FARM AND DAIRY RURAL HOME



BETTER FARMING

Toronto, Ont., January 17, 1918





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CALDWELLS Conserve and Produce

The Government is urging you to produce more milk. The only way to accomplish this with your herd is to feed them a balanced ration. If you do so, your cows will give a maximum flow of milk.

CALDWELL'S DAIRY MEAL is a balanced meal ration for milking cows. It is high in protein and made from clean, sweet, notritive materials, which are easily digested. When you feed our ment from the rest of the food eaten. It balances their diet perfectly. Feed Caldwell's Dairy Meal if you want more milk and healthler cows.

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DUNDAS ONTARIO Makers also of Cream Substitute Calf Meal, Hog Feed, Molasses Horse Feed and Poultry Feeds of all kinds.



STANDARD FEEDS

Eastern Dairymen Want Higher Cheese Prices

The Work of the Cheese Commission Last Year Appreciated. Cost of Producing Milk, However, is Advancing, so Dairymen Will Ask Government to Try for Higher Prices

NE thing stood out above every-thing class at the M. O. D. A. Convention held last week at Perth-this was that higher prices are required for cheese if its production is to be fully maintained. This subject was discursed from all angles and at year length. and at great length. As a result it was decided to send a monster deputawas decided to send a monster upputa-tion to Ottawa, in the near future, to ask the Federal Minister of Agricul-ture to use his influence with the Brit-ish Government to have a higher price set for Canadian cheese this year. In-cidentally the following facts were brought out:

First—During the past year a num-ber of cheese factories in Eastern Ontario have found it impossible, at the prices they were receiving for chaese. to offer such prices for milk as would enable them to compete with certain other milk markets, and as a consequence had to close their doors.
Second—The increased costs of pro-

ducing milk over those at the time the price of cheese was set last spring will require that many factories pay more for their milk they last year or shut down, and to pay more they

there was a disposition to feel that the farmers should have been consult-ed last year before a price was seet. The subject was introduced by J. A. Campbell, of Ormond, who proposed that a deputation of one man from each county of Eastern Ontario go be-fore the Federal Minister of Agriculture and ask that the Government use its influence with the British Govern creased. He pointed to the closing of cheese factories in certain sections cheese factories in certain sections of Eastern Ontario through their in ability to compete with the pricabling paid for milk by condenseries, and stated that every blow to the cheese industry with the pork industry, which is so important at present. "Cheese and hors," said Mr. Campbell "zo tovether."

J. W. McLeod, of Cornwall, com-mended the resolution. Dairymen will produce but they want a just recom-pense. "We are not cetting the cost pense. We are not secting see con-of production, marketing milk through cheese," said Mr. McLeod, "and next year conditions will be worse. The high price fixed for wheat will make our feeds expensive, and the increased

THE RESOLUTION

and,
"Whereas, this action has tended to discourage the production of milk
for cheese-making; and,
"Whereas, the closing of cheese factories caused by low prices for
cheese and competition from condenseries in turn discourages the production of ports, and

an important part of the army ration.
"Be it resolved that we the dairymen of Eastern Ontario, assembled in season, with a visw to increased production at a reasonable profit to pre-tation including one or more delegates from such, and arrange for a deput ation including one or more delegates from such, and arrange for a deput contains to the season of the season

must receive higher cheese prices. (The advances in the cost of milk production are due largely to the higher prices of grain and labor, and to the increase in freight rates.)

Third-The British Government last year did not, however, set a maximum price for Canadian cheese, but sim ply the price it was willing to pay for it. If Canadian producers could have obtained higher prices elsewhere they were free to do so.

Fourth—The choese trade in Can-ada, because of the complete break-down in shipping and banking facilities, brought about by the war, would have been absolutely unable to have handled the cheese export business handled the cheese export business last year had it not been for the ap-

last year nad it not been for the ap-pointment of the cheese commission. Fifth—That after the British Gov-ernment had set the price it was will-ing to pay for Canadian cheese it aping to pay for Canadian cheese it ap-pointed one commissioner and asked the Canadian Government to appoint two others to look after the buving and shipping of the cheese. These commissioner Ruddick and Mr. James Alexan-der, who worked all season without repumpersion. remuneration

Sixth—The reason higher prices are paid for condensed milk than for cheese is that a larger countries are competing for it. England is our only cheese market.

Seventh—That while the Canadian

Government may ask to have a higher price set for cheese this year it has no power to ensure such action being

The Discussion.

This discussion was opened on Thursday, "Farmers' Day" at the Conven-tion. At that time the members of the commission had not arrived and freight rates will increase this ex-

The resolution was called for, and was passed without a dissenting vote. Both Sides of it.

The resolution, however, was brought up for further consideration on Friday after the members of the Cheese Commission had arrived. Dairy Commissioner Ruddick in his Dairy Commissioner Ruddick in his address, Friday, pointed out the futility of asking the Canadian Government for higher cheese prices. These, he stated, are fixed by the British Board of Trade. The buyer always has the priviledge of refusing an article if he considers the price too high. He showed that had it not been for the work of the human trade. for the work of the cheese commis-sion, Canadian cheese could not have been exported last season at any price because of disorganized trade condi-tions. The commission took up the work because the ordinary channels of trade were closed, and they obtain-ed the best deal possible under the cir-

cumstances for the cheese.

James Alexander, chairman of the commission, reviewed the conditions that led up to the appointment of the cheese commission. He told of the blocked warehouses, the inability of the exporters to get tonnage or to float their shipments because of the uncer-tainty of exchange. When the British Government offered to take the cheese at a certain price, the commission was at a cortain price, the commission was formed to buy and ship the cheese at the price offered by the British Board of Trade, and within three weeks had moved 300,000 cheese. The Cana-dian Government advanced \$46,000,000,

(Continued on page 18.)

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The Recognized Exponent of Dairying in Canada 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 Chothom

VOL. XXXVII

TORONTO, ONT., JANUARY 17, 1918

The Ontario Experimental Union Meets at Guelph

War Time Problems Up for Discussion-What About the Labor Supply?-- and the Root Seed Supply?-- And Greater Production ?---Some Results of the Caledon Rural Survey are Made Public,

THE annual meeting of the Ontario Agricultural and Experimental Union each year at Guelph, and Experimental Union each year at Guelph, selon of probabilisms of the Managament. The meetings of last, week were managament. The meetings of last, week were managament and many of the war-time problems of the farmed and many of the war-time problems of the farmed and habor scarce," remarked Dr. C. A. Zavits, "I believe there is no time in which the Experimental Union can exert a greater influence than at the present time. People are realising, more and more, that if labor is scarce it is important to do those things that will jeid most for least labor. The importance of variety is better appreciated, and I consider that we can actually increase production under that we can actually increase production under present circumstances if we will but pay attention to those points that our Union emphasizes."

to those points that our Union supphasizes."
The growth of the Union's experimental work has been phenomenal. Starting with 12 experimenters in 1886, the number has increased until, in 1917, there were 4,299 Ontario farmers cooperating in the work. Many of the most popular varieties of the various crops were first introduced to the public through these experiments. During the meetings hat week the results of the 1917 experiments were made known and in addition. such sublects of made known and, in addition, such subjects made known and, in addition, such suspects or pressing importance as the labor problem, produc-tion of root and vegetable seed, under-drainingo, testing eathle for tuberculosis and the stimulation of production were discussed. At the banquet on production were discussed. At the banquet on Tuesday night Premier Hearst was the principal

The President's Address.

The manufacture of munitions, the increased "The manufacture of munitions, the increased trade in all commodities required for the equipping and maintaining of a vast army has taken men from the fields whose services could Ill, be spared," said Preeldent Harry Sirett, of Brighton, in his opening address. "But we recognize the need of these industries and have endeavored to spare the men to carry them on. Unfortunately these necessary is. dustries and have endeavored to spare the men to carry them on. Unfortunately these necessary in-dustries are not alone in feeling an impetus, and many industries which are engaged in the produc-tion of what in no sense can be considered as neces-cities are competing with other manufacturers and cities are competing with other manufacturers and which the farmer for labor. Many of these industries which the farmer for labor. has made it almost impossible for the farmer to compete against them."

Mr. Sirett did not blame laborers for going where Mr. Sirett did not biame laborers for going where rewards are greatest. He suggested, however, that "it is as necessary to conscript men to work in the fields as to fight in the trenches," New essential industries, he would place under a restriction, "If farmers are to be urged to produce 'even at a loss," then manufacturers must be prepared to restrict their production 'even at a loss," Among non-essential industries he mentioned automobiles and accessories, confectioners, and articles of necessaries. essential industries he mentioned antomobiles and accessories, confectionery, and articles of personal adornment, not necessary to health or comfort. The liberation of labor resulting would tend to reduce the price of necessary commodities. "The amount of labor available," concluded Mr. Sirstt, "cannot be increased. If remains then for us to see that what is available be employed in industries which are most essential."

Mr. Harvy B. Wobster, the "extraction of the property of the property

are most essential."

Mr. Harvey B. Webster, the new vresident, in leading the discussion, dwelf on the fac. that scar-city of labor in rural Canada is not a new thing, but as old one; rural Canada was being depopulated long before the war started. Thronghout the address of before the war started. Thronghout the address of the rural situation as it is a property season.

Dr. Zavitz's Report.

Dr. C. A. Zavitz, Secretary of the Union, dealt exhaustively with the experimental work, the chief

results of which are summarized in tabulated form in this issue of Farm and Dalpy. The oat, as the most import-in grain crop of catastic described most attention. U. A. C. No. 72, is still the service of the angle of the control of the angle of the ang much heavier than appearances would indicate. Some spring grain mixtures are not desirable, but the combination of oats and barley still out-yields the grains grown separately. Replying to a question Dr. Zavitz recommended O. A. C. No. 21 or Mandecturi barley with O. A. C. No. 3. Daubenay or Alaska oats, all of these varieties of oats maturing are the contractions of the contraction of the

In experiments at Guelph, the secretary reported, In experiments at Guelph, the secretary reported, field cabbage when sown the same as raye, using one and a half pounds of seed to the acre and not thinning, gave particularly good results as a soiling crop, with a yield of 11.8 to 18.3 tons per acre. Only two varieties of potatose were experimented with in 1917,—Extra Early Euroka with a yield of 167.8 bushles; acre and Davies Warrior, 147.3 bushles;

Fertilizer experiments were limited to applications of nitrate of soda and common salt to mangels. The former, applied at the rate of 160 lbs. per acre when

the mangels were three inches in height, increased the yield fully six tons per acre during the tests of five years.

Dr. G. C. Creelman Speaks.

Some of the most immediate needs of agriculture

Dr. G. C. Creelman Speaks.

Some of the most Immediate needs of agriculture in Ontario were tonched upon by Dr. G. C. Creelman. The first great necessity of the coming year he named as a large production of the coming year he named as a large production of the produced more casily, the prica has been authorities on the food situation have used to be the produced more casily the prica has been authorities on the food situation have used to be the produced more casily the prica has been authorities on the food situation have used to be the produced more casily the produced more for it. A plea was made for more spring wheat. Pail work is being seriously interfered with by the necessity of exchanging help at threshing when case the production of the production. The first question has already been might own. The first question has already been might own. The first question has already been might own. The first question has already been out two men the production of the production of the present \$25 to \$50 or \$250. The production of the present \$25 to \$50 or \$250. The production of the present \$25 to \$50 or \$250. The production with the farmer favor the larger cash outlay for his price that all the production of the present \$25 to \$50 or \$250. The production with the production of the present \$25 to \$50 or \$250. The production with the production with the production of the present \$25 to \$50 or \$250. The production with the production with the production with the production of the present \$25 to \$50 or \$250. The production with the production of the present \$25 to \$50 or \$250. The production with the prod

being purchased by farmers. Farm trained boys have proved the best operators, and 100 are expected for the tractor short course at the college this month. In connection with greater production campaigns, and the state of the connection with greater production campaigns, and the state of the tractor of the connection of the connection

economical sources of nutrients and the grain can be used to better advantage clowhere. So far so good. It was wher Dr. Creelman advo-cated the importation of 100,000 Chinamen in bond to relieve the labor situation that he drew an emphatic relieve the labor situation that he draw an emphatic objection from one of his audience and many others looked their disapproval. In conclusion, the Dector urged a most careful study of the see Stuation, which, in the case of both roots and corn, is serious. The corn specialist, he said had advised him that seed corn would not test over 40 per cent, sermina-tion this year.

seen corn wound the control of the control of the capering and the afternoon Prof. J. E. Hewitt told of the experimental work done in weed vandication. The essential features of this address will be given in full in a later issue of Farm and Dairy.

Root Seed Production in Canada.

Floor beed Production in Unions.

Dr. M. O. Malle, Central Experimental Farm, Ottawa, regretted the wide spread, but false iten that European seed is superior to Canadian Root seed was mentioned particularly. In one experiment at Ottawa three favorite varieties or margels were grown from both Canadian grown and imported the control of grown from both Canadian grown and imported seed. In all cases the home-grown seed produced a crop of three tons to three tons seven cwt. greater weight than the imported seed. The speaker advised very farmer to endeavor to grow at least what he would need for himself. To help out the seed situation, which is critical, without supplies in sight for 1019, the Dominion Experimental Parms have rented 350 acres of land scattered over several provinces in which root seed will be grown next year.

Mr. H. Stokes, who has the supervision of the seed.

What Varieties Shall We Grow?

A Summary of Ex	perimenta	l Union	Tests		
Varieties	Compar tive value.	Strav	eld per a	Grain	
Oats (53 tests) O. A. C. No. 72 O. A. C. No. 3	69	1.74	45.86 41.20	1559 1401	
Six-rowed Barley and E mer (20 tests)—					
O. A. C. No. 21 Common Emmer	73	1.34	37.38 42.63	1794 1705	
Hulless Barley (11 tests Black Hulless Guy Mayle	100	1.28	23.88 23.45	1433	
Spring Wheat (24 tests Wild Goose Marquis	100	1.53	20.80	1248 1206	
Winter Wheat (25 tests) O. A. C. No. 104 Improved Imperial A	100	1.78	23.69	1421	
ber	n's 94	1.78	22.91	1375	
Golden Chaff Kharkov	48	1.41 1.72 1.79	21.47 19.34 17.57	1288 1160 1054	
Spring Rye (5 tests)— O. A. C. No. 61 Common	100	2.17	22.50 21.36	1260 1140	
Winter Rye and Wint Wheat (12 tests)	ter		21.00	1140	
Petkus Winter Rye American Banner Wi	m-	1.11	27.89	1562	
ter Wheat		1.02	21.62	1297	
Potter	96	1.20 1.32 1.49	21.84 21.36 21,24	1310 1281 1274	
Field Beans (27 tests)— Pearce's Improved Tr Elliott's Pea	ee 90 100	.86 .65	18.75	1125	

61 .93 14.81 Will Feed Purchases Be Reduced?

