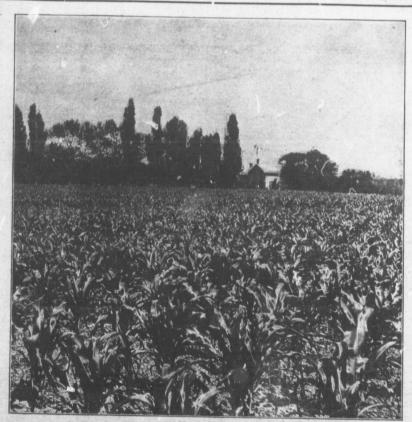
FARM AND DATRY RURAL HOME



Toronto, Ont., May 17, 1917



Comm of Conservation



A GOOD ACREAGE OF CORN WILL SIMPLIFY THE FEEDING PROBLEM NEXT WINTER.
Scene in Huron Co., Ont

LEET -00 Shoes on the Farm



For work and play-in the middle of the day-and when on pleasure bent.

For field, farm and wagon, wear Fleet Foot Shoes. They are far cheaper than leatherlight, easy, comfortable-long wearing. For every-day wear, you will find them immeasurably



better than hot, heavy, expensive leather boots.



When you're out for good time, wear WHITE "Fleet Foot"

Shoes. In fact, you must wear White Shoes this summer, to be well dressed. Dealers everywhere have "Fleet Foot" Shoes, in all styles for men, women and children.







The Value of Pigs Incressed



During Last Year

Pure Bred Pig Free

It's quite easy for you to call on or telephone a few of your neighbors Tell them about Farm and Dairy. Tell them how useful it has been to you, and how much valuable help you get from it. Show them it's the cheapest and best hired help they can get. Tell them of its fight for better dairy condition, greater cooperation among farmers, and more money for them. Get their subscriptions.

Send only for live new jeerly subscriptions at \$1.00 each and we will send free of charge to you, a pure bred pig. Your own choice as to variety. Pedigree for registration. If you don't want the pig, or cannot get the full number of subscriptions, send in all you can get, and we will pay ou a cash commission on each subscription sent in. Right now is the time to begin. Say to yourself NOW, "Here is an opportunity for me and I am going to take it."

Circulation Department

British Agriculture After the War

The Situation Reviewed by J. R. Donaldson, Formerly of the Staff of

representative of Farm and Dairy when the war broke out, and in that capacity became personally acquainted with many of Our Folks. With the commencement of hostilities he immediately enlisted with the medical corps for service in which he was peculiarly qualified. Donald-son is of an economic turn of mind and his letters are full of conditions he finds them across the water. His latest letter comes from France under date of March 29. It reads in part as follows:

"The feeling out here regarding the war is most optimistic. Everyone expects that there is still hard fighting to do, but no one seems to doubt that the result will be peace with victory in 1917. Events in Russia during the month are perhaps the most hopeful that have occurred since 1914. Democracy seems to have gained a definite victory. If the people of Germany pro-fit by the example, the prospects of a genuine European peace will have vastly improved. The only cure for-ever is a fuller recognition of brotherhood, and democracy is a step in that direction. Only a step of course, but fust a few more steps will probably prevent the re-appearance of the pre-sent hideous spectacle as far as Europe is concerned.

French Agriculture.

"The weather out here is of the usual March and early April variety, a good deal of rain and drizzle, a little snow and sharp alternatives from frosts to warm sleepy sunshine. The farmers are hard at work plowing. They all use a single furrow, but double mould board-plow and by reversing, do away with ridges. often plow with three horses, a rather-rare sight in England. In fact, rural France offers quite a contrast to an lenglish countryside. Instead of hedges, there are broad unfenced acres, but the effect of farness is prevented by the trees that do not cluster, but are planted in regular rows around the farm houses and along the roads. The impression that we gather from the passing train is that farming is a much more important business on this side of the channel than in England. For quiet beauty, nothing I have yet seen can be compared with the winding roads and green hedges of southern England. But you always seem to feel that the farms are only part of the landscape pattern and rming a very secondary consideration in the scheme of things. The war has altered that state of things to some extent and it may work de cided and permanent changes in English agriculture.

To Encourage British Agriculture.

"I read a small book last fall by A. H. Hall, entitled "Agriculture after the War." It was published in Febru-ary, 1916, and brought forth considerable comment from all sections of the press at the time. Mr. Hall was until lately, at Rothampsfead Experiment Station, and is an authority on agricultural matters, both from the technical and from the sociological standpoint. and from the sociological standpoint. He was a member of the commission appointed in 1915 to investigate agricultural conditions. His thesis is that the production of wheat in Great Britain can be very largely increased without any dimension of the amount of live stock text. He solute as when the contract we have the solute of the solut

R. DONALDSON was live stock turning the plowed land to grass. That representative of Farm and policy has been followed ever since, Latry when the war broke out, with the result that England has in that capacity became personally placed herself at a perilocally short lainted with many of Our Folks, distance from starvation and that rural life has suffered from stagna-tion. The latter fact is painfully evident as far as the agricultural laborer dent as far as the agricultural laborer of the south is concerned. It is some time since I read the book, and I have forgotten, the accurate figures and percentages. Briefly, however, he claimed that as long as the farmer was left to compete with the cheap wheat of the new world, these condi-tions would continue. He based his plea for protection of the farmer, not on financial grounds, but on the ground that it was as essential a measure of protection as is the Brit-ish navy. He proposed to offer boun-ties for the reclaiming of land and also to guarantee the farmer a fair price for his produce and the laborer a minimum wage. He recognized clearly enough that under any such scheme it would be the landowner and not the operating farmer that would benefit by increasing the rent, and he said provision would have to be made for that, but, of course, as a servant of the state, he had to steer off from the logical solution. For the land tax happens to be, or was, a highly controversial subject

Small Holdings and Industrial Farms. "On the much discussed subject of small holdings he was in favor of giv-

ing the real chance that they have not yet obtained and at the same time he thought experiments should be made in the running of large farms on the industrial system. In short, he was in favor of giving as much diversity

as possible to agriculture Now the interesting fact is 'hat Mr. "Now the interesting fact is hat Mr. Hall has lately been made permanent secretary of agriculture, and therefore will have a good deal of influence on matters agricultural, while the Secretary of the Board of Agriculture in the Lloyd George ministry is, for the first time in many years, also a man of extensive first hand knowledge of agri-cultural conditions. He is the author of at least one book on the history of British agriculture. But in politics he is a strong conservative and was one of Lloyd George's chief opponents in the land tax campaign. Already the farmers have been guaranteed fixed prices for seven years on a number of crops and the farm laborers have a minimum wage, and it is quite possible that the prospects for the men on the land will really undergo a change for the better."

Make This a Land of Smiling Plenty

N this war we are learning that the antithesis between the plowshare and the sword is more a matter of poetic fancy than of actual fact. wielders of the sword, however num-erous they might be, would have to quit the field if there was not behind them an army of men to drive the plow and raise the crops and keep the commissariat flowing. The war ma-chine must be backed by the agricul-tural machine. Trench mortars, field guns, and "tanks" are served by men who depend upon gang-plows, tractor-plows and harvest implements open ated by farm workers. In this country FARM AND DAIRY - Peterborough, Ont.

Further information and sample copies sent on request

When You Write---Mention Farm and Dairy

Without any diminution of the amount afted by farm darkers. In this country, the points out that we have the cill, and we have hands before the disastrous times that followed, to put in crop a greater acreating to the country of the points out that we have the cill, and we have hands before the disastrous times that followed to point and capacity of the point of the amount of food- ed before. It is the bounden duty of the point of the amount after the point of the p



Trade increases t

VOL. XXXVI

S sweet clover o Ontario farm? Dairy have been men report an unpr clover seed. Agricu mental Farms receiv plant than any other to-day receiving the a few years ago wa alfalfa crop has now stage, and is one of liable to do likewise? missing the agricultu Fulmer, B.S.A., who careful study than a

says in O. A. C. Bull

"After a general su wherein sweet clover we cannot but conclud gives much promise c plant which is widely widely adaptable. B publications on the respondence, by cor different farmers and agricultural work, and servation and experier plant to be growing and on all types of soil in addition to its gre we find it actually to place on the farm in countries and in a few try. Not only has this a knowledge of this f time in the province of farmers are trying out farms in order to der whether or not it has the experimental stag ready, and these, who h farms for several seaso enthusiastic for its futu more widespread know cultural value of this pl

As a Sol

"Up to date sweet of mense value as a soil haps, lies its main virtu on very poor soils, soils or which have become i tive cropping or others would otherwise produc such as alkali soil and prising yields. Not on where otherwise there v but, what is just as imp these same soils into su fertility and tilth that o were impossible can th duced. This will be of



Trade increases the wealth and glory of a country; but its real strength and stamina are to be looked for among the cultivators of the land. —Lord Chatham

VOL. XXXVI

TORONTO, ONT., MAY 17, 1917'

No. 20

The Agricultural Value of Sweet Clover and Its Culture

S sweet clover a good crop for the average Ontario farm? Many readers of Farm and Dairy have been asking this question. Seedsmen report an unprecedented demand for sweet clover seed. Agricultural Colleges and Experimental Farms receive more inquiries about this plant than any other farm crop. Sweet clover is to-day receiving the enthusiastic attention that, a few years ago was bestowed on alfalfa. The alfalfa crop has now passed the experimental stage, and is one of our staples. Is sweet clover liable to do likewise? We believe that it is. Dismissing the agricultural value of the plant, H. L. Fulmer, B.S.A., who has given the subject more careful study than any other Canadian scientist, says in O. A. C. Bulletin 235:

"After a general survey of the whole field wherein sweet clover could serve as a farm crop

we cannot but conclude that this plant gives much promise of value. It is a plant which is widely distributed and widely adaptable. By reference to publications on the subject, by correspondence, by conversation with different farmers and men engaged in agricultural work, and by personal observation and experience we find this plant to be growing in all countries and on all types of soil. Furthermore, in addition to its great adaptability, we find it actually to have found a place on the farm in many foreign

countries and in a few sections in our own coun try. Not only has this usefulness been found but a knowledge of this fact is spreading. At this time in the province of Ontario, quite a number of farmers are trying out this new crop on their own farms in order to demonstrate to themselves whether or not it has any virtue. It is beyond the experimental stage with some farmers already, and these, who have now grown it on their farms for several seasons, are convinced and are enthusiastic for its future. Soon there will be a more widespread knowledge concerning the agricultural value of this plant,

As a Soll Improver.

"Up to date sweet clover seems to have immense value as a soil improver and herein, perhaps, lies its main virtue. It will establish itself on very poor soils, soils which are naturally poor or which have become so by a system of exhaustive cropping or otherwise, and on soils which would otherwise produce practically no growth, such as alkali soil and blow sand, and give surprising yields. Not only does it give growth where otherwise there would practically be none, but, what is just as important, it eventually puts these same soils into such an improved state of fertility and tilth that other crops which before were impossible can then be successfully pro duced. This will be of inestimable value to our

worn out or impoverished lands and to our bad lands sections

"But, in addition to its green manuring value, much value is attached to sweet clover as a pasture and hay crop. This is of particular value in very dry climes or seasons or to those sections of low fertility, for here, otherwise, practically no provender would be available and nothing would exist but a barren waste. Furthermore, there are other values attached, particularly that as a bee pasture or honey plant."

A Farmer's Evidence.

Mr. T. M. Caton, Cherry Valley, Ont., gives his experience vith sweet clover as follows: "I can give you a little more information about sweet clover than last year. It grew well, and averaged between three and four tons to the acre. We sowed 5 lbs. on one-fifth of an acre, and off that

other plant will be found growing on as poor soils as it will

"Our animals will not refuse to eat it. In fact, when I turned our cattle in on it last year after the grain crop was harvested they ate it in preference to the abundance of June grass that was growing along the fences and in a waste portion of the field. However, there may be some animals that would require a little education to make them eat it, but the effort would be small on the part of the teacher. I believe that it is as good a feed as is alfalfa, but cannot speak definitely on that point. It does taint the milk and butter, but the taint is anything but offensive. The taint is sweet and pleasant and will leave the butter after it has been made about three days.

"I have seeded with the white variety and much prefer it to the yellow."

Its Value Per Acre.

The value of the crop can be gauged by the table given on this page. We quote from Mr. Fulmer again: "From the table it will be seen that sweet clover furnishes a much larger amount of animal nutrients per acre at first cutting than alfalfa or the other legumes, and a very much greater quantity than does timothy. If we wish to take into consideration all the growth for the year, then sweet clover, red clover and alsike should be credited with about one-half more of

each of the nutrients. This is assuming that the second cutting will give on the average 50 per cent. of the weight of material in the first cutting. Alfalfa will give a second and third cutting, which, together, usually amounts to about threequarters of the first. But even if we add 50 per cent to the amount of each constituent derived from the first cutting of sweet clover, red clover and alsike, and 75 per cent. to that got from the first cutting of alfalfa, the sweet clover still furnishes a greater quantity of nourishment per acre than any one of the other crops included if the comparison."

The Culture of Sweet Clover.

"The most essential thing to observe in seeding sweet clover is to have the seed bed thoroughly compacted, with just sufficient loose soil on top to allow of the seed being properly covered. It may be sown in the spring, alone or along with a nurse crop, much like red clover, or in late summer or early fall, like alfalfa. Of the hulled seed, about 20 ^2 25 pounds per acre should be used, and of the unhulled seed about five pounds more. Much of the seed may not germinate the same year on account of the hard seed coats, hence a generous application of seed is advisable, When a nurse crop is used the latter should not be sown too thickly, else it will tend to smother

(Continued on page 8.)

	Yield of Hay, Ibs., per Acre	Protein, Ibs., per Acr	Fuel Value Cals.
Sweet clover, first cutting Alfalfa, first cutting Alfalfa, first cutting Red Clover Alaike Timothy	4,295 5,160 4,000	1,320 739 888 563 511 286	14,535,000 6,892,000 8,276,000 6,626,000 6,359,500 7,473,500

fifth of an acre cut three-quarters of a ton of dry hay and have been feeding a horse on it. The horse is working hard every day and is in good condition, feeding off the hay from that plot since the 6th of June.

"All we have is now from two to three feet high and white with blossom; we expect a nice bunch of seed. I sowed three acres this year and will sow fifteen acres next spring. It will grow where alfalfa is a failure. I sowed the larger plot where the year before I had sowed \$22.00 worth of alfalfa and that was no good, and the sweet clover was three feet high in June. All stock will eat it readily."

Grey County Experience.

Thomas H. Binnie, secretary of the Grey County Board of Agriculture, writes of his experience in laudatory terms: "I do not consider it a bad or noxious weed. Even if it will not all die on-plowing the roots will be taking some nitrogen from the air and that is what we want it to do. There is one way that it can be killed effectually, and that is by cutting in June with the mower or other implement which will cut it close to the ground. This I have observed time and again when we got the seed in other grass

"It will grow on all kinds and conditions of soil, but seems to grow best on well-drained loam. No

"A Silo on Every Farm It Is the Farmer's "Treasure Tower"

S OME months ago a vigorous movement was started in the fruit district. York with the slogan, "A Silo on Every Farm." Wide-awake fruit farmers had found that dairying filled a unique and profitable place in their farming system. And, modern dairying is scarcely possible without the silo.

But when one considers that less than one-third of the farmers of Wisconsin, a famous dairy state, have the advantages of a silo, and that the proportion is not so great in Ontario, one is ready to acknowledge that this worthy movement deserves to spread over the entire country.

If "Corn is king," then the silo is the king's "Treasure Tower." For, there can be no question that the way to get the most profit from the corn crop is to make it into silage. Investigation has shown that an acre of corn made into good silage has about 40% greater feeding value than when fed as crib corn and dry fodder. Besides this big main saving there are many other advantages to be gained from a good silo. Cows need succulent feed during the winter months and silage furnishes it in convenient, economical form. Not only is silage indispensable in the modern dairy but fattening steers and lambs make faster and cheaper gains when silage is made a part of the

Building costs are rising year by year, and here again the silo effects a big saving. A ton of hay

requires at least 400 cubic feet when stored in the barn; a ton of silage only 50 cubic feet. ' A silo makes it possible to get along with smaller barns. This means less interest and depreciation charges on expensive buildings, fewer repairs and less insurance.

Look at it any way you will the silo pays, and most farmers now admit that it does. is a further There urgent reason for erecting a silo this season -the prices of all feeds are unusually high, and the saving with silage is consequently greater than ever before Wide-awake bankers now recognize the silo as a wise investment, and will gladly lend



On Pastures Green in Dundas County.

JAS. MONTGOMERY, Chateauguay Co., Que. THE root crop is not appreciated at its true worth, and I am glad to see bur Macdonald College advocating the more extensive culture of roots as a field crop in this province. In advocating roots I would not like to be understood as minimizing the value of the silo. I am an advocate of the silo for every dairy farm. We built the first one in our immediate neighborhood. and would not be without it. We feed heavily of silage. But along with our corn crop we also grow a lot of roots and feed a lot of them. Their

value has been demonstrated to us with particular

force this last winter when our supply was very

limited, owing to a crop failure last summer. We



Horse Power is the Most Important Factor in the "Spring Drive" now in Progress.

had lots of ensilage to feed, but we could not keep the milk flow up to the same standard that we expected in other will when roots were fed in large quantities, and this in spite of the fact that we were feeding more heavily of grain than ever

Corn ensilage we regard as a roughage. It is easier to grow than roots, and is cheaper. The cows, however, regard roots as a delicacy, and it

takes the place of grain in the ration. Experiments conducted in Denmark prove that one pound of dry matter in roots is equal to one pound of grain in feeding value. About five pounds of roots will contain one pound of matter. When. therefore, we feed our cows 30 lbs. of roots daily in addition to liberal rations of corn ensilage and clover hav. we consider that we are feeding the equivalent of six pounds of grain. Some grain, of course, is fed as well to heavy milking cows.

