.
Farmers should have some sot of enjoyment to change the routine of life, and lureak the monotony. Monntons was one of the conditions under which even liealthy people dit not thrive well. There should be enjoyment on the larm in the evening. lispecially those who have been a the college where they have seen things as they should be, should look into the samiary conditions of their own homes very carefully. We know how to tile-drain our land and how to ventilate our builalings properly. The outer buidings should be a good distance from the house. Some farmets in the Southern Staies are going to the trouble of putting up a covered rool from the tharn to the house before they will put up with the unhealthy condition of the farmhouse by its being situated close to the stable.

It will be a surprise to many to learn that the farmer is very low on the list of those who are considered to be the best tisks for life msurance. This condition of things is largely due to themselves. They have, in many instances, completely ignored the laws relating to sanitary conditions with the result that to day the farmer, instead of being classed among the best life insurance risks, is down low in the scale. This is something that every farmer should consider, not because it is necessary to secure a better position among in surance risks, but because he owes it to himself and to his family to provide such condutions, on the farm as will be conducive to good health and freedom from disease.

## Hired Help on the Farm.

## Editor of Faksung:

Re your comments on my article on " llired Ilelp on the Farm," I grant you a farmer would be more likely to keep a married man longer than a songle one, whinch would be a great advantage, as he woulid soon get into the farmer's ways, and things would naturally run smoother than when one is always chopping and changing, as is the case where single men are hired. But your argument in reference to the wages goes to support my clam that a married man is too expensive a luxury for the majority of farmers at pres ent. For, if it costs a farmer \$io a montin for a man's board and washang, it would cost a married man more Thereforemy extimate of $\$ 250$ i, far ton luw, as it would cost him more than that to board himsell and wife, without reckoning on such trifles as children, clothing, etc. Then there is another cash oullay in my favor, that of the cost of erecting a cottage, which would mean $\$ 300$ or $\$ 400$ more on to the norigage.

Then, sir, i hardly think you refute my argument of poverty by referring to the same class in England, for aniongst them it is dreadful, and they seldom see meat more than once a week, if that. One young lellow who has come lo this country tells me he used to consider himself lucky if he got a "slice of bread and : carrot for his lireaklast." Now, I am sure we do not want that state of things with us. So until farmers go in for more intensive farming, I am sure they will find single men more in keeping with their incomes than the more luxuri ous article, a married man.

Ivan, Ont., March i4th, 1898.
W. T. Marrison.

## Editor of Firaning:

Ilaving noticed that quite a bit is said about hired help on the farm, and that the single man is being badly trampled apon, I thought I would say a word in his behalf. In re. gard to morals, I carnot see why, if a man is maried, he is going to be any better in that way. I think that there are just as bad.married men as there are single men; and as to a single man demoralizing the family, I cannot se that he can do such a great deal more harin than a mar. ried man. The farmers' boys are with the hired man through the day, when he is working in the fields, and I think that is the time when he uses most of his bad language. Another thing-what are we going to do with our single men who are too young to get married, if we are all going to hire married men? I think that this married hired man cry is another blow that will help to drive our young men off the farm, and which we are all trying to prevent.

## March $14^{\text {th }}, 1898$

R. B. Martis.

We are pleased that this hired man question is exciting some interest. It is gratifying also to know that Mr. Harrison agrees with us in regard to the farmer being able to keep a married man for a much longer time than a single man. Then, his remarks in reference to intensive farming are quite in keeping with our contentucn. The only difference being that he is looking forward to a time when a more intensive systern of farming will
be practised, while we believe that a more intens ive system of farming should be begun by our farmers at once. If it is the right line of farming to adopt, why put off practising it till the indefinite future? Our remarks in regard to wages were made entirely from the farmer's point of view. Nevertheless, we believe there are many married men in our towns and citics who would be glad to work on a farm for $\$ 250$ a year and a free house.

In regard to the statement of Mr. Martin that "this married hired man cry" will drive our young men off the farm, we are molined to the very oppo site view. We might ask, what becomes of the young single men who are now employed on our farms? Do they remain single all their days and stay on the farm? We venture to state that not one per cent. of them do. After knocking about for a few years with several farmers, they very often drift, no one knows where, and if they were traced through the later years of their lives, may probably be found located in some pour house on some back street in our large cities, trying to eke out a precarious ewistence for themselves and their families on whatever odd jobs can be had. Of course, there is the exception in the young hared man who is the son of a farmer, perhaps in the locality in which he is working. He has specirl advantages over the young man who has to deper entirely upon himself for a living and whether $h$ works on the farm or not, must rely upon his ow resources. We repeat, that it would be better for this young man, for the country, and for the farmer who employs him, if after working a few years his position were made more permanent by being given an opportunity to settle down for life if he wished. We are sure that it would be a decided gain to the farmer to have a steady man with him year after year whom he could trust and who understood all about the work on the farm. We have known of several instances of married men who have worked several years with farmers, becoming farmers themselves after having saved sufficient to help then get a start in the way of stock, etc., on a rented farm, and moreover these have invariably turned out to be some of our very best farmers.

## Canadian Butter at the Top.

'The St. Mary's Creamery Co. recently made a shipment of butter direct to England, which sold for one-half to one shilling per cwt. ( 112 lbs.) highed than the Danish butter was selling for at the same time. The St. Mary's butter brought 108 shillings, and the Danish from 106 to 107 shillings. This result is very gratifying indeed, and shows what the possibulities are in the development of our export butter trade. We have as good facilities in Canada for making first class butter as the Danes have, and we have only to make the good qualithes of our butter known in order to obtain the highest price.

The St. Mary's creamery is to be commended in the efforts it is making to establish a trade with Great Britain. If every creamery would adopt the same plans, and ship all the butter made direct, it would not be long before we had created a large export demand for Canadian butter. The shipment referred to above netted $203 / 4$ cents at the factory, and the company were able to pay the patrons $19 \%$ cents per lb . for butter fat. They have averaged $\pm 3,000 \mathrm{lbs}$. of butter por month during the winter, and expect to make 15,000 lbs. during March. Thete are now six skimming stations in addition to the central creamery at St. Mary's. The business is growing very rapidly, and the manager, Mr. J. Stonehouse, expects to be turning out about $12,000 \mathrm{ll}$ s. per week in the middle of the summer. The firm has direct connection with British commission houses, where the butter is sold on its merits.

You will make a garden that will be both profitable and attractive by $u$-illzing the packets of $g$ arden and flower seeds which we give for new subscriptions. These seeds are the very best oblainable and selected especially with a view to the requiremente of our subscribers.

## Fresh Pastures for Horses.

According to the best authorities, horses will thrive best on new pastures, or, in other words, if horses duting their growing period are confined to small pastures, and have not sufficient run, they will not be so full of life and spirit as horses haying almost unlimited scope for exercise. The highest types of horses to be found to day, especially in the racing classes, are those reared in a comparatively wild state, where fresh pastures are abundant and where theanimals areallowed considerablelibertyand frcedom. In Australia it is claimed by old inhabitants that in the early days of settlement of that country the horses were superior to the horses of the present day because they were reared on unenclosed runs, where they could wander fat and wide for the pastures they liked best. This frec exercise in the wide range of country in the old days produced an animal that was accustomed to travel long distances without trouble, while the young horse, raised in a small enclosure, is natur ally more slovenly and less energetic, with less en durance. The same reasoning would, perhaps apply to other countries. We all know that many of the horses reared in a comparatively wild state on the American plains are models of energy and speed. Then, some of the finest horses the world produces to day are to be found in the wilds of Arabia, where they have fresh pastures and large runs galore.