N the spring of 1917 the Vermont Agricultural Experiment Station conducted an investigation into the cost of producting milk on 212 dairy farms in that State. The results of that investigation are now available. In addition to stating milk costs, now avaisable. In addition to stating milk costs, the investigators raise a question as to the profitableness of buying concentrates in such quantities as have been common in the past. The report in this connection reads as follows:—

connection reads as follows:—
"The scarcity of commercial feeds during the past winter should teach Vermont dairymen the desirability of raising their feed at home whenever practicable, of growing soiling crops and of feeding slage the year around. Many of them rate utilities on on grain at home for cattle feeding and grow only a boor grade of roughage. Much effort was the past of the pa through the cour'y agents to secure the growing of an increased acreage of clover, affalfa, soy beans

and small grains. Farmers who adopt d these sug-gestions and are planning to a greater extent than hitherto to feed their cattle on their home-grown resources, should be able to satisfy their needs should be able to satisfy their needs at less cost and with equal or greater effectiveness than their neighbors who resort to the feed store.

"Less the reader misunderstand, it

she be said that the purchase of great for dairy attle feeding is pro-por in dormal times provided reason-able prices are charged, if it is used not in lieu of but as a supplement to home-grown material. Under such cirhome-grown material. Under such cur-cumstances the practice is eco omical-ly defensible, provided a new dollar can be seen clearly on its way to re-place the old one laid out in grain purplace the old one laid out in grain pur-chase. The writers always and con-sistently have advocated the well-advised purchase of grain for dairy cattle and expect to continue such ad-yocacy when the times are not out of Joint. However, in view of the ex-tremely abnormal -onditions now obtaining and the high prices of all kinds of grain in comparison to the value of of grain in comparison to the value of the product, they stress more than ever-the necessity of reliance upon home resources and emphasize the impera-tive need that the farm r who pur-chases grain for his dairy cattle make wise choices."

wise choices. If present conditions are lasting, the dairy farms, not only of Vermont, but of Canada as well, must be more self-supporting in the matter of feed. Every farmer should endeavor to produce as much good roughage as his cattle will consume with maximum feeding.

much good roughage as his cattle will a brief swe consume with maximum feeding. Small grains, too, will be grown extensively on farms, where, in the past, purchased concentrates have been relied on almost entirely. At present prices, however, it would be profitable to sell coarse grains and use the money in purchasing such concentrates as bran and cottonseed meal. One thing is certain,—milk prices do not justify heavy buying or heavy feeding of feeding stuffs.

More Roughages Should Be Grown

To Replace Some Grain in the Ration

N EAR-TAMINE conditions the world over are having their effect on the farmer. For the last three years we have heard very little but duction." Now, however, our experts, realizing we farmers are about going the limit in this "production." direction, are coming out with a new watchword, "conservation." In foods for human consumption. substitutes are replacing those that are needed mos overseas. War bread is replacing wheat bread We have our mealess days, and economy is being urged in the consumption of sugar. It is not strauge, therefore, that we should be called to consider economy also in the rations of our juve stock.

The greatest advance in this connection has been made by the dairy farmers of England. They first have given this matter attention because they first were faced with the seriousness of the food situwere tacked with the vertices of the load attu-ation. The dairy expects of England have been testing out different proportions of concentrates in the rations of their cows to determine the most economical ratios for the production of milk. In many cases English distribute have been able to down their grain ration by a pound or so in the day, replacing this by addition to the amount of touglage fed. And they have done this without seriously affecting the milk flow.

In any move we may make toward economy in the feeding of the dairy cow, we must guard against cutting down the feeds to the detriment of milk production or of the health of the herd. We know of some dairymen who are producing a lot of milk this winter and who are feeding little if any grain. Their cows are given all the this winter and who are recding little if any grain. Their cows are given all the good clover hay and casliage they will eat. There is a danger, however, of the cows fulling away in flesh, although it may not be noticeable to one tending them from day to day. And this lack in condition may adversely affect the usefulness of the cow in her next milking d. In many cases, however, it would be pos-for the dairyman to replace some of the grain in the ration by feeding a little extra clover hay

or ensuage.

In feeding live stock grain, we know that it takes approximately five pounds of grain to produce one pound of meat. Now, in food value the five pounds of grain is worth considerably more than the one of grain is worth considerably more than the one pound of meat. This would lead to the conclusion that stock should not be feel on , rain, but further consideration would show this to be poor economy of feed stuffs and poor business policy. It stakes antirely too much feed and too long a time to fat-



The Distinctive Home of a Distinguished Herd.

The round barn on the farm of W. C. Tully, of Athelatan, Que, a well-known Ayrshire breeder. This type of barn construction is not common in Canada, but owners are usually boosters. Further information regarding Mr. Tully's Barn, including a brief review of the advantages and disadvantages of this type of construction, is given on another page of this justice.

ten without grain, and it would cripple the live stock business to cut down the number of stock animals.

However, a saving can be made of the grains which are valuable for human food and for shipping to places of greater need for live stock. More roughages should be grown as well as grains, because with a little added roughage and a little less grain with a little added roughage and a little less grain as considerable saving of grain can be made without affecting the ration appreciably. Hay cannot be of its bulk for the great distance on account of its bulk for the great control of the bulk for the great control of the bulk for the great saving in transportation is made, and a saving in the grains which can be used for human food.

Better results are obtained by feeding young calves three times a day, with the periods between feeding as nearly equal as possible. When fed in this way the calf does not overload its stomach, and the digestion of the feed is more evenly distributed. Regularity in feeding is important. When calves are fed but twice a d.y., the feeding should be as nearly as possible 12 hours.

The farm is a permanent investment. The most of us who buy a farm do so with intention of making farming our life work usually on that farm. Why, then, not make all of our improvements of a permanent nature. Use permanent materials such as cement or masonry, where possible. Plan permanent fences and build good ones. It pays to figure on future use rather than present cheapness, and there is an added satisfaction in the contemplation of a substantial and well kept

Conserve the Farm Wood Lot Coal Scarcity May Tempt Injudicious Cutting

FEW years ago wher every farmer could go to his wood lot in winter and take out not PEW years ago wher every farmer could go to his wood lot in winter and take out not only his own fuel supply, but as much wood for saie as he felt like cutting, fuel economy did not seem necessary. In fact, it often seemed a dearrible thing to burn the wood quickly, for the more wood the necessary was not a few back the necessary with the seemed and a few hard. Farms sold by the size of their clearings. To speak of reforestation in those days was equivalent to delivering one-self up to the keepers of the near lunatic asylum. But times have changed. Old Ontario as achieved wast clearings. In some of the older districts the work has been as well-done that scarcely enough work of the self-way was and the homes are exposed to prizirelite the deaks, and the homes are exposed to prizirelite the left for many addistricts. But at last the wood t is beginning to get some, attention. For years we farmers went bittled constanting rid of our forests as fast as we could and installing coal stoves, but now we find ourselves facing a coal familie. Not only has this increased the prize of wood in town, and therefore made it.

Lave a wood lot from which to

lave a wood lot from which to draw a revenue in supplying wood at these high prices, but in some state the high prices, but in some state the large representation of the supplying the

provement of the woodlot in mind.

In cutting to improve a woodlot the owned should remove the dead and dyling trees, and trees attacked by in-sects or fungt. He should leave the good, sound, straight trees suitable for saw loss, as these will bring more for lumber than for fuel. Crooked, leaning trees may be cut for fuel, at trees of inferior species. Old, ed and decadent trees may be

No portion of the woodlot should be No portion of the woodle is clean cut unless the area is cleared for agriculture or pasture or is to be planted to trees. In cutting is to be planted to trees. In cutting the woodlot for fuel, then, the general tae woodlot for fuel, then, the general scheme should always be to remove the least valuable material. By following this plan the woodlot will be continually improving. Care must be categories that when the continually improving. Care must be taken, however, not to remove so much material that wind will throw the remaining trees or that grass or weeds will come in thickly.

The Wisdom of Registrations A Valuable Lesson from Guelph Winter Fair

A Valuable Lesson from Gueiph Winter Fair A BLOGSFERRED pedigree will not make a cow give a single extra pound of milk. Perhaps this explains why many dairy farmers, owners of pure bred animals, are careless with their registration papers, and frequently neglect allogather the registering of their young stock. They wish to avoid the small expense connected with the transaction. In the long run this neglect is the loss may assume is well illustrated by the case of the cow Lilly that won the dairy test at Gueiph.

Lilly is a pure bred Holstein. She was bred in a herd where registrations had long been neglected. Animals have died unregistered. Breeding records were not available and finally the herd got into such a condition that registration was impossible. such a condition that registration was impossible. As a result, Lilly, with several generations of unregistered pure bred ancestors, must be regarded as a grade cow. Had the registration of her ancestors been continued she would be worth probably 8600. As it is, she is not worth over \$200. Her male attree will be vested and her helfer the probability of calves sold at the prices usually realized for good grade helfers. Nor is the loss on Lilly alone the only consideration. With the sp.endid showing she made at Gueiph, all pure bred Holsteins related to her, which had been regist red, would have increased in value and the total results of her win at Gueiph might easily be counted in thousands of dollars. It was costly carelessness when Lilly's papers were neglected. But still there are hundreds of dairymen who are continuing to take the same risk in their herds!

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Where the Small Sized Cow Excels.

In Eastern Canada are many farms where the land is furtile but rough. It is on this rough land that the lighter breeds of militars excel. The illustration shows the famous Pinchurst herd of Jerseys owned by Ruiter Bros., Mississioni Co. Our

Reaping Satisfaction on a Waterloo County Farm

Mr. Owen Otto is Proud of His Farm and His Cows and He is Doing Well-By F. E. Ellis

"HE farmer who is happy in his work is the most contented man on earth."

When I read this sentence from the pen of an American philosopher, whose books have travelled to all corners of the globe, it seemed natural to think of Own Otto. I have met many farmers who are well pleased with their business, but fow who are so sbundantly happy in it as is this big Dutch farmer of Waterloo county. I stopped at his home for only an hour during a three-day visit to Waterloo county hast spring, but the con-

at his home for only an hour during a three-day visit to Waterloo county last apring, but the contagious quality of Mr. Otto's enthusiasm is one of the most vivid recollections of my trip.

The section in which Mr. Otto lives is one of the best, agriculturally speaking, in Ontario. The land is gently undulating; the soil se a rich clay land is gently undulating; the soil se a rich clay long the section. One hundred acres of it is cleared and under the plow. "Feonle week live all the section. One hundred acres of it is cleared and under the plow. "Feonle week live all the section. there is in the section. One hundred acres of it is cleared and under the plow. "People with live al-ways on this good land, don't groperly know how to appreciate it," said Mr. Otto, with conviction. "I myself started farming on poor sandy land eight miles from here. I used to drive over to this sec-tion and look at the farms and admire the crops and wish that I could get a start on such land. Eight

and wish that I could get a start on such land. Eight yeags ago this place was for sale. The buildings were in had shape, the stabling was discouraging, the land was full of sow thiste and the fences had been neglected. But I knew that the tand was strong and rich, and I knew that on it I could succeed. "And you have succeeded, Mr. Otto?"

The answering smile was good to see. "Yes." he said, "I have a real farm now, I make more money and make it easier, and it is a pleasure to farm on land that responds to every effort. During the last I2 months my boy and I have had over \$1,000 clear of all expenses, including our living, and was the last I2 months my boy and I have had over \$1,000 clear of all expenses, including our living, and was been improving the farm at the same time, the same time of the same time of the same time.

A Diversified Farmer.

Mr. Otto is a directified farmer, but his principal line is dairying. "I can't figure out any surer results than from a good bunch of cows, he remarked. "I have been in the dairy business now about 15 years. I started over on the sandy farm with eight Durham cows. We could hardly fill a 60-lb box of butter in a week, so we went in for more cows. At the same time I went over to see Mr. Baird on the farm now run by his two sons, R. and A. H. Baird, and bought my first Jersey bull." "I went into Mr. Baird's stables," Mr. Otto continued, "and I looked over his splendid herd of grade Jerseys. All of them looking for all the world like pure-bred cattle. "Mr. Baird told me that if I peraevcred with Jersey bulls I cou breed up a breavered with Jersey bulls I cou breed up a Mr. Otto is a diversified farmer, but his principal

like pure-bred cattle. 'Mr. Baird told me that if I persevered with Jersey buils I cou bred up a herd from my grade Durbdms that would be just as good as bis. When I went home and looked at my grade Durbams again, the task of breeding a good herd from them seemed almost impossible. However, I wen, back for many buils after that and the herd has steadily inproved and now you can see what we hay for yourself."

In Mr. Otto's stables, I found 1S milking cows and about 27 head of cattle altogether. The cows were all rood looking grades, showing strongly their Jerse all rood looking grades, showing strongly their Jerse all rood looking grades, showing strongly their Jerse

about 27 head of cattle altogether. The cows were all good looking grades, showing strongly their Jersey breeding. I found that the butter from this herd is made at home and shipped to a grocer in Teronto at something better than the price for best creamers, "We sent our butter to one man for 12 years," said Mr. O'tio, "and we would be shipping to him yet had he not died. We have been shipping to our new man for three years. Last year we shipped

about 5,200 lbs. of butter and vealed many calves from our dairy herd."

Feeding the Herd.

Feeding the Herd.

The Otto farm is ordered so as to provide a maximum amount of feed for the cows and the hogs, which are the most important side line. About 11 acres are devoted to corn. Wisconsia No. 7, and acres are devoted to corn. Wisconsia No. 7, and so that the second secon

I have already mentioned that this farm was offuted with sow thistle when it came into Mr. polluted with sow thistle when it came into Mr. Otto's Lands. "The first year I was on the farm," said Mr. Otto, "in explaning his method of dealing with this pest, "I selected the dirtiest part of the farm and seeded it down. I followed the hay crop with corn and I kept that corn absolutely clean. We went at the rest of the farm in the same The We went at the rest of the farm in the same The We went at the rest of the farm in the same a cleaner farm cut any thistles now, there is not a cleaner farm cut any thistles now, there is not a cleaner farm clean without a clean he corno."

None of the crops are sold off of this farm with the exception of wheat, and, unless the price of wheat is very good as at present, it too is chopped and fed to the pigs. White middlings, the best that can be bought, is the concentrate for both pigs and cows that Mr. Otto purchases most liberally. The dairy meal ration consists of middlings and bran, mixed in the proportion of three to one along with

a small quantity of cottenseed and oil meal, mixed equal parts. A cow in full flow of milk would get about eight pecunds a day of middlings and bran and somewhat over a pint of cottonseed and oil cake. The cows are fed in proportion to the amount of milk they are giving the proportion of the amount of milk they are giving the proportion of the proporti

Pigs a Profitable Sideline.