The root we favor is the mangel. We can grow 20 to 30 tons of mangels to the acre. We use seven or eight

pounds of seed to insure a heavy stand, and then when the roots are ready for singling we harrow cross ways or diagonally of the rows with the common drag harrow Sometimes we drag two or three times. This re duces the labor of singling by about two-thirds. Even then, however, roots require a great deal of hand labor, and we plan to have our root croop on the best land on the farm, fall plowed and fall manured. We can grow roots at \$2.50 a ton, and an acre of roots properly fed will displace four tons of grain in the ration. With almost any concentrates selling over \$40 a ton, and the most of them at \$50, roots have a feeding value of \$150 to \$200 an acre.

Our herd is largely grades, and we have never attempted to make big records. We notice in such papers as Farm and Dairy and Hoard's Dairy man, however, that when breeders tell of the feeding of their record cows, they almost always talk of roots, some of them feeding as much as 100 lbs, of roots a day to one cow. They are equally important in making milk production profitable on a commercial scale

When the Cows Go on Pasture Pasture May Be a Handicap on Production CHAS. WESTLAKE, Dundas Co., Ont.

WHEN we turn the cows to pasture, we like to see them get off to a good start. The start has so much to do with the production of the entire season. It has been our experience that pasturing injudiciously may be a handicap rather than a help to production. Our cows are stable fed until May 24th to June 1st. Even at the later date, however, the grasses are not nutritious. They are stimulating and medicinal in their effects, and if the cows have to depend on grass exclusively for their sustenance the result is diarrhoea and loss of flesh. When our cows go on grass we have found it wise to continue as heavy a grain ration as they were getting in the stable, changing only the character of the ration. For instance, gluten and corn meal are better than bran, as the latter is laxative. Cottonseed may be fed without danger at this period, and if it was purchased early enough last fall, will be the cheapest feeding stuff we have this spring.

Our mainstay for winter feeding is corn ensilage, and this is fed right up to the time the cows go on grass. We do not like to feed ensilage, however, along with the pasture in the fore part of the season. It, too, is succulent, and in combination with pasture grass is altogether too laxative. Rather we encourage the cows to eat clover hay just as long as they will. Our surplus silage we reserve for later in the season when pastures begin to get short and grasses are drier and more nutritious

Grooming is particularly important at this time of the year. The old hair is coming out. Clean skin promotes vigorous health. Now, if at any time, a run over the cows with the curry comb and brush every other day or so will pay good dividends. We farm 150 acres, and we know the temptation to neglect this grooming. However, it requires just a few minutes to cover a herd of a dozen or more.

This advice of mine may not seem orthodox. We all know that the cows increase in production when turned on grass. We used to hail the pasture season as the end of all chores. Then, when we got better cows' and greater production, we began to pay more attention to the cattle, and we noticed that early pastures without stronger feed in conjunction was in the long run a handicap on

The trouble on most farms is that dairying is a side line, and caring for the cows is chores; and chores are done when all the work possible has been gotten out of the teams. Real dairymen, however, will not neglect their cows even in the rush of spring work.

May 17, 1917.

More Cor Does Corn Alwa

THE teaching of practical Institu Cultivate! Cu most hoe crops this is us have proved it so along comes the Illin the information that we may do more har average year we can work by cutting out se In telling of this nev do not wish to be s merely submit the ev ment Station for consideration of Ca dian farmers.

It was back in 1 that these experime were first started ' experiments were o ducted on the bro silty loam of Illin Three plots were ploy to a depth of six inch and the seed bed ca fully worked. The fou was left unplowed a received no preparat beyond the removal stubble and other refu The purpose of this l plot was to find whether plowing a careful seed bed p paration are payi operations for the co crop. The fields were planted with the sai seed and at the same i ready for cultivation; tirely uncultivated th the weeds having full The second was given this removing all weed soil mulch. The third the surface of the gro with a sharp hoe, very without disturbing the plot baked as hard as it the one with no seed hoe scraped as number

This experiment has up to the present. Th years, 1907 to 1913, hav per acre for the weed; vated one with the dus scraped crop which was plot which received no These results are rathe



Another British Columbia

More Corn---Less Work Does Corn Always Pay for Cultivating By F. E. ELLIS.

THE teaching of the colleges, likewise of the practical Institute lecturer, has always been Cultivate! Cultivate! Cultivate! With most hoe crops this is good advice. Thousands of us have proved it so on our own farms. Now, along comes the Illinois Experiment Station with the information that in cultivating the corn crop we may do more harm than good, and that in an average year we can grow more corn with less work by cutting out several of the latter scufflings In telling of this new method of growing corn 1 do not wish to be suspected of endorsing it. I merely submit the evidence of the Illinois Experi-

ment Station for the consideration of Canadian farmers

It was back in 1907 that these experiments were first started. The experiments were conducted on the brown silty loam of Illinois. Three plots were plowed to a depth of six inches, and the seed bed carefully worked. The fourth was left unplowed and received no preparation beyond the removal of stubble and other refuse." The purpose of this last plot was to find out whether plowing and careful seed bed preparation are paying operations for the corn crop. The fields were all planted with the same

seed and at the same time. When the plots were ready for cultivation; one was allowed to go entirely uncultivated through the whole season. the weeds having full opportunity to develop. The second was given three shallow cultivations, this removing all weeds and maintaining an ideal soil mulch. The third plot was not cultivated, but the surface of the ground was carefully scraped with a sharp hoe, very shallow, to destroy weeds without disturbing the soil. The surface of this plot baked as hard as it pleased. The fourth plot, the one with no seed bed preparation, was also hoe scraped as number three.

This experiment has been repeated every year up to the present. The averages for the eight years, 1907 to 1913, have been 7.3 bushels of corn per acre for the weedy plot; 39.2 for the cultivated one with the dust mulch; 45.9 for the hoe scraped crop which was plowed and 31.4 for the plot which received no seed bed preparation. These results are rather startling. The dust

mulch seems to have lost its virtue, as a plot without mulch and the surface baked hard yielded

more heavily in a period of eight years. The explanation, I believe, is found in the peculiar rooting system of the corn plant. I remember one year when we had some corn on a hillside. A heavy rain washed away the surface soil on parts of the rows. It left exposed a perfect net work of fine corn rootlets which covered every square centimeter of that confield. In the Illinois experiments, these rootlets must have absorbed the moisture as quickly as it could be brought to the surface. Hence the growth of the corn on the uncultivated plot. But why did the corn not grow equally well on the well cultivated plot? Probably because the cultivator, even though carefully managed, destroyed a portion of the rootlets



Can Corn be Grown in British Columbia? This Field on the Colony Stock Farm Yielded 26 Tons of Ensilage per acre.

The lesson that I would draw from the Illinois experiments is not that corn cultivation should be neglected, but that the seed bed in the first place should be thoroughly prepared, that the early harrowings before the plants are more than two or three inches high, should be frequent and thorough, and that the first scuffling or two, the ones that really kill the most of the weeds, should be made with cultivators of the hoe type and very shallow. Thereafter scuffling should be omitted if the weeds are not making a dangerous growth. Where scuffling is necessary, it should be very shallow, just enough to scrape off the weeds with sharp hoe blades. Apparently the root system of the corn plant is of more importance to its growth than is a dry mulch. Every farmer can afford to duplicate the Illinois experiments under his own peculiar conditions. It would represent no extra labor worth mentioning, and if his results were similar to the ones given above he would save himself many days' work each season.

His Best Investment

A Milking Machine for 36 Cows

W. H. MILLS, Elgin Co., Ont.

7 E are getting great and wonderful satisfaction from the milking machine. We installed a two double unit milker last June, which we used continually until December, when we put it away as the cows were about dry. We milked 36 cows last year and never had a cow lose a quarter. We expect to milk the same number this year, besides 12 on which we are raising calves. We keep one man to look after the cows and calves, do what little stripping is necessary, take care of milker, wash pails, cans, etc. It takes him an hour and a quarter to an hour and a half to milk 36 cows.

We cannot see that it is hurtful to the cows in any way.

sincerely believe that the milker does much better work than the average hired man In fact, the labor problem is so acute, and men so dislike to milk cows by hand, that we consider the mechanical milker will be used by all dairymen in the near future. We keep six men, none of whom we could hire to milk cows by hand.

On first using the milker last spring we had very little trouble with the cows getting accustomed to it. The heifers gave their milk down very freely, but

two or three of the older cows did not. However, this spring, those same cows are in fresh and are milking perfectly with it. We cannot see that it is hurtful to the cows in any way.

I think a man should have a dozen cows before it would pay him to instal an outfit. He could milk 12 to 20 cows with one double unit and do his own stripping. As to the cost of installation that depends entirely upon the number of units used, and the kind of power used. We are using a 4 H. P. coal oil engine, which milks the cows, pulps the roots, cuts feed, etc.

We have no repair bills yet. The teat cups are not perishable. The rubber lining inside will occasionally have to be replaced, but they are only about 60c. each.

I believe it is the best investment we ever made. If it were not for the milker I would not be a dairyman, as it would be impossible to get the men and time to milk so many cows along with the other farm work.



Another British Columbia Scene; a dairy herd on the Fair and Fertile Island of Vancouver. Little provision for Winter Feeding is required in this District.

574





Feeding the Chicks

Mrs. L. Bradshaw, Perth Co., Ont.

HAVE just been out feeding the We have 170 now, all beauties. As soon as I open the brooder house door, there is such a screeching and fluttering as only healthy, hungry chicks are capable of. Yes, our chickens are hungry. We would think there was something wrong if they were otherwise. When we first started into the chicken business we decided to grow our pullets as fast as we could, with the idea that they would lay earlier and lay more Instead of responding to our eggs eggs. Instead or responding to our good feeding, they sickened and died by the score. Now, we keep them hungry from the time they leave the incubator until they are out on free range. Then they can have as much

feed as they like.

During the first week of the chick's life we feed a mixture of bread crumbs, hard boiled eggs and oatmeal. The proportions are not so important as the amount fed. We give just one ounce of feed to every 50 or 60 chickens six times a day. It doesn't seem enough. The chickens seem just as hungry when through with their meal as at the beginning and the teaspoon or so of chick feed that we scatter in the litter after each feeding of mash, is disposed of in a hurry But small as the allowance seems, we have found that the chicks grow rapidly and that very few of them ever have anything the matter with them. The second week they get the same mash three or four times a day, only we allow one and one half ounces and two feedings are of chick feed eutirely, this being scattered in the liiter on the floor. Once a day they get a mash of middlings, feed flour, corn meal and beef scrap, all they will clean up. The third week the feeding the same, except that twice a day they get all the mash that they need Each week the allowance is increased slightly until at the fifth or sixth week we start hopper feeding and allow the chickens all they will eat. It is, how-ever, during the first three or four weeks that the worst results are ex-perienced from improper feeding improper methods.

Thoughts on Breeding By "Uncle Mike."

F every aim is to be for phenomenat egg records, what will become of our meat supply? Surely an unnatural flow of eggs cripple fertility, but will also make weak and puny chicks.

Have good, strong, vigorous hens s the foundation. Use trap nests, as the foundation. Use trap nests, and each year pick out the best layers among this strong, vigorous stock, mating to males of equally good condition—but never inbreed—and then gradually aim for a figure that will leave no bad effects.

In the mad rush for these great egg records, the stock is forced by condiments, heavy feeding of meat, and any and everything of a stimulating nature. Such feeding will bring the eggs, and it will also bring on early

The method generally adopted by those ambitious for big results, is to

there a more sure way of deteriorating stock than that?

May 17, 1917.

The rule should be, never inbreed each year select the best layers, and feed material that will make eggs, but no stimulant should be used that will force beyond the intention of nature.

Distinguishing Sex

C OULD you tell me how to distinguish sex in guinea fowl?—G. D., Muskoka Dist., Ont.

The male guineas may generally be distinguished by their larger combs and especially their larger wattles and coarser heads. They also have a pe-culiar habit of walking on tiptoes when they are excited. The cries of the two sexes are very much different, the cry of the male being simply a shriek, while the female has a peculiar call, often thought to resemble "Buck-wheat, buckwheat." When angry they make a hissing cry.

Poultry Pointers

HERE are two articles of diet, especially for young chicks, in which we have great faith: bran and rolled oats. We place bran in little troughs in the brooders at night. and rolled oats. The next morning the chicks at once begin feasting on it. Given in a raw state, bran regulates the bowels with out physicing them. We have not had a loss from bowel troubles from the time we began feeding chicks that article of food. Twice a day we give a handful or two of rolled oats, dry, to each brooder pen of chicks, and they greedily eat it. There is no betbone and muscle food than oats, and in consequence we have not had a single case of leg weakness.

Fright will cripple the egg There is no theory about that; it is a fact. Back in 1899 we were first taught that lesson, and we have had it proved ever since. At that time we were building an addition to our poul-try house. This new pen adjoined a pen occupied by a flock of Leghorns, and up to the time we began building, they were doing some fine laying. In putting up the frame work of the new pen we were compelled to do considerable pounding, and almost immediately our Leghorns shut off laying. For thirteen days they did not lay an egg, and then on the fourteenth day they laid one, but did not increase that number for over a month. It was certain the fright occasioned by this pounding, and which was nece kept up for a week, did it.

Each year thousands of infertile eggs, tested from incubators the first week, go to market. Bakers espec ially are anxious to buy them. An infertile egg one week under the tem-perature of 103 degrees, is equivalent to an inferfile egg kept two weeks in the pantry. It is a stale egg, but not necessarily a bad one. Usually, we necessarily a bad one. Usually, we feed these eggs in mashes to our fowls and chicks, but we so often have applications among poor people for them, that we do not have many to We sell these eggs at half the price charged for fresh ones. We are opposed to shipping them to market for the same reason that we are opposed to preserving eggs, viz., they are not so good as the fresh article, and in market they would come in competition with the fresh egg. Yet we would rather eat a tested infertile egg than one that has been preserved in brine for several months, or placed in a refrigerator.-M.K.B.

It seems as though nothing is so poorly marketed as poultry. If alive they are in a crowded coop, all sizes and colors. If dressed they are so often unattractive. There is no reason why dressed chickens cannot be put on the market in a more inviting condition. Buyers do not bestimate the piece for a nice, clean, tasty article.

A Progressi HE Elma Bra in Perth C

In

pace in co progressive clubs branch was organ cember, 1916, with first purchase was on January 17, 19:

"In the first thre istence, we handle goods," said W. S. dent, when chattin Farm and Dairy, in "We have purchas grain. By coopera ing clubs, we Recently v sugar. ping hogs, and me shipped calves, se packing plant. W cent shipments, th bers the same as the turns were in, we it the members 40 cen be rebated back to We now have \$4

We are going to bu the track, and for th use the accumulate.
The members of the Club fully appreciate strong central organizations that before the control of the contr maximum usefulne clubs, it must have capital. Already the taken a dozen or m United Farmers' (any, Limited, and every member of the duced eventually to one share in the This too is a record

A Conference

T the time of t A of the director Limited, in Toronto, received from officer. tion of Resources C tario, through its Se bott, to have lunch cuss matters relating duction. Although th very busy, arrangem to devote the not

luncheon In explaining the ob-ing, Mr. W. E. Rundl member of the Orga sources Committee, m there was no though city men to give adv ers, but simply a des with them in every increase production in country's need. He as sentatives of the farm est possible way that and sincere desire on people of the towns ar as of the Governmen farmers every assistan power in increasing forts would be made assistance was practic in character and suc likely to be of the g benefit to the farmers.

Mr. B. C. Tucker,
tario, the President of

Farmers' Company, farmers were doing could to produce a me products on their farm scarcity of labor in tricts made it impossil to produce as much as could, while the high munition factories pre-

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When You write--Mention Farm and Dairy

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poultry, produce of all kinds.

A FORTUNE IN POULTRY

brood of Baby Chicks of our high record Rocks, Wyandottes, Leghorns or Reds. 1917 Mating List con-taining 65 photos of

In Union There is Strength

A Progressive Young Club

HE Elma Branch of the U. F. O. in Perth Co., Ont., has set a pace in cooperative business pace in cooperative business which marks it out as one of the most progressive clubs in Ontario. This branch was organized the last of December, 1916, with 37 members. Their first purchase was series. first purchase was a car of mixed feed, on January 17, 1917.

on January 17, 1817.
"In the first three months of our existence, we handled \$20,000 worth of goods," said W. S. Shearer, the President, when chatting with an editor of dent, when chatting with an editor of dent, when chatting with an editor of Fearm and Dairy, in Stratford recently, when all purchased a great deal of Fearm was previously a carload of grain. By such as a carload of grain, By such as a carload of grain and grain and

"We now have \$400 in the treasury.
We are going to build a storehouse at
the track, and for this purpose we will

the track, and for this purpose we will use the accumulated profits."

The members of the Elma Farmers' Ciub fully appreciate the benefit of a strong central organization. They know that before the Central can be of know that before the Central can be of maximum usefulness to the local clubs, it must have a good working capital. Already the Simum branch has taken a dozen or more presente in the Central Central Company. Limited, and if at all spoble over more considered to the company. Limited, and if at all spoble over member of the club will be adduced eventually to purchase at least duced eventually to purchase at least one share in the Central Company. This too is a record to be proud of.

A Conference on Production

T the time of the recent meeting of the directors of The United of the directors of The United Farmers' Cooperative Company, Limited, in Toronto, an invitation was received from officers of the Organizareceived from officers of the Organiza-tion of Resources Committee for On-tario, through its Secretary, Mr. Ab-bott, to have lunch with them to discuss matters relating to increased production. Although the directors were very busy, arrangements were made to devote the noon hour to this

luncheon.