All this goes to show that as a rule the finest types of horses are those reared under conditions as much like the natural as possible. Though our breeders of horses may not be able to supply these conditions as nature supplied them, it will pay to go as far as possible and supply young horses especially with as much fresh pasture as can be had conveniently. Not only will this plan be advantageous to the growing animal, but it will be beneficial to the pasture as well. Horses are harder on pastures than either cattle or sheep. As a rule, fields that have been kept as permanent pastures for horses for a number of years will become full of weeds and coarse grasses, owing to the fact that the best plants have been eaten out. It will, therefore, pay farmers to provide their horses frequently with fresh pastures, and to allow their young animals as much of a run as possible.

## NOTES AND IDEAS.

The total killings of hogs in the west show a considerable increase over those of one year ago. The first two weeks of March show a total approx imating 790,000 as agamst 720,000 a year ago. Mest of the offerings are of tirrly good quality but there is leis uniformity, the receipts including considerable of immature stock.

## CANADA'S DAIRYMEN.

## J. C. Chapais, LL.B., St. Denis, Que.

Mr. J. C. Chapais, Assistant Dairy Commissioner for Canada, whose photo appears in this week's Farming, is well known to Canaulan dairymen in all parts of the Dominion, and especially in his native Province of Quebec. In the March and June numbers of Farming of last year we gave short sketches of Mr. Chapais and his work, and therefore will not need to enlarge very much on these lines just now. He was born at St . Denis, Quelec, and is the son of the late Hon. J. C. Chapais, 厄', nator. He received the advantages of a goon education, which he applied later on to acquiring an intimate knowledge of practical farming, his special lines being the culitivation of the soil and fruit growing. He is an ardent believer in up-to date dairy farm. inf, and thinks that the Quebee farmer should adopt it. His efforts in inducing the Quebec farmer to go into dairying seem to be meeting with good resuits, as no province in
the Dominion is making the progress that Quebec is doing the Dominion is making th
along practical dairy lines.
For 2 number of years Mr. Chapais was assistant editor of $L e$ Journal ${ }^{\prime}$ ' Agriculture Officiel, published by the De partment of Agriculture of Quebec. His editorial work in. duced a close study and a research into many agricultural problems, which have been bencficial to him in lis specia work on the Dairy Commissioners staff. IIis work in this department is chitfy in the French-speaking districts of Quebec, where his services are in great demand 252 speaker at agricultural gatherings. FARMING has been favored frequently with articles from the pen of Mr. Chapais, and we hope to be favored again.

THE WALKING HORSE.
Too many young farmers are talkng about the trotting horse and we hear reas little about the walking horse. Buth are valuable in ther way but the must valuable to the farmer is the walking horse.
Farm work has to be done with horses at a walk. A very hitle difference in the speed at which a team walks when at work will make a great difference in the amount of work done in a das. Too many farm teams are allowed to get into a slow, lazy way of walking even if they have no load. This habit becomes fixed and it is then almost impossible to stir up the team to a faster gait. Much of the work on the farm is light work, and while performing it the team can walk at a good pace. When commenemg the spring work teach the horses to waik up good and sharp.
The best way to get a fast walking horse is to train him as a colt to walk as fast as he can without trothng. A coli generally wants to go as fast as he can, but the trouble is he is allowed to do this at a trot. On the walk he is mate to go slow to cool off after a trot. It would be much better to teach him to walk fast first and don't allow him to trot until he has learned to walk as fast as he can without trot ting. Train him to walk fast and make him keep on walking as fast as he can and the habit will soon become a fixed one. Such a horse will be worth 25 per cent. more for farmi work than a slow walking one.

## PLANT SUGAR MAPLES.

The first settlers found the land heavily timbered. To them a tree was something that stood in the way of returns from the land and it had to come down. Cut down the tree was their motto, and of course the children grew up with the same idea. Hence the great disrespect for tree life which prevails throughout the country. We have over-cleared the land, and on many a farm there is waste land that should never have been cleared. Now that it is cleared, it should be planted with forest trees again. The youth of the country must be taught to take better care of trees, to preserve the:n from destruction and to plant a tree for every one that is cut down.

There has been a great deal written just now about growing sugar bects. If the farmers would grow sugar maples on the waste places of the farm, in groves for shade for the stock, and in windbreaks to serve as protection for the house and barns, they would snon have a source of supply for sugar that would nearly meet the demands of the farm home for sugar, or if the product was marketed as syrup the proceeds would buy a very large share of the sugar needed. Most farmers could make the larger part of this sugar supply just as easily as they raise their own potatoes.
Where maple trees stand in a grove in the open they run much better than those in the forest. Fifty such trees should produce from 200 to 250 pounds of maple sugar. This would be about half an ordinary family's requirement of sugar. If the product is sold as syrup the returns will be some. what larger.
Such a grove at the adjoining corners
of four fields would not take up more than a yuarter of an acre, and besides the sugar product would be of value as affording shade for stock, as a windbreak and sheletr, abd as aיs eymaliaer of temperature and mosture. While maple trees do best in a grove, they will also do well planted in rows aleng the fences. There are many vacant places and curners in the woudland and on the farm that could be protitably set out with forest trees again. Nearly every woodlot will suppl) the nucessary trees, or they can be obtained from some neighbor's woodlot. Why not plant a grove thas spring? Why not fill up the vacant corners and open places of the woothot?

## BEES IN THE ORCHARD.

Many fruit-growers do not thoroughly apprectate the value of bees in an orchard or there would be more orchards with bees in them. Their value in an orchard was demonstrated in a most practical was at the Oregon Experiment Station some years ago. A few peach trees were forced into bloom in November and a colony of bees was placed in the house when the trees began to bloom. For some days, however, a heavy fog prevented the bees from working, although the fowers were open not a bee was seen upon them. The first bright day the bees set to work at once and remained at work so long as there was angthing for them. The result was that not a peach dropped at the stoning season, the time all unfertife fruit falls. The crop was so heavy that $t$ had to be thinned out. As a check test one tree was protected so that not a bee could get to it. On this tree all the fruit dropped at the stoming period. Bees and other insects have a duty to perform in the orchard, for which there is no substutute provided. This is the distribution of the pollen from flower to llower and from tree to trec. They insure success in the orchard and every fruit grower should encourage the bees in their work by not spraying, or dong anything that would be injurnous to the bees while the trees are in full bloom.

## EARLY FORAGE CROPS.

Among the earhest sowngs a farmer should make in the spring is a small piece of peas and nats for solling. Prepare a nice piece of ground convenient to the buildings or to a pasture field, If it is to be fed there, and sow ahout an eighth of an acre for every ten cows. If the cows are to be kept entirely on the crop about half an acre will be required. Sow another plot every ten days for four or five sowings. Then sowings of millet, Hungarian grass and corn may be made.