The pigs are a good second to the cows, as they should be on all farms where the skir: milk is retained at home, and Mr. Otto is known in the district as a crack pig feeder. Shortly before my visit he had shipped five hogs at \$15.50 a cwt., which netted him \$i\$1 each. These hogs were finished on the clowning rainer. Two sacks of onts and one sack following ration: Two sacks of oats and one sack of corn chopped together and then mixed with shorts at the rate of one bag of shorts to two bags of chop. For carrying the hogs along two sacks of home-grown chop are mixed with one bag of shorts and along with this the pigs get lots of skim milk. Seventy to seventy-dive hogs are marketed each year, and in the first few months of this year \$1,025 were received from hog sales. All the hogs are ratised on the farm. Four broot sows are kept and five on the farm. Four broot sows are kept and five on the farm, better the seventy of the seven

"One man should do all of the feeding," said Myotto in discussing his methods with hogs. "Wo
feed three times a day, but the meal at noon is a
light one. The héaviest feed comes at night. In
winter, roots is the biggest part of the meal. Next
to good feed, the pigs must be kept comfortable. I
would work all night cleaning the pig pen rather
than see the pigs uncomfortable."
It was well on in the afternoon and it was a dirty,
disagreeable day when I visited Mr. Otto. Otherwise
I am sure he would have insisted on taking me back
over every acree of his rich black loan farm. His

I am sure he would have insisted on taking me back over every acre of his rich black loam farm. His prefer has read to be a farm was something good to see. His rich hin his farm was something good to see. His rich hin his farm was something to him his a son, now a well-grown lad, whose enther me has a son, now a well-grown lad, whose enther me has a son, how a well-grown lad, whose enther me has a son, how a well-grown lad, whose enther me has the farm is just as great as his father? He, too knows the value of a good farm, and like his father, he is full of plans for further improvement. The first thing on the list is an up-to-date poultry house. Next will come a moc. I new dairy barn. Already fences have been improved and shade trees planted. Before many years, we predict, the Ottos will have a farm of which anyone might well be proud—P. E. E.

Use the Fanning Mill Clean Seed Grain During the Winter

MARTIME farming means efficient farming. Not only must wide machinery and other laborsaving devices be introduced to the farm scheme, but we must also plan to spread out the labor at our disposal, over as much farm work as possible. This means working in winter. These are the days when the fanning mill should be kept

are the days when the fanning mill should be kept going. All next year's seed grain should be cleaned now. You will get this job off your mind early. Late winter will bring work that you were not expecting and good seed grain will keep very nicety. Uncleaned seed grain is very deceptive at planting time. We can't afford to make a mistake during these times of high prices that might result in get these times of high prices that might result in a smaller yield per acre. We conce had a man hired without refulling the seed box. 'After he had been writing behind the seeder for some hours, he noticed that no grain was coming out of the spouts. While that no grain was coming out of the spouts. While it worried him he did not think of looking for the cause, but went right ahead with his work. In the

ght ahead with his work. In the afternoon he and a neighboring farmer who also was seeding, met at the line fence and he be-gan to tell the defect of our seeder. "It's cheating the ground," said he. The neighbor ground," said he. The neighbor went over, lifted the cover of the seed box and found the difficulty.

It is the same with uncleaned

It is the same with uncleaned seed. You are liable to cheat the ground. In seeding we should remember that it is the last few bushels of grain per acre that will make our profits next year. The light seeds that are taken out of the grain with the fanning

mill, will make good stock feed for this winter. If these seeds are left in the seed grain they are left in the seed grain they will only serve as manure in the grain field next year, and they cannot possibly bring as much returns in this way as if they have first been passed through a meat or milk producing machine.—J. P. W.

"he New Champion from Another Angle

of Marilda Clothilde 3rd DeKol, the new world's car, kier official record for one year is 30,467.2 lbs. witer. She is owned by the Colony Farm, Essonde e. B. C.

A cow is n t capable of large milk production unless she be of strong constitution. Small nos-trils, narrow head and limited heart girth are indications of poor constitution.



Gasoline and Kerosene Engines, Saw frames, saw blades, grain grinders, straw cutters, belting, scales, farm and lawn fence. Write for price list.

A. R. LUNDY



IETALLIC ROOFING CO

Bran ford Kerosene Engines 11/2 to 60 H. P. Stationary, Mounted, Traction



These engines are the perfected product of years of study and experimentation with Internal Combustion Engines, and are a demonstration of the company of th

GOGLO, SHAPLEY & MUIR CO., LTD Brantford, Winnipeg, Regins, Calgary



On Having a Shave

Men for their sins Have shaving, too, entailed upon their chins.

-Byron

SN'T it the grand feeling entirely to be newly shaved? I have just been giving my jowls the weekly scrape in preparation for the Sab-bath, and my razor worked fine. A oath, and my razor worked line. A razor is a furmy thing—so temperamental. Stropping a razor is like strapping a boy—you may meet with varying degrees of success. Sometimes your razor is sharp and slips along doing its work so cheerfully that you become infected and grin at your image in the glass and it grins back, and all is revelry and joy. Again, with exactly the same treatment, the razor has its dull fits, just like a regular fellow. And when a razor is feeling out of sorts, it has the faculty of imparting its low spirits to all in its immediate vicinity. But it wasn't of razors I wanted to

write. It was on having a shave. I'm not one of these efficient chaps whom we hear from time to time who can shave with one hand and learn French with the other. When on the lathered face in the mirror, My ears are still of considerable value to me. But if I can't read when I'm shaving I at least can think. So as I was pulling the razor over my face to-night I began thinking of how much of his life one spends shaving, and then I went over some of the differ-ent shaves I've had and some of the different barbers I've wanted to mur-

I always go into a barber shop in an laways go into a parcer sapp in an unprejudiced frame of mind. I go in prepared to be pleused on the slight est provocation. How I come out debends on the barber. If the barber has a smooth, warm hand, plenty of hot water and towels, and a keen razor. I come out humming a cheer-ful ditty and feeling happy and good, the way you do after making your New Year's resolutions and eating your New Year's goose. The proba-bility is that I give the first boy I meet a nickel for his paper and do not wait for the change.

On the other hand, a barber with horny or a cold hand, a barber that the in the lather over much, a barber that shaves against the grain, or a barber that chews tobacca as be works will lash my usually placid worse will now in we used by sheder tenence into a seething red-hot rage. From such a shed I come out hum-ming a song of hete. The probability is that I assaminate the first news-how that molects me, and when I see home I force to be down trusty old

Dobbin for the night.

But to get back to the more pleas-ant topic of shaving—a good shave always leaves a pleasant clay. When the stubble has been moved off, one begins to feel almost respectable. is the same with dressing up. I somehow can't feel despondent when rlean shaved and dressed in a neathanging from a nail behind the bed-room door, or with glassy eyes and a bottle in one hand tast used to contain carbolic acid, it will be noticed that there is a goodly crop of whiskers hiding my smiling face, that my trousers need pressing, and my boots are down at the heels.

Tramps are good examples of the psychological effect of non-shaving. I have never decided whether they don't shave because they are tramps on whether they are tramms because they don't shave, but I rather incline to the latter view. Personally I would deteriorate into a tramp rapid-ly were it not for the saving grace of the razor. And because of the psychotogical influence of it, I believe it will often rest you more, if you are feeling, "drug out," to get into a hardboiled shirt and shiny shoes and the you off to Jim Jones's house warming the state of the ship of the sh

than to "turn in early."
Of course, different

Of course, different cases require different treatment. If you're sufferthen the bed's the thing. And the bed has no more ardent adherent than myself. Especially do I adhere these cold mornings. Occasionally, howtoo much work when he is really suffering from too much whisker.
What he needs is a bracer in the
form of a razor. That's the time it
does a farmer good to get dressed up and take in a show at town.

Sam Ray

Higher Prices Will Prevail

Fallacies Exposed by Prof. G. E. Dav. LE consumer is calling out against high prices. He is calling the farmer hard names. a calling the farmer bard names. As a consumer myself I have little consolation to offer to these other consumers. If the war lasts much longer there will be a more serious food shortage than at present, and with the high prices of the future, we may look back on the year 1977 and wish we could get things as cheaply as we did then." In these words. Prof. Geo. E. Day expressed his belief in the control of the prices of the prices of the prices. in the continuance of high prices for in the continuance of high prices for food in an address during luncheon hour at the recent winter fair at Guelph. Proceeding, he said:
"There is one crop you may depend upon to flourish in times like these—I refer to the crop of fallacies. One of these fallacies, that I might cite to the crop of the crop

I refer to the crop of fameres. One or these fallacies that I might cite is the belief that production can be stimulated by lowering prices. One form in which this belief presents itself is the agitation to prevent the slaughter of calves." Prof. Day then went on to show that much veal is went on to show that much veal is dairy veal, made from calves which were simply "knocked on the head" before high prices stimulated vealing and these veals, therefore, represent just that much of a gain in the sup-plies of meat available.

Another popular demand with which Prof. Day was not in sympathy, was the demand for the prohibition of export of all meat animals. As a means of increasing supply, such a plan of increasing supply, such a plan sounds plausible. "But take the case of a farmer in Western Canada," argued the Professor. "He may live in the drouth area and have a bunch of thin pigs on his hands. He may not have the credit with which to finish He may fear to buy the feed He looks around for someone who wants the hogs. It he finds that he can ship them to the United States and get out of the enterprise with a whole skin, his confidence in the business is sustained and he will go in for more hogs as soon as he has the feed. Shut off the United States market, however, and leave that man in the lurch and he will be out of the business for all time to come." The speaker concluded this portion of his re-marks by stating vigorously that the freer the movement of stock the bet-ter it would be for the feeding of the allies—for that is the object of both the United States and Canada. Speaking of the price of hogs, Prof.

Day remarked that it was little use pointing out to the farmer that the average price for the season has been high if the farmer has had to sell his output on a low market. This, he stated, was a point that was frighten stated, was a point that was frightening the farmer to-day. The price control scheme of the United States food
administration was endorsed and the
opinion expressed that their action
would tend to equalize prices here.
"I see no reason," said Port. Day further, "why a part of the Victory Lean should not be used to finance the hog market.

market."

Speaking to the cattle men he srid:

"Prices of breeding cattle are nigh.

There mey be a tendency for many of
our breeders to sell out a little too Let us not forget that there is a tremendous shortage on both con-tinents and I do not see how the out-look could be better for the cattle It will pay us to stay in the

Mr. Tully's Round Barn

HILE visiting recently the farm of Mr. W. C. Tully, Athelstan, Que., I became interested in his round barn, a photo terested in his round barn, a photo of which appears on another page of this issue. A round barn, covered with matched lumber and nicely painted as Mr. Tully's is, certainly gives a distinctive appearance to a farm, and is in many ways both con-

venient and economical.

One of the most important advantages claimed by Mr. Tully for his round barn is economy of roof space. Considerable roof space is saved by this style of building, and as the roof is the most expensive part of a barn this is quite a consideration. An-other valuable consideration is economy of timber for frame. In Mr. Tully's barn there is no heavy timber whatever. The silo forms the centre support of the frame, while the outside circle is built on the balloon frame system, quite light material being used.

Another advantage well worth cor sidering, especially in our cold eli-mate, is the fact that the sile is completely surrounded by the stable below and by the upper barn above. This acts to prevent freezing in winter, and at the same time moderates the heat and keeps the silage from spoiling during summer. But greatest advantage of the round barn is in feeding. The cows are in a circhutes are situated so as to put f silo and mangers, and much t saved during this operation.

While the round barn has ma vantages, yet a person who has al-ways been accustomed to the rect-angular variety can notice a few points in which the latter excels. With a round barn the farmer would be confined to but one silo, unless one were built outside the barn, and this would be getting away from the real advantage of the round barn system,

in convenience in feeding.

Another disadvantage is the fact of the limitations regarding size. Only one row of cows can be accommodated, and that row forms a circle, the size of which is regulated by the size of the allo and the width of feed passage. Thus if a farmer wished to maintain a herd larger than what could be accommodated in the circle surrounding the silo and feed pas sage, he would have to build another barn for young stock and horses. This Mr. Tully later intends to do, or else build his barn large enough to have a row of box stalls outside the circle of cow stalls and next the out

In the upper storey the amount of space occupied by the floor is a some what objectionable feature. This could be easily remedied by building the barn a little higher and baying a loft over the greater part of the barn floor.

Mr. Tully's stables are warm and comfortable. The wall up to the cell-ing of stable is double boarded, both inside and outside of the frame, with matched lumber next weather and for the inside finish.-G C. McKillican, Field Representative Farm and Dairy.

Tommy-Mamma, why did they put Monday next to Sunday?

Mamma—Don't trouble me now.

dear; I'm sure I don't know.

Tommy (after a pause)—Was it because cleanliness is next to godliness?

grea cathe of th amo that blac whic in w work In Pen silae

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THE HORSE

Finishing Horses for Market

ORSES are not only fed on a larger n'.mber of farms, but are more widely distributed in cities and towns, than any other kind of livestock. Their feeding is, there-fore, of almost universal interest. There are usually one or more of three different objects in view in horse feeding—to maintain health and convition, to enable them to expend a greater amount of energy at work, or improve in general appearance her as a matter of personal pride of the owner or to enhance their mar-ket value. The condition or the amount of fat deposited on a horse increases his market value more than that of animals fattened for the black. It is also true that rations which cause an economical increase in weight may be generally considered as economical in furnishing energy for work

Pennsylvania Experiment Station finishing horses it was found silage, which is made from mould, h horses it was found that corn, is free from mould, has not been exposed to air too long before feeding and is properly supplemented with other feeds which will make up the deficiency in protein, can be fed to horses with safety when care is ased to have them become gradually accustomed to it. Horses fed silage as a portion of their ration consumed less grain, made their gains as

Coming Events

Western Ontario Dairymen's As-

sociation Convention, Strat-ford, Jan. 16-17.

Annual Meetings of Live Stock Breeders' Associations, To-ronto, Feb. 5-8.

ronto, Feb. 5-8.

British Columbia Dairymen's Association Convention, Chilliwack, Feb. 6-7.

Provincial Dairy Convention, Edmonton, Alta., Feb. 20-21.

Ontario Corn Growers' Association, Chatham, Feb. 12-15.

lesser cost per pound, were sleeker and better finished than when fed on rations not containing silage. Using cottonseed meal to replace outs resulted in a cheaper ration, a larger gain, smaller cost of gain and a higher finish in fattening horses.

The ability of a horse to lay on flesh is largely a matter of individu-ality, controlled by disposition, temperament, age, condition, digestive capacity and type. The average gains made by horses weighing over 1,450 pounds at the beginning of the experiment were practically the same as those of lighter horses, which would seem to indicate that weight is not a controlling factor in making gains. Mature horses, six to seven years of Mature horses, six to seven years of seg. make more satisfactory sains than those four to five years of age. A higher finish was secured on the mature individuals. The most profit-sible type of horse for feeding purposes is one which shows every evidence of draft breeding, with clean, dense of draft breeding, with clean, and the second showing a constituting and consection of the second showing the second showing and second showing the s constitution and capacity throughout

When Buying a Horse

HE soundness of a horse is one the first considerations of the buyer and should be of the breeder. If the animal is not sufficiently sound to withstand the use for which he is intended, the logical time to learn of this is before the

Selection must be based primarily a a thorough, systematic examina-ion; the examination should be based

on a clear knowledge of desirable and undesirable qualities. Not only the undesirable qualities. Not only the presence of unsoundness but also the condition or seriousness of the un-soundness should be noted. Tempor-ary unfitness should be distinguished

from permanent unsoundness.