In explaining the object of the meeting, Mr. W. E. Rundle, of Toronto, a member of the Organization of Resources Committee, made it clear high there was no thought on the part of there was no thought on the part of the read of the part of the read of the part there was no thought on the part of city men to give advice to the farmers, but simply a desire to cooperate with them in every way possible to increase production in this time of the country's need. He assured the representatives of the farmers in the plainest possible way that there is a deep and sincere desire on the part of the people of the towns and cities, as well as of the Government, to give the farmers every assistance within their power in increasing production. Ef. power in increasing production. Ef-forts would be made to see that this assistance was practical and valuable in character and such as would be likely to be of the greatest possible

ing

engaging help at the prevailing rate of wages. Seeing the trend of the times farmers have been reducing the times farmers have been reducing the areas of their cultivated land to fit their supply of labor, and it is imposible for them on short notice to change their whole system of farm management. They would be glad of all the help they can secure, especially in harvesting time, and could be depended upon to do their part towards increased production. Mr. R. H. Halbert, President of The United Farmers of Ontario, stated that the Government was late in starting.

the Government was late in starting its campaign. The farmers long ago saw what was going to happen if the help was all taken from the farmers, and warned the Government of the dangers that were ahead. Instead of being listened to, however, they were laughed at and called unpatriotic and even insulted, with the result that such a large number of men have now that left the farms that the work of pro duction has been seriously interfered with, and it is now impossible for farmers to produce as much as they could were there a sufficient supply of

experienced help available,
Mr. J. J. Morrison, Secretary of
The United Farmers of Ontario,
pointed out that it takes several years for farmers to change their system of farm management. A dairy cow, for instance, cannot be produced in



The President of the Farmers'

The President of the Farmers' Company,

Mr. B. C. Tucker, Harold, Ont., President of the United Farmers' Cooperative Co., Learning Comments of the United Farmers' Club, Hastilla the Minto Farmers' Club, Hastilla the Company, corrections as called upon greater services in the Central Company.

less than three years. There is no use urging farmers to keep more cows or hogs, as these cows or hogs are not available, and nothing will are not available, and soching will be accomplished by one farmer buy-ing these animals from another farmer, as to do so would be trans-farmer, as to do so would be trans-planting animals from one farm to another. For years business men in the cities have been reducing the output of their factories, in order that they might obtain higher prices for their goods, and have taken ad-for their goods, and have taken adin character and such as would be that they might obtain higher prices likely to be of the greater possible for their goods, and have taken adbened to the farmers.

Mr. B. C. Tucker, of Harold, Ontario, the President of The United this. Now they cry to the farmers can be used to increase their production, although a farmers were doing everything they action in ordinary years would be to could to produce a maximum of food decrease prices. However, farmers could to produce a maximum of the train the search of the trains. The great realize the need of the Empire, and tricts made it impossible for farmers to respond to it. They are handities made it impossible for farmers to respond to it. They are handities produce as much as they otherwise capped, however, by the shortage of could, while the high wares paid in help, the high wages paid by promunition factories prevented farmers.

(Continued on page 11.)



Have running water in your house and barn

Enjoy the comforts of a modern bathroom. Have hot and cold water—hard and soft—in the kitchen. Have water under pressure in the barn, yard and for fire protection. How? By putting in your home an

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N. SANGSTER.

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water bother for attenen range, attenen sink, engine and pump, pneumatic pressure storage tank and piping.

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(8)

cut at the proper time, or else it be- of the lower branches will be left un-comes too woody and stemmy for first cut, otherwise the second erop will be

The Agricultural Value of Sweet Clover in its Culture Clover in its Culture (Continued from page 3.)

The young clover seedlings.

"Sweet clover may not do well on soil that has never produced it before, because of the lack of the nodule forming bacteria. In this case it would be advisable to incucltate the seed from the producing sweet clover is made to be come through the producing sweet clover is made to be come through the producing sweet clover is made to be come through the producing sweet clover is made to be come through the producing sweet clover is made to the control of the first copy. Fare mixed be exercised that it has to be cut at the proper time, or else it be cut at the proper time time the citien che divide the first long to appear on the fail of the first copy. The time the citien che with it in the case of the lack of the late of the proper time the cut at a time when there is a considerate time the citien the citien che with it in the case of the late of which it can be come time the cut to appear in the time the citien that the time the citien that the time the citien the dwith it for that the first long as a should line or case be a the Furthermore, it care be not exer-cised during the curing process a greater part of the leaves will be lost, and in this way the better part of the hay be wasted. Any severe hand-ling at this time, such as tedding and

raking, should be done, when the hay is still a little tough. However, any one familiar with the of curing alfalfa will understand this thoroughly for this plant is much like sweet clover in these respects, being hard to cure and diffi-cult to handle without considerable loss of leaves.

Rules for Pasturing. "To be used successfully for pas turage sweet clover must be pastured sufficiently heavy and close to keep sufficiently heavy and close to keep from getting too far advanced, and to keep abundance of fresh and tender growth coming on at all times. If it rets ahead of the stock it becomes oo coarse and fibrous to be relished. Should such happen it is a wise plan to clip it back to a height of six to eight inches. Some men of experience eight inches, some men or experience claim that stock should be turned on when the plants have reached a height of about four inches. For permanent pasture some plants must, however, be allowed to go to seed the second be allowed to go to seed the second year, enough to reseed the field; or seed must be sown. If this is not done the plants being blennial, will run out at the end of that time.

"For the production of seed the first crop of the second year can be allow-

ENDORSES SWEET CLOVER.

N Farm and Dairy I noticed a request for experience with sweet clover. I had a lot of it last fal! and I think it a twin sister to alfalfa, both for milk and beef production. Some claim that cattle have to cultivate a taste for sweet clover, but I must differ with them as my cattle enjoyed it from the first. In feeding value I consider It equal to alfalfa and much easier grown. A farmer can make no mistake in sowing sweet clover. —W. F. Fisher, Algoma Dist.,

ed to go to maturity, although would perhaps be more economical and practical to take the first cutting off for hay and to allow only the sec-ond crop to mature for seed. It should be harvested when three-quarters of the seed pods become dark. Harvest-ing can be done with a binder and further operations carried on the same as with other grain crops. Handling should be avoided when the straw is very dry, as the seed will shell badly as such a fime and much would be lost. Threshing and hulling should tost. Taresning and sulfing should be carried on, however, when thor-oughly dry. A yield of from two to eight bushels per acre can be obtained. Go Slow.

Mr. Fulmer's closing word is one of caution. He writes: "Although there appears to be no question as to the value of sweet clover, conservatism is to be urged. It is never wise to take up a new thing in a hurry. Everything has to be learned in regard to this new plant and failure might be the result of some very simple mistake due to inexperience. If failure results the inexperience. If failure results the logical outcome, of course, is condemnation, and condemnation under these conditions is very often undeserved. It is desirable, therefore, that small areas only be seeded to this plant in the beginning until its management. and value be determined, and then it can be gone into with greater assur-ance or discarded altogether, as the farmer concerned may see fit."

Successful treatment of cattle affected with blackleg is not possible, as the disease is so rapidly fatal. Happily, however, the cattle can be protected by vaccination, and the operation may be performed by anyone action may be performed by anyone action. customed to the handling of cattle The Government prepares blackles vaccine for distribution, at a small vaccine for distribution charge, to cattle owners.



Quick Hauling To Market

think of the time the Ford saves a busy farmer in hauling milk to the cheese factory-vegetables, butter, eggs and poultry to market—fruit to the railway station. One fruit grower, last season, made four trips a day to the railway station, a total of 144 miles, and carried as high as 72 crates of 11 quarts each on a trip. He couldn't have made more than one 36 mile trip a day with a team.

The Ford soon pays for itself in the time it saves the farmer. With help so scarce, every farmer needs to make use of every precious minute of his time. To him the Ford car is a real necessity. Indeed, some farmers tell us that it is doubtful if they could carry on their farm work under present labor conditions if it, wasn't for the time the Ford saves them.

No farmer need be without a Ford. In fact, the average farmer could afford one if it were double the price. It is as easy to drive as a horse, three times as fast, and costs less per mile to run. Why not order one to-day?



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FORD -- - ONTARIO

35

FEEDERS Conducted by

Feeding Va

Recent experime the Central Experi mangels to eight per cent. bett and per cent. bett production than tu In addition to this, of flavoring the mil with turnip feeding found that one pou as contained in roo approximately one that is, 100 pound have a value equiv age grain mixture, found that one pou in roots is worth i per cent. less than tter in good corn 100 pounds of roots lent to about 41 po quality of corn ensi in Ontario corn car cheaply per ton than mangels, hence good age would be very m roots for the feedin However, variety is of good selection of rule, a mixture of es will give greatest re tity of roots containe depending largely u raising. Undoubtedlest production of m preferably mangels will play a very larger for the food value co due to the fact that the appetite for meals and also keep the digestiv in good working coud the qualities, apart analysis of roots, w such great value in —E. S. A.

Pig Feeding

In order to keep y from vermin, it is nece pens be kept clean as well fed and allowed cise. It is usually also they have some tonic scribed below. To ric lice, they might be am lice, they might be sm grade machine oil or care should be taken in too heavily, as it will has a rule; it is much sa kerosene emulsion or sawarm solution of such as creolin, zenoleum car products. In order in the feeding of your ture of digester tanks separately as a thin s mixed with the other successfully used. A composed of corn, four oats, two parts; short fankage, one part may l used in rearing young milk. A very good to young pigs might be c

FEEDERS CORNER Conducted by E. S. Archibald.

Feeding Value of Roots

W HAT is the relative feeding value of manetis, turnips and corn sillage for his part of the bare a sile, but can I afford to be have a sile, but can I afford to be have a sile, but can I afford to be have a sile, but can I afford to be silled to the s

Recent experiments conducted at the Central Experimental Farm have shown mangels to be from five to eight per cent, better for milk and fat eight per cent, better for hilk and fat production than turnipe (rutabagas). In addition to this, there is no di iger of flavoring the milk with mangels as with turnip feeding. It has also been found that one pound of dry matter constituted in words is acquiralent to as contained in roots is equivalent to approximately one pound of grain, that is, 100 pounds of roots would have a value equivalent to approxi-mately nine to ten pounds of an avermately line to ten pounds of an aver-age grain mixture. Again, it has been found that one pound of dry matter in roots is worth from three to six per cent. less than one pound of dry matter in good corn ensilage, that is, 100 pounds of roots would be equivalent to about 41 pounds of the best quality of corn ensilage. As a rule, in Ontario corn can be raised more cheaply per ton than turnips or even cheapiy per ton than turning or ever mangels, hence good quality corn ensi age would be very much cheaper the roots for the feeding of dairy co-However, variety is one of the sec of good selection of feeds and, as a e, a mixture of ensilage and will give greatest returns, tity of roots contained in the Exture epending largely upon raising. Undoubtedly, for the greatest production of milk or fat, roots, preferably mangels or sugar beets, will play a very large part not only for the food value contained, but also due to the fact that they stimulate the appetite for meals and other feeds and also keep the digestive tract cool and in good working condition. These are the qualities, apart from the actual analysis of roots, which give them such great value in record making. -E. S. A.

Pig Feeding Inquiries

HAT is best to put on young pigs to keep them clean and free from the state of feed is best when milk is take that of feed is portions should sulphur, said, cround bone and sahes be mixed to put to the state of th

In order to keep young pigs free from vermin, it is necessary that their pens be kept clean and that they be well fed and allowed plenty of exer-It is usually also advisable that cise. It is usually also aurisonate as de-they have some tonic mixture as de-scribed below. To rid young pigs of lice, they might be smeared with low grade machine oil or kerosene, but care should be taken not to apply this too heavily, as it will blister the skin. As a rule, it is much safer to rub with kerosene emulsion or a two per cent. warm solution of such disinfectants as creolin, zenoleum or similar coal tar products. In order to replace milk in the feeding of young pigs, a mix ture of digester tankage, either fed separately as a thin slop or, better, mixed with the other meals, may be successfully used. A meal mixture composed of corn, four parts; ground oats, two parts; shorts, two parts; tankage, one part may be successfully used in rearing young pigs without milk. A very good tonic lick for

sulphur, one part; salt, three parts; charcoal, three parts; ground bone, three parts and ashes three parts. Another mixture which is highly recommended is composed of sulphur, one part; salt, three parts; charcoal, four four parts; Glauber's salts, three parts; copperas, three parts and sal soda, three parts. Either of these mixtures may be placed in a box sheltered from rain, but so located that the pigs may help themselves at

Self-Feeders for Calves

Deli-i ecders for Caives

Adi interested in the saif feeder and
have been reading all of the information obtainable on the subject.

Could we profitable use a self feeder for
dairy caives? We have a does no more
and would like to reduce the dame and
would like to reduce the cair and
would say a recommend for the feeding?

A. B. Order Ce, Duit.

I have never tried the self-feeder with calves of either dairy or beef breeding. However, if meals are fed which would not choke in the feeder and if the calves were brought gradand if the calves were brought grad-ually on to this free supply of meal, I have no doubt that such a device might be satisfactorily used. A grain mixture of necessity must be com-paratively light in character, such as a mixture of equal parts of crushed oats, crushed barley and bran.—E.S.A.

HORTICULTURE

Hardy Plums

HERE are great areas in Canada where the European plums, such as Lombard and many others, do succeed, either the fruit buds or the trees being injured or killed by winter. There are two species of wild plum, however, in Canada, the culti-vated varieties of which enable one to grow this fine fruit in very cold regions. In Eastern Canada the common wild species is the Canada plum, Prunus nigra, while in Manitoba the common native species is the American plum. Prunus americana. It is surprising that trees of these plums are not planted by everyone having a garden when there is room enough to have a few trees, as they bear young and bear abundantly, and the fruit of the best cultivated varieties, while not as good as the best of the European sorts, is excellent when eaten raw and makes very good jam when properly cooked.

At the Experimental Farm, Ottawa, over 100 varieties of these plums have been tested during the past 28 years. The outstanding or most widely use-The outstanding or most widely use-ful variety of the Canada plum has been found to be the Cheney, a red variety of fairly good quality which cooks well. The Assinibolne, a new cooks well. The Assimbolne, a new variety, is very promising. On ac-count of its earliness, the Cheney is particularly useful in the prairie provinces, where many of the varieties are too late to ripen, Few of the American sorts usually offered for sale are sufficiently early for the prairies, most of them having been originated in the states of Minnesota and Iowa, where earliness is not so important. Seedlings of the native Manitoba sorts are now being grown the Experimental Farms on the at the Experimental Farms on the prairies to obtain other and better ones. The Major plum, which has been brought to notice by the Bran-don Farm, is a very early sort.

At Ottawa, where the season is long enough for most of the American varieties, the Brackett, Terry and Ad-miral Schley have proved to be three

Don't Reap With a

The modern farmer or dairyman cannot afford to do by hand the labor, which a machine can do in less time, at less cost and less

Hand milking is bothersome; it makes labor discontented. takes costly labor from other needed work.

One man operating two 2-cow Burrell Milkers does the work of three men, milks from 24 to 30 cows an hour, according to con-

Burrell (B-L-K)

Good for the Herd

By labor wages saved, the Burrell outfit often pays for its purchase in less than a year.

The men being more contented, sayed from the annoyance of hand milking, are likely to treat the cows better.

Burrell Milkers are closed against dust and dirt—yet all parts are easily cleaned—making

milk of certified grade easily ob tainable

If you believe machine reapers are better than scythes, and if you have 20 or more cows to mik, write tq-day for illustrated book easier milk profits the Burrell ay. Profits warrant writing

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used in rearing youngs pigs without mitral senies have proved to be three milk. A very good tonle lick for of the best. Another hardy plum is young pigs might be compounded of the Omaha, which experiments at Ot. When You Write Mention "Farm and Dairy"

TORONTO

SEEDS

(10) SEED CORN

"That Will Grow"

We caupply rade-cured corn, or the on supply rade-cured corn, or the one of the corn of th

Seed Panasaco, grasses. Seed Meal, Oll Cake Octor Seed Meal, Bran, Shorts, Peed Oats, Whole Oats, Pure Lin-Peed Oats, Whole Oats, Pure Lin-Meal, Good Luck Brand Calf Meal, Good Luck Brand Calf Meal, Good Luck Brand Pouls

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ADVERTISE in these popular col-umns, which others find so profitable— costs you only \$1.68 an inch.

tawa have shown to be one of the best for that part of Canada, and, it is believed, for districts having a some-what similar climate. This is a hybrid between the Japanese plum and the American, and has combined in it the good points of both, being, like the American, hardier than the Japbut having the thin skin and firm flesh of the latter. The Omaha ripens about the middle of August, a time when there is usually a go market for plums.

It is desirable to have more than one variety of these hardy plums if the best success is to be obtained as they are more or less self-sterile and each variety requires another near it blooming at the same time to ensure

a good crop for both.

S EPARATE runners from the strawberry plants and set them in the

new hed. Set strawberry plants with the crown even with the surface of the ground

One third of the new growth of gooseberry bushes should be cut off each year.

Two or three year old wood pro

Two or three year old wood produces the best currants. Older wood should be cut out.

One hundred asparagus plants will supply the ordinary family. Divide old roots, or buy one or two year old

Plant potatoes or vegetables tween the rows of trees in the orchard.
The frequent cultivation is good for the trees, if care is taken not to get too

Continual surface cultivation should be given currants and gooseberries. In setting out plants from the hotbed or cold frame, see that the soil is fine

warm. From May 15 to June 1 is usually about the right time. Raspberries, blackberries and straw-

berries will succeed on any good corn land. A north slope is best.

Wayside Gleanings By "Burnbrae"

Talk About the Weather HAT unfavorable weather we have been having for the past month. It was with a good deal of alarm that farmers observed the different frosts that we had in the early part of the season, and much

w seeds and fall wheat. One as heard to remark recently,

freezing and thawing of this was enough to "cook" anything. and ambiguity of this saying is quite obvious, but the meaning is clear, and we have all been watching what the result would be on these tender plants. But the dull, cloudy, cool weather of these last few weeks has come in for its share of criticism also. Yet the farmers who have visited their meadows, and given the ques-tion of weather any thought, should be convinced that this kind of weather was possibly the best. looking better than at first anticipated The setback they received from the freezing has been very much over-come by the cool cloudy weather, in that the sun's rays have not been strong enough to wither up the tender plants, and has given them a chance to take root and revive.

It was with a good deal of interest that I looked over our new alfalfa seeding and noted that a number of the plants, although sickly looking, have still a spark of life in them, and the plants, although sickly looking, cutsway plates, weighted with about have still a spark of life in them, and 200 lbs. of stone. The tractor climbs their chances for living, if reasonably 30 per cent. grades with this disc good weather is forthcoming from nicely. Lintend to add smoothing harnow on, are very good. It seems to rows behald the disk."

me that the habit of criticizing the weather is altogether a too common one, when half the time, if we would stop and think, the weather is best suited for our needs as it is.