A mixture of two bushels oats and one bushel peas; two bushels oats and three bushels peas; one and-a-nalf bushel oats and two bushels peas, and one bushel oats and three bushels peas are all good mixtures to sow; but of them all the first is probably the lest. The Prussian blue pea, with either the Siberian, Banner, or Egyptian oats makes a very good combination for green fodder, and is recommended by Mr. C. A. Zavitz from extensive trialo
with them at Guelph.

TO MAKE DURABLE FENCE POSTS.
The following is given as a good plan to make fence posts last longer than they generally dn in the first place the timber shonld he cut in midwinter, split, and allowed to season under cover. Now burn the lower end of the post so that it will have a coal showing from the lower end to six inches above the ground when set. Then saturate the bumed part with hot coal tar 'The prosts are ready then to be set. If not wanted immed iately let them stand under shelter with the black end down. It is claimed that posts fixed in this way will last twenty times as long as those of the same timber cut and set green and without being burned. The extra cost of fixing them will not be lwo cents a post.

## CLOSING EXERCISES AT THE GUELPH

 DAIRY SCHOOL.The closing exercises at the Pro vincial Dairy School, (illetph, for the last term, took place on March 23 rd. There has been the largest attendance thas season of any since the school started. The number on the roll was 110, 19 of whom were ladies. Ths number was made up of one from New Brunswick, one from Nova Scotia, three from ()uebec, one from Mantola, one from the North-west Terriories, one from Liverpool, England, and one from New lork, the balance being from Ontario. This speaks wonders for the repu'ation of the school and the good work it is doing towards higher education along practical dairy lines.
The students of the term just closed showed their appreciation of the efforts of the staff in their behalf by presenting a nicels worded address at the closing whech was sumably replied in by Professor Dean and other menbers of the staff The utmost good feeling between teacher and pupil has prevaled during the term and the expressions of gratitude contained in the address can have none other than a good effect upon all concerned.

The large attendance of ladies this
year is worthy of note. The number present patronized the home dairy, where special instruction was given in home buttermaking This department should be filled every year by the girls from our dairy farms. There is a demand for good butter all along the line, from the home dairy as well as from the large creamery, and those who make it must be fully equipped.

## QUESTIONS AND ANSWERS.

## HOOKS FOK THE YARMER.

Teefy Mulcahy, Orillia: Please give me the names of good books on the raising, feeding, breeding, and care of horses, cattle and sheep; where can I get such books? Please give me the address of some one who has a good saddle mare for sale or one in foal.
Ans: The best work covering the breeding, feeding and raising of horses is "Horse lBreedıng." by J. H. Sanders, price $\$ 1.50$. "Feeding Animals," by Stewart, is a good practical work, price \$2.00. "Fceds and leeding," by Professor Henry, Madison, Wis., and noticed recently is a capital work, price $\$ 2.00$. "Cattle, Brecds and Management," by Wm. Housman, is a very useful work, price $\$ 1.25$. "Stock Breeding," by Manly Miles, price $\$ \mathrm{r} .50$; and "Catle Brecding," by Warfield, price $\$ 2.00$, are two reliable works on catle breed. ing. "Ihe Shepherd's Manual," by Stewart, is perhaps as reliable a work on sheep as there is published, price $\$ 1.50$. All of these books can be ordered through Farmans.

Perhaps some of our numerous read. ers can tell Mr. Mulcahy where he can get a good saddle marc.

Paint the garden trellis, etc., now, don't wait until you are too busy to do it. Also give the porch floor, the door steps, etc., a coating of good drab, buff or ochre colored paint.

All paint for outside work should be mixed only with raw linseed oil and a little Japan to dry it. Never add turpentune or varnish to outside paint, nether kerosene oil or benzine, etc. It is poor economy to use poor paint.


The ahove is an illustration of a seen it used on both sides of the line. "Weeder," manufactured by Messrs. There can be no doubt that it is the David Maxwell \& Sons, of St. Marys, most effective implement for destroyOnt., for the season of 1808 . It is not a ing weeds without any injury to the new instrument, however, and has been crop. We can recommend it to every in operation for some years in Canada farmer. Directions for the use of the and the United States. It is highly weeder are furnished by the manufacpraised by all who have used it and turers.

CHEESE AND BUTTER-MAKERS' MEETING.
The Executive Commitee of the new Cheese and Butter makers' Association met on March 23 rd at the Daury School, Guelph. There were present: President, 'r.' B. Millar, Kincardine; Geo. H Barr, Sebringville; (G. E. Goodhand, Milverton ; and IV. IV. Brown, Attercliffe Station. A circu. lar will be issued to the dairymen of the Province, seiting forth the objects of the association and containng a number of recommendations to the
salesmen of factories and cheese-buyers, which, if carried into effect, will do much towards remedying some of the grievances that are known to exist in the working ollt of our co-operative cheese factory system. One of these is a recommendation to the salesmen of factories asking them to adopt such regulations at the local cheese markets as will make all sales binding on both the buyer and seller, and make it necessary to have all cheeses inspected by the buyer before he purchases them. If this regulation were adopted it is claimed that makers would not be imposed upon as they are at present, and have to make good losses on cheese which the buyers may think fit to reject after having purchased. This is not intended to relieve the maker of responsibility where he is to blame, but to protect him from being imposed upon by unsciupulous buyers, who sometimes reject passable cheese and get a.: extra commission from the maker whe does not wish it known that he hats any rejected cheese.

Arrangements will be made to give certificates to makers who have shown themseives competent to manage factories successfully and to make a good quality of cheese Such an arrangement should prove of great benefit to the cheese and butter irade if properly managed and certificates given only to those who are competent to make good butter and good cheese.
The new association has now a nem bership of 102, among whom ate the leading checse and butter makers in Western Ontario.

## SCOURS IN CALVES.

A new remedy is suggested by a reliable stockman as a remedy for that troublesome evil among caives, scours. This is no less than coffee-a pint to a quart of stroug coffee put in the calf's drink. The quantity is varied according to the age of the calf and the severity of the trouble. Oi course the quantity of milk is reduced by the amount of coffee added. In one case beneficial results were obtamed by giving strong coffee to a cow. It is always well, however, to look for the cause of scours. The cause must be found and removed. More can be done in this way than in giving medicine and remedies to keep all stock in good health. The best remedy in all cases is to remove the cause. Medicine may relieve for the time, but the trouble will return unless the cause of it is removed.

At the Fruit Growers' Convention winter spraying of fluit was very strongly recommended. Now would be a good time to try it. Give the twigs and branches of the fruit trees a
good spraying. This will go a long with vermin while selting, and occasionally way towards reducing the need of spraying later en when you are more busy. By destroying the spores that are resting on the twiss the fi.ut lot of them will be destroyed. When the leaves come out spraying again will destroy those spores that may be on them. By this means muelh more thorough work can be done. Try it.
Hogs should be salted as regularly as any other stack on the farm. Don't neglect them.