A harried examination is likely to prove a disappointment. Observe blemishes, vice, faulty conformation blemisnes, vice, faulty conformation, unsoundness and general characteristics. Common blemisnes are scars from old wounds, poll evil, scratches, shoe boils and small ruptures. Common vices are halter pulling, cribbing, kicking, stall walking, weaving and biting. Common faults of conforma-tion are straight shoulders, crooked, weak or improperly set legs, ewe weak or improperly set legs, ewe neck, long, weak back, and drooping splints, thoroughpin, spayin, curb, ex-

treme fistula, ringbone, side bones, extreme atrophy of muscles, contracted tendons and broken wind.

General characteristics 'uclude fleshing, temperament, quality, color and age. In final selection, look for the good qualities and weigh them against the defects

Care of Unshod Hoofs

HE colt should have abundant exercise on dry ground. The hoofs will then wear gradually, and it will only be necessary from time to time to regulate any uneven wear with the rasp and to round off the sharp edge about the toe in order the snarp edge about the toe in order to prevent breaking away of the wall. Colts in the stable can not wear down their hoofs, so that every four to six weeks they should be rasped down and the lower edge of the wall well rounded to prevent chipping. The soles and clefts of the frog should be picked out every few days and the entire hoof washed clean. Plenty clean straw litter should be provided. Hoofs that are becoming "awry" should have the wall short ened in such a manner as to straight en the foot axis. This will ultimately produce a good hoof and will improve the position of the limb.

An old Scottish woman wished to

An old Scottish woman wished to sell a hen to a neighbor. "Please tell me," the neighbor said, "is she a'tegither a guid bird? Has she nae fauts at all?"

"Aweel, Margot, the other oid woman admitted, "she ha got one faut. She will lay on the Lord's Day."





The Ford Saves the Hay and Oats the Horses Eat

T HAS been estimated that five acres of land are required to maintain one horse for a year, and that the same five acres would produce nearly enough food for two people. If 50,000 Canadian farmers each replaced one horse with a Ford, 250,000 acres would be added to the loin's source of food supply and enough extra food made available to feed 100,000 people.

Just think what a great service this means to the country at the present time and the benefit to the farmers from the sale of food produced on

A Ford car also saves the farmer a week or more of valuable time each year, which can be used for further productive work. The Ford travels three times as fast as a horse and rig—costs less to run and keep, and is far easier to take care of. With labor so scarce and high priced, time means money, so do not delay in getting your Ford.



E. O. B. FORD, ONT.



Ford Motor Company of Canada, Limited Ford, Ontario

Live Subjects Discussed by E. O. Dairymen

The Price of Cheese Considered Low. Cream Must be Pasteurized to Make Good Storage Butter. Will Keep Eye on Oleo.

HE following points of great interest to dairymen were discussed and dealt with at the first arnual convention of the Eastern Ontario Dairymen's Association, held in Porth. Ont. on Thursday and Friday of last week. First—The securing of a higher price for each of the price of the securing of the price of th a higher price for cheese during the approaching season. Second—The approaching season. Second—The necessity of pasteurization of crean where butter for storage is wanted Third-Coagulants will be scarce and Third—Coagulants will be scarce and high in price this season. Arrange for them now. Fourth—We must not only produce all the food we can, but save all we can if the war is to be won. Fifth—The use of wider ma-chinery on farms will decrease the cost and multiply results in produc-tion.

Over the whole convention hung the shadow of the war. Not only were problems of production and conservaproblems of production and conserva-tion presented to the convention, but in every phase of dairying we are required to cope with difficulties brought on by the abnormal condi-tions under which we live. The attendance at the convention was never surpassed, and for con-tinued interest has never been equal-

led. The need for a higher price on cheese brought out many, while the excellent cheese exhibit, which was declared by the judges "the best ever," doubtless added also to the attendance. Further particulars of this exhibit, with a list of awards, will be found on page 20 of this issue.

Officers Elected.

The following officers were elected, all previously having been nominated at the district dairy meetings. The occupations of the officers and directors are stated as it has sometimes been asserted that the Association is not properly representative of the farming industry. Hon. Pres., John R. Dargavel, M L.A., Eighi, President, R. G. Leggett, farmer, New-President, R. G. Leggett, farmer, New-boro; 1st Vice-President, Joseph Mc-Grath, farmer, Mt. Chesney; 2nd Vice-President, Neil Fraser, cheese manu-facturer, Vanleek Hill; Secretary, T. A. Thompson, Almonte; Treasurer, J. R. Anderson, Mountain View; Audi-tors, J. J. Payne, Brinston, and M. tors, J. J. Payne, Brinston, and M. Bird, Stirling. Executive Committee: H. Glendinning, farmer, Manilla; G. A. Gilespie, M.L.A., creamery proprietor, Peterboro; W. H. Olmstead, cheese

manufacture: Bearbrooks; J. A. Sanderson, merchant and cheese buyer.
Oxford Station; Alex Hume, farmer,
Menie. Directors: B. G. Graham,
farmer, Carp; Wm. Brown, farmer,
Dickinson's Landing; A. J. Robertson,
farmer, Martintown; John Kerr,
cheese buyer, Belleville; Geo. Smith,
farmer, Iroquois; D. Muirhend, retired
farmer, Iroquois; D. Muirhend, retired
farmer, Almonte; W. A. Benson, retired farmer, Picton. The directors
for the other districts will be found in
the list of officers manufacturer, Bearbrooke; J. A. Santhe list of officers

Financial Statement.

The financial statement showed total receipts of \$8,624.62, and total expenditures of \$7,189.13, leaving a balexpensitures of \$7,189.13, leaving a bal-ance on hand of \$1,435.39. The prin-cipal receipts were, balance from previous year, \$1,420.43; membership fees, \$232; government grant, \$2,500; money received from prosecutions, \$1,260; secelpts from dairy exhibits. \$2.765.20

The principal expenditures pay sheet for directors, \$578.65; pro-secutor's salary and expenses, \$863.20; lecturer's expenses, \$562.60; advertising and printing, \$422.67; district meeting expenses, \$242.02; secretary's salary, \$600; expenses for 'airy exhibits, \$3,561.70. J. J. Payne, Auditor.

Don't Quit Cheese Business. "I would advise the cheese dairy-

men to stay firmly by the cheese business," said president J. N. Stone, Nor-ham, in opening the convention. Mr. Stone pointed out that if cheese patness they should get prices that would allow them to compete with other systems of dairying.

Mr. Stone called the attention of the

dairymen to oleomargarine, which was admitted to Canada without consultadmitted to Canada without consul-ing the dairy interests—but strictly as a war measure. It is up to the dairy-men to see that it is knocked out when conditions resume normal, and to do this they must keep organized

Chief Instructor's Report.

Mr. C. G. Publow, Chief Dairy Instructor, in his annual report stated that there were 833 cheese factories in operation cheese factories in operation in Eastern Offiario in 1917, a reduction of 20 from the year before. The new districts of Northern Ontario have now 19 factories operating, and the success with which these ventures in Northern dairying have met gives Northern dairying have met gives try in our newer sections. The in-spectors under Mr. Publow's department found cheese factories generally in better condition than ever before

Despite the reduction in the num-ber of cheese factories in operation the number of patrons supplying milk to factories in Eastern Ontario re-mains practically the same as during 1916. The number of cows increased slightly, from 276 132 to 285 000, but on account of some cheese factories clos-ing early in the season through their ing early in the season through their inability to compare with condenseries the total may of cheese was crity \$89.90,784 be which is a million pounds less than in 1916. The average selling price, however, was two and three arter cents a pound more, so that the total revenue in 1916 about \$17.000 about \$17.00

Last year it took 11.07 lbs, of milk to make a pound of cheese. This year ferior congulants, was s

Forty creameries we during 1917. The am during 1917. The amount of buller during 1917. The amount of buller needled in the season was 4.080 and hea, an increase over the previous access of nine ner cent. The average selling price of buller was 3.95 content, or six cents a pount better than the 1916 price. The qualities of the season o prid price. The quality of the butter produced this year was considerably better than last year. It was nointed out that for best results the raw cream must be of good quality. Even pasteurisation cannot overcome feets which are actually present in the cream. A modified system of

the cream. A modified system of cream grading suitable to Eastern conditions should be introduced. Experiments were carried on in the vield of cheese from mikes containing different percentages of fat. These experiments percentages of fat. These experiments again confirmed the fact that yield is practically in direct proportion to the percentage of fat in the milk. Four chosen were exhibited as the result of one of these experiments. ed as the result of one of theso ex-neriments carried on at the Kingston Delry School by Mr. Zufolt. Mr. Chechan and Mr. Publow. These were from milk testing from 5.3 ner cent. fat down to 22 ner cent. The cheese made from 10a lbs. of 5.3 ner cent. milk well-and nearly five cont. milk well-and nearly five milk. R. well-and nearly five milk. R. was not of 23 ner cent. The these made is the control of the link. R. was not of 23 ner cent. Inc. the vear the number of the same voluntarily nearly by the language. voluntarily paying by test increase I from 86 to 95.

from se to 95.

J. H. Grisdale on "Production."
Thursday was "Parmer's Day" at
the convention. Advantage was taken
of this to have Mr. J. H. Crisdale, Director of Dominion & perimental
Farms, give an address on "Production."

Practically the only means of fur-ther increasing production is by the employment of greater efficiency in farming. More acres cannot be (Continued on page 18.)



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> pulle leas. oats and ther of e be a pose doze feed.

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The Grain the Pullet Eats

He Grain the Pullet Eats
when car in its pullet year?"
hen eat in its pullet year?"
enquires a Dundas county woman. "We keep no track of the grain
coasumed by our bred-to-lay Plymouth Rocks. We just go to the
granary or feed bags and help oursolves. Grain is so high in price this
year that my serves. Grain is so high in price this year that my husband is objecting. He says there is no money in it and he wants the flock reduced or done away We in the house have a special

with. We in the house have a special interest in the poultry, as the egg money is ours. Now, how can we figure out their cost?"

In his bulletin ou "Farm Poultry,"
Prof. Graham, at Guelph, states that birds of the American breeds such as Barred Rocks, Wyamdottes, etc., will Barred Rooks, Wyandottes, etc., will eat 80 to 90 lbs. of grain, including the grain in the dry mash, during their pullet year. Leghorns and other light breeds will consume 16 to 20 per cent. less. Grain this year will probably average about three cents a pound; oats and meal a little less and wheat good commercial flock, but probably high for an average farm flock. Ten dozen eggs are worth four dollars. Allow 40 cts. for labor, 20 cts. for green feed, charcoal, oyster shell and occasional deaths and we have net profit of one dollar per fowl.

This is a conservative estimate and if the birds are well eared for, more than one dollar should be easily than one dollar should be easily realized. The selling value of the fewl next fall will more than pay for the cost of rearing them up to the laying age. At least this is our opinion. Farm and Dairy readers who have kept accounts with farm sized flocks, may be able to give fuller information to our Dundas county frlend

Poultry Ideas

a post-mortem examination of a heavy hen, that died suddenly, will show considerable fat depos-ited between the muscular fibres, it is proof that overfat was the cause of is proof that overfat was the cause or death. Often many of these fibres themselves are replaced by fat, which makes them weak in action and easily ruptured, and those around the eag passage become weak and flabby. If through fright extra strain is because it may also be supported by the cause of the ca brought upon these muscles, the passage is readily torn, and the contents pass into the abdominal cavity, followed by peritonitie and death.

Egg-eating is a vice acquired by s when a tempting broken egg before them. To prevent the ole it is necessary to keep a trouble it is necessary to keep a watch of the condition of the hens. When hens are too fat—and also when there is an insufficient amount of lime in their food, they are not to lay soft-shelled eggs. It is seldom that hens in a proper condition lay eems other than strongly-shelled ones. Hens are often tempted to eat eggs by having shells still wet with the albumen thrown to them. The best way to feed egg shells to fowls is to first heat the shells in the stove oven for about an hour, and then crumble and mix with the soft food.

There is not much profit in fuss-ing with sick fowls. If the early symptoms of disease are promptly

treated there need be no fear of contagion. The flocks should be con-tinually watched so that their condi-tion may be daily noted. Trying to cure roup, or some other contagious disease, is a good way to endanger the tisease, is a good way to endanger the lives of all the fowls. It is not always possible to keep the stock entirely free from sickness, but by early work one is enabled to ward off two-thirds of the signents that it seems poultry are heir to.

The liver of a healthy fowl is of a uniform chocolate-red color, firm, and the right lobe larger than the left. Anything else indicates some disease. Whenever a fowl is killed for table use its liver should be carefully inspected. If greyish or yellowish masses or tubercles are formed in the liver, it is unfit for food, as the deposits are a strong proof that the bird is suffering from tuberculosis. . . .

Fowls laying brown or dark brown eggs as a rule have yellow skin and orange-yellow legs—while those laying light colored eggs have whitish skin and light (lemon) colored legs. By selecting the dark eggs to hatch and breeding from the yellow-skinned and yellow-legged birds, the quality of the dressed poultry will be greatly

The writer one year made a test, for profits, between one good family cow and 50 hens, to see which would yield the most profit. The result was, the the most prout. The result was, the cow's milk was worth, at market rates, \$144.10, and the poultry account (which was mainly for eggs sold) equalled \$160.81. It cost \$52 to feed the crw one year, and \$50 for the hens. The value of the manure of hens. The value of the manure of both was about equal: But the big-gest item in favor of the hens was in point of labor, it requiring double the amount to attend to the cow that it did to the hens.

Leg weakness in ducks is usually caused by dampness. If the duck is compelled to sleep in a damp house, she is likely to be attacked rheumatism or cramps, for which there is no sure remedy. Overfeeding will also do it. Sometimes ducks break down by persistent attention of heavy

Of all the French breeds, the Hou-dan seems to be the best for our changeable climate. They lead in France in every particular except for table use, in which capacity they are classed second to only one varietythe Greve Coeur—but the latter breed does not thrive well with us. The does not three well with us. The Houdans are large, heavy, short-legged fowls, with small, light bone, a re-markable absence of offal. They are of the highest order as table fowls.

There is no room in the poultry world for dudes nor dandles. One day a gentleman, dressed in the latest style, doffing a high hat and wearing kid gloves, dropped in to talk poultry with the writer. The first impression was that our visitor was a man of means, or a business man a man of means, or a business man with a country estate, and wanted to add a positry plant to it. But, in-stead, he explained that he had a few hundred dollars in cash, and he want-ed to invest it in the poultry busi-ness. He made it plain that he be-lieved the work to be next to nothing, and that he had experily figured over and that he had carefully figured out and that he had careful had a how it was possible to realize an income of several thousand dollars a year. But we put a damper on his ardor. We explained that high hats and kid gloves were not the proper paraphernalia for poultrymen—that a man afraid of work would never be successful—that really hard work was connected with the business—that there were a whole lot of stumbling blocks—and so on we enumerated, until, in despair, he gave up the idea. Oh, these air castles; these false dreams. No wonder the failures.— M. K. B.