Horses With Scratches. The spring season is usually a trying time for the teamster who has one or more horses that are inclined to have grease legs or scratches. Many men give little or no attention to their horses' legs and frequently they allow quite valuable horse to depreciate for the lack of a little care. Unfor-tunately we have an old mare that suffers every year from this trouble. The winter season, with little regular work, seems to be just what is needed to make her legs swell and break out in those nasty running sores. This year she was neglected and her legs are in bad shape.

The other day we decided to try and help her if possible. The first operation was to clip her legs as well as was possible with clippers. Twice a week since doing this we have been giving her legs a thorough rubbing with a dilute solution of Zenoleum and they are improving. The short hair allows the rubbing off of the scurf or scabs and the Zenoleum seems to be scaos and the Zenoleum seems to be cleaning up the sore spots. I never heard of this remedy being used be-fore and was rather skeptical of its value, but we are learning not to de-spise any remedy these times, so long as it is cheap and easy to apply.

Ontario's Annual Fire Bill

HE fire waste of the province of Ontario for the first three months of 1917, amounts to \$3,321,931. In 1916 4t amounted in round figures to \$12,000,000. This waste is largely the destruction of field products in barns, elevators and warehouses. One-half of these fires could be avoided by a little care and thought. Three very Do not plant beans until the soil is simple suggestions have recently been made by a Fire Marshal of Ontarlo, which, if adopted will go a long way accomplish an important reduction in fire wastage

1. Install lightning rods on barns and save fires from lightning. The De-partment of Agriculture, Parliament Buildings, Toronto, will furnish any one with a pamphlet showing how the rods should be made and erected. is an absolute fact that barns properly rodded and grounded are not liable to

be struck by lightning.
2. The crops should not be put in until it is certain they have been properly cured. Evidence is daily ac-cumulating that the heavy clover crops of last year did not receive full and proper care and resulted in the firing of barns from spontaneous combustion. Many doubt this theory, but recognition of the cause is growing very rapidly.

3. Ventilate the barn so that gases caused by the fermentation of imperfectly cured crops will be successfully carried off. In an unventilated barn to keep the doors and windows closed after harvest, and then admit air by the opening of the doors, windows, or other apertures during the warm fall weather is to invite the fire flend to get in his work.

More Work for His Tractor

a recent letter to Farm and Dairy, Mr. H. K. Revell, who compared the relative merits of tractor vs. orse plowing in the Farm Machinery Number, writes further of his tractor experience as follows:

"Since writing for your Farm Ma-chinery Number, I have been using my tractor on a disk harrow with 20



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(Continue tected industries tories, and the on the goods the There are a few be planted, and farmers would de power to plant s During the dis

ed out that the very advantageo including potatoe to farmers at preach, on the or should all be pla A willingness wa farmers to take a the city is going The members of Resources Comm urge the Government provide seed in and intimated tha already been recol

More Cap HAT the actio ers of The U arranging at their to increase the cap from \$10,000 to \$2 indicated by the fi first three months Company has been \$230 for interest an nection with the fin At times i bank has been ove or more on which interest. If the Colent capital it wo secure so much as bank and thus wou of this expenditure

Before the desire sary that the Com that 90% of its p capital has been a selling rapidly and the necessary amou plication will be mad in the capital of the already been approholders.

Two Nev THE egg circle at toria county, ca April 25th, at v Valley Farmers' Clu Mr. J. J. Morrison meeting. An unusua election of a lady se directors of the sam There were 50 p. Clairville Farmers' Clon May 2nd. Mr. J.

Mr. J. W. Stark, the tative for Peel county Both of these pr Cattle Embargo M. T HE British emba

force since 1892, Hon. Martin Burrell, culture, stated in the mons last week that den had taken to Eng complete memorandu complete memorandul bargo queetion and with British author moval. Mr. Burrell when the matter is f the embargo may be The embargo as I readers probably kno readers probably kno

as a sanitary protect five stock interests.

A Conference on Production

(Continued from page 7.)

tected industries and munition factories, and the high prices received on the goods the farmers need to enable them to increase their crops.

There are a few crops which can still be planted, and he felt sure that the farmers would do everything in their

power to plant such crops
During the discussion it was point,
ed out that the Government might
very advantageously purchase seed,
including potatoes, and furnish these
to farmere at prices within their reach, on the one condition that it should all be planted and not resold. anound all be planted and not resold. A willingness was expressed by the farmers to take any experienced help the city is going to be able to give. The members of the Organization of Resources Committee promised to urge the Government immediately to provide seed in the way suggested, and intimated that this question had already here reconstructs. already been receiving their attention.

More Capital Needed

HAT the action of the shareholders of The United Farmers' Cooperative Company, Limited, in arranging at their last annual meeting to increase the capital of the Company from \$10,000 to \$250,000 was wise is indicated by the fact that during the first three months of this year the Company has been forced to pay over \$230 for interest and each or the contract. \$230 for interest and exchange in con-nection with the financing of its operations. At ignes its account at the bank has been overdrawn by \$50,000 or more on which it has had to pay interest. If the Company had suffi-cient capital it would not need to secure so much assistance from the bank and thus would eliminate much of this expenditure on interest ac-At times its account at count

count.

Before the desired increase in capitalization can be obtained it is necessary that the Company shall sell additional stock so that it can show additional stock so kna it can show that 30% of its present authorized capital has been sold. Shares are selling rapidly and it is expected that the necessary amount will soon have been disposed of when immediate application will be made for the increase in the capital of the Company that has already been approved by the share-

Two New Clubs

HE egg circle at Cambray in Vic-The egg circle at Cambray in Vic-toria county, called a meeting on April 25th, at which the Linden Valley Furmers' Club was organized. Mr. J. J. Morrison addressed the meeting. An unusual feature was the election of a lady secretary and four directors of the same sex.

directors of the same sex.

There were 50 present when the
Clairville Farmers' Club was organized
on May 2nd. Mr. J. J. Morrison and
Mr. J. W. Stark, the district representative for Peel county, wer the speak ers. Both of these promise to be good

Cattle Embargo May be Removed

The British embargo on live cattle from Canada, which has been in force clinical 1822, may be removed. Hon. Martin Burrell, Minister of Agriculture, stated in the House of Commons inst week that Sir Robert Borden and taken to England with him a complete, supergranders and the company of the complete memorandum on the em-harge question and would negotiate with British authorities for its re-moval. Mr. Burrell believes that

moval. Mr. Burrell believes that when the matter is fully understood, the embargo may be removed. The embargo, as Farm and Dairy readers probably know, was imposed as a sanitary protection to British. Eve stock interests.

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"Read not to contradict and to confute, nor believe and take for granted, but to weigh and condens sider."—Bacon.

Our National Debt

ANADIAN war expenditures to date, including what is owing to Great Britain, a sum not yet adjusted, total approximately \$600,-000,000. The net national debt of the Dominion has risen from \$336,000,000 before the war to \$900,000,000 at present, and Finance Minister White predicts that by the close of the fiscal year, which opened a few weeks ago, the net debt may reach \$1,300,000,000. Assuming that Canada has a population of eight millions and that the average family consists of five persons, our national debt now represents an average indebtedness per family of \$812.50. With interest at five and one-half per cent., this represents an annual charge against each family of \$44.68.

This is a heavy debt, and one that is constantly growing greater. It would be a mistake to assume, however, that it is one which will necessarily interfere with production or bear with crushing weight on the expansion of industry, Its effect will depend on the way in which the interest charges are to be met. If they are to be collected as at present by means of a high protective tariff, then the national debt will constitute a tremendous burden on Canadian producers, as for every dollar that goes into the treasury three or four will find their way into the pockets of protected manufacturers. If the very extent of our national obligations, however, forces the Government to consider other and more equitable means of raising public revenues, as, for instance, the taxation of unimproved land values and a graduated income tax, as recommended by the Canadian Council of Agriculture, then the debt may prove a blessing in disguise and the annual charges will be easily met.

Price Regulation

T is announced semi-officially that the governments of Canada and the United States may join forces to regulate the price of wheat. The Department of Labor has already interfered with the forts of milk producers as an organized body to advance the price of their product. Now city organizations everywhere are calling on the Government to regulate the selling price of all food products. Their suggestions, too, seem to be meeting with approval in official quarters.

But is price regulation to be limited to the pro ducts of the farm? If pork is up in price, sugar has advanced to an equal degree. Boots and shoes are soaring along with wheat and oats. In short, products of city factories are proportionately priced with the produce of the farm If farm products are made subject to price regulations, then it is only fair that all commodities should be similarly regulated, not forgetting wages. So far the farmer has not been heard from regarding the fixing of prices. He is too busy increasing his supply of foodstuffs to pay much heed to the numberless suggestions that are meeting with ready acceptance in our cities. The actual imposition of such regulations as are now proposed, however, would, we doubt not, call forth the most vigorous protest, even of such a busy man as the Canadian farmer. In farm products, if in anything, demand can be trusted to fix a price commensurate with the supply.

T has been suggested to the Dominion Government that the provisions ment that the provisions of the Lord's Day Observance Act be not enforced from now until the end of the war in order that farmors may have more time for crop production. A-section of the city press, not a large section we are glad to say, has spoken approvingly of the suggestion. It has the hearty support of several of the recently organized production committees of our cities. We wonder if the gentlemen who compose these committees know that for the past six or eight months farmers have been working seven days a week-a farmer's day on six days and a union day on the seventh. Winter chores take up a large part of every Sabbath-a regrettably large part. During the summer months the chores are not so arduous, but even then the average farmer still works at least one-half of a union day on works that can be properly classed as those of necessity and mercy. To ask the farmer to work full speed for seven days a week, for that is what the petition implies, is asking him for more than human strength can furnish, or real wisdom would dictate.

"Honor the Sabbath day and keep it holy," is a Divine command with a very human application. It is the experience of all that more and better work can be done by both men and teams by preserving, so far as possible, one day of rest in seven. To infringe on Divine laws is to merit Divine disapproval, and no nation or individual can hope to profit thereby.

Freight Rate Increase

ANADIAN railroad companies have petitioned the Dominion Railway Commission for the right to increase freight rates by 15 per cent. In defence of the proposed increase the companies plead enormously increased cost of operation, due to the higher wages paid employees and the greatly enhanced cost of equ'ament. Greater revenues, they say, are a necessity to efficient operation. Some of the business interests have already publicly protested against the proposed increase, but it has not yet been definitely decided whether the Canadian Manufacturers'

Association, on behalf of the manufacturers, and the Canadian Council of Agriculture, on behalf of the farmers of Canada, will make a definite fight against the increase.

While it is easy to give the railways an advance in rates when they need M, it is much harder to get a reduction in rates when increased prosperity makes it possible for the companies to return to their old tariff schedules. Increased rates simply enable those railways which are doing well to further water their stocks, and when railroads that previously did need greater revenues, get on a paying basis, if there are no reductions in rates, it encourages them to do the same.

Nor is it always well to believe all that the railways have to say about the critical financial condition in which they find themselves. Shortly after the war started the railways of the United States published public advertisements to show that they were nearly bankrupt, but the great increase in commercial activities caused by the war gave them the best year they ever had. We admit, however, that some of the railways do need assistance, as is amply proven by the report of the Royal Commission appointed to investigate the Canadian railway situation. In the case of these roads, however, their nationalization along the lines of the Commission's report, is the best way of dealing with the situation, and in the meantime it might be well to defer any increase in rates until the greater question of railway nationalization or readjustment has been decided.

The Company's Good Work

HERE are three aspects of the work being done by the United Farmers' Cooperative Company, Limited, of Toronto, which the farmers of the province should not overlook. The first is that the company is composed of farmers and farmers' clubs throughout the province, and all profits are used for the benefit of the farmers. Not over seven per cent. can be paid to the shareholders, and the balance is used for the promotion of causes in which the farmers of the province are interested, and by which they are likely to be benefited.

A second way in which the farmers are benefiting is through the fact that by the United Farmers' Cooperative Company being in the field its competition assists in keeping down the prices charged by firms handling numerous lines of farmers' supplies. Savings effected in this way are not so apparent, but may easily be, and undoubtedly are, infinitely greater than are received more directly in the form of profits.

A third way in which farmers have been bene fited during this past season has been by the saving which the Company has effected through purchasing goods on a rising market and furnishing these goods to farmers at practically the same prices for which they were purchased, although the current market prices had greatly advanced in the meantime. Mr. C. W. Gurney, the manager of the Farmers' Company, estimates that through the action of the company in purchasing corn and sugar before the advance went into effect, the farmers in the clubs which handled this corn and sugar saved at least \$40,000 on the corn and \$8,000 on the sugar. The savings on these two items alone have much more than justified all the efforts that have been put forth to date to promote the cause of the United Farmers' Cooperative Company.

The prohibition of oleomargarine is about the only compensation the farmers have for the multitudinous burdens of protection they have borne almost without complaint. They should not be deprived of it without compensatory relief. The public are indifferent because they know that an oleomargarine combine, if worldly wise, would fix its charges according to the price of butter.

R. FAR is doi: government under Ontar chased one machine; the eight horse and 16 on th third day's p Oshawa last We for three 12-inch work. The swell over, an looking job a with a wai extent than i soil in which fectly adapte level field as equally good grade. A slis on an incline the guiding di steering altog Expensive

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headland. Working The Doctor to the limit. and another fa the strength o So far it night and day. ing all day. A barn take turns turning the lan

to talk authori To draw three to work to the as a general th bottoms. It mo It is in operation well has requir his farm; or rat it cost him \$1, the tractor prov promises to de, will be sold, the and remaining h than the former alone. And a g worked. The tractor i

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cular value for tion," remarked showed me over I have just rente the back. With I will get it ther ter this year's cr So far at least

pleased with hi

Dr. Farewell's Tractor Experience To Date the Machine Fulfills All Expectations

R. FAREWELL, down at Oshawa. is doing some pioneering. In-stead of waiting to see how the stead of waiting to see how the government tractors will "pan out" under Ontario conditions, he has pur-chased one of his own, an eight-sixteen machine; that is, one that will deliver eight horse power on the draw-bar and 16 on the belt. It was doing its and 16 on the best. It was doing its third day's plowing when an editor of Farm and Dairy "dropped off" at Oshawa last week to see it in opera-tion. We found the machine drawing three 12-inch bottoms and doing good three 12-inch bottoms and doing good work. The stubble was being turned well over, and while not as smooth a looking job as could have been done looking job as could have been done with a walking plow, the soil was really being pulverized to a greater extent than is usually the case. The soil in which it was working was persoli in which it was working was per-fectly adapted for easy plowing, a level field and no stones. The day previous, however, it had done almost

on an incline was overcome by taking the guiding disk out of the furrow and steering altogether by hand.

Expensive and experienced help does not seem to be necessary. The company sent a demonstrator along with the tractor. One of the farm hands watched him at work for a time, then took his place and got along without any trouble. When we saw him at work after a few days experience he looked like a veteran tractor operator. Some little trouble was being experienced with the carburator, but this did not interfere with the tor, but this did not interfere with the operation of the machine. It merely operation of the machine. It merely wasted gasoline at 35 cents a gallon. Ir. Farewell's machine is a one man tractor. A ferk on a rope lifts the plows out of the ground and puts them back in again. Turning was accomplished easily on a 20 or 24 foot

equally good work on a 20 per cent. grade. A slight tendency to side slip on an incline was overcome by taking

Working Day and Night: The Doctor is working his machine to the limit. It was late in arriving and another farm had been leased on the strength of what the tractor will do. So far it has been worked both do. So far it has been worked both night and day. One man keeps it go-ing all day. At dark a headlight is attached and the men from the dairy barn take turns in keeping the plows turning the land all night. Expense? Well it is a little early

headland.

to talk authoritatively on that point and the Doctor did not attempt to do so. To draw three plows the engine has to work to the limit. It is proposed to work to the limit. It is proposed as a general thing, to draw just two bottoms. It moves along more quickly than a team. It uses fuel only when It is in operation. Heretofore Dr. Farewell has required 14 work horses on his farm; or rather farms. Last year it cost him \$1,000 to feed them. If the tractor proves the success that it promises to do, half of these horses will be sold, the investment in tractor and remaining horses being no greater than the former investment in horses And a greater acreage will be

The tractor is to do service elsewhere than on the land. When he purchased his tractor, Dr. Farewell also bought a silo-filling equipment and a threshing machine. The blower and the thresher will both be operated by the tractor. The grain is to be threshed as it is drawn in from the fields.
"I expect the tractor to be of parti-

cular value for after harvest cultiva-tion," remarked the Doctor, as he showed me over the farm. "That farm I have just rented is full of quack at the back. With the aid of the tractor I will get it thoroughly worked up af-ter this year's crops are removed."

So far at least, Dr. Farewell is well

pleased with his pioneering with a

Land for Returned Soldiers

HE Dominion Government will introduce legislation to provide for the settlement on Dominion lands in the prairie provinces of homorably discharged soldiers after the war. In a resolution introduced in the House on May 7th, Hon. W. J. Roche out-lined the main features of the coming legislation.

Arrangements will be in the hands Arrangements will be in the hands of three commissioners, who are to be appointed. Each soldier will be siven 160 acree of land free and a loan of \$2,000, with which to purchase stock and implements. The rate of interest will be five per cent. per annum. Furthermore, these soldiers will be trained either on state owned farms or with approved private farmers, or with approved private farmers. or with approved private farmers. Very wisely the Minister stated that the issuance of scrip to veterans, as after the South African war, would not be considered and patents will be given only to persons who will remain permanently on the land

\$200 Credit for Seed

HE statement has been frequently made of late that many farmers have not the money with which have not the money with which to buy seed nor the credit to secure loans from their nod hanks. This was particularly troub hanks. This was particularly troub tenant farmers and it was clear that hand of soud continuous seed would seriously custom to an arrangement with the Canadian Bankers' Association whereby loans for the specific purpose of the purchase of seed, are to be made by local banks to those who need such financial assistance.

sistance. The arrangement provides for a maximum loan of \$200 to one individual, to be governed entirely by the discretion of the local bank manager and local standing of the farmer applying for the loan. All loans made under this agreement will be repayable with interest at 6 per cent. On the lat of November, after the farmer has sold his crop. The arrangement will enable tenant farmers, whose deficiency in property holdings whose deficiency in property holdings has been a handicap to credit privileges, to secure the necessary moneleges, to secure the necessary monetary assistance for the purpose of increasing their producing acreage. This will not apply to those farmers who have obtained loans for seed pur-poses from the Loan Commissioner for Northern Ontario.