## QUESTIONS AND ANSWERS.

## freminci Rishlator.

A. S., linfleld: I enjoy reading the ques. ions and answers, and would like to know the best way of feeding ensalage. I am fattening fourteen hearl, but never led any ensilage before. I am also feeding it to iwentyhee others, hut I do nut find the catte
fattening as fast as I expected on such ond. looking feed. I mix about one third wit straw with the encilage, and give one gallon of meal to each heast, one-half gallon at noon
and the rest at $S$ o'clock. What is the best way to use it? Should hay or turnips be fed ?
1 have one of more hens that are dizzyheaded. What is the cause and the remedy?
ANs. : You do not say how much ensilage you ate feeding, nor how mature the corn was tion of ears was in the corn. Enslage is not a perfect food, and you have not improved it by adding a third straw to is. We would suggest that you feed 50 to 55 lbs. of enstlage if the corn was well eared, and what hay the animals will eat. If the corn was not well eared, and the ensilage is coltr, it will be bethay. It will not be necessary to feed any turnips. For fattening stock the amoun
meal should be increased at least a half.

It would appear as though your birds were It would appear as thongh your birds were
suffering from vertigo. This is caused by a rush of blood to the head, by a sudden fright, or is the result of an over-stimulating diet. Mr. I.. G. Javis recommends holding the head of the bird under a stream of cold water, or pouring cold water on the head fo: a few minutes. This will artest the tromble. Then an opening medicine shond he given, which
will remove the tendency to another altach.

HKNS EAllist, Fincs.
D. (i.I.: I have something new for you. Egts are dear, but my hens are eating them. I shut them up in lath coops with a lath floor, one foot from the lfoor. Resutt -the eggs
drop through and I gather them. That is drop through and I gather them. That is
better than cutting their heads off. It is a better than cutting their heads off. It is a
complete success.
ANs. : Your pian is certainly a novel one, and worth; of trial il you catch the first one to start eating egge. If all the hens were to Icarn the habit you would have a contract, unless you could make them lay in nests with condition of the hens, and is best remedied by supplying them wilh plenty of green veretable supplying them with plenty of green vegetable
matter, oyster shell, and meat. As soon as the liens can eet oni for a run let them out and there will not likely tre any mure trouble. SETTING HENS.
$13 \mathrm{~J}:$ What is the best way to ireat a selling hen to keep her free from vermun?
ANv: Many a poor hen is almost caten up
with vermin while setting, and occasionally
the vermin get so bad as to drive her off the nest. There is nothing better than to dust the hen thoroughly with insect powder, and also the ust: Repeat two or three umes white the leen is setting. It is a good plan to put the nest in a quiet place. Tolace, stems
make good material for the nest. make good material for the nest.

## SICK EWES.

Shepherd, Richmond Co : We bave lost sereral valuable ewes latel;, anil wish to know The canse and how to prevent losing more. condulyey wete heavy in lamb, and in good conditon, the vulva protruded, and conld not be put back to stay. A few weeks before lambing the sheep would prese it out as large readers of Fikvini: kindly siate the cause and how to prevent it? The sheep have been fed on hay and a few onts daily all winter.
Ans.: The trouble seems to be what is called prolapsus vaginas, or a weakening of the parts mentioned, and is common in the cow and occasionally in the ewe or in any ani mal. It is very frequently caused by severe straining such as occurs when animals are constipated. This can lee relieved by feeding roots or other laxative foods. It may also be caused by the ewes lying on a sloping floor with the parts downwards. The remedy for this is a level floor. Iby way of remedy give laxative diet, foment parts with warm water, wash clean, and return carefully by manipu. lation. With the ewe there is perhaps no better way than after the parts are returned to keep them in place by muting a pad over the vulva and tying it to the wool on either side. In fact. a kind of truss is required, with an opening for the escape of the urine.

## THE LAMBING SEASON IN ENGLAND.

The general average of the reports to hand as to the results of the lambing season is that mild wewing, in the main, to the open and mild weather, the loses have been very small,
yet the crop will not be a larg: one. Few yed the crop will not be alarg? one, $r e w$
if any reports have been seen, but they all if any reports have been seen, but they at complan of the paucity of twins. This is not
almgether a detriment, particularly in the altogether a detriment, particularly in the
ram- ${ }^{2}$, ram-breeding flacks, or then one guod hamb
will probaldy be worth mare than two mid. till probably be worth mare than two mid.
ding ones. $A$ few typial reports can be dling ones. A fow typeal reports can be
taken from those to hand. For Lineolns hami.
Fon the to
For Linzolns we can select those of Messrs. Henry Dudding, S. (i. Dean, and Mrs. and J. E. Carswell, all of whom report an excellent fall of lambs, with first-class quality and full of character as one would ex. pect them to be when bre. 1 in such $n$-cks as ithese.
Ilanpshire Downs have been dong well. Mr. J. Flower reports a grand fall of lamb: true to type and character, all of which, owing to the very abundant supply of fodder, are doing extremely well, and bid tair to be, when August comes round, as grand a lot of lambs as he has ever produced.
MIr. W. T. Hall, Lord Carnarvon's agent, reports a tirst class drop of very excellent lambs, all of which are well bred from vers carefully selected sires and dams.
Southdowns, the world renowned flock of the l'agham Ilarbor, are reported as having had a grand season, all their produce being of a very level and true to type tiock-likeness had a really excellent fall of lambe, heing sired by some very special sires, and IIr. W. Toop's flock, from whence in days gone by reported prize winners have heen produced, is crup being of eacellent greai form, the lamb
品


# "Alpha" DeIraval Oeparators 

Retall Prices from $\$ 65$ to $\$ 500$ each.
The cloceses skimmer and best machine on the market. Gives peffect satisfaction wherever used.

Canadian Dairy Supply Company,



Oxford Downs, from general reports to hand, have done very well, feed being very plentiful and losses very small. Amongst Those whom we have seen are Messrs. T. I.
Hubbs and G. Street, both of whom re. nort very excellent results,
port very excellent results.
Shropshires are not guite so forward in Shropshires are not quite so forward in
lanbing as are some other breeds, but from the reports we have to hand it appears that in this, too, the general run of luck has been very good, and that there is cvery indication
of an excellent fall of strong and robust of an
lamb

Suffolks have done well generally, taking a revew of the varous reports to hand. The past season appears to have been with this breed one of great success, with a really capptal fall of lambs full of merit and excellent type.
CLOSING EXERCISES OF THE ONTARIO VETERINARY COLLEGE.
The Ontario Veterinary College cloced another successful gear s work on Thursday, the 2.4th of March. The closing exercises, held in were Convocalion flall on Temperance street, were very interesting. frizes and nedals the province. The gold medal for general the province. The gold medal for general proficiency in the second ycar goes io an Anenchan, a large number or whom attend the
college. The prout winer is $C$. Wisher, oollege. The proue winner is C. W. Fisher, year aiso goes to the other side, to W. M. ycar aiso goes
Ilon. E. Davis was present, and in a few well-chosen words congratulated the students and the college on thear success. Ite told the boys that they were just beginning their life, and success was ganed only by earnest, hon est work. He was glad to see that the value of horses was incteasing, as this woold mean increased business for them. The depression was rolling away, and Canada was on the eve of prosperity.
In all, more than seventy students received their degrees. The president of the graduating class presented Dr. Smith with a large framed group photo of the class.
Dr. Smith has reason to be proud of the successlul year's work just closed, for cach year the good work done at the college is attracting large numbers of s niecican studients to Toronto.