Cream Saving **Machines**

F you are still setting your milk and skimming by hand, you are losing anywhere from one-fourth to one-third of your one-tourn to one-card of your cream. If you are using a sep-arator, and it is not one of the best, you are still losing an amount of cream that would surprise you if you knew it. Every farm loss or leak that can be stopped this year should be stopped. Buy a Primrose stopped. cream separator and stop the cream loss



Don't imagine that cream left in the skim milk will fatten pige and calves faster. It has been proved scores of times that stock thrives as fast on warm separator skim milk, when a little meaor flax replaces the fat. Cream in the skim milk is dead-loss

Primrose separators get that cream. We can prove to you that they get it all, except about one drop in each gallon.

Besides that, they are well-known as simple, easy-running, easilycleaned machines that last and do the same good work year after year. Buy a Primrose-it will pay back its cost in cream you may now be losing. See the local dealers who handle these separators, or, write us for catalogues.

International Harvester Company of Canada, Ltd.

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definite part of the staunch, reliable Glison Regine—get a Glison on our new easy payment plan, and it work for it to do this fall and winter, you have the yourself a lot of worry, and enjoy that plan to the staunch, reliable Glison Regines have long enjoyed an industries.

Glison Engines have long enloyed an indisputable reputation for depends of the control of the co

GILSON MFG. CO., LIMITED, 257 York St., Guelph, Ont.

ThisClever Shetland Pony-FREE KIND GENTLE N

BOYS! Here is the easiest proposition ever made to bright boys in Canada

WRITE TO-DAY and we will seed you free to copies of the finest Canadian Weekly Magazine you ever saw—daniyoolored covers and fillsutrations—good fiction and articles labs—tast the magazine every one has been will like it so much that you will have done will like it so much that you will have done and dones of customers very quickly. You self outle of Canada Weekly as 6. each and 1.

towns.
Hurry up, boys, and be the first in your wn or district to get the pony and earn a sular weekly income of several dollars.

DEPT. 24 CANADA WEEKLY, 35 LOMBARD STREET, TORONTO

Advertising is something more than the selling of goods and buying of good will. It is sementing higher than "scientific distribution" or business science. It is a great the selection of the se

The Experimental Union (Continued from Page 3.)

work of the Dominion Sugar Com-pany, placed the need of his company for sugar beet seed at 450,000 lbs. for sugar beet seed at 450,000 lbs. This coming season they will wow 200 acres of seed, which will be well with the seed from one acre in 1917. As this seed from one acre in 1917, As this seed now promises to reach one dollar a pound, the returns "looked good" to many of the addence. All who had had experience seemed agreed that to many of the audience. All who had had experience seemed agreed that Canada can grow as good seed as can be imported; or even better. The dif-ficulties in the way are lack of labor and inexperience in the work.

Seed From New Ontario.
Northern grown seed potatoes are superior to those grown in old Ontario. Mr. Justus Miller attributed this superiority to climatic conditions, freedom from disease and their immaturity. Such diseases as leaf roll, mesaie and curly dwarf are found practically not at all in New Ontario, while they are serious in old Ontario. The value of immaturity is now genthe valide of limitation of the control of the cont regular bractice of plowing the son after haying and planting potatoes. The crop of small, immature potatoes he used for seed, and last season dug 356 bushels of potatoes per acre. In the United States the best potato the United States the best potato growers all favor the immature seed from Maine. The natural source of Old Ontario's seed is New Ontario. The speaker stated that 1,609 bags of northern grown seed had been pur-chased for the requirements of the Department of Agriculture. One

Mr. A. Leitch, Lecturer in Farm Management at Guelph, who had the work in charge, explained the objects of the undertaking. Government and college farms could not study systems of farm management, and the proper relationships of the various departments of the farm from the stand-point of profit. In every well settled point of profit. In every well settled township, however, are farms of every size and description. A careful ana-lysis of these farm businesses will show just what systems are most profitable, and the weaknesses of other systems. Caledon, in Peel County, was the township selected for a survey in 1917, and 113 farms were covered. At the time of the Experimental Union meetings returns had been compiled for just 49 of these farms.

The most important deduction

for just 49 of these farms.
The most important deduction drawn by Mr. Leitch from the compilations was the relationship of the farmer's labor income to the size of his farm. The table published on this page gives the results. It will be noticed that the 'income increased as the area increased. Special attention was called to the greater area of crops handled by each man and each horse. handled by each man and each norse. The unproductive capital is not much greater on the large farm than the small one; that is, the money invested in machinery and buildings. "The man smail one; that is, the momey invested in machinery and buildings. "The man on the small farm is right up against it in Ontario," decided Mr. Leitch, "He has too small a business." Illustrating his point still further, the speaker ing his point still further, the speaker stated that although this past year had been "the year when Caledon farmers made money if they ever did," fully one-third of the farmers, those on the smallest farms, had made a labor income of only \$382, or less than hired men got in the same township.
"I'll guarantee," said he, "that for the

RELATION OF SIZE OF FARM TO LABOR INCOME.

D URING the past few months a survey has been conducted in Cale. Township, in Peel Co., ont., on 113 farms. Returns from 48 farms. new complete and tabulated. The results, as presented by Mr. Leite, the complete and tabulated. The results, as presented by Mr. Leite, insofar as they are farm income in relationship to a creakly, are summarized in the following tabulationship.

Under 85 16 72 \$7,132 \$4,317 86-100 12 93 101-124 125-150 151-180 22 56 \$814 58 65 \$1,073 \$1,699 \$1.061

thousand farmers, through the Experithousand farmers, through the Experi-mental Union, will be given a small quantity of northern and southern grown seed for a comparative test. Small lots of northern seed will be distributed to 9,000 rural school child-ren. All of the district representa-tives will conduct tests with New Branawick. New Osterick CAS. tives will conduct tests with New Brunswick, New Ontario and Old On-tario seed. On the provincial farms at Burwash and Ft William about 40 acres of seed potatoes will be grown. Farmers in Northern Ontario will be assisted to some extent in getting in-spected Maritime seed of the two standard varieties, Irish Cobbler and special Maritime seed of the two standard varieties, Irish Cobbler and paid from Nothern Orteste will be placed to the control of the con-trol of the con-trol of the control of the con-trol Clubs in Old Ontario will be placed in touch with sources of seed that were inspected in the past summer and certified free from disease. Fields this year will be inspected with a view to recommending seed next fall. Such are the plans of the Department for the improvement of the Ontario seed potato supply.

"New Ontario is practically free from the physiologic diseases," refrom the physiologic diseases," remarked Prof. J. E. Hewitt, who spoke briefly after Mr. Miller. "These diseases are transmitted through the seed. The only way to avoid them is to get seed in districts that are tree from them." Even with disease free seed, however, precautions arainst ordinary diseases will have to be

The Farm Survey. Ontario has had its first farm surpast 25 years, on the average, this group of farmers have worked for nothing or less than nothing."

The greatest need of Caledon is

181-240

\$1,925

The greatest need of Caledon is good stock. Mr. Leitch Illustrated this by the following summary of survey

results:

Poor Crops. Poor Crops.

Poor Stock. Good Stock.

Number of farms. 12 11 12

Labor Income ... 2505 81.150

Good Crops. Good Crops. Good Stock.

Number of farms. 2505 81.150

Good Crops. Good Stock.

Number of farms. 2505 81.150

Good crops. H will be seen, resulted in a material improvement in incomp. but not so great as did good stock.

Stock. too, can be improved more quickly and more cheaply than crops.

"And the crying need of almost all." results:

"And the crying need of almost all farmers is more capital," concluded Mr. Leitch

Cooperation in Wool Marketing.

Mr. R. W. Wade, who engineered the Mr. R. W. Wade, who engineered the successful cooperative wood marketing scheme of the last year, reviewed his work. Nine thousand application forms had been een out, but up to April 33rd only 100,000 lbs. of wool had been listed. Then an advertising campaign was conducted in the agricultural press, and 100,000 hs. al press, and 100,000 lbs. more came in.
All told, 270,000 lbs. were handled. Mr. Wade exhorted his hearers to not look to price alone, but to support the cooperative principle. The Department materially cheapened the mark-ting expense last year, but in future the

(Continued on page 13.)

District

Prize Winners

in Bread Making Contests Conducted by The Campbell Flour Mills Company, Limited, at Rural School Fairs in Ontario

WE must say the task of picking out the winners of district prizes taxed the good judgment of the experts to the uttermost. The general excellence of the loaves of bread submitted to be judged by Miss Purdy, of the Ontario Agricultural College, was surprising. No wonder great care was needed to decide who were to be the prize winners in each district.

The winners of First Prize in the Local Contests at Rural School Fairs automatically became contestants for District Prizes. In each of the five Districts the first prize winner has received a splendid Pathe Phonograph (value \$150), the second prize winner a valuable set of Dickens' Works,

and the third, fourth and fifth winners each received a fine Canuck bread-mixer. The local prize winners were announced at the different Rurul School Fairs. All prizes were awarded for the best loaves of bread baked with

Cream the West Flour

the hard wheat flour that is guaranteed for bread

The results have wonderfully justified our purpose in offering these splendid prizes. They have encouraged many folks to know by experience that "Cream of the West" really and truly does make just the finest big loaves of highly nourishing, delicious bread of fine texture and good crumb—always. We say "always" because samples of all of the high grade Western hard wheat used in "Cream of the West" are examined by experts in our own chemical laboratory. In this way we are able always to maintain the high quality of "Cream of the West" at uniform excellence.

Here is the Complete List of District Prize Winners

Di	strict No. 1		K, RENFREW, GLENGARRY FRONTENAC, LENNON	STORMONT, DUNDAS,	GRENVILLE, LEED
1st 2nd 3rd 4th 5th	95 points 91 points 89 points 88 points 87 points	Name. Margaret Sutherland Jessie F. MacLean Loretto Ward Helen Dodds Marjorie Ennis	County. Lanark Dundas Lennox and Addington Lanark Lanark	Address, Almonte R.R. 2 Ormond, Ont. Erinsville Middleville Balderson R.R. 1	Fair. Almonte Maple Ridge Lamworth Middleville Harpe
	strict No. 2		NGS, PRINCE EDWARD, PE' VICTORIA,	TERBORO, NORTHUMBE	RLAND,
and ard 4th 5th	96 points 93 points 92 points 88 points 86 points	Gladys Lewis Blanche M. Clarke Alma P. Aldworth Vera Crandell Mildred R. Brock	Victoria Prince E, Durham Prince E, Durham	Dunsford Picton R.R. 1 Bowmanville R.R. 3 Hillier Millbrook R.R. 3	Dunsford Bloomfield Maple Grove Hillier Millbrook
Dis	strict No. 3	YORK, ONTARIO,	PERTH, PEEL, HALTON, W. BRANT, WA	ENTWORTH, OXFORD, I	
and ard 4th 5th	99 points 95 points 93 points 91 points 90 points	Edna M. Armstrong Ruth Cheyne Edith U. Maw Edith Irvine Eletta Terry	Wentworth Peel Peel Halton Vork	Mt. Hope Malton R.R. 1 Mono Road R.R. 2 Hornby King R.R. 1	Mt. Hope Ebeneser Bolton Hornby Kettleby
Dis	trict No. 4	WE	ILAND, HALDIMAND, NOR LAMBTON, M	FOLK, ELGIN, KENT, ES	
and ard 4th 5th	92 points 91 points 87 points 81 points 80 points	Mary E. Carson Gladys M. Botier Blanche Bateman Viola Green Maude Allyn	Elgin Middlesex Lambton Welland Essex	Bothwell R.R. 3 London Jet. R.R. 1 Dresden R.R. 2 Ridgeway Tilbury R.R. 4	Rodney Thorndale Rutherford Bertie Woodslee
	trict No. 5	ALGOMA, SUDBUE	RY, MANITOULIN, BRUCE, O MUSKOKA, PARRY SOU	GREY, WELLINGTON, DU	
rst 2nd 3rd 4th 5th	89 points 87 points 85 points 84 points 84 points	Onnolee Cathrae Olive F. Aitchison Gladys Fawcett Helen Hamilton Mary F. Martin	Grey Simcoe Dufferin Bruce Simcoe	Chatsworth R.R. 5 Tottenham R.R. 3 Hornings Mills Port Elgin R.R. Oro Sta. R.R. 2	Holland Centre Beeton Hornings Mills Pt. Elgin Oro Town Hall

The Campbell Flour Mills Company, Limited, West Toronto

Farm and Dairy

Rural Come

"The Farm Paper for the farmer who milks cows."
Published every Thursday by
The Rural Publishing Company, Limited
Peterboro and Toronto.

47

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The paid subscriptions to Faremann.

The paid subscriptions to Farem and Dairy approximate to the paid subscription and the paid subscription are according to the paid subscription. In areas, and sample copies, water from 20,000 22,500 copies. No subscriptions are accepted at less Sworn detailed statements of circulation of the paper, nowing its distribution by counties and provinces, will mailed free on request.

OUR GUARANTEE.

We guarantee that every acceptance in this issue is reliable. We are able to do this because the advertising columns of Farm and Dairy are as carefully edited as the residing columns, and because to protect our readers, and recommendation of the residing columns, and because to protect our readers, advertises herein deal dishonestly within the our paid-in-advance subscribers, we will make good the within of your loss, provided such transaction occurs within the pair loss provided such transaction course within the pair loss provided such transaction course from the pair of th

The Rural Publishing Company, Ltd PETERBORO AND TORONTO

tead not to contradict and to confute, nor to believe take for granted, but to weigh and consider."

More Hogs

THE various provincial departments of agriculture are all starting out with a will to boost the greater hog production campaign. Some of the provincial departments, notably that in Optario will depend for their increase almost solely on well organized propaganda work. Others, as in Manitoba and Saskatchewan, have plans completed for supplying well bred sows to farmers at cost. But whatever the method adopted, the object is the same everywhere-the production of more pork as one of war's vital necessities. The pairlotic appeal alone will reach every local farmer. Of itself it will be sufficient to greatly increase the hog output of many farms. And many other farmers, equally loyal, will hesitate about that extra sow. Why?

Well, in the first place, the farmer has not yet gotten over his distrust of market fluctuations. He knows that in the past greater production has always resulted in lower prices and the price has been low in proportion as the supplies were great. "If we produce this winter as never before, to where may the market not go?" is his natural question. And as Mr. Ames remarked at the recent U. F. O. convention, farmers have not yet had it demonstrated to them how they can live on patriotism. This is a point of which many propagandists seem to lose sight-that it is from the profits of production that a farmer feeds, clothes and shelters his family. The farmers who can afford to lose heavily on a single department of their farms are decidedly in the minority. As yet, however, neither the government nor the Food Controller has taken any real measures to prevent these fluctuations in the hog market.