Currying Horses Joseph Smith, Welland Co., Ont.

AM convinced that if the curry comb and brush were used more frequently and more thoroughly, we would avoid many of the trials that would avoid many of the trials that beset the teamster. Not the least of these is sore show/ders. Unquestionably it is hard on a horse to be started suddenly at heavy spring work. The cause of most sore shoulders, however, is not the wearing of the coller. ever, is not the wearing of the collar against the shoulder, but the accumu-lations under the collar resulting from lations there the collar resulting from excessive sweating. If the horses were thoroughly cleaned each day, particularly on shoulders and neck, this trouble would be largely avoided. The general health of the horse also

depends in large measure on respiradepends in large measure on respira-tion through the pores of the body. Unless cleaned regularly and thoroughly these pores become cloged and vigor suffers accordingly. Another point that I would emphasize is, keep tha low slan. News allow the horses the legs clean. Never allow the borses to stand over night with their legs en-cased in mud. Neglect in this parti-cular is often, I believe, the cause of cracked heels and similar troubles.

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and less labor in feeding.



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(14)



NOWLEDGE is indeed, that which next to virtue, truly and essentially raises one man above another. - Addison.

Winning the Wilderness

**YES, you can," Leigh replied in a low voice. "There are some things I must do for Uncle Jim

lilies looking up from the still surface of the lakelet were surface of the lakelet were not so fair as the pink-tinted face of Alice Leigh's daughter, framed in the soft brown shadows of her hair with a hint of gold in the ripples at the white temples. And be-hind the face, looking out through long-lashed violet eyes, was loving sacrifice and utter self-forgetfulness.

Thaine was nineteen and wise to give advice. A sudden thrill caught his pulse, mid-

"Is that all? Can't I something?" he asked eagerly "That's a great deal. And nobody can do for anybody. We have to do for ourselves."

You are not doing anything for Uncle Jim, then, I am to understand," Thaine said.

But Leigh ignored his thrust. saying:

"When Pryor leaves, doesn't want to say good-by to anybody, not even to Uncle Jim. He says China is only a little way off, just behind the purple notches over there. I'm going to take him to the train to-morrow and then I'm going on to Wykerton on business

After that, I may need lots of advice." "Wykerton's a joint-ridden place, but John Jacobs has put a good class of farmers cround it. He's such an old saloon hater, Hans Wyker'd like to kill saioon nater, Hans Wyker'd like to kill bim. But say, why not tell me now what you are about, so I can be look-ing up references and former judicial decisions handed down in similar cases?" Thaine asked lightly.

"Because it's too long a story, and I must get Pryor to the eight o'clock limited," Leigh said.

The crowing of chickens in a far away farmyard came faintly at that moment, and Thaine with a strange new sense of the importance of living, sent the black horses cantering down the trail to the old Cloverdale Ranch

Jo Bennington slept late. She had been up late. She had danced often and she had waited for Thaine's homecoming. Yet, when she came down-stairs in a white morning dress all sprinkled with little pink sprays, there was hardly a hint of weariness in her young face or in her guick footsteps.

"I'm glad you stayed, Jo," Mrs. Ayde-"I'm glad you stayed, Jo," MIS. Ayue-lot greeted her. "This is 'the morning after the night before,' and, as usual, the desertions equal the wounded and imprisoned. Asher and the men had to go across the river early to look after the fences and washouts on the things I must do for-Uncle Jim and when you are doing for people you can't tell them nor depend on their imprisoned. Asher and the men had bay cott as unconcerned as a bump on advice. When Pryor is gone, may I to go across the river early to look a log, it was the funniest sight I ever ask you sometimes what to do! I after the fences and weahouts on the lower quarter. And Rosic Gimpke delated that cided to go forme this morning as soon "Sar, Curly Locks, Curly Locks, you alloe Leigh was the prettiest girl in as breakfast was done. So it is left ought to always sit on a cushion and

wake you when she made up the other beds, she suddenly got homesick, her hand grew worse and she flew the premises. I'll run up and attend to that bed while you finish your breakfast," and Virginia left the room

ppeared on the side porch before the dining room door

"Oh, it's his mother he's thinking about," Jo said with pretty petulance. In truth, she was angry with Thaine for taking Leigh home last night and for leaving home to-day.

said he'd quit the old home and was moving his goods up to Wolfe Creek for keeps. And with that fat tow-head-ed Gimpke girl sitting on the frisky bay colt as unconcerned as a bump on

stay till it gets well. Then she suddenly changed her mind. Possibly it was the spare-room bed," Virginia said laughing. "When I told her not to

At that moment young Todd Stewart

Thaine stopped long enough to ask me to come over and move furniture for his mother," Todd sang out. "He doesn't think you were made to lift cupboards and carry chairs down-

"No, it's his mother he's ceased to love," Todd said, coming inside. "He

"Oh, that depends on how helpful he Jo responded tactfully.

15. Jo responded tactually. Todd sprang up and began to fling the chairs about with extravagant en-ergy in his pretense of being useful.

"Let's help Mrs. Aydelot as swift as possible. It's hot as the dickens this morning, and the prognostics are for morning, and the prognostics are for a cyclone before twelve hours. It's nearly eleven of 'em now. I'll take you home when we are through. Thaine isn't the whole of Grass River and the adjacent creeks and tributaries and all that in them is."

CHAPTED YV

The Coburn Book

And I see, from my higher level, It is not the path but the pace That wearles the back, and dims the

And writes the lines on the face. -Margaret E. Sangster.

Meanwhile the May sunshine beat Meanwhile the May aunshine beat hot upon the green parie, and the promised storm gathered the promised storm gathered the promised storm gathered the property of the property the broken country about Big Won Creek, was more uncomfortable than the open prairie. And especially was it uncomfortable in the "blind tiger" of the Wyker eating-house,

To-day the men of the old firm of Champers & Co. were firm of Champers & Co. were again holding a meeting in this Jittle room that could have told of much lawless plotting if walls could only

"It's danged hot in Wyker. Wyker. Open that window," Darley Champers complained "What kept you fellows so long, anyhow?"

"Business kep' me, and Smith here, he stop to peek at a pretty girl for goot as ten minutes," Hans Wyker said focosely

Champers stared at Thomas Smith, whose small eyes gleamed back at him.

"Oh, I just turned to look at Miss Shirley in the dining room. Can't a man look at a pretty girl if he is past forty-five? She didn't see me, though."

though."
"Naw, she see nobotty but
young Aytelot sitting mit her.
Why you take oop precious
time peekin' trough der crack
in der kitchen door? I be
haak in a migute vonce. Smitt back in a minute vonce. Smitt haf business mit you," Wyker declared as he turned to the kitchen again. Left together, the two men

or no business with each other ex cept as I am agent for your rents and mortgages.

"You seem to fatten on them, or something," Smith answered insinuatingly. "You lose no flesh with the years, I see."

"I've little occasion to worry," Dar-

"I've little occasion to worry," Dar-ley Champers repide meaningly, "Not with a fat income like yours and small returns to your employer who's kept you all these year," Smith began, but Darley Champers mentally blew up. It was in the bluffer's game that ha always attended.

blew up. It was in the that he always succeeded best.
"Now, see here, dang you. Get to business. You and Wyker and me dissolved partnership long ago. I've been your agent years and years. I've did my best. I never got so rich you notice it on my breath. I'm not a thief nor a murderer. I keep inside the law. I broke with you fellows years ago, except straight contract that'll probate in any court. You are

(Continued on page 18.



In our issue of May 3rd we published an article by Mrs. Edith Stevenson Rutherford, an illustration, of her home in British Columbia. As we stated in that issue, Mrs. Ruther an enthusiastic lover of flowers, and herewith we show the unique flower-bordered walk leads from her home to the take shore.

for us to get the house over t'e party. Not so easy as getting ready for it, especially without help." Where's Thaine?' Jo asked care

lessly, though her face was a tattler. "He took some colts over to John Jacob's ranch. He had Rosie ride one and he rode another and led two. They were a sight. I hoped you might see them go by your window. Thaine had his hat stuck on like a Dutchman's and he puffed himself out and made up a regular Wyker face as he jogged a-long. And Rosie plumped herself down on that capering colt as though she shifted all responsibility for accidents upon it. The more it pranced about the firmer she sat and the less concerned she was. I heard Thaine calling out. 'Breakers ahead' as he watched her bring it back into the road in front of him with a sort of side kick of her foot."

"What made Gimpke leave?" Jo asked, to cover her disappointment "She cut her hand badly last night. She insisted at first that she would "And you don't care for a farmer anyhow," Todd said suavely. help me to-day and go home later to

sew a fine seam and wear a dress to breakfast with those little pink dudds scattered over it."

Sat silert a moment. Then the breakfast with those little pink dugds scattered over it."

What do you want now? We've got no business with a frown:

"Not if I was a farmer's wife," Jo

responded quickly.

"Oh, Jo, do you really want to be a city girl?" Todd's face was frankly sorrowful. "Could you never be satisfied on a farm?"

don't believe I ever could," Jo said prettily.

"Thaine's a farmer all right, Jo. "He' isn't going to be one always,"
Jo broke in quickly. "He's going to
the Kansas University and there's no
telling after that."

tening after that.

"No, he's just going to Wykerion, that's all. Nay, he have went. Him hand him fraulein. And say, there's another pretty fraulein went up the trail just shead of the Aydelot horse party. A sweetheart of a girl whom Thaine Aydelot took home after all last night."

"I don't care where Thaine goes," Jo cried

stre the particularly in er visit to Ne ful was Brook below. In try Caul Mission

KK- HEY

it. and stopp soldier on gu The greatnes overpowering from a little tories high, blocks, before most continue gleaming so fa How could ceive, and how cute such a pi ed very insign

was its creato But behind who had given power. In the was borne ial, peculiar w That same for the great

may not ask u common and duties of ordi to be. It never from duty to ure, with str everything tha full grand sig ness and anxiand happiness, each of us car I. H. N.

Prevent

S warm v of the ta is that and other valu summer month points to remer properly is the are essential. are essential. away, the odor such as camph in hindering the their destructiv

Authorities t moths are likel which are put turbed for so ments and clos aired and swep ously affected. light are proba the oldest rem stances deman put away, how effective device large pasteboar use, and gum a around the edg box completely If the garments cleaned before boxes, no ado necessary, and ectionable odor tic of so many

Some people l coarse muslin that would bec folded. After cleaned and air hung on a coa

The Upward Look

Power

T HEY go from strength to strength." Ps. 84:7. Of all the wonderful sights which particularly impressed me, on an Easter visit to New York, the most wonderful was Brooklyn Bridge, as seen from In trying to find the Jerry Mc Caul Mission, we passed underneath it, and stopped by a little fire of a soldier on guard. There I looked up. The greatness of that structure was overpowering. Then we studied it from a little distance; rising hund-reds of feet, passing over houses many stories high, going inland many many blocks, before it reached its level, with its massive foundations and almost continuous succession of cars. gleaming so far above like toy ones.

How could the brain of man con-ceive, and how was it possible to exe-cute such a piece of work? Man look-ed very insignificant beside it, yet man

But behind man was his Creator, who had given him all that necessary power. In this tangible way, a conception of the power of our God Himself was borne in upon me, in a special, peculiar way.

That same power is ours, not only for the great things, that He may or may not ask us to do, but also for the common and uncommon calls and duties of ordinary life that are ours to be. It never fails; it just goes on from duty to duty, pleasure to pleas-ure, with strength to strength, in ure, with strength to strength, in everything that He calls us to do and enjoy. If we can but grasp this in its full grand significance, we will find that just as it takes away all nervousness and anxiety, so it adds strength and happiness, until life is a tribute each of us can live to His Power.— I. H. N.

Prevent Moth Ravages

S warm weather approaches one of the tasks we must not neglect is that of putting a ay furs and other valuable garments for the summer months. One of the main points to remember in doing this work properly is that the beating and air are essential. If the eggs of the moth are in the clothes when they are put away, the odor from various repellants such as campbor balls, tarred paper, cedar chips and so forth, has no effect in hindering the moths from getting in their destructive work.

Authorities tell us that, in general moths are likely to affect only articles which are put away and left undisturbed for some little time. Apartments and closets that are frequently aired and swept are not apt to be seriously affected. In fact, airing and sun-light are probably the best as well as the oldest remedies. Where circumstances demand that the articles be stances temand that the articles be put away, however, a convenient and effective device is to place them in large pasteboard boxes such as tailors use, and gum a strip of wrapping paper around the edge so as to seal up the box completely and leave no cracks. If the garments have been thoroughly cleaned before being placed in these boxes, no additional protection is necessary, and there is none of the obectionable odor which is characteristic of so many moth-repellants.

Some people have long bags made of coarse muslin in which to put coats that would become much wrinkled if folded. After they are thoroughly cleaned and aired they are pressed, hung on a coat hanger, newspapers pinned securely around them and slip- our own garden, but we presume that Boil them until tender, drain and ped into these muslin bags. In the all of Our Folks do, it will help to serve on slices of thin hot buttered fall they are ready for wear as soon make a nice variety in the menu, even taken out of their sum- if we have to purchase it.

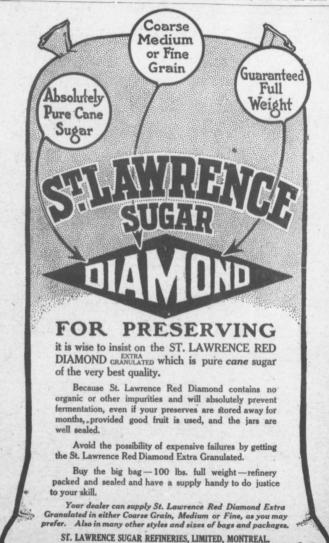
Vegetables in Season

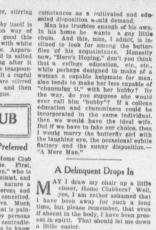
vegetable we can enjoy in the spring, and from it we can a number of delicious dishes. Even if we do not grow asparagus in

Green peas and asparagus make an appetizing dish. Cook the peas and asparagus in separate vessels, drain Vegetables in Season

SPARAGUS is about the first and the tender part of the stalks cut regetable we can enjoy in the in half-inch lengths, to one cup of springs, and from it we can peas, a quarter of a cup of thia cream and butter, pepper and salt to taste.
As an appetizer use only the tips.

over them or placed on the toast first. Cream asparagus soup may be made from the stalks after the tips have been used for some other dish. Cut stalks into one-inch pieces, boil until tender, and put through a vegetable press. Add milk to the pulp and the liquid that goes with it. Season with said and pepper and heat. Pour this solvely over four and butter which the proper solves of the proper solves.





AY I draw my chair up a little closer, Home Clubbers? Well, yes, I am rather ashamed that have been away for such a long time, but please remember, that even if absent in the body, I have been pres-ent in spirit. That should let me down

A number of splendid letters have appeared in the Home Club lately, and I have followed them with inter-est. I wonder if "Merry Margaret" est. I wonder if "Merry Margaret" has succeeded in securing that dish washer yet? I was interested in her letter on the subject, and also "Austr Flousie's," but as I was not in a position to offer any advice it was necessary for me to "keep mum." "Dot's" letters are always interesting, and her letters are always interesting, and her will. Her will be the subject of her must be the subject of the subject of her must be subject to the subject of her must be cussed question of how much money a man should have before asking a girl to marry him were splendid, and

girl to marry him were splendid, and I cortainly agree with her that "plain living and high thinking" are essen-tials in making a happy home. I would like to shake hands with "A British Columbia Ploneer." She deserves much credit for the original way in which she is "making play a business," and her little girl will surely remember the happy times she spends with mother in this way for many years to come. Don't you think, Home Club members, that if we grown ups would follow "A B.C. Pioneer's example and find a place in our busy

days for "play" of-some kind, that we would profit by it? If "Tirza Ann" had happened to -leave out the last paragraph of her let-ter on "Men and Their Ways," what a storm of opposition might have come her way. She softened down her strong statements in the latter part of her letter, however, although I rather think it might have been rather think it might have been good for some men if she had not done so. What do other members think? And by the way, now that I have asked for discussion, here is another subject I would like to see diswoman a sense of cussed: "Has cussed: "Has a woman a sense or humer?" I asked a man for his opin-ion the other day, and he said, "Why, yes, my wife has a greater sense of humor than I have, and I think women on the farm need to be able to see the humorous side of things, or their lives will not be very happy." That is opinion No. 1. What do others think?— "Cousin Mae."

Summer Meetings Soon to Commence

CONFERENCE of Institute lecturers was held re-cently in Toronto, for the purpose of discussing features which should be emphasized during the com-ing summer series of meetings. The first of these meetings commences on



in FARM AND DAIRY You'll Find the Advertisers advertising reliable goods. They want to know you; also want to know you saw the Ad. When writing them don't forget to tell them you saw the Ad in FARM AND DAIRY. has been creamed together, stirring constantly.

Boiled asparagus served by itself is probably the most common way of eating it, and it is very good this way, too. It can be served with white sauce or drawn butter sauce. Asparagus should always be boiled in salted water. One way of serving after it has been boiled is to melt a teaspoonful of butter and to add to it a cupful of bread crumbs. These are stirred over the fire until brown and then sprinkled over the asparagus.