## Publishers' Desk.

The Grinder.-Messrs. Mathew Moody \& Sons, of Terrebonne, Que., are llanufacturers of a very high class of machinery for the farm. The grinder which they advertise in another column is said to be one of the best. They are also makers of a superior class of tread power machines, feed culters, hay plesses, circular saw machines, etc. We advise our readers to procure a copy of their catalogue.
Gasoline Engines.-A discussion respecting the benefits accruing to the farmer through the invention of convenient appli. ances for generating power for farm uses will be found interesting and valuable to every farmer. Those who desire to become familiar with the subject should write for the Northey Manufacturing Co.'s booklet, which contains hints and information of value to every farmer.

## Millers <br> TICK DESTROYER <br> 

Effectunlly Destroys Ticks, Scabs, and all Vermia

Winkes the skin clean and healthy, and imparts a silky sortness and luatre to

HUGE MILLER \& CO. Toronto, Ont.

# The Ontario Agricultural Gazette 

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

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

## BENEFITS OF MEMBERSRIP.

Each member receiver a free copy of each phblication issued by the Association to which he belongs during the year in which he is a member, In the aste of the Sume Breeders' Assoctatior this maludes a cups,
of the Swine Record. A member of the S
are charged $\$ 1.00$ per head.
member of the Sheep Breeders' Association is allowed to register sheep at soc. per head, white non
The name and address of
 Experiment Station in Canada and the United States, also to prominent breceders and probabie huyers resident in Canada, the United Scites and elsewherc. which he belongs ; that is, to advertice cattle he must be a member of the nomponding to the Association to linn, to advertise sheep he must be a member of the Domanon Sheep Breederabi Association, Breeders' Associawine he must be a member of the Dominion Swine Breeders' Asscintion.
The list of cattle, sheep, and wine for sale will be publiched tin the third issue of eationonth Members having stock for sale, in order that they may be meluded ia the Gazelte, are tequired to notify the uniler migned by letier on or before the th of each monh, of the number, breet, age, and cex of the animak. Shumer densed form.
F. W. Hobson, Secretary.

## REDUCED FREIGHT RATES.

Following is a circular issued by the Canadian Pacific Railway to taike effect April ist. A similar circular has been issued by the Grand Trunk Rail. way:

## To Agents East of Fort William:

Circular No. 39 of March 19th, 1897, is hereby cancelled.
The following arrangement will hereafter govern the transportation of pedigreed cattle, sheep, and swine, in less than car loads, between stations on this Company's lines east of Fort William when intended for breeding purposes only:
Shipments will be way billed at onehalf regular tariff rates and at estimated weights as per Canadian Joint Freight Classification.
Certificates of Registration must, in all cases, be prodiced $b$; shipper. Agents will take note of particulars as to name of animal and age, and keep record of same, also make notation on way-bill accordingly.
Shipnents may be taken without men in charge, provided owners sign the usual contract releasing the company from liability in consequence thereof.
These special rates will only apty when owners sign the usual valuation agreement for ordinary stock. If extra values are declared the weights and rates will be as per classification for valuable stock, page 45 , classification No. 10A.

Agents will give reference to this circular in way.billing.
G. M. Bosworth, Freight Traffic Manager.
Copy of Correspondence Regarding the Roads on which the Rates will Apply.
John Earls, Esq., Chairman Canadian Joint Freight Tariff Committee, City:
Dear Str,-Will you kindly let me know at once over what roads the rates, as per circular, will be good ? (Sgd.) F. W. Hodson.

## Canadian Freight Association.

F. W. Hodson, Esq., Toronto :

Dear Sir,-I understand the arrangement respecting pedigreed stock to be adopted by all railroads in Canada east of Fort William. I believe, however, that the Government Rail.
way System has a special arrangement on its own lines for thoroughbred stock, but there is no doubt the arrangement made by us here will apply on any thoroughbred stock interchanged between the I.C.R. and the G.T.R or C.P.R. companies.
(Sgd.) John Earls,
Chairman.
Farmers' Institute Department.
Reportc concernme the woik of the Farmest' In. heat; also paper, prepared for this department by Institute workers. Secretaries and officers having announcements to make are invited to send full par
culars to the Superminemitht.
THE REQUIREMENTS OF THE BRITISH CHEESEAND BUTTER TRADE.

HOW CANADA CAN BFST PROMOTE
TRADE IN THESE DRODUCIS WITH THE MOTHER COUNTRY.
By H. A. Hopgsen, of Hudgson Hros., Fxppotern and Cheese--It is most desirable tha this article should be sold in quantitues when the youngest cheese is about 15 days old, with the exception of the first half of May make, which should be made to cure early, so as to be ready to be shipped out at 10 days old. This $c$ 's be done by light salt ing, say at least $2 l \mathrm{lbs}$. per 1000 lbs . milk, and adding sufficient rennet to cut the curd in 15 minutes, using the usual amount of cooking and drying so as to give it body, but the last half of May should be salted at the rate of $21 / 2 \mathrm{lbs}$. per 1000 lbs. milk, and June cheese should be saltedat, at least, 3 lbs ., and makers should use less rennet and bring the cheese down firm-bodied. Cheese made during the months of June, July, and the balance of the season, should not be shipped from the factory younger than 15 days old, and it is important that the factorymen should have a good curing room, so as to give the cheese a good even curing temperature. The curing rooms should be lined with good matched lumber, having a space of at least one foot between the outside and inside walls, which should be lined with tar or felt paper in such a way that the
rooms could be turned into cold storrooms could be turned into cold stor-
age rooms if desirable without much extra expense. Cheese should be kept as clean as possible while at the fac-
well boxed, double scale boarded top the sale of the butter to a considerable and bottom, and naled down tightly extent. Three per cent. or half an so as to have the top of the cheese ounce of salt to a pound of butter an close against the lids. Cheese carry the standard requirement for export much better across the ocean in this and our local market. Never more way than if lousely packed. Canadian than this should matket. Never more
cheese bas ausined but London cheese has attained a very high stan- market can take even a little lighter dard on the English makeet, but we salting. The demand is for a nice, thonk there is room for improvenent, pale straw color, and even in the espectally in flavors, and these could be month of June the creameries should improved upon if more attention were avoid high colored butter, which can given at niiking time. We have easily be done by proper manipulation
travelled nearly through the whole of length of Ontario the whole of the cream. It is important to pack length of Ontario, Quebec, New the boxes full, and to contain as uniEdward Island, and we have seen form a weight as possible, so that the some very careless milking. Cows butrives in ill Gre out 56 lbs . when it siould be milked on the highest level should be used as a paste on the face of the farm, where free ventilation of air can be had, and away from the barnyard. When in England I visited a model dairy farm and found the cows were driven into a cobble-stone yard with a drain running in the middle. The milk-maids had to show their hands, and if they are not clean they were sent back to the kitchen to wash them ; the same also with thei pails and stools. After each maid had finished her cow, the cheese-maker tried to milk the cow to see if it had been thoroughly milked. Now if all our farmers would take these pains, see that their hands were clean, and the cow's udder and teats well cleaned
before milking better before milking, better flavors would result.
Butter.-Our shipments last year placed our butter in a higher position than we bave reached in firmer years, and it is regrettable that a large number of our creameries stopped making butter last season and turned therr attention to cheese, mainly on account of cheese selling relatively highe: than butter. The increased quantity of butter being made in the States at the present moment is supplsing the English wants, and their prices are fully one cent per pound under ours. The make this season promises to be fully 30 per cent. to 40 per cent. greater than last season, and although it is true that the present receipts are being largely absorbed by our local trade, yet it will not be long betore this source is satisfied, and we
shall have a surplus for export. are largely coming into favor on our local marker, and are preferred largely in England. Only wire nails should be used, even in the cover, and then only a few should be used, or screws or other devices employed, so that the cover may be removed without disfiguring the package. It is very important that the boxes, and even tubs, should be paraffine wax lined, as it prevents all possibility of a woody flavor being imparted to the butter. It is also important that the boxes should be kept perfectly clean. For either phrpose the creameries should bags, or else straw should be used on the bottoms of the farmers' wagons and railway freight cars as well as between the packages. Style and appearance as well as convenience in opening, help the sale, while dirty or
ordinary sawn and nailed boxes yurt
should be used as a paste on the face
of butter packed in boxes (this does not apply to tubs).
Parchment Paper.-Use only the very best quality; never less than 35 lbs. to the ream, and preferably from 40 to 50 lbs . should be used. This paper should be used in two pieces, and not in three or four as is sonetimes the case. It should be of sufficient width to lap well over the butter on all sides. The same kind of parch ment paper should be used for boxes and all kinds and sizes of tubs. Most of the parchment paper used by the creameries last year was too thin and light. It is to be hoped that our factorymen will not use this light, thin parchment this year. Mould in butter is generally caused by green wood and poor parchment paper, or by the butter being kept too long in a damp, poor
ice-house.