Viewing the situation as a whole, we grant that there is much cause for optimism. The great reduction in the world's hog population, the tremendous demands of the allied governments and the decreased output in America, all seem to be guarantees of a strong future hog market. Packers, too, may be fearful of allowing the market to fluctuate as in other

years for fear such action might result in further drastic regulations on the part of the government. Probably our best guarantee of a stable market, how ever, is the promise of the United States food administration to keep the price of live bogs up to \$15.50 by buying heavily on the open market when the live stock market shows weakness. With all of these guarantees, we believe that the future of the hog market is safe. The situation is certainly much more promising than it has been many times in the past when farmers have gone in for greater hog production without any patriotic stimulus. We dis like the idea, however, of placing our main dependence for a profitable market on the financial support of Uncle Sam in his own market centres. It flavors too much of dependence. Farmers are still asking if it should not be possible for our own government to take some action whereby the Canadian hog market will be guaranteed. Two courses have already been suggested-the fixing of a minimum price, and government operation of packing plants. Possibly neither of these suggestions offers the best solution of the problem. Probably the new minister of agriculture, the Hon. T. A. Crerar, is already working toward a solution. If so, an early announcement of his decision would do much to stimulate pork production for the next year.

Our Political Bias

HE following two letters are typical of a goodly number received by Farm and Dairy since the recent Dominion election:

"Farm and Dairy is the farm paper for the farmer who milks Union cows. As I have none of that kind, the paper is of no use to me, so stop it at once.

"I have rejected your Farm and Dairy. I have no use for a Laurier man."

These letters speak for themselves. In one we are accused of being too strongly Laurier; in the other our imputed Unionist tendencies prove equally objectionable. As Farm and Dairy took no part editorially in the campaign, the viewpoint of these partisans must be that "who is not for us is against us." Evidently, however, a brief re-statement of our policy is in order. In the first place, let us state emphatically that Farm and Dairy is nonpartisan. The only political campaigns in which we take any active part are those in which the paramount issue is one vitally affecting agriculture. Such, for instance, was the reciprocity campaign in which not only Farm and Dairy, but all the independent farmers' organizations in Canada and all of the other farm papers actively supported the administration which had negotiated the agreement In the campaign of last December, on the other hand, the paramount issue was not agricultural but national in character. That it was so regarded by Canadian farmers generally is indicated by the nonpartisan stand taken by all of the farmers' organizations in the Dominion and by all but two of the leading agricultural publications.

When it comes to our advertising columns we have a different policy. In these columns all parties are at liberty, within reasonable bounds, to express their views. During the recent campaign advertising space was used by both parties in placing their position before the people. No matter what our personal views may be, Farm and Dairy does not consider that it has any right to suppress the opportunity of any party to place its case before the people. To do so would be a curtailment of freedom of speech, one of the liberties which English speaking people hold dear. Democracy thrives on full and complete freedom of expression. The democra tic citizen desires to hear both sides of the case, balance the arguments pro and con and cast his vote according to his judgment rather than according to the dictates of prejudice. An attempt to suppress the publication of the opinions of one side or the other is an unwarranted interference with this freedom of thought. In the long run it is a two-edged sword, as were such a policy generally sanctioned, the views of one party would be suppressed in one publication, the views of the opposing party in another and the

net result would be that both parties would be given less opportunity to express their viewpoint and the people would have just that much less opportunity to study the questions before the country. Farm and Dairy reserves the right to espouse any cause in which the interests of the farmer predominates, but we must refuse to totally suppress the views, even of the parties with which we disagree. We could not be true to democratic ideals and do other-

The Seed Outlook

O order seeds early will be good business this year. This advice applies to seeds of both foreign and domestic origin. Our supplies of foreign seed, principally roots and vegetables, have been steadily growing scarcer since the war commenced. Originally we depended almost altogether for root and vegetable seed on Germany and the Scandinavian countries, but principally on the former. These supplies have now largely been shut off. Strenuous endeavors have been made, with the cooperation of the Departments of Agriculture, to increase the home grown output and, as a result, the production of root and vegetable seed in Canada and the United States has been wonderfully stimulated. We are still, however, far from making up the deficiency caused by the shutting off of European supplies. Prices will be higher next spring than they were last spring, and in many cases the seed will be of poorer quality; perhaps even then there will not be enough to go around.

In the case of home grown seeds, the greatest scarcity will be that of corn. A few weeks ago Farm and Dairy reported that there would be no surplus seed corn in the southwestern counties of Ontario and fuller information does not engender optimism as to the outlook for even a small supply of home grown seed. Most of the seed corn for the 1918 crop will have to be imported from the United States. Even in that country, with a bumper crop of feeding corn, supplies of well matured seed corn are limited and prices are expected to reach new high record levels. In the case of spring a most Canadian farmers are happily situated in they have abundant supplies of their own.

· The Real Test

W ILBUR J. FRASER, Professor of Dairy Farming at the University of Illinois, believes that the dairy farmer is now up against "the real test." In a recent issue of Hoard's Dairyman, Prof. Fraser writes:

Present conditions make imperative the elimina tion of all poor cows and heifers, but at the same time sound a warning against the slaughter of those which are productive, for the need of more good, efficient cows grows greater every day. Dairy farm enticient cows grouse greater every day. Dairy larming now is up against the real test which haphasard dairying cannot withstand. There is but one wise way for dairymen to move at present and that is to weigh and test the milk of every cow in the herd often enough to determine her production, and then hang on to the good cows and their heifers and send the poor ones to the butcher.

This goes to the root of the situation. Conditions are changing and we must change with them. In the early days, when land was cheap and rich, anybody could grow good crops; farming was not a skilled occupation. Then land increased in price with the influx of population and the soil lost much of its virgin fertility. Farming became a skilled occupation and new methods were demanded, requiring the application of both brain and brawn. The evolution through which dairying is now passing is similar to the evolution in tillage methods just described. We must be more efficient in all our dairy work. Even more important is it that our cow: be efficient producers. Not otherwise can we stay in the business with profit to ourselves. To quote further from Prof. Fraser:

"It is nothing short of a calamity to continue keeping poor cows and raising their helfers in these times of high feed prices and short food supply, and it is an even greater calamity to acrifice the good, high productey cows and their helfers for never have we needed the good cow so much as now."

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The Experimental Union

business will have to be on a business business will have to be on a business basis. In future a charge of one cent a pound, and one cent for freight would cover all charges. "The sys-tem," concluded Mr. Wade, "must satisfy the buyer by turning out. no-thing but the best according to the

grades."

Sources of Seed Supply.

The value of the Experimental Union as a source of seed supply was illustrated by Prof. W. J. Squirrell, in mentioning that most of the prizes at seed fairs in Ontario are given to varieties that were first distributed varieties that were first distributed may be increased to may be increased to may be increased to three years. Mr. R. S. Duncan full the work the district renesantiatives. three years. Mr. R. S. Duncan told of the work the district representatives are doing to facilitate the purchase of good seed. Last spring 156 farmers in York County alone secured their seed through their representative. Forty cars of seed potatoes were brought from the East and distributed. Many farmers in now grows all of cars of seed potatoes were brought from the East and distributed Many farmers, toe, now grow all of a crop from seed originally distributed in connection with school fair work. J. Lockide-Wilson put in a good word for the Standing Field Crop Competitions which were started in 1997 with an which were started in 1997 with an work, as Mr. Wilson acres. This work, as Mr. Wilson acres. This work, as Mr. Wilson acres. This stimulated much interest and set of the seed trade. He anticipated a strong demand for good seed oats and Red Fyfe wheat, with supplies short. There will be a good stock of Marquis wheat, and fair supplies of barley, buck sheat, closed and better fairly supplies of the control of the contr

Mr. L. H. Newman, of the Canadian ad Growers' Association, sent along aper, which was read by Dr. Zavitz. aper, which was read by Dr. Zavitz.
e value of the Seed Centre work of
s association, he illustrated by the
cases of the North Gower Banner
Oat Centre, which has an offer of
\$1.25 a bushel for its entire output.
Mr. P. L. Fancher, Ontario Corn
Specialist, emphasized and re-emphasized the importance of farmers testsized the importance of farmers test-ing their seed corn this spring. Much of it, he said, will not test 40 per cent, germination. The general situation, however, is more hopeful than it was a few weeks ago, as corn suitable for eusilage, and germinating 90 per cent. can be secured in the Southern States.

Under Drainage and Tile Making. Since the Ontario Government started to loan money to farmers to assist in tile drainage work some years ago, only \$300,000 has been taken out. Of this, 90 per cent. is in the two counties only \$300,000 has been taken out. Of this, 90 per cent. is in the two counties of Kent and Essex, and a large pert of the balance in Lambton. Why the the balance in Lambton. Why the control of the tent and the province has not more larged to the tent of the

Alfred Wehlann, of Cairo, a tile arr. Airred Wehlann, of Caire, a tile manufacturer, made a good case for tile drainage as a profitable invest-ment, and incidentally put in a good word for his own type of product, the clay tile. Mr. Nelson Montelth told of leaving the college 28 years before, fired with enthusiasm for tile drains. He laid 25,000 tile with his own hands, and has never made a better invest-

ment since.

Increasing Production.

A discussion of practical methods in food production for the next year occupied a good part of the final afternoon. Prof. 6. E. Day discussed beef cattle and hogs; Dr. C. A. Zavitz, wheat and beans; Prof. H. H. Dean, cheese and butter, and Prof. W. R. Craham, poultry and eggs, Prof. D. H. Jones dealt with the use of the tuberculin test in cardicate subsers. the could be seen that the use of the tuberculin test in eradicating tuberculosis from dairy herds. As all of these addresses will be published in full in future issues of Farm and Dairy, they

need not be summarized here.

Mr. P. W. Hodgetts, in speaking to apple-growers, advised specialists in fruit-growing to carry on as best they can. The small fruit-grower he advised to let the orchard go and attendy to other and more necessary ends of

Election of Officers.

The election of officers resulted as The election of officers resulted as follows: President, H. B. Webster, St. Marya; Vice-Pres, P. S. McLaren, McGarry; Secretary, Dr. C. A. Zavits; Assistant Secretary, Prof. W. J. Squir-rell; Treasurer, A. W. Mason, O. A.C.; Directors, Dr. G. C. Creelman, Selson Montelth, Stratford; C. A. Kyle, Chatham; H. K. Revell, Goderich; D. J.

When Choosing Root Seed Consult These Experimental Union Results.

Name of the last	Compar-	Yiel
Varieties.	ative	perac
	value.	(tons)
Mangels (10 tests)-	_	
Yellow Leviathan	1	
(Ferry)	1	24.86
Long Red	20	24.78
Seed Company) Sugar Mangels (8	91	24.16
tests) Bruce's Glant		
White Feeding. Carter's Improved	100	20.72
White Sugar Swede Turnips (4	71	16.80
tests)—		
Garton's Model Steel, Briggs' Good	85	20.09
American Purple	100	19.89
Top	85	19.06
Intermediate Smooth White Rennie's Mam- moth Short	100	15.32
Rape, Kale and Cab- bage (2 tests)—	100	14.18
Sutton's Earliest Drumhead Cab-		
Thousand Headed	100	11.76
Kale	93	8.17
Dwarf Essex Rape	90	7.11

Swarr Essex Rape 90	7.11
Matheson, O.A.C., Auditors, Gandier, R. R. Graham.	
The Treasurer's statement follows:	was as
Balance from 1916 Government Grant Membership fees at 50 cts Interest in Bank	2,750.00
Expenditures. Experiments Botanical Fyperiments Annual Meetings of Executive Advertising	37.50 173.75

Balance \$2,008.39
The meeting this year, as in past years, was a gold mine of sound, practical information for the October 1999. tical information for the Ontario farmers who attended its sessions. It is regrettable that so few practical farmers. ers avail themselves of its opportuni-



DE LAVAL CREAM SEPARATOR Is a Winner!

THE

Why don't you let it win for you?

A T the great national and international expositions, the juries have invariably acknowledged the superiority of the De Laval.

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the creameries and the big milk plants and dairies, think of the De Laval is best evidenced by the fact that 98 per cent. of the cream separators in use in such plants the world over are of De Laval

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Since 1892 the National Buttermakers' Association has held butter-correction with its Annual Convention, and a classification of the Convention butter made from cream separated by a butter and from cream separated by a butter and specific properties of the Decord possible, and or chance there. Only unusual merit made such a record possible, and or chance there. Only unusual merit made such a re-

cord possible.

Proof of the superiority of De Laval Separators and of De Laval produced cream has been piled up and multiplied so many times that it is no longer questioned. It is an accepted fact.

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MONTREAL

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THANKFUL heart to God for His blessings is the greatest blessing of all. -R. Lucas

The Heart of the Desert

(Continued from last week)

46S HE maybe help 'em run," said Alchise, coming forward. The relief in Kut-le's voice increased Rhoda's anger.

"No such thing! She was persuading me not to go! Kut-le, you give Alchise orders not to touch Molly again. I won't have it!"

"Oh, that's not necessary," said Kut-le serenely, undians are pretty Kut-le serenely. "indians are pretty good to their women as a general thing. They average up with the whites, I guess. Molly, get up and help Cesca with these!" He flung some newly killed rabbits at the gaplas sumaw, who still lay where sabhad fallen

Rhoda, trembling and glowering, walked unsteadily up and down bewalked unsteadily up and down be-neath the cottonwoods. The details of her new existence, the dirt, the roughness, were beginning to sink in on her. She paced back and forth, lips compressed, eves black. Kut-le stood with his back against a cottonstood with his back against a cotton-wood eying the slender figure with frank delight. Now and again he chuckled as he rolled a cigarette with his facile fager. His hands were fine as only an Indian's can be: strong and sinewy yet seconds with stender fin-gers and almond-shaped nails.

He smored contentedly with his He smothed contentedly with his eyes on the girl. Inscrutable as was his face at a casual glance, had Rhoda observed keenly she might have read much in the changing light of his eres. There was appreciation of her and love of her and a merciless determination to hold her at all costs And still as he gazed there was that tragedy in his look which is part and portion of the Indian's face.

Silence in the camp had continued Silence in the camp had continued for some time when a strange young Indian strode up the slope, nodded to the group in the camp, and deliberately rolled himself in a blanket and dropped to sleep. Rhoda stared at dropped to sleen.

Alchise's and Cesca's son," said distance and remove all trace of our

trisil. Not an overturned pebble misses his eve. I'll need him only for a day or two."
"Kut-le," said Rhoda suddenly, "when are you soing to end the farce and let me go?"