HOME CLUB

The "Butterfly" Girl Preferred

VEN Farm and Dairy Home Club has its contradictions. First, along comes "First Ann," who re evidently a very modern feminist, and assures us that man is by nature a peacock; vanity is his inherent and inbred characteristic. He is conceited. His self esteem is superlative. Much more "Tirza Ann" tells us that is painmore tirza Ann tens us that is painful to remember, at least by persons of my sex. But here is the contradiction. "Here's Hoping" wants to know why this peacock, this vain, conceited being called man, does not appreciate and marry the well educated woman of cultivated mind and high ideals.
Gracious alive! What would a repreof celtivated mind and high ideals, Gracious slive! What would a representative of shallow and superficial masculinity do with such a deity around the house? Little chance would be have then to pulp and "strut about," which "Firsa Ann" tells us, is his chief delicht. Oh no, he would be kept everlastingly on the houstle to keep up with his superior wife. His evenings would be spent in study of Plato and Henry Lames, even wife. His evenings would be spent in study of Plato and Henry James, even as his days must be spent in toil; the first to hold his place in his "wifie's" (he would never dare address her so familiarly) esteem, and the day time toll to keep her in such outward cir-

May 22nd Departmen the Home courage a tables; to i them a mo of preservi ineneo o 2th and as a m

May 17,

ing the you Other poi elend are th ing foods w ance than e ditions. He fore the wa wages for aking cou Medical-deni so of great i be overlooke

It is our tute lectures various bran mer, dear jects in a pr member to b meeting on t

Mrs. Jas. Pa ture to t Things that

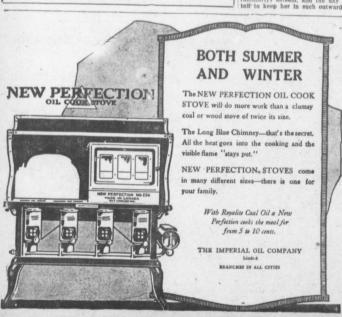
The

winter, do now, and a que mind frequen "What she foodstuffs con Really thou the farm shout tremely fortu our city siste most every their tables. have practical are going, whi merely long t their prohibits we have lots of ter, etc., and t largely to mar

One vegetab

their tables at the year is the necessary to they are very if we do find it amount of pot this is no ex over and over either bolled o out of this bes to have variet; wash day, who several hours, other times, in and mashing t their jackets. raw potatoes, of grated che Over this a littl whole covered the oven. It is potaroes are ge spring, to boil thick slices, th over them. dish is made by one pint mashe eggs, one cup pepper to taste.

a hot, greased | We all know should not be quantities now winter weather good substitute dishes. Fish



tables; fo induce our people to grow a greater variety of vegetables and give them a more important place in the menu; to couple with this, methods of preserving and storing, which will insure a liberal supply the year round, and as a means of attracting and holding the younger women and girls in the Institute.

Other points which should be empha sized are the study of food values and combinations and methods of preserving foods which are of greater importance than ever under present war con ditions. Home nursing and first aid are of more general interest than be-fore the war. On account of the high wages for seamstresses, the dress wages for seamstresses, the trees-making course is much appreciated. Medical-dental school inspection is al-so of great importance, and should not be overlooked.

It is our opinion that if the Insti-tute lecturers who are to address the various branches throughout the summer, deal with these important subjects in a practical way, it should be well worth while for every Institute member to be present at their branch meeting on the day the lecturer visits

The Spring Larder

Mrs. Jas. Patterson, Lanark Co., Ont.

seems characteristic of human nature to become rather pernickety about what we eat in the spring. Things that tasted good through the winter, do not seem to appeal to us now, and a question that rankles in my mind frequently when planning meals is "What shall we have until spring foodstuffs come into season?"

Really thouse, when we come to think of it, those of us who live on the farm should consider ourselves ex-tremely fortunate in comparison with our city sisters, who have to buy almost every morsel that goes on to their tables. We are in a position to have practically all the delicacies that are going, while many city people must merely long for them on account of their prohibitive price. For instance, we have lots of milk, cream, eggs, but-ter, etc., and these products contribute

ter, etc., and these products contribute largely to many tasty dishes.

One vegetable most people have on their tables at least once every day in the year is the potato. It is hardly necessary to mention the fact that they are very scarce this year. Even if we do find it wise to cut down in the amount of potatoes we use, however, this is no excuse for serving them over and over again in the same way, either bolled or fried. I try to keep over and over again in the same way, either boiled or fried. I try to keep out of this beaten path, and endeavor to have variety. Quite frequently, on wash day, when the fire is soins for several hours, I roast the postaces. At other times, instead of simply boiling and mashing them, I cook them in their Jackets. Another dish which the family favors is made with sliced raw potatoses, allerhated with a layer the ramily layers is made with succe faw potatoes, alternated with a layer of grated cheese, salt and pepper. Over this a little flour is sifted and the whole covered with milk and baked in the oven. It is a good idea when the potatoes are getting rather old in the spring, to boil and cut up into fairly spring, to boil and cut up into fairly thick slices, then pour a white sauce over them. A delicious potato supper dish is made by beating well together one pint mashed potators, one or two

one pint mashed polators, one or two cerss, one cup awed cream, sait and pepper to taste. Drop in spoonfuls on hot, greased pan and let brown well. We all know that heavy meats well as the case of the control of the

May 22ad. It was pointed out that the diffi for the evening meal. If there Department has a four-fold purpose in is any left over from dinner it can be the Home Garden Campaign, to en-shredded, placed on lettuce leaves or courage a greater production of voge-garnished with pariety and albles; to induce our people to grow a dressing poured over it. Here is another fish salad for those who are fond of sardines. Boll and drain a cupful of rice, season with finely chopped onion and pour salad dressing over it.
When cool arrange on lettuce leaves, and on this lay sardines which have been drained. If desired, diced pickl-

deet drained. It desired, diced pickied beets may add the finishing touch.

I make use of eggs quite often also as a substitute for meat. Egg omelet is relished by our family, and I some-times vary the usual way of making times vary the usual way or making by adding one cup sweet milk, one tablespoon flour, salt and pepper. When this thickens add to the beaten yolks, then fold in the stiffly beaten Occasionally for the evening meal I make egg salad by slicing hard boiled eggs, placing them on lettuce leaves and pouring salad dressing

Food Value of the Date

OW many of our Women Folk are familiar with the food com-position of the date? We re cently came across an analysis of its value which stated that the date food value which stated that the carbohy-contained 70.6 per cent. carbohy-drates; fat, 2.5; protein, 1.9; ash, 1.2; water, 13.8; bulk, 10 per cent. Very seldom are these six constituents found in one food in such large quan-

Our attention was first called to Farm and Dairy by our herds-man, who lives with us. He said he had heard Farm and Dairy very highly spoken of in Ontario, very nightly aboven of its Ontario, and he subscribed for it. Since that time the paper has come to us regularly, and we would not care, to be without it. We always recommend it as Canada's leading dairy paper. J. I. Alexander, Compton Co., Que. Lee

tities, so on this account the date is worthy of a more prominent place in our menus than the majority of us have been in the habit of giving it. ar cousins across the line realized the value of the date some time ago, and one of the most common ways in which they use it is with cooked breakfast cereals. If about half a cup breakfast cereais. If about half a cup of stoned and chopped dates are stirred into our breakfast food be-fore serving it makes an appetizing dist and we are told that when the two are eaten together they make an almost perfect food.

It is so difficult at this season of It is so directly at this season of the year to think of something with which to make pies that the date comes in useful here. The dates should be washed, then milk poured abould be washed, then milk poured over them and placed on the stove to heat slowly. When they are soft, stone, crush and thicken with a little corn starch or an egg. Place the mix-ture in a pastry shell and bake. If desired, strips of pastry may be used for the ton or massiage, by the for the top or meringue, but good whipped cream is best of all, and we who live in the country are in a posttion to enjoy this treat occasionally at least. A pound of dates will make two good ples.

Date sandwiches are tasty and nourishing, and a mixture of dates and walnuts makes a good combination. Remove stones from dates and cut in small pieces, or, if desired, the dates may be put through the meat chopper. add not meats and a dash of salt and spread between slices of bread, either brown or white. Cheese and dates is another good sandwich combination.

winter weather. Fish dishes are a The farmer who forgets the ques-good substitute for the heavier meat tion, "Will it pay?" soon arrives in the dishes. Fish also makes a tasty has-been brigade.



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Winning the Wilderness (Continued from page 14.)

signed your name to no end or papers for you when you wouldn't put your own left-handed writin' in sight. 1 have your written permit safe for doin' it. I reckon somebody must a' but that right hand of yours out of commission sometime. I'll find out about it one of these days myself."

Thomas Smith sat looking at the speaker with steady gaze. Many lines crossed his countenance now, but the crooked scar had not faded with time. In a coffin his would be the face of an old man. Alive, it was so colorless and uninteresting in expression that not one person in a hundred would turn to take a second look at him nor dream of the orgies of dissipation his years could recount. With-al, he had the shabby, run-down ap-pearance as of a man in hard lines financially.

"I want money and I want it quick, or I'd not come clear out here. And you are going to get it for me. That Cloverdale quarter I've held grown Cloverdate quarter tve neig grown to weeds so long you will sell to the first buyer now. Jim Shirley's at the last of his string. I did what I wanted to do with him. He'll never own a quarter again," Smith spoke composedly

"Yes, I guess you're right. done him to his ruin. Jacobs has a mortgage on his home, too, and a Jew's a Jew. He'll close on Jim with a snap yet. It won't be the first time he's done it," Darley Champers declar-

"And that niece, Tank's girl, he was to protect for Alice Leigh?" Smith

"Oh, eventually she'll either marry seme hired man, I reckon, or go to sewin' or something like it for a livin'. She's a danged pretty girl now, but girls fade quick," Champers said. For just one instant something like

morse swept Smith's face. Then he hardened again as the ruling passion asserted itself.

"Serves her right," he said in a tone so brutal that Champers remembered

"But I tell you I must nave money. Two hundred dollars to-night and four teen hundred inside of two weeks. And you'll get it for me. You under-stand that. And listen, now." Smith's voice slowly uncoiled itself to Champers' senses as a snake moves leisure-ly toward a bird it means to draw to itself. "You say you have signed my name for me and transacted business. handling my money. If you care to air the thing in court, I'm ready for you any time. But do you dare? Well, bring me two hundred dollars before to-morrow and the other fourteen hundred inside of two weeks. And after this look out for yourself."

The threat in the last words was indescribable, and Champers would have shuddered could he have seen Smith's countenance as he left the room

"So he taunts me with being coward and a brute; a thief and cut-throat; dares to strike me in the face when I've given him a living so long he's forgotten who did it. I'm done with him. But he don't dare to say a word.

He shut his lips tightly and slowly clinched his hands. "For wy you stare so at dat door

yet? Where's Champers?" Hans Wyker demanded as he came in. "The game's between us two now," Thomas Smith declared, turning to

Hans Wyker.

a bully in power and a coward out of brewery business, had let his hatred it. What the devil do you want with of John Jacobs grow to a virulent mer l' mn obank. Be clear and quick poison in his eystem. While Thomes about it and quit your infermal dodgin' Smith, whose character Darley Chamme? I'm no bank. Be clear and quick about it and quit your infernal dodgir? Smith, whose character Darley Unan-human beins like a cut-threat. I've pers had read truly, followed so many signed your name to no end of papers wrong paths down the years that considered your name to no end of papers wrong paths down the years that considered when you wouldn't put your science and manhood were strangers. or dropped to the employment of a a brewers' association. His commis-of sloh was to tempt young men and boys to drink; to create appetites that should build up the brewing business for the future. In the game now, for the future. In the game now, smith was to deliver beer and whiskey into Wyker's hands. Wyker would do the rest. Whoever opposed him must suffer for his rashness. It was cooler in the large diningroom where Thaine Aydelot and Leigh Shirley had met by chance at

Leigh's face wore a deeper bloom and her eyes were shining with the exciting events of the day; the going of Pryor Gaines and the busi-ness that had brought her to Wyker-Something like pain stabbed sud denly into Thaine Aydelot's mind as he caught sight of her, a surprise to find how daintily attractive she was in her cool summer gown of pale blue gingham and her becoming hat with its broad brim above her brown-gold hair

"I didn't expect to find you here, Leigh said as Thaine took the chair opposite her at the little table.

"I came over to Little Wolf with Rosie Gimpke and some other colts. Then I walked over here to catch a ride to Careyville, if I could," Thaine said carelessly.

"You can ride with me if you want.
I'll be going soon after dinner," Leigh suggested.

"Oh, I'll want to all right. It may be well to start early. It's so hot I expect there'll be a storm before night," Thaine suggested, wondering the while what Leigh's business Wykerton might be.

Darley Champers was in a fever when he came from his conference with Thomas Smith. Smith had Smith had played large sums into his hands played large sums into his hands in the first years of their partnership. Of late the sums had all gone the other way. But Champers was entangled enough to know that he must raise the money required, and the land was the only asset. Few things are more difficult to accomplish than to find a buyer for what must be sold.

At the office Leigh was waiting for him. "Mr. Champers, I am Leigh Shirley from the Cloverdale piace on looking River." she sald, earnestly up at him.

Darley Champers

was no ladies' man, but so far as in his coarse-grained nature lay, he was never knowingly rude to a woman, and Leigh's manner and presence made the atmosphere of his office comfortingly different from the place he had just quitted. The white lilac bush in the yard behind the office whose blossoms sent a faint odor through the rear door, med to double its fragrance

(To be continued.)

FOR SALE AND WANT ADVERTISING

THREE CENTS A WORD, CASH WITH ORDER BUFF ORPINGTON EGGS for hatching, \$1.00 for 15 eggs. 9 chicks guaranteed. Silver cup winners and extra heavy layers. Hugh A. Scott, Caledonia, Ont.

ROOFING MILL ENDS CHEAP. Unequalled for silos, garages, poultry houses and larger roofs. A limited quantity of high grade mill ends of roofing for sale cheap. Write for free samples and prices. Address Factory Distributors, Box 61, Hamilton, Canada.

And a grim game was plotted then and there. Hans, who had been a perfour years. Would like quiet, gentle ones, petual law-breaer since the loss of his 44, Parry Sound, Ont.

The M

The B.C. D T. A. F. Wia

HE Dairie ter 16, 19 lations of passed by Ord will go into that every cre station, milk ice cream ma eery, market n son receiving, dealing in or cream on the to hold a licens on application Agriculture of payment of an license may b comply with the

The Act alecteramery or de have in its en and be respons all samples and cock test of mi

person by the l ture upon pres cant of proof o payment of a f shall be valid f and may be ren without examina time be revoked to comply with tions under whi granted.

A candidate must take and tester's license nouncements o will be issued i Agriculture, due The written exa of a series of q position and ter butter, cheese, i products of the The laboratory

period of several samples of milk, The Rules and that the milk an ron shall be acco weighed, and for sample, represent cans in e each patron, mus must be kept in arate, well-stoppe ed not less ofter and reports mail shipper immedia making of the techeld for verifica after the test is cases of dispute t

The Act provid shall be unlawful pulate the weight of any patron or pls or to fraudules amples. It shall der road over-re fraudulently manitest or to falsify t

til a Dairy Inspe

ment of Agriculta

Penalties of frany violations of t

The Makers' Corner

Buster and Cheese Makers are in-vited to send contributions to this department, to ask questions on matters relating to cheese making, and to suggest subjects for discus-

will go into effect shortly, provides minutes, that every creamery, dairy, shipping firm cut station, milk factory, cheese-factory, "By h the cream manufactory, milk-condensery, market milk plant, and any person receiving, buy heat and any person receiving, buy heat person or paying the person of paying the dealing for paying the contained therein, shall be required to hold a license which shall be issued to application to the Department of Agriculture of British Columbia upon payment of an annual fee of \$1. The license may be revoked by the Department of the license fails to comply with the provisions of the Act.

The Act also provides that every and and be responsible for the taking of all samples and shall operate the IB-boook test of milk and cream.

The license shall be issued to such person by the Department of Agriculture upon presentation by the applicant of proof of his competency and payment of a fee of \$1. The license is the order of the competency and payment of a fee of \$1. The license is the order of the competency and payment of a fee of \$1. The license is the order of the competency and payment of a fee of \$1. The license is the place of rennet, and at a payment of a fee of \$1. The license is the place of rennet, and at a payment of a fee of \$1. The license is the place of rennet, and at a payment of a fee of \$1. The license is the place of rennet, and at a payment of a fee of \$1. The license is the place of rennet, and at a payment of a fee of \$1. The license is the place of rennet, and at a payment of a fee of \$1. The license is the place of rennet, and at a payment of a fee of \$1. The license is the place of rennet, and at a payment of a fee of \$1. The license is the place of rennet, and at a payment of a fee of \$1. The license is the place of rennet, and at a payment of a fee of \$1. The license is the place of rennet, and at a payment of a fee of \$1. The license is the place of rennet, and at a payment of a fee of \$1. The license is the place of rennet, and at a payment of a fee of \$1. The license is the place of rennet, and at a payment of a fee of \$1. The license is the place of rennet, and at a payment of a fee of \$1. The l ice cream manufactory, milk-conden-sery, market milk plant, and any per-

and may be renewed upon application without examination, but may at any doubt it will time be revoked if the licensee fails tory results." to comply with the Rules and Regulations under which the license was

A candidate for a tester's license must take and successfully pass a tester's license examination. The announcements of such examination will be issued by the Department of Agriculture, due notice being given of place and date of such examinations, the convention that up to the time he have written examinations, which we will be seen a convention that up to the time he had been saked to propage that add to such examinations. of a series of questions on the com-position and testing of milk cream, butter, cheese, ice cream and all by-

products of the dairy.

The laboratory test will cover a period of several hours in which the candidate will be required to test samples of milk, cream, etc.

The Rules and Regulations provide that the milk and cream of each pat-ron shall be accurately and correctly weighed, and for testing purposes a sample, representative of the contents cans in each consignment of of all came in each consignment of each patron, must be taken. Samples must be kept in a cool place, in sep-arate, well-stoppered bottles and test-ed not less often than semi-monthly and reports mailed or handed to the subpart immediately following the subpart immediately following the held for verification experience in the held for verification except that in after the test is made, except that in cases of dispute they shall be held uncases of dispute they shall be held un-til a Dairy Inspector of the Depart-ment of Agriculture shall have tested

The Act provides further that it shall be unlawful to fraudulently manipulate the weights of milk or cream of any patron or to take unfair sampls or to fraudulently manipulate such samples. It shall be unlawful to underread, over-read of otherwise fraudulently manipulate the Babcock test or to falsify the record thereof.

Penalties of from \$20 to \$100 for any violations of the provisions of the

Act are provided. Copies of the Act with Rules and Regulations may be obtained upon application to the Department of Agriculture, Live Stock Branch, Victoria.

Experience With Curdalac

WRITER in Farm and Dairy last week spoke rather disparaging-ly of Curdalac. Mr. Robert The B.C. Dairies Regulation Act Gale, a cheesemaker of Peel Co., Ont.