Ontario Agricultural College.
Announcements concerning the College work will
published weekly under this head.

## FOALING TIME

By J. Hugo Rayb, VaS: professot of Veteritiary

> (Continued from last issue).

There are other numerous conditions which may arise, the evil consequences of which can be averted by careful interference. It is good practice to have a solution of corrosive sublimate about ito 1000 of water on hand and to dress the navel string and opening with it three or four times daily unili the parts have healed. This prevents the entrance of germs that frequently cause joint or navel ill which usually proves fatal. If the foal should be weakly he should be helped to his feet when about an hour old and assisted to stand and take nourishment. If the dam is cross a twitch can be ap. plied or other means taken to force her to allow the colt to suck. If unable to stand or suck, the mare should be milked and the young animal given nourishment out of a bottle until he has become strong enough to stand and help himself. In cases of this kind he should be given milk frequently, say every half hour, and in small quantities. Unless his bowels move early, means should be taken to relieve him. The contents of the bowels at birth is called meconium, and consists of a blackish substance somewhat tarry in appearance and about the consist-
ence of putty and existing in lumps.

These lumps are often so large that the little animal is unable to force them out of the bowel and they must be moved mechanically; the admmis. tration of purgatives to the little cecatures for this purpose is dangerous, as medicines administered by the moulh have very litte or no action upon the contents of the posterior intestines. The forefinger should be well oiled and carefuliy mserted uto the tectum and all the meconium that cant be reached should be removed after which an injection of a latle raw lmseed onl or a little soapy water should be given. This operation should be repeated several tumes danly utitl the feeces that are passed are of a gellow color, whinch tells us that the meconum has alt passed and what is passing now is the product of the malk the young animal bas taken after birth. The attendant should observe whether the urine is passed in a normal manner, as sometimes the opening into the urethra is closed by a false membrane and then the urine will escape by the navel opening or not at all. If an obstruction of this kind exists a small catheter must be passed to break down the membrane, but fortunately this conditton is seldom met with. If the birth has been normal all the attention the dam will require is to be excluded from draughts for a few days, kept comfortable, fed on warm mashes, and if in cold weather the chill should be taken off the drinking water for a few days. If parturition has been difficult, caus ing complications of differemt kinds, the services of a veterinary obstetrist should be secured.

## Stock Notes

Another car. load of purebred stock has gone west It started from Guel ph, and sock was als taken on
at Itrite and at Curletin lace. The following were the thppers : the FiW. Stone Extate Guelph, four
HIereford heilers; Capt. Furest, one Shorthorn luall calf; G. W. Clemons, St. Furest, one Shorthorn bull calf; G. Wh. Cleinons, st. Braniford, one Berkshire buar ; I G. Saell, Surlgrove,
a lierk hire baar aud a Cotswold rama ; Arthur Jhn
 sorn bullswil. D. Smith, Comphon, Quevec, one Iereford heifer; Sir. Wilson, Compton, onellereford, and the walance of the car was made up of live Ayr:
s ires fiom the herd of $R$. $G$. Stasy of $1 . ; n$. Some of the animals are for poinis west or Calkary and are sent to Edmmntor for $n$ coit of nbout $\$ \$ 9$, where.a-
under the old rates it would have cost over $\$ 0$ on land under the old rat
an animal there.
d. Drvitr $\&$ Son's Clvinsidalrs.-The Clydesdales to be found at J. Devist Sions. Ficeman, are
of an excellent and usefulispe. The head of the stud of an excellent and usefultype. The head of the stud
for some sears has been Doug imported in dam by D $\mathbb{E} 0$ Sothy in Ansust, 1888.


## Compati

No other make of salt will give such satisfaction. Every package is guaranteed to the purchaser.

## Address

## R. \& J. Ransford

(19ss) bs Giod Hope, (1670.) hy Dandey, and hiv grand. danik Mall. (6267). SIncuberonisa beaultul bay with










 The su wed by Malay, dam Mabella, and has heen a



 and interding purchacers can see thuteen of Mase
pher an's get in the tuls. 1 his should be a sreat con