The young man smiled.
"You know the way the farce usually ends! The man always gets the cirl and they live happily forever

"What do you suppose Jack and Katherine think of you? They have loved and trusted you so!" For the first time the Indian's face

showed pain. they see how happy I am going to

Phoda controlled her voice with dif-

"Can't you see what you have done? No matter what the outcome, can you believe that I or any one that loves me can formive the outrage to me?"
"After we have married and lived abroad for a year or two people will

remember only the romance of it!"
"Heavens!" ejaculated Rhoda. She returned to her angry walking.

Molly was preparing supper. She worked always with one eye on Rhoda, as if she could not see enough of the girl's fragile loveliness. her attention thus divided, she stumbled constantly, dropping the pots and spilling the food. She her-self was not at all disturbed by her mishaps but, with a grimace and chuckle, picked up the food Cesca was annoyed. She was tend-ing the fire which by a marvel of skill ing the fire which by a marvel of skill she kept always clear and all but smokeless. At each of Molly's mis-haps, Cesca hurled a stone at her friend's back with a savage "Me-yah!" that disturbed Molly not at all.

Mercifully night was on the camp by the time the rabbits were cooked and Rhoda ate unconscious of the dirt the food had acquired in the cooking. When the silent meal was finished, Kut-le pointed to Rhoda's blankets. "We will start in half an hour. You must rest during that time."

Too weary to resent the peremptory tone, Rhoda obeyed. The fire long



Hay Making With a Potato Fork.
This young lady is enjoying her visit
in the country immensely and is here
seen all ready to try her hand at
anying.

since had been extinguished and the since had been extinguished and the camp was dark. The Indians were to be located only by faint whispers un-der the trees. The opportunity seem-ed providential! Rhoda slipped from her blankets and crept through the darkness away from the same

> CHAPTER VII. The First Lesson.

After crawling on her hands and knees for several yards, Rhoda rose and started on a run down the long slope to the open desert. But after few steps she found running impossible, for the slope was a wilderness of rock, thickly grown with cholla and yucca with here and there a thicker growth of cat's claw

er growth of cat's-claw.

Almost at once her hands were torn and bleeding and she thought gratefully for the first time of her buckskin trousers which valiantly resisted all detaining thorns. The way dropped rapidly and after her first wild spurt Rhoda leaned exhausted and panting against a boulder. She had not the vaguest idea of where she was going vaguest idea of where she was going or of what she was going to do, except that she was going to lose herself so thoroughly that not even Kut-le could find her. After that he was quite willing to trust to fate.

After a short rest she started on.

every sense keen for the sound every sense keen for the sound of pursuit, but none came. As the sil-ent minutes passed Rhoda became elated. How easy it was! What a pity that she had not tried before! At foot of the slope, she turned up

the arroyo. Here her cou heavier. The arroyo was cut by deep ruts and gullies down which the girl slid and tumbled in mad haste only to find rock masses over which she crawled with utmost difficulty. Now and again the stout vamps of her bunting boots were of her hunting boots were pierced by chollas and, half frantic in her haste, she was forced to stop and struggle to pull out the It was not long before

It was not long before the shri's scant strength was gone, and when after a mad scraughle she fell from a boulder to the ground, she was too done up to rise. She lay face to the stars, half sobbing with excitement and disappointment. After a time, however, the sobs ceased and she lay thinking. She knew now that until she was inured to the desert and had a working knowledge of its ways, esknowledge of its ways, escape was impossible. She
must bide her time and
walt for her friends to rescue her. She had no idea
how far she had come from
the Indian camp. Whether
or not Kut-le could find her
again she could not guess.

If he did not, then unless a white stumbled on her she must die in the stumpled on her she must die in the desert. Well then, let it be so! The old lethargy closed in on her and she lay motionless and hopeless.

From all sides she heard the night From all suces see neard the hight howls of the coyote packs circling nearer and nearer. Nothing could more perfectly interpret the horrible desolation of the desert, Rhoda thought, than the demoniacal, long-drawn laughter of the coyote. How drawn laughter of the coyote. How long she lay she neither knew nor cared. But just as she fancied that the coyotes had drawn so near that she could hear their footsteps, a hand was laid on her arm.
"Have you had enough, Rhoda?"

"Have asked Kut-le.

"No!" shuddered Rhoda. "I'd rather

The Indian laughed softly as he lift-ed her from the ground.

"A good hater makes a good lover, hoda," he said. "I wish I'd had time to let you learn your lesson more thoroughly. I haven't been twentythoroughly. I haven't been twenty-five feet away from you since you left the camp. I wanted you to try your hand at it just so you'd realize what you are up against. But you've tired yourself badly."

Shoda 'ay mute in the young man's arms. She was not thinking of his words but of the first time that the words but of the first time that the Indian had carried her. She saw John DeWitt's protesting face, and tears of weakness and despair ran silently down her cheeks. Kut-le strode rapidly and unhesitatingly over the course she had followed so painfully and in a few moments they were

fully and in a few moments they were among the waiting Indians. Kut-le put Rhoda in her saddle, fas-tened her securely and put a Navajo about her shoulders. The night's misery was begun. Whether they went up and down mountains, whether they crossed deserts, Rhoda neither knew crossed deserts, knoda neither knew nor cared. The blind purpose of clinging to the saddle was the one alm of the dreadful night. She was a little light-headed at times and with her head against the horse's neck, she murmured John DeWitt's name, or sitting erect she called to him wildly. ne. At such times Kut-le's fingers tightened and he clinched his teeth, but he ed and he clinched his teeth, but he did not go to her. When, however, the frail figure dropped silently and inertly against the waist strap he seemed to know even in the darkness. Then and then only he lifted down, the squaws massaged wracked body, and she was put in the saddle again. Over and over during saddle again. Over and over during the night this was repeated until at dawn Rhoda was barely conscious that after being

lifted to the ground she was not remounted but was covered carefully and left in peace.

left in peace.

It was late in the afternoon again when Rhoda
woke. She pushed aside
her blankets and tried to
get up but fell back with a
groan. The stiffness of the groan. The stiffness of the previous days was nothing whatever to the misery that now held every muscle rigid. The overexertion of three nights in the saddle which the massaging had so far mitigated had asserted itself and every muscle in the girl's body seemed in the girl's body seemed acutely painful. To lift her hand to her hair, to draw a long breath, to turn her head, was almost imposothla

Rhoda looked dismally about her. The camp this time was on the side of a mountain that lay in a series of mighty ranges, each separated from the other by a narrow strip of desert.

White and gold gleamed the snow-capped peaks. the snow-capped peaks. Purple and lavender melted

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tor,
On the farm of Mr.
P. Webster, Victoria Co., Ont., the
sheep in the illustration runs the
separator. He is
seen enjoying his
evening repast
from the hands of
a little visitor from
the city. the shimmering desert into arm across her eyes to hide the hate-ful sight, and moaned in pain at the movement

Power Be-

hind the Senara.

tor.

movement.

Molly ran to her side.

"Your bones heap sick? Molly rub
'emp" she asked eagerly.

"O Molly, if you would!" replied
Rhoda gratefully, and she wondered
at the skill and gentleness of the In-

dian woman who manipulated the aching muscles with such rapidity and acting muscles with such rapidity and firmness that in a little while Rhoda staggered stiffly to her feet. "Molly," she said. "I want to wash my feet."

my face.

Molly puckered up her own face in her effort to understand, and scratched her head.

ratched her head.
"Don't sabe that," she said.
"Wash my face!" repeated Rhoda
a astonishment, "Of course you unin astonishment. derstand."

derstand."
Molly laughed.
"No! You no wash! No use! You just get cold—heap cold!"
"Molly!" called Kut-le's authorita-

tive voice. Molly went flying toward the packs, from which she returned with a canteen and a tiny pitch-smeared basket. Kut-le fokowed with a towel. He grinned at Rhoda.

grinned at Rhoda.
"Molly is possessed with the idea
that anything as trail as you would
be attuffed out like a candle by a drop
of water. You and I each possess a
lone lorn towel which we must wash
out ourselves till the end of the trip.
The annuaw don't know when a thing

The squaws don't know when a thing

(Continued or page 17.)

THE UPWARD LOOK

One of God's Angels

HE Lord gave, and the Lord hath Tills Lord gave, and the Lord hath taken away: blessed be the name of the Lord.—Job 1:21.

Have you had one of God's own angels in your home for two and a half happy years? Those that have have had no could have her content.

never had one could have no concention of the joy over such a one. Then

God took her.

At first, in the bitter grief and ter-At first, in the bitter grief and ter-rible missing, the heart refuses to be conforted. One cannot put away the conforted. One cannot put away the anticle of the phanned for and the ambiguity of the phanned for and the anticle of the phanned for and the anticle of the phanned for and the anticle of the phanned for and phanned phan and time, all these dear and glad anticleations will see dear and glad anticleations will see dear and pra-cious memories, that and precious memories, that and precious memories, that and precious days she was with us. Can you imagine what life would be now with-out these memories?

With deep gratitude we can thank With deep gratitude we can thank Him for the joy and the gladness she brought us. If we had not had her, we could have had no conception of the joy and happiness that life holds in the possession of little children.
We can thank Him for the wonder-

We can thank Him for the wonderful influence on our own lives, of that little life so far. She has guided us and led us, and given us such a knowledge of higher and deeper and nobler loughns and hopes and desires, to develop the beat that is within us. Though life will have many lesolate moments without how much more grandly full it is, and now much more grandly rull it is, and will always be, on account of her brief any with us. "Blessed be the name I the Lord."—I. H. N.

What the Year Has Taught Us With the Household Editor.

OW quickly time speeds by. It seems but a few short weeks since we were greeting the year a since we were greeting the year 7, and new it has sped from us. In the morning of life we are apt to look allead, and think our time on earth is apt to be very long. As we grow older, however, the wheels of time seem to speed faster and faster, time seem to speed faster and faster, as that one Christmas scarcely passes so that one Christmas scarcely passes before we realize that another one is upon us. A year of unknown possi-bilities lies before us. We cannot lift the vell from one of the 365 mysteridays of the year which come to make far and the procession. But when it almost the procession. But when the moment comes. God Husself will have vell. True, a new year begins even well. we are only in the babli of constinct we are only in the babli of constinct of the calendar year many ensaged in of the calendar year many ensaged in business pursuits aim to balance their accounts. Some of us also try to balance to the calendar year if the accounts, and all the the vell from one of the 365 mysteri-

accounts. Some of us also try to balance our life accounts, and all the world takes a fresh hold and begins to count the days over again.

Is looking over the past year, we are naturally led to wonder what we have learned. It is a good thing to take a yearly inventory of one's assets, liabilities and future possibilities, cataloguing the mistakes as well as the successes for future reference. as the successes for future reference. What has 1917 taught us about conwhat has 1917 taught us about con-serving time values, mind values, strength values and soul values—the things that make up real life values?

Time is the one thing of which we all have an equal amount—"all the time there is." But everything detime there is." But everything de-pends on what use we make of that time. The war has caused us to set new standards of valuation on time as new standards of valuation on time as well as on many other things. While many of us did considerable "war work" during the first years of the war. 1917 bus taught us to a still greater degree that we have time to do work which will helto to sustain the and bring comfort to many who suffer We have been able to do these things by making use of time which before the outbreak of hostilities was oftentimes squandered. There is still much for us to learn, however, regarding time values

ing time values. The year 1917 has taught us to think more seriously—to think less of frivolity and more of the worth-while things. When we commence to think seriously we we commence to think seriously we are also improving our minds. A great philosopher once aid: "My mind to me a kingdom at a mind mind to me a kingdom at a net the person who pays some at another to storing the mind, keeping and outreaching, unconsciously fulfillia this idea more and more an place of the more active ones of youth, thus proving a wonderful asset in

Probably, too, the majority of us have learned something during 1917 about strength values. There have been so many calls for help of various kinds and so many ways in which we have been anxious to "do our bit," that we have perhaps had a tendency that we have perhaps han a tentions, to forget our physical limitations. We should not measure our tasks and duties by what others can do or what they think we ought to do, but by what we know we can do without overtaxing the body. Health is one of our most valuable resources, yet too often it is not valued until it is lost through ignorance. ignorance or overtaxing of our hodies

And what about soul values? Times And what about soul values? Times like the present bring out the best and the worst there is in mankind. Selfish greed and lust, on the one side, debase man into the class of the side, debase man into the class of the lower animals; while chivalry, nobil-ity and unselfishness, on the other, crown him with that true crown him with that true nobility which makes it possible for the sorely-bereaved ones to proudly lift their heads, realizing in a new and per-sonal manner that living truth which He of Galilee spake when He said; "Greater love hath no man than this, that he lay down his life for his friend." Has 1917 not been teaching us that gold is purified by fire, that apparent calamities frequently prove blessings, and to lift our eyes with hope in an earnest gaze for the first glimmer of a brighter day?

glimmer of a brighter day?

Some of the events of 1917 have taught us to think more seriously and to study more about Scripture prophesies and the relation of the events of to-day with Christ's second coming. This is particularly true in connection with Jerusalem falling into the nection with Jerusalom falling into the hands of the British. It was prophe-sled that Jerusalem would be down trodden by the Gentiles until the "times of the Gentiles would then be silven back to the Jews. Indications would lead us to believe that prophery to holes fulfilled at the screent there. is being fulfilled at the present time

Has 1917 not taught us also to appreciate to a greater extent the true spirit of Christmas—the spirit of love, devotion and true unselfishness? If we could all catch and reflect the glory and joy of God throughout 1918, the and joy or God throughout 1918, the year would stand out like a star in history. Hamoiness is a very import-ant part of Christianity. As someone ant part of Christianity. As someone has said: "In Christianity the first thing necessary is cheerfulness, the second is cheerfulness, and the third is cheerfulness." None of us are so insignificant that our example has no force or our acts no nower force on our acts no nower force on our acts no nower force on the second in the control of the contr force or our acts no power for good

There is an old saying, and a true one, that "The room for improvement is the largest room in the world." No matter what we may have accom-plished during 1917, we can do still plished during 1917, we can do still better this year. And shall we not expect greater things of ourselvers, who dares claim that he is all he mirbt be? Life is full of Iresh opportunities and hidden forces and glad surprises. It is the threspected that is always coming to pass. No one knows what a day may bring forth, and therefore the way is always open and therefore the way is always open.



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KNOWLEDGE IS POWER



By VICTOR W. PAGE for driving ing are given. Every detail is treated in a non-technical yet thereuse manner.

ing are given, Every detail is treated in a mon-technical yet treated in a mon-technical yet. The property of the property of

BOOK DEPARTMENT, FARM AND DAIRY, PETERBORO

for a brave heart to expect the advent of something better.
Some of the things we will need to

Some of the things we will need to strive for during 1918 are courage, good cheer, patience, steadfastness, confidence, and last, but by no means least, economy. Let us resolve to live as well and as happy as we can the day that is before us, leaving to-morrow, with its uncertainties, to take corn of itself.

COOK'S CORNER

Potato Dishes to Save Bread

AST year we were continually being advised to use substitutes in order to save potatoes. This year the order is reversed, and we are asked to use potatoes in order to are asked to use potatoes in order to save bread. It should not be a hard-shap for any of us to eat potatoes frequently, but even though we do use them often there is no necessity use them often there is no necessary for our serving them in the seme old way, day in and day out, either boiled or fried. There are many palatable potato dishes which lend variety to the menu. Herewith are several methods of preparing tasty potato dishes

Potato Scones.

Take mashed potatoes, add salt and Take mashed potatoes, add salt and knead with a little flour. Form into scones an inch thick. Bake in a moderate oven, pricking to prevent blistering. Split and butter, then serve piping hot.

Old-Fashioned Potato Cake.

Make with half potatoes and half flour, add a little shortening, sugar, currents or raisins, nutmer and a very little baking powder. Roll about raisins, nutmeg and a an inch thick and bake or cook in the frying pan over a very slow fire. When brown on one side turn over. This requires no milk, eggs or Mitter, as lard or soft dripping will

Potato Puree.

Mash thoroughly the boiled pota Mash thoroughly the boiled pota-toes and season them well with sait, person and butter. Add enough hot milk to moisten them. Put in a pud-ding dish, brush the too with egg and brown in the oven. Serve with it a tomato sauce. Either boiled or baked potatoes may be used.

Delmonico Potatoes.

Four cups cold diced potatoes, one half cup grated cheese, pepper and half cup grated cheese, popper and solt, two cupe cream sauce. Cut the potatoes in small cice and turn into a brittered baking dish. Stir season-ing into the cream sauce, pour this sauce over pointoes. Smrinkle the ton with grated cheese and bake in hot oven until the cheese is brown.

Potato Scallop

Take a deep baker and put on top of stove with a little butter in it. Slice one small onion in it and let it fry a few minutes. Take from stove and put potatoes, sliced thin, in the pan in lavers, nutting penner, salt, and a little butter on each layer, Sprinkle a few bread crumbs on top and pour one-half pint milk over all. Bake in a moderate oven one hour

Communicable Diseases* Major J. G. Fitzgerald, Toronto University.

T the outset I would like to point out that it is the desire of Mr. Putnam that I should lim/t my remarks to a brief discussion on but one class of communicable sion on but one claus of communicable diseases,—namely, venereal diseases, Under the heading, "venereal diseases, there are two communicable diseases, syphilis and genorrhoea, Those diseases are wideswread, not only in this country, but also in the

A synonsis of an address delivered by Major J. G. Fitzerald, of Toronto Uni-versity, before the delegates at the re-cent Women's Institute Convention.

United States and on the continent of Europe. No one knows just how widespread they are. The estimates which have been made of their prevalence—and they are only estimates— have been based on examinations which have been made of public ward patients in general hospitals in Great Britain, in the United States and in Canada. All are agreed that it is a very serious problem and in order to give you a rough idea, it has been estimated by examinations of patients admitted to the public wards of the largest general hospitals in Boston and New York that from 10 to 15 per cent. of the admissions are suffering from or have suffered from syphilis. In addition, it is known that gonor rhoea is two, three or four times as prevalent as syphilis.

Until within the past five years it

has been practically imposible to make it generally known how wide spread these diseases are and it also has been impossible to arouse public has been impossible to arouse public option to the point where any effective measures might be taken to deal with them. These diseases have probably been worse in time of war, but an army is infected with venereal diseases by the civilian population. This menace is not found in the larger centres of population only, however, but also in smaller rural communities. In a very fine editorial which appeared in The Toronto Globe a few weeks ago, Dr. J. A. Macdonald pointed out that he had received a letter from a hysician in a small Ontario town. In that letter the physician related some of the experiences he had had in his practice. Dr. Macdonald also pointed out in the editorial that owing to the means of transportation nowadays, such as the automobile, these diseases are not limited to the larger centres as they might have been in earlier times. I want you to bear in mind that while the problem may be more acute in the larger centres, it is also widespread throughout the whole

Since it seems evident that the difficulty, from the medical point of view at least, is very largely due to the fact that we do not know where the ses are so far as the population is concerned, and also that we are not able to deal with cases in an adequate fashion, we want vour assistance. It is the belief of those who have studied this problem that most important single factor in solving the problem is education. Just s soon as all the people realize what the problem is, how widespread it is and what may be done to help, effective measures may be taken to greatly eliminate venereal diseases, if not stamp them out completely Four Methods of Attack

Our local committee on this word in Toronto believe there are four methods of attacking the problem which will have fairly satisfactory re sults. First of all we need social tions; second, education of soldiers and civilians in recept to venereal diseases; third, preventive measures venereal diseases; fourth, nooingt medical care.

more important in increasing the in-stance of venereal diseases than the lack of places where men and women may meet together in friendly social intercourse. This was realized when we been to mobilize an expeditionary force in this country, force in this country. Various ground-zations such as the Y.M.C.A. under-took to provide rest rooms, reading rooms and to develop the social side rooms and to develop the account sole as much as possible. From the infor-motion we have on hand, and as this problem existed before the war began, and will be with us after the war, there is still an opportunity for considerably more expansion in this di-

In regard to educating soldiers a civilians, we see to it that all enlisted men know about venereal diseases, We explain to them the nature of these diseases, how they are contracted, how

they are spread, and the gravity of them. These lectures are not given once, but several times. Lectures for civilians are equally necessary, but they are not given nearly as often as they might or should be. We go even farther than this in the army, as we do everything possible to prevent the development of these diseases, and every single case in the army is

British Plans.

Before the war, the problem of venereal diseases had seemed to be of such a magnitude that it was deemed wise in Great Britain to appoint a Royal Commission to go into the whole question and to determine if whole duestion and to determine it possible the extent of the diseaser, also the best methods of grappling with the problem. The recommenda-tion of this commission was as fol-"In our opinion the menace of lows: 'In our opinion the memory wenereal diseases can best be combated in three ways.—(1) By widespread education; (2) Facilities ample, adequate and easy of access for the combandary (2). ple. Adequate and easy of access for the diagnosis of these diseases; (3) Proper measures of treatment which shall be accessible to all the people, at all times." In order to give strength to these recommendations the local government board of Great Prints designed. Britain developed a plan for at once carrying them into effect. A timely propaganda is being carried on and in addition, through local medical agencies, facilities for treatment are now available. For those living at some distance from a treatment centre and who cannot afford to pay their railway fare in order to take advantage of the treatment, their rollway fare will be paid and they will be given proper treatment. Three-quarters of the extreatment. Three-quarters of the ex-pense to which the country is put in connection with the diagnosis and treatment of these discusses is borne e Imperial Exchequer.

What can we do in this country to eleewhere and adont some of the recommendations which have been made? In the first place I believe that in every community where there are organizations such as Women's metitates, there must be a committee whose activities would be largely those of a sub-committee for combatting veneral diseases. Our local committee in Toronto, of which I am chairman, will be very glad indeed to cooperate with any local centre in connerate with any local centre in summylying bectures or literature, and in doing anything we can to aid you in selving the problem as it annears in your community. We first of all must have education. If in addition we nave equestion. If in saction we can have some measures whereby we can isolate and give proper traction to those in an infectious state, it is my belief that within a very short time we will be seriously grapping with the birecast health resolution in this country to day. problem in this country to-day.

War-Time Hints for Women TERNAL vegetable canning is the price of winter plenty.

It's never too late to send gifts to

the boys at the front.

An ounce of sacrifice is worth a

pound of knitting.

Take care of the left-overs and the food supply will take care of itself.

Where there's a will there should be a bequest for war orphans. Be among the first by whom new economical recipes are tried, and be the last to set the cook book aside.

The wastefulness of women shall be on the nation.

A place for every woman, and every an in her place.

Help and the girls help with you, loaf and you loaf alone.—Life. Little Lydia had been given a new ring for her birthday, which none of the guests at the dinner table had

the guests at the dinner table had noticed. Finally, being unable to stand the obscurity any longer, she remarked: "Oh, dear, I'm so warm in my new ring!"—Farm and Ranch.

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When Writing Mention FARM & DAIRY

The Heart of the Desert

(Continued from page 14.)

Rhoda took the towel silently, and Rhoda took the towel silently, and the young indian, after waiting a minute as if in hope of a word from her, left the girl to her difficult toilet. When Rhoda had finished she picked up the field glasses that Kutle had left on her blankets and with her back to the Indians sat down on a rock to waitch the desart. rock to watch the desert.

The sordid discomforts of the camp seemed to her unbearable. She hated the blue haze of the desert below and beyond her. She hated the very pon-ies that Alchise was leading up from water. It was the fourth day since her abduction. Rhoda could not un-derstand why John and the Newmans were so slow to overtake her. She knew nothing as yet of the skill of her abductors. She was like an ignor ant child placed in a new world whose very A B C was closed to her. After always having been cared for and protected after never having known a hardship, the girl suddenly was thrust into existen age simplicity was sufficient to try the hardiest man. Supper was eaten in silence, Kut-le

finally giving up his attempts to make conversation. It was dusk when they conversation. It was dusk when they mounted and rode up the mountain. Near the crest a whirling cloud of mist enveloped them. It became desperately cold and Rhoda shivered beneath her Navaio but Kut-le gave no sed to her. He led on and on, the horses slipping, the cold growing every minute more intense. At last there appeared before them a dlm there awneared before them a dim fleure silhouetted against a flickering light. Kut-le halted his party and rode forward: Rhoda saw the dim figure rise hastily and after a short time Kut-le called back. "Come ahead!"

The little camp was only an open rate ittle camp was only an open space at the canon edge, with a sheep-skin shelter over a tiny fire. Beside the fire stood a sheen-herder, a swarthy figure wrapped from head to foot in sheepskins. Over in the dark-ness by the mountain wall were the many nameless sounds that tell of animals herding for the night. The shepherd greeted them with the per-fect courtesy of the Mexican.

"Senors, the camp is yours!"
Kut-le lifted the shivering Rhoda
from her horse. The rain was lessening but the cold was still so great
that Rhoda huddled gratefully by the that knoda hudored gratefully by the little fire under the sheenskin shelter. Kut-le refused the Mexican's offer of tortilles and the man sat down to en-joy their society. He eyed Rhoda

"Ah! It is a senorita!" Then he gasned. "It is perhaps the Senerita Rhoda Tuttle!"

thoda Tuttle!"
Rhoda junned to her feet.
"Yes! Yes! How did you know?"
Kut-le glared at the herder menacnely, but the little fellow did not
ee. He spoke up bravely, as if he
and menace for Bhode. had a message for Rhoda.

"Some people told me yesterday.
They look for her everywhere!"
Bhoda's eves lichted joyfully.
"Who? Where?" she cried.

Knt-le spoke concisely:
"You know nothing!" he said.
The Mexican looked into Apache's eyes and shivered slightly. "Nothing, of course, Senor," he re-

plied.

Put Rhoda was not daunted.

"Who were they?" she repeated.

"What did they say? Where did they

The herder glanced at Rhoda and shook his head. "Oulen sabe?

Rhoda turned to Kut-le in anger.
"Don't be more brutal than you have to be!" she cried. "What harm can it do for this man to give me word of my friends?"

or hy triends;

Kut-le's cyes softened.

"Answer the senorita's questions,
amico," he said.

The Mexican began eagerly.

"There were three. They rode up the trail one day ago. They called the dark man Porter, the big blue-eyed one DeWitt, and the yellow-haired one

Rhoda clasped her hands with a lit-

Rhous clasped her hands with a lit-tie murmur of relief.

"The blue-eyed one acted as if the cooled. They cursed much at a name, locoed. They cursed much at a name, kut-le. But otherwise they talked tittle. They went that way," pointing back over the trail. They had found a scart with a ston tied in it."

a scarf with a stone tied in it—"
"What's that?" interrupted Kut-le

Rhoda's eyes shone in the firelight.

known's eyes snone in the Breiight.

"Not an overturned pebble escapes his eye," she said serenely.

"Bully for you!" exclaimed Kut-le, smiling at Rhoda in understanding.

"However, I guess we will move on, having clanned the interesting the contraction. having news!" gleaned this interesting

He remounted his little party.
Rhoda reeled a little but she made no protest. As they took to the trail again the sheep-herder stood by the fire, watching, and Rhoda called to

"If you see them again tell them that I'm all right but that they must hurry!"

Rhoda felt new life in her veins after the meeting with the sheep-herder and finished the night's trail in better shape than she had done before. Yet not the next day nor for many days and the sight pursuers. With incen-uity that seemed diabolical, Kut-le laid his course. He seldom moved huriedly. Indeed, except for the fact that the traveling was done by night, the excedition had every aspect of unlimited lesurs. unlimited leisure.

As the days passed, Rhoda forced herself to the calm of desperation. Slowly she realized that she was in the hands of the masters of the art of flight, an art that the very cruelty of the country abetted. But to her ut-ter astonishment her delirium of physical misery bagan to lift. Saddle stiffness after the first two weeks left her. Though Kut-le still fastened her her. Though Kut-le still fastened her to the saddle by the waist strap and rested her for a short time every hour rected her for a short time every hour or so during the night's ride, the hours in the saddle ceased to tax her strength. She was surprised to find that she could eat—eat the wretched cooking of the souaws!

cooking of the souaws!

At last she hald out a definite course
for herself. Every night on the trail
and at every camp she tried to leave
some mark for the whites—a scratch
on pebble or stone, a bit of marked
yieca or a twisted cat's-claw. She
cand antical to smalle to Kuttle ce sed entirely to speak to Kut-le, treating him with a contemptuous sil ence that was torture to the Indian

though he gave no outward sign.

Molly was her devoted friend and Rhoda derived great comfort from the faithful servitor. Rhoda sat in the camp one afternoon with the two souaws while Kut-le and Alchise were off on a turkey hunt. Some of the girl's pallor had given way to a del-leate tan. The dark circles about her eves had lightened a little. Molly

her eves had lichtened a little. Molly was busily pounding craceles between two stones. Rhode watched her felly. Suddenly an enter the blood to her thin cheeke. Why shouldn't she learn to make seed meal, to catch and cook rabbits, to distinguish eithel cactus from in outble? Then indeed she would so able to care for herself on the trail. To Rhoda, who never had worked with her hands, who indeed had come with her hands, who indeed had come on manual labor as held to inferiors, the idea was revolution ary. For a long time she turned it over in her mind, watching Molly the while. The most violent housewifely while. The most violent housewifely task that Rhoda ever had undertaken had been the concecting of chafing-dish meeses at school.
"Molly," she said suddenly, "teach me how to do that!"

(To be continued.)



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Eastern Dairymen Want Higher Cheese Prices

(Continued from Page 2.) dinary exporter would have had to do. dinary exporter would have had to do, they saved the Canadian cheese trade \$1,461,000 in exchanges. The British Government, by assuming the war risk saved the Canadian cheese industry

saved the Canadian cheese industry another \$2,210,000 in insurance. Private companies couldn't have done the business. They couldn't have done the business. They couldn't have obtained the ships. These were all arranged for by the commission through the British Board of Trade. It was the latter organization that faced prices and alloted space.

Why the Spread. Mr. A. McGrure, a