T. A. F. Wiancko, Provincial Districtor.

The Dairies Regulation Act, Chapter 16, 1916, the Rules and Regulations of which have just been passed by Order in Council and which will go into effect shortly, provides will go into effect shortly, provides milities and we are the second of the second minutes, and we get a nice, smooth,

"By heating to 88 degrees we find By neating to as aggress we have that we can get a figmer cut, and the whey will separate from the curd more rapidly, and cook better after cutting. With the acidity of 20, the curd will dip in two hours and fifteen to thirty

have had no experience with Curda-lac in the summer months, but no doubt it will do its work with satisfac-

Cost of Pasteurizing Cream

the convention that up to the time he had been asked to proper that address he felt that he knew, in a hazy cress he felt that he knew, in a hazy cress he relative to pasteurise. When it came to puting it down on paper, however, the problem bulked larger than before, and finally, to determine just what it cost, he kept accurate track of the expenses in connection with one vat containing 2.550 needs on many yielding 876 bbs. of but has of oream, yielding 876 bbs. of but has of oream, yielding 876 bbs. of but has defended to prove the convenience of the conven lbs. of cream, yielding 876 lbs. of but-ter. Here is a summary of Mr. Low's costs, as given to the condensery:

a great to the condense	TV:
1. Cost of heating	20.10
2. Cost of cooling-Water	0.30
-lee	0.50
3. Cost of power	0.08
4. Cost of extra labor	0.95
5. Interest on extra investment	0.10
6. Extra upkeep and depreci-	
ation	0.27
7. Extra loss fat in buttermilk	1.86
8. Extra loss of casein in over	
run	0.65

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TUESDAY "ALL RAIL" - also b

THURSDAY'S STEAMER "Great Lakes Routes'

Your Future is in the West

The fertile prairies have put Western and on the map. There are still usands of sores walling for the man owants a home and prosperity. Take antage of Lew Rates and travel via

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(19)

ASK ANY SHIPPER about our service and prompt

ASK FOR PRICES. The figures for yesterday may be TOO LOW for to-WE FURNISH CANS.

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The Viking is a Quality Machine

Quality Machine

MADE in Sweden in the
largest cream separator
factory in the world; capacity,
180,000 separators a year. The
fact that we manufacture in such
scormous quantities is one reason
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SWEDISH SEPARATOR COMPANY 515 South Fifth Ave. - Chicago III Cream Separators of Quality

mention Farm and Dairy when writing advertisers.

CHEESE-MAKERS:

Curdalac* (Liquid Coagulator) and Spongy Pepsin for Cheese-making

Are the original peptic coagulators.
Are uniform and tested for curding-power.
Are made by the best known pharmaceutical laboratory in the world.
Have stood a full year's test in several hundred cheese factories, and are not an experiment.

Used properly, give a full yield of cheese of prime consistence and flavor.

Cost less than Rennet extract.

Don't delay or experiment with novelties. Specify "P. D. & Co," and get a reliable product. Ask your supply dealer for information and prices.

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POINT AU BARIL MUSKOKA LAKES KAWARTHA LAKES LAKE MAZINAW FRENCH and PICKEREL RIVERS RIDEAU LAKES SEVERN RIVER are delightful resorts and easily reached via C.P.R.

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All cows give some

MILK

Well fed cows of course give

MORE MILK but cows fed COTTON SEED MEAL give the

MOST MILK

and do it at less cost per pound COTTON SEED MEAL

when carefully selected, such as our Brands are, is the most economica and most satisfactory concentrate on the market. It is rich in protein, and offers it to the animal in a highly palatable and digestible form, and cows need protein to produce the maximum amount of milk. A scienthe ration sufficient cotton seed meal More natural farm roughage and less grain products can be used. Ask your Experiment Station.

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win Cure for Spavins, Curb, Ringbone, Splint, Bony Growths and Lameness Spiint, Bony Growths and Lameness from many other causes. It keeps horses working. A \$1 bottle may save a horse for you. Get a bottle the next time you are in town. Sold by druggists everywhere, \$1 a bottle, 6 for \$5, also ask for a copy of our book. "A Treatise on the Horse"—orwrite to

Dr. B. J. KENDALL COMPANY Enosburg Falls, Vermont 117

DEAL WITH

visability of pasteurizing, Mr. Low

"I have not been able to figure out the credit side of this problem, not cause I do not believe that we have not received any credit from pasteurizing, but because we have done other things along with pasteurizing which no doubt improves our butter. For instance, we have graded cream, and just where one of these things leaves off and the other begins, is hard to We seem to have pleased our buyers, and you know they are big partners. I believe we all did something last year, among which, no doubt, pasteurization was the most important that put Afberta butter on the man."

Returned Soldiers and Land Settlement

HE problem of settling the re turned soldier on the land is receiving much attention now adays. The latest recommendations come from the Ottawa Valley Agricul tural Alumni Association, an associ-ation composed of graduates of the Ontario Agricultural College, mostly resident in Ottawa. Their recommendations may be summarized as

There are between 40,000 and 50. 000 Canadians overseas whose former occupation was farming. Such should be permitted to select and purchase available farms to their liking, loans to be made on first mortgage amounting to \$5,000 at four per cent. Interest; \$2,000 to be exempt from interest during the first three years.

Former farm laborers, not inclined to return to their former positions, might be organized into groups of settlers and a farm prepared for each member of the respective groups with and stock and implements to the value of \$500. Payments would be made over a number of years, without in-terest for the first three years, after-

wards at four per cent. per annum. Returned soldiers inexperienced agriculture who may be disposed to train as bona fide approved farmers, should have their earnings supplemented to the extent of nine dollars per month for the first year, seven dollars the second year, and five dollars the third year.

Keep Milking Machines Clean

THE fact that cows are milked by assurance whatever that the milk will be cleaner or healthier. Experience with milking machines has proven than one cannot be too scrupulous about the sanitary condition of the lous about the sanitary condition of the machine or cow. Often the bacterial count has been higher in milk drawn by machine milker simply because the operator failed to pay sufficient at-tention to the cleaning and proper care of the machine.

Another source of contamination is in the stripping. Stripping by hand after the machine, is essential if the best results are to be obtained, but the udder of the cow should be thor-oughly washed. Many operators be-lieve this latter practice is not necessary, since the greater part of the milk is drawn by the machine. Such milk management contaminates the milk far more than the old method of care in cleanliness of the cow, and the hand milker. The modern milking machine can prove an economical blessing to our dairies, but an unsanitary curse unless the proper care and management is applied with its use .- T. E. Leiper

Prisoners at the jail farm are busy Farm & Dairy's Advertisers sowing oats, but they are not of the

A Profit-Sharing Scheme for the Faim

A Plan of Which Criticism is Requested

DITOR, Farm and Dairy: long time I have been studying this pose to set as follows: problem with the idea of solving it to brooten with the idea of solving it to the satisfaction of all the perties in-terested and at last have devised a plan which I think will work in my own case and will possibly apply in many others. In this letter I propose to outline my plan that it may be sidered and criticized by yourself and the readers of Farm and Dairy, before it is put into actual practice.

My farm consists of some 370 acres of land, about 130 of which are at the present time under cultivation, remainder being logged off land which has been fenced and seeded to clover and timothy for pasture. For a nun ber of years cattle were kept as the principal stock and as many as a hundred head of these besides horses, sheep and hogs have been kept on the farm at one time. Besides providing food for the stock, several cars of have were sold each year. Later the price of hay went so high (\$20 to \$22 a ton) that the cattle were disposed of and a aple of hundred tons of hay sold each year. The meadow, being of a rich vegetable loam, has not been very badly exhausted by this treatment, although it would probably be better not to continue it.

Dependence on Hired Help.

For the past couple of years I have business to attend to which has oc-cupied the greater portion of my time and as a consequence have had to leave the farm work almost entirely in the hands of the help employed. In spite of the fact that I have been for tunate in securing the services of some of the best farm hands in country, results have not been all one could hope for, and I am more convinced than ever that some system of profit sharing is the only thing that will bring about the desired end.

As a step in this direction an inebruary of all the stock, implements, buildings, fences, etc., and values set upon the same. The hay, vegetables, grain, and other farm products on the form at that date were also included in the inventory so that at the first of Feb., 1918, and succeeding years a fairly accurate balance sheet can be drawn up. I might add that the farm foreman assisted me in taking the inventory and estimating valuations. Also my dwelling, auto, and cutter Also my dwelling, auto, and cutter were not included in the inventory, as these will be used for my own pur poses and are not, strictly speaking, part of the farm equipment.

Farm land has been valued in this neighborhood at prices running into the hundreds of dollars per acre, but it has been my aim in valuing the farm for the purpose in hand to ignore all inflated prices and place on it a valuation that will stand the test under the most adverse circumstances. The value as placed on the inventory is \$100 an acre for the improved land and \$25 for the logged off portion.
That the men may have full advantage of the products of their industry, I have decided to arrange the division of profits as follows:

Dividing the Profits.

After interest has been paid at the rate of 6% on the capital already invested, and interest on further investments at current rate, taxes, wages, depreciation, and incidental ex penses have been paid, 5% of the pro-fits are to be set aside as a minimum wage reserve fund-to maintain a fair minimum wage in poor years, say \$400—the balance of the profits to be

The divided between the owner (who is problem of obtaining and retain- also the farm manager), the fereman ing efficient farm help is a ser and the other employees in proportion ious one in British Columbia. For a to a basic scale of wages which I pro-

Manager, \$12 a month; foreman, \$12 a month; able farm men, \$10 a month; boys or other help in proportion to

The monthly wage as indicated above to be given to the men at the end of each month and charged to exend of each month and charged to ex-pense account along with other wages. Groceries, coal oil, and fuel for the use of all working under proposed agreement to be charged in the same way, some limit would probably need to be set in the agreement governing the extent of this allowance When day labor is needed to supplement the working force, this will naturally be naid in the usual way at current wages

From the foregoing it will be seen that the men will have even a better of making good than they would have were they to undertake to buy an improved farm for themselves, and this without any of the possibility of losing anything that they may have, while the owner gets interest the money he has invested and has an equal chance with the others to make wages, or a little better, for his efforts. There, no doubt, are many improvements that can be suggested by those who read this letter and I as-sure you I shall be grateful to learn of them through the columns of Farm and Dairy.—H. Calhoun, Yale, Cariboo

Manitoba Factory Dairying

HE year 1916 was a very satisfactory one for the dairymen of Mani-toba. Unprecedented high prices prevailed for all dairy products and there was a substantial increase in the quantity of butter and cheese pro-duced. The following table, which is from the annual report of the Manitoba Department of Agriculture, just issued, gives the status of Manitoba dairying for last year:

Total\$4,483,614.85 Compare the above with the following table for the year 1915:-

Quantity Price per lb.

Product Lbs. Cents Value
 Croamery but-ter
 6,839,667
 29.0
 \$1,693,603.43

 Dairy butter
 4,150,444
 33.0
 958,185.76

 Cheese
 726,725
 18.0
 109,008,76

 Milk
 44,679,000
 2.1
 22,655.00
 496,334 32.0 158,826.88 Total\$3,845,183.82

A dairy ration is good as a basis of feeding, but it must not be followed too closely in dealing with the individual dairy cow. For instance, the cow giving 30 lbs. of milk daily, should get eight to 10 lbs. of grain as her allewance, if the cow giving 20 lbs. of milk receives five or six pounds of grain.

An item appeared in Farm and Dairy recently regarding a report of carry recently regarding a report of poisoned cheese manufactured in Os-goode township in Eastern Ontario. We now have the assurance of Mr. L. A. Zufett, Superintendent of the East-ern Dairy School that "there is neth-ing in it."

HOLSTEIN-

Farm and D exponent of di The great made of the Canadia Association ar paper. Member are invited to a est to Holstein lication in this

ANOTHER SATISF

THE LAKEV!

A MONG the resonance is that.
Lakeve less that.
Lakeve

Champio and the Champio and the Champion and the Champion

Another very prom sold to Mr. G. Bett Corners. This young Madam Pauline Abei days gave 478 lbs. of of butter with an a

ays gave 478 lbs. of butter with an a er dam, Madam Po days gave 835.6 lbs butter, while in .131.8 lbs. milk and th 5 months yet to his will be one of This will be one of the largest, year roce. His aire is Dutchland Others who were I, cure some of the goo selew were Mr. L. A. Ont.; Mr. R. Clarice, J. acus-Swedelius of T. Mossrs. Warner am Cayuga, Mr. J. H. H. Ser, X.B., and last, by the chancel four of the grant of the grant

Type-



A typical daughter,

HOLSTEIN-FRIESIAN NEWS

Farm and Dairy is the leading exponent of dairying in Canada. The great majority of the members of the Canadian Holstein-Friesian Association are readers of the paper. Members of the Association are invited to send items of interest to Holstein breeders for publication in this column.

Rattier, the Canadian champion 1916 but-ter cow, who gave 724 lbs. milk and \$4.54 of butter, with an average test of 4.14 of butter, with an average test of 4.16 of Lakeview Holst old the Arriving features of Lakeview Holst old the First her cent. of butters the cent. of butters are to be congratulated upon their good fortine in securing such pro-their good fortine in securing such pro-their good fortine in securing such pro-their good fortine in securing such pro-tact of the centre of the centre of the centre of the Arriving of the centre of the centre of the centre of the Bronte, Only Manager, Lakeview Farm, Bronte, Only

WHAT A HOLSTEIN COW DOES IN

	No.	Milk	Fat	Per
Fual Aged Cows.	1150	16.280.0	E65 99	9.40
Senior Fours	232	15.537.1	5.9B 25	2 20
Junior Fours	244	14:919 0	E11 49	9.40
Senior Threes	286	74.089.1	477.60	2.90
Junior Threes	264	13.662.9	479.95	9.90
Senior Twos	369	13,067.3	455.28	3.48
Junior Trops	693	11,644.8	401.03	3.44
Average of 3338				
animals		14,526.4	497.15	3.43
Average of class				



Kerr St., near Oakville, Halton Co., On ario Constructed with "Tarvia-X" in 1915

Frost-proof Roads for Canada—

The greatest enemy of highways in the Dominion of Canada is

All winter long the moisture soaks into the ground and freezes to

reezes to a consider-able depth. Finally come spring thaws and that baleful per-iod when the frost is com-ing out of the ground, loosening ov-Preserves Roads Prevents Dust-

the ground, loosening every stone in the road and making the surface rough and muddy. In the fields that process of nature is beneficent. On roads it is highly destructive, for after it has gone through this process a macadam through this process as macadam solidity.

When used as a binder or cement in macadam roads, the Tarvia makes the road shed water like a good roof.

Dampness does not penetrate the road at all. The frost never gets in, and so it never has to come out. In the spring, when other middly and in Canada and impass-Made in Canada 0

able, the Tarvia road will be smooth and clean, show-ing little or no winterdamage. Experien

highways Tarvis roses that on main highways Tarvis roses that on main most economical onesto are under the Dominion. Other types, are so susceptible to frost-damage as well as automobile traffic, that well as automobile traffic, that maintenance and roses that ought to go into extension of the highway system bed to be spent in keeping up the day walk.

Any macadam road can be converted into a Tarvia toad at slight expense, and then it becomes easy to take care of at small expense.

Let us send you a Tarvia booklet showing you how you can get better roads for less money,

THE PATERSON MANUFACTURING COMPANY, LIMITED MONTREAL TORONTO WINNIPEG VANCOUVER

THE CARRITTE-PATERSON MANUFACTURING CO., LIMITED ST. JOHN, N.B. HALIFAX, N.S. SYDNEY, N.S.

The Hallman Public Sale of Holsteins--- Breslau May 23 Type—Breeding—Record—Backing— 40 Head —Mostly Females 1 P.M.

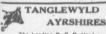
typical daughter of SIR KORNDYKE BOON. This daughter, along with 20 others, are included in the sale

Every animal except four in my big sale on MAY 23 has been bred and raised under my supervision. They are backed by the richest blood in Holsteins, as it has been my practice in 34 years' breeding experience to select only the choicest of sires. Most breeders

SIR KORNDYKE BOON, my Senior herd sir; is a son of the greatest of bulls, PONTIAC KORNDYKE. There will be 20 daughters offered from SIR K. BOON. They are a magnificent lot, and will make choice foundation stock for many new herds. Many of these have not yet been tested, and thus offer splendid opportunities to breeders to make records. have not yet been tested, and thus offer splendid opportunities to breeders to make records. Several sons from this great sire are also included. They are of the same splendid type as their sire. Come, if you need one of these chaps. The deferings in mature animals are specially good, and most of them will be in calf to the senior Herd Sire. Don't fail to get a catalogue and look up the list of yearlings and this year's calves. A few of these are yet my junior sire SIR ECHO POSCH, a son of INKA SYLVIA BEETS POSCH, the sire of MAY ECHO SYLVIA. In every way you will find my herd backed by the choicest lines of blood. Cat a catalogue. A card will bring one. Lunch at the farm on day of sale. Buyers from Western Ontario coming by trolley to Kitchener, between 12 and 1 p.m., will be met by bus at the Bowman House, and taken to the farm.

A. C. Hallman, SPRINGBROOK Breslau, Ont.

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The Leading R. O. P. Herd Large Cows, Large Teats, Large Re-cords, High Testers. Choice Young Bulls and Bull Calves and a few Cows

WODDOISSE BROS. R. H. NO. I. MODREFIELD, ONT

Fernbrook Ayrshires for Sale

Bulls from 8 to 12 months old, out of dams closely related to the two greatest Ayrshire cows in the world. Garclaugh May Mischief and Jean Armour.

COLLIER BROS., Beachville, Ont., Oxford Co.

Matura Gows

Tynija Schulling Hviss Corpacopta
Continue 1881 7 Hviss Corpacopta
Changling Maid, 1881 7 Hviss Corpacopta
Changeling Maid, 1881 6 Hvis Walde
Scris 1846 G Hvis Walde
Changeling Maid, 1881 6 Hvis Walde
Ary Bell 1848, John Chinning, Pickering:
Ary Bell 1848, John Chinning, Pickering
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LOOK HERE

An extra good Jersey Bull for sale—one that I have been using on my own cows. He is large with lots of quality, and was one year old last October. Guaranteed sure. H. H. GEE, Hagersville, Ont.

PEACH BLOW AYRSHIRES

Young Stock for sale, always on hand (both sexes), from high-testing heavy producers. Good udders and large test a special feature of my herd. Three fine young Stree ready for service. Get particulars of these if you need a sire. R. T. BROWNLEE, Peach Blow Farm, HEMMINGFORD, Que.

FAIRMOUNT AYRSHIRES

fature cows and young stock for sale always on hand (both series) from page neavy producing high teating cows, sired by Robin Hoad of Fairmount, pp. U.S.A. No. 49184, son of the famous Netherhall Hobin Hoad, imp., No. 1782. Inspect herd or write for particulars.

Eighth Annual Live Stock Show

Live Stock Breeders' Association

DISTRICT OF BEAUHARNOIS, Ltd.

Will be held at

ORMSTOWN, Que.

JUNE 6, 7, 8,

Come to Ormstown, Quebec on the above dates and see one of the best Live Stock Shows in Canada.

All Horses and Cattle Judged under cover in the large Stadium at 10 a.m., 2 p.m. and 8 p.m. daily.

HORSE RACING ON THE THREE DAYS OF THE SHOW,

Admission to Grounds:

CHILDREN, 15e. Write the Secretary for Prize Lists and other information.

W. G. McGERRIGLE,

When You Write---Mention Farm & Dairy

Perry; Mons Belle Calamity, 112, Fred Toronto; Princess Fayns Posch, 1175, A. J. Ormiston, Burketon; Queen Dek il Acme, Campbell, Unionville; Fern Wayne Fayns, Posch, 1185, T. Cassiati, Waster, Pauline Ruby, 1306, D. A. Dunlog, Toroto, Calaita Syria, 1125, O. T. Cassiati, Waster, Pauline Ruby, 1306, D. A. Dunlog, Toroto, Calaita Syria, 1125, O. T. Cassiati, Waster, Calaita Syria, 1125, O. T. Cassiati, Waster, Calaita Syria, 1125, O. T. Cassiati, Vaster, Calaita Syria, 1125, O. T. Cassiati, Vaster, Calaita Syria, 1126, O. T. Cassiati, Vaster, Calaita Syria

rere purchased by W. Manclark. Wood-ides; H. F. Bouke, Dewnswiss; and G. doyneshan, York Mills, for \$305, \$135 and 10, Torrato; King Tidy Artis Syvita, For respective, Heifers.

De Vries Sylvia, \$335, D. A. Dunlop, J. H. Robson, Woodbridge.

Market Review and Forecast

TORONTO, May 14.—Brratic markets may be looked for during next few The export trade in eggs has a somewhat may be looked for during next few The export trade in eggs has a somewhat mean the property of the export trade in eggs has a somewhat mean trade of the property of the export trade in eggs has a somewhat mean the property of the export trade in eggs has a somewhat mean trade in eggs has a somewhat the property of the pro

WHEAT.

WHEAT.

According to the winter wheat crop forecast from the University Department
of Agriculture, there will be partment
of Agriculture, there will be abandonment of winter wheat accease
a bandonment of uniter States since 1834.

A production of Uniter States since 1834.

A production last year was
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ward, according as much as 22 cents in two
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COARSE GRAINS.

The coarse grain market strengthened with the advances on wheat especially on Quotations. Manibods onto was ignit. Quotations. Manibods onto was ignit on the strength of the

Millfeeds are firm, with a fair demand. Shorts, \$45; bran, \$42; middlings, \$43; good feed flour, bag, \$3 to \$3.10. At Montreal, bran, \$42; shorts, \$46; mid-dlings, \$48 to \$50; moullie, \$52 to \$57.

HAY AND STRAW.

Hay, track here, extra No. 2, \$12 to \$13; mixed, \$9 to \$11.50; straw, carlots, \$8.50 to \$9. At Montreal, hay, No. 2, carlots, \$13 to \$13.50. POTATOES AND BEANS.

POTATOES ND BEANS.
The market for potatoes holds strong, and there seems little prospect for enaise prices. Original of the propect for enaise prices. Original of the seems little prospect for enaise prices. Original or

4.26.
Beans—Japanese, hand-picked, bushel, \$6.50 to \$6.75; prime, \$6 to \$6.25; Canadian, hand-picked, bushel, \$7.75; prime, \$7.25.

EGGS AND POULTRY. Eggs are coming on the market in only

Creamery Creamery	prints.	store	CO		44c 42c	to	4
Choice da	dry prin	its		2.2	39c	to	41
Ordinary Bakers'	awn's b	rinta	*****	2.8	340	to	36

Spot business in cheese is practically at a standardil, and will probably remain so until the ceruminations who were appropriate to secure the surplus Canadian cheese the trade to secure the surplus Canadian cheese the trade trade of the standard of the standard of the surplus Canadian cheese while at String 25½c was also made, while at String 25½c was asked made at Campbellford 28 9-16c secured and at Campbellford 28 9-16c secured on the surplus canadian surplus canadians and su

LIVE STOCK.

On this market, stockers and feeders were steady and strong at last week's prices. There were steady and strong at last week's milkers of good quality of containts were unchanged on the hog man and the denand on the part of packers was only fair and purchases rather light. Quotations are as follows:

Choice heavy steers\$14.6		****
Butchers', choice handy, 10.7		11.26
do good 10.5		11.50
		10.75
Butchers' bulls choice 10.2		2.50
do good 9.0		11.00
		9.75
		8.76
do good 9.71		11.00
do medium 9.71		10.25
		9.50
do medium, 700 to 800	to	10.25
		9.00
		8.50
Grane commen 6.50	to	7.00
Grass cows, 800 to 1,000		
pounds 6.75		
Cutters 5.25	to	
Canners 5.26		5.75
Milkers, good to choice, 85.00		118.00
do com. and medium. 60.00		80.00
Springers 60.00	to	115.00
Calves, veal, choice 11.50	to	13.00
do medium 10.00		11.00
do common 6 00		8.50
do grass 6.00	to	7.00
do heavy, fat 7.50	to	10.00
Spring lambs, each 11.00	to	14.00
Sheep, yearlings, choice 15.50	to	16.50
do common 13.50	to	14.50
do culls 9.50	to	11.00
Sheep, ewes, light 12.00	to	14.00
do heavy and bucks 9.00	to	11.00
do culls 4.00	to	7.00
Hogs, fed and watered		702204
choice 17.00	to	00.00

Postal Corres

May 17, 1917

REBRINGVIL commenced and nicely when the stop to everythin wheat is a common and the rehigh land. Labourges exceeding in this section, \$ present. Potato seed, and hard cattle are not well as the seed of the see

TERRA OOT wheat is badly and cold winds, late. Some are indigned for growth is great weather. Pork i ers are paying; ers are paying; the all coarse grain The clover is frosts. A large sown this year, but greater products.

CAMPUBLIACOS
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The sown for two we.
There still seed grant shipping pigs, atill
finished. Butter a parison with other
parison with other
through the wife
larger amount of
J. A. S. T.

VICTOR TOBIQUE RIVI

Fairmont Ho PETER S. ARI (Perth Co.

Ourvilla

HOME

B. R. Barr, Pr

offers the serv His Dam-PON average te days, aver-

His Sire's Day 578 lbs. mi 2,450 lbs. m

M. McDC

Postal Card Reports

Correspondence Invited.

PERTH CO. ONT

RISHEMOVILLE, May 7—Seeding has commenced and the land was working nicely when the rain of May let put a stop to everything for a few days. Fall wheat is a complete failure in this section, which was a complete failure on the high land. Laborers are very on the high land. Laborers are very on the wares exceedingly high. Hogs are scarce in this section, \$16.50 a cwt being paid at section, \$16.50 a cwt being paid at section, \$16.50 a cwt being paid at section and the section \$16.50 a cwt being paid at section. The section \$16.50 a cwt being paid at section \$16.50 a cwt be

Ourvilla Holsteins Got in the swim and buy a herd header from the family that has produced the first 50-10, cow by get-ting a son of FINDERNE KING MALDIAN BROS, AVLMER, ONT. R. R. No. 1 (Elgin Co.)

call of Premier Foster and the Minister of Agriculture. All parts of the Province were well represented, and farmers, business of the premiers of the control of the contro

SOUTHERN ONTARIO CONSIGNMENT

PERTH CO., ONT.

SUSPRIMOVILLE, May 7.—Seeding had commenced and the land was working at the commenced and the land was working the commenced and the land was a most large arrange and support the commenced and the land was a most grant or the land or the commenced proposed and the commenced was a most large arrange weather. But the commenced was the commenced was a most grant or the land or the commenced was a most grant or the land or the commenced was a most grant or the commenced was a most grant or the land or the commenced was a most grant or the land or the commenced was a most grant or the commenced was a most grant or the land or the commenced was a most grant or the land or the commenced was a most grant or the commenced was a most grant or the land or the commenced was a most grant or the land or the commenced was a most grant or the land or the commenced was a most grant or the land or the commenced was a most grant or the land or the commenced was a most grant or the land or the commenced was a most grant or the land or the land or the commenced was a most grant or the land or the commenced was a most grant or the land or the la

Holsteins For Sale

100 choice cows, helfers, helfer calves, bulls, bull calves. Write us your requirements and we will quote you at attractive prices. Apply at

Apply at
NORFOLK HOLSTEIN-FRIESIAN
BREEDERS' CLUB
J. Alex. Wallace, Sec'y.
Simcoe, Ont.

HOMESTEAD HOLSTEIN STOCK FARM

Offers for sale 11 helfers from 11 to 16 months old. Eight are grand-daughters of PALADIN ORMSEY. All have good breeding, are well grown, of good type, and nicely marked, and at a price that will pay you well.

B. R. Barr, Prop., R.R. No. 1, Mossley, Ont. Harrietaville Station, C.P.R.

"CENTRE VIEW" FARM=

offers the service of PONTIAC KING WALKER.

His Dam—PONTIAC JESSIE—664 lbs. milk, 37.62 lbs. butter, 7 days, average test 4.53 per cent, 2827 lbs. milk, 153.46 lbs. butter 30 days, average test 4.3 per cent.

His Sire's Dam-BROOKSIDE SEGIS KORNDYKE (17149) C.H.B. 578 lbs. mflk, 29.79 lbs. butter 7 days, average test 4.14 per cent. 2,450 lbs. mflk, 119.76 lbs. butter 30 days, average test 4.04 per cent.

Terms: \$50.00 to insure a live calf.

M. McDOWELL Shipping Oxford Centre, Ont.

Fit for Service---Priced to Sell = A Holstein Bull, 12 mos. old, whose dam (with 2nd calf), and sire's

23,000 lbs. milk in 1 year.. (Semi-officially.)

is sired by a % brother to DEKOL MUTUAL COUNTESS, 20,696 lbs. milk, 867.5 butter at 3 years. (World's record when HIS SIRE:-

A son of RAUWERD, only Canadian 29,000 lb. cow, and dam of two daughters, both Canadian Champions.

N.B.—If looking for an EXCEPTIONALLY GOOD BULL, the INDI-VIDUALITY, BREEDING AND PRICE of this one will "get" you.

G. A. BRETHEN, Hillcrest Farm, NORWOOD, ONT.

Registered Holsteins

Bulls from one month to 17 months old for sale. All from our grand herd s ire, Echo Segis Fayne, whose sire is half-brother to Segis Fayne Johanna, the world's wonder cow, that has just made a record of 50 lbs. in 7 days. If you need a well backed bull write at once. JOHN M. MONTLE, Sunnyside Stock Farm

VILLA VIEW OFFERS FOR SALE

choice bull calves all sired by our \$2,000, 35 lb. ALCARTRA bull. The demand has been greater than the supply. 60 head in the herd and only 5 bulls in the large state of the supply. Septimoville. Ont.

ARBOGAST BROTHERS.

Great Demand for Pietje Bulls

Why-Because they are such encodient individuals. Because they are rain encodient individuals. We are offering three youngeters aired because they are all great producers.

We are offering three youngeters aired because the great bull. WOODCHEST SIR CLYDE. They are three of the choicast fareast bull. WOODCHEST SIR CLYDE. They are three of the choicast fareast bull. WOODCHEST SIR CLYDE. They are three of the choicast fareast one born Nov. 22, 1916, from the great now con. PRIDE OF CHARLES, record over 23 lbs., a daughter of PRINCE HERNGENVENDED FROM PLAND. BLIED FROM PLAND AND ASSETTING THE CLYPTHILDE HORADD HILL. Third born years 19,58 bs., a daughter of K. P. A. CANADA and HERCHEVENDE OF AVONDALE. Note the three generations of cows. Write at once the prices.

H. LYNN, Manager, AVONDALE FARM, BROCKVILLE, ONT.

-HIGHLAND LAKE FARMS-

Herd sire, AVONDALE PONTIAC EXAMO (under lease), a son of MAY Record for butter, 41 has not leave the start of the start o

LAKEVIEW HOLSTEINS

Are still in the lead. The latest Helstein year book shows that they held 4 Canadian Records for butter, and Lakeview buils have wen an hoporar and Lakeview buils have wen an hoporar and London Enthibitions, 1913 and 1916. No provided the fall fairs, and we have decided to give 181.00 in good to the man that buys the 1917 winner.

Lakeview. Terms cash or time.

Major E. F. OSLER, Prop. Bronte, Ont. T. A. DAWSON, Mgr.

A HERD SIRE AT A BARGAIN

Billie Hengerveld Plus No. 24510, Vol. 18. Was calred August 13, 1915. He is a big, beautifully marked animal, showing lot of character, is very lively and quest. He has never had a cow to be borded back the second time. Sire is Burkeyje Hengerveld Plus, and dam Eupeni Cases, is thought to have been the best Hoistein cow to be brought to this county. He is a bargain at \$150. Write quick if you want him.

W. E. N. Hodgins

Box 46, Shawville, Que.

Port Perry, R. R. 4

Could spare 10 cows or helfers bred to the Great Bull KING SEGIS PON-TIAC DUPLICATE. Have one yearling bull, and calves from 10 months down. Myrtle, C.P.R. Manchester, G.T.R. R.M. HOLTBY.

FOR SALE

Herd bull VICTOR PAUL PIETERTJE, born July 4, 1914. Easy Herd bull VICTOR FAUL PIETERTJE, born July 4, 1914. Easy to handle and sure. Dam gave 110.8 lbs. milk 1 day. She is the champion cow of Canada for 8 mos. after calving test, with 20.72 lbs. butter and 525.1 lbs. milk in 7 days. His dam's dam is the only cow in Canada with 2 daughters that have both milked 110 lbs. 1 day. ALSO BULL FIT FOR SERVICE, born Apr. 17, 1916. Mostly white in color, sired by a son of a 22,300 lbs. cow. Dam sized by a son of a 27,71 b. cow. son of a 25.77 lb. cow.

Write or come and see them.

S. LEMON & SONS, LYNDEN, ONT.



Spraying Will Count This Year

With the British market cut off there will be only the home market available. This means that only good fruit will sell.

On account of the embargo on fresh apples entering Great Britain, our exports may be cut off. If our crop is again normal the home markets will thus be called upon to consume more apples than ever before.

The man with the best article has the one that will win out in a crowded market.

Do Not Neglect the Spraying

If, owing to shortage of labor, your pruning had to be delayed for another year no harm can result. You may not get the size and color desired, but if the spraying is theroughly done, a crop of good serviceable fruit can be obtained.

Two Thorough Sprays With the Lime Sulphur

Will, under normal weather conditions, give sound apples and pears. Spray just before the bloom and within four days after the bloom drops away. One spray now before the leaf buds open will protect from San Jose or Oyster Shell Scale. Write us to day for Calendar so as you can economize intelligently in spray-

You Can Save on Cultivation

Try the sod strip in the tree rows, and work the land between if you can't manage this, let the land grow up in grass or weeds, then run the mower through it now and again to keep the growth from getting too rank and taking up too much of the moisture necessary for the fruit.

If opportunity offers, you can put in a few profit-able hoars in removing some of the numerous suck-ers seen in the trees this year. These take much of the food that would otherwise increase the size of the fruit. For this purpose there is no tool so satisfac-tory as a fine tooth saw. Cut close to the main limb, otherwise they will sprout again.



ONTARIO

Increased Production of Honey

Very possible - and very profitable. Closer attention to apiaries will get better results. Weed out the swarms ing strains.

The fact that the 1916 Honey Crop was above the average, and that it was all sold before Christmas, shows that the people are hungry for honey. And conditions for 1917 point to even a sharper demand on account of the general shortage in food supplies.

Of course, weather conditions control the crop to a large extent but every bee keeper can assist the much needed increased production by giving the bees every care during changeable weather.

Prevention of Swarming

You can check this with a few precautions. First-study each you can check this with a lew precalmons. First—study each hive carefully week by week, and note the conditions. Second—give each hive sufficient room. Third—provide ventilation and some shade. Fourth—see that the Queen is young, and, if possible, of a non-swarming strain.

Look the Queens over carefully, and, when necessary, plan to re-queen during fruit bloom to increase your profits. You can get new Queen-bees from the Secretary of the Ontario Bee Keepers' Association, O. A. C., Guelph, Ont.

Bees themselves may be bought by the pound from breeders in the Southern States.

Check the swarming habit and one man can look Check the swarming habit and one man can look after four times as many colonies. The 7,560 bee-keepers in Ontario can materially assist in the Greater Production Campaign by giving their spiarles a little-better-than-ordinary care the year. Make very colony produce the maximum amount of Honey. The market is Canada-wide.

Let us send you further information, results of ments, etc., as printed in Bulletins 213 and 233. Write us today.

WRITE US FULLY ABOUT ANY PROBLEM THAT FACES YOU ON YOUR FARM. WE ARE HERE TO BE OF ANY ASSISTANCE POSSIBLE, AND WE HAVE INFORMATION AND THE RESULTS OF EXPERIMENTS, ETC., ON FILE THAT MAY EXACTLY SUIT YOUR CASE. OF COURSE, THIS SERVICE IS ENTIRELY FREE.

The Ontario Department of Agriculture, Parliament Buildings, TORONTO

SIR WM. H. HEARST, Minister of Agriculture

G. C. CREELMAN, Commissioner of Agriculture