Mir. SImmons' Dispersion Sale
There was a large attendance of proypective busers
 Quite a number of buyers were also jreeent from the Q.s. and the Northweat. Good prices, ns a rule, were obtained, and ever thing went of smoothy under hie
hands of ihe able nucionerr. Capt. 1 . Eubsin. The sturk was in breedilng conditiunt only, so that buy ers had the best of chances to see what the stuck
fike. then another hing that added the value the took was the nuinber of young calves at the side
of the datns, stowithe that the cours were regula or the
brceders.
In all
In nht here wese ten mentiers of the Suachallan
 As a inmify they present a situgh likenes, weing gixen-
sized, strong. boned thick. Aeshed ueful catle. Thev
 are guoul enough to fat itheir way into the prize lists
at our leading exhibitions, nnd even to uin the sueepat our leading exhibitions, and even to uin she su eep.
sakes Award. Mraded by the old cow, Daies of Strathallan, the) made a group of animats of whith no breeder need be ashanmed. The dld cow in he
sevententh jear, with a beifer calf by her side, by sevententh year, with a beiter calf by her side, by
Blue Ribbon, brought sith. All hle Seathallane sold for good prices. Mr. Rolert Miller buaktht two o
them, but sold them again before te left the round Those who let the others slip through their fingers
determined to have the latt one of the fanily, Dais determined to have the latione of the hamily, Dasy
of Strathallan sath, a beautifully formed heifer, show ing loss of quality, and with a heifer cald by her side. She is of the thick. Ae hed sort, and though Mr. Cas penter had to man up the highest price of the days t
secure her, he can rest assured that he lias sot some shing good, as she is the making of an excellem cuw The thre representatives of the Golden Drop famils
were cood ones. The old cow, Golden Drap, by here coou othes. The old cow, Golden Drap, by
Birmaton llero, is a goud-sized cow, with well sprung hinmpton liero, is a gow-sized cow, with well sprung
rib, smisoth, thick-feshed, and shows lotr of quality: Sice and her jearling heifer. Golden Drop 3 Jd, b; Royal Saxon, gor to W. S. Carpenter. Simpoe. The other member of the famils, goes to J. T. Gibson, Den
field. She, too, is a well.built, smouth, gocd haiged heifer. The Mina wow Rees, ot keep connpany; with the thick animals at Maple Lodge, and her dauchter, Mina and; perthapsthe sweetest and nicest animal suld,
went to W. D. E. Flath, Hamition. The Eivira family
were headed by lifina nth, now almost phirteen vears



 The bulia did not netraut as much attemticras the
cemancs dha. ho buned vore a. thou, huld Bive kil


 animials sold well. The fulluwing is a liss of the natues
of all the animale, giving date of birth, purchaser nid














 carn gur (avi. 94). Mine Hiompon,




 Sinith, $\ddagger 45$. Nelson Duon (Uec., yo), Alex. Swath, making an aiverage jer head of \$146. I he averase per hend tor femates was \$1s2, Mind the nverape pes hrad for males was sito. A good many breeders
went away from the sale feeling as though they werd worth a litle mure money.

## Clydesdale Stallions

 2 Prize-Winning StallionsDOUGLASS MACPHERSON (inp.) (irga) and
(iRANDFUK 1 (rat) AKO a number of Brood
 wares and kitlies of superior breeding ath the leading faits ot Ontario.
what

1. HATITT \& SUN, Freeman.

A J.C.C. JERSEYS of the richest treedinn. Our hera sis noted lor large hutter recurds; can always inhin int. tambert blowd. Bulls ready for service, and ereral cows dinect granddaughters of Stoke
pugis the Pugis the 3rd. Prices to meet the times. milfurd, Hants. Co.. N.S.
the daisy grall grinderithe dalsy barrel churn


Suitable for all purposer. Madr in four sires, yeing
inch, nnd 20 and 12 inch reversible phates. Fited 8 inch, and so and 12 inch reverritic phates. Filuple
with ball beatines and relief springs. By a siuple lever allarhment the plates may be instantly separated
and brought tozether asain while in motion. Elevato and brought tozether again while
and baveer added when deksed.
THE WORTMAN \& WARD MFG. CO., Limited, LONDON ONTAREO.

## FREE SEEDS

## Change of Seed Makes

 Larger YieldW
have made special arrangements with the old and teliable seed firm of John S. Plearce \& Co. London, Ont., whereby we are able to offer the following valuable cullections of seeds as premiums for new subscribers.
These seeds are of the best varietie and are specially for our patrons.

COLLECTION A.
10 Packets Vegetables. Prlce, 50c

Glven for one new vearly subscriber at \$1.
COLLECTION B.
10 Packets Flowers. Price, 50c.


Glven for one new yearly subscrlber at \$1.
COLLECTION C
20 Packets Vegetables and Flowers.


COLLECTION D.
20 Packets Vegetables. Price, $\$ 1$.

| cket |  | ${ }_{2} 1$ Packet | Ca |
| :---: | :---: | :---: | :---: |
| 16." | Cucumber | 1 | Caubage |
|  | Musk Melon | 1 " | Watermelon |
| ". | Cirron | 1 '، | Onion |
| " | $\underset{\substack{\text { Radish } \\ \text { Toinato }}}{\substack{\text { Ras }}}$ | 1 1." | Squasb ${ }_{\text {line Peach }}$ |
| " | Parsley | 1 | S. Savory |
|  | Sage |  | Thym |

Given for two new yearly subscribers

## Barley

For one new yearly subscriber at st, and 18 conts
added to pay for bas, we will give one bushel or Mandscheurl Barley.

## Oats

For one new yarly subscriber 1255 and 18 ecuts
and s.lded to pay for bsi,
sitborlan White Oats.

These varieties are among the best in the market, and from reports gathered from reliable sources have headed the lists, both in eld and quality.

## Purebred Poultry

One pair of any of the following breeds of Fowls:
Siiver and Golden Wjandotes, Barred. Ply moulh
Kocka Black Rocks Black langshans and Single Comb White
Leghorns given for six new yearly subscribers at $\$ \mathrm{t}$

## Eggs for Hatching

 Waniotes, Golden Wyardo:tes, B. Mitinorcas,' S.L. White Leghorns and Brown Leghoms for two new
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THIS IS YOUR. OPPORTUNITY
Make an effort, and we are sure you will sucseed
securing some of these valualle preiniums

## FARMING

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Sample Copies Free.

## MARKET REVIEW AND FORECAST.

Office of Fakning.
44 and 46 Richuond stleet W., Turonte

## Match ssh, lSuS.

The volume of trade in many lines is es 1 mate I as lxing 25 jer cent. gireater for fels turs than for the same month a year ak" The (iucornment bank retuons for Fobruaty thow att incecace of \$s: 2, Eut in the circula. tion for the month, orer that of lanaats: In abler interevting fealure of the mones maine is the allynentatson of curnent loms in 1 ch ruary of $\$ 4,129,42 \mathrm{~S}$. Thss is unturw hasimes enierphisey, and shouva pencral expansion o! irade: I lages ohate of the mereace in ifue bo the increased mevement in coatse granas ath daity prolucts as well as heneral methan dixe.

The wheat situstion zemolini alonut the same as it hav leen the sume the homk. leviet continuev to holl the balarece of juwer, andis hold prices almove thete teal value. Silambithe tis; humever, to nratket one sith part of his: bollings theic nouid ix a crash, sloun hith


 Deccminer. Whale this naj le an, ite has up. $x$ the whine wheat trade of the wofli. Millers and dealcts are mot busing asy motic than they need for inumediate use, as these is
 fung as they tast they ate konit fur the farmer, Eut whenatice dog dodlum 11 they will have 2 veif dejpesimis sfices.

The local mathet is puiet. line wack of ened with wheat at sjic.: it advalucerl a litule, then dectiacil to Str. f.u.b. cars west and mosth. Manitolia wheat continces stcacis at $\$ 1$ ugit in $\$ 1.10$ for Nio. 1 hadd at Niosth May, and \$t.çi lomen sound and Midianit. Muntecal nisikets shuw that the Hatket is weaker.

## tearke and Oats.

Batey is quize. Nor, 2 graje is nouninal at

 at soc. $10+2 \mathrm{c}$.
Uais have hel! their onn this week. Tiere is guite an cnojuiry lio Canadian uat, fromo all geats of ille ¿'sutcel Kingdinn. They are steady at jic cast fug white, and joc. ncsi. As Nunircal the market is sicady; at ishe. iu to 34c. in siote, anil Maj cats ate quoted at 35=. to 351c. atiant.

## Pass and Corn.

The manket for preas is somentiat exvist, prices having declined almout one cent, jisc. to gac. Leing: ibe foice int peas mumith and weot,
 Nnolical sume fuciness has lren dune in a basis of 65c. 21 653c. for exportatl bat in II yy: This is a dechipe of treatly inu cesits.
Cum is eany at joftco fus Camadian yell in west. American corn at Tonomite is wurth 36:. At Moniseai Nic. 2 thicano mulaed is yunced at 35c. in jilic. 2ti.al in May. In some cuta is wuith jxic. (1) \&oc.

## Buctument and 角ye.

Thackwheat is quic: at 36c. 30 37c. Wist. Morotreal market iepouts shows luckmbeat

Kye remains twminal at $5^{\prime} \mathrm{C}$. fien cats noth and wes!. At Nontecal values are 2 litile eacier at 60:. aftial in liay.

## Sran aud smorts.

Miltsed is dull but steatly at a litile lower prices. Bram is quoricd at 511 west, and shomis. $\$ 13$. Ai Ni,mitical slicte is a giond demaemi for Uniasio Iran at \$14.5u in \$is, and shorts at $\$ 16$ tu $\$ 10 . j 0$.

## Timany and Cluwer save.

At Toronto red cirver seed is leinging 5: it $\$ 3,60$ per inashel. Alsike $\$ 3.25$ to St. ana cimoting $\$ 1.25$ to $\$ 2.35$. At Noiniseal inc 53.25 it St: alsike at 53 solo 54.25 , and 5inouby at St.50 tu $\$ 2$, accurcline to givality and quandity
It ss reppried that Canadian holicers of tim. ofly and chover meed are buhlinge laxck slucks an accouat of the low pricer goinh. To meet The decmand tmarican enw. avis are leir. conotry without improtions and if at werc ine courty withor

## Andinges

Putates on the track are easief, 57 C . 10
bring alout usc. At Montreal they lining 55. to we. per lag of no lli.

## Poultry.

The supply is "tearce, the demand w-u.all) keod, though often only lair. l'tices atit steady at isic. for turkes: and 55c. to ejec fur chuckell.

## Ege

The tine $x$ sather hav sent the erins wollits drunll hill arain. l'ijce, have fallen away' (1) ro.. still the amaket in steady. At Manticat


## Maple Byrup.

In the wist the maple syrus seawn hit theen a light one. In the east the zun of mapile sap promises to be very lurge. l'siece Of Stun at Nuntreal have therefore declined. Sales are seporited in uquatity at 55 c to coc. and crentit 50c. a wine willon. It tas aloo revu s.d at 55. a pound, which is cipuivalent a alout i5c. sidgar is vellime at 7 c . as
 is velinus at tive. a winc pallon, in quantity.

## Chacse.

1).irymen ate gwtimg anvious to know what lue provicts for the cheree tade the comum easurn alle likely folre. A: present the wat. bouk is nut at all height, and slosk the wow on hand are being sold at conavideralichenss los the
 cheree held at Liverf.xil, Canalian was sold

 han have theen sealized for a considerabie :inte, and ahraplil fead to a larger consuaption of ohl slocks. factor)men may ilsetefore wok for luw prices as the leadinning of the casun at least; though if the prexem latge omsumpive demand kecjs ap, ar.d very lithe ar inn tinkiker checere is made, the situation mas impone cunsiderally trefore the full weras cheese are sealy for the arasket.
lieceipls on this shic continue small, and the wind-upol favi season's business is proving icty unsalistactorg. Sales wete made as Montreal last week at from fife to -ita., and ouse lot of chince, western repuember's, was efpolited soldt at ife. at which prices the holders must bine heavily. It is alses sepmotent that a few facturics, who intembl ogenilgs on - Ireil ist, have iseen ufferel 7 c . for the new brods.

## Sutier.

The haltef situation continues tim though tecciphs of creamety are incteacing. At Moniscal there is $x$ scatcuty of chrice fresh creausety, there liring hasdily suttizient 10 aup. gily the lis al iemami. Sales of cherige gomels iadte leern made at zode. in inc. in luss of 20
 mile thath ihese figures. The winter bulter ceason is miteling up a fond cleal lectler than mas capectical. At the lrokianing o! the yeat prices comin.eticed to alceline and whil as low as iS cents for finest creanery al the latter lats of felosuary. Alout that tuake a uemami set in feotil Fingland atud prices ailvancent to creathety was whal fecen:ly at IS.. and tos: that a month age" would omly lring jo. The make of ercamety bulter is sapidly inciexunce athl freseat prices may mon bekept up sery I mag. Ifoweret, the Finglish tiemand is goot akd should it cuntinue procss will iemain at a juying tipure.
At Tirfonto prices fur cieamery are ruling hixh, Inith tulis awd pints selling at $22 c$ Chuce dairy is quoted as side. tos Ie. Ibary tul, is sarce. A fow lots of riavicin Tumb. ships daing have sokl at llontical al zic. 10 21 릉, or rival to creanists.

## Catime.

Fiviaj's market at the sorck yarils was an acille one, athd all the slock was sold lechowe nown. lsulcise
Ei., Avrl alife, - There was a steady isupisy
 ing fromi $\$ 3.751054,25=$ per Cw . As hyghas
 3c. 10 3ic. per imami. At Nontreal t mmi
 breld at $4 \frac{1}{2}:$ in
fresent calife.
fiwtiders' eftic. .. Juying in rsidas'x mar. kti was vely aclive, ainf prect arivameed iue (1) 13 c . acwi. Sime fascy calle lioungth to. fun, fonterer, was from 5340 to 53 ge man sun, moneret, was from $\$ 3$ to $10 ~ \$ 3$.
cwi. Common stulf sold showa so 27 c .
Wi. Common sluff sold thown 1027 C .
Shaters avd freders.- The demand wa Fri. day's manket for suckers and foriers was

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Ggarian kall wouks sa Rmpeo sh. Mow York
 this chav of calle, and one of them bought what sowkers came in on the Mithand train without secing them at \$3.io per cut. The wal sun is from $\$ 3.30$ to $\$ 3$. (on per ewl. for tuekets atal $\$ 3.4$ it $53 . j 0$ for feciere. Colves bund from $\$ 2$ in $\$ S_{\text {each, and tancy }}$ ones as high as \$o. Milch curs and springers hing froul $\$ 25$ to $\$$ to each.

Hutchers' and export sheep bring from 3 c. (1) itce per tho. hucks 3c. lamins, of rather (athng: are thing lerter: 5hc. 11) 5ic. pry fund. Tnis spinges lambis fo for from \$4 . $\$ 7$ apicce.

## Hons.

Eiverthing in this line quint towatis luwer rices: still prices did not decline last week hholigh offerings were faitl; large. lient
 anil sumis at 5 3 10 \$ $\$ 3.25$ per cmi .

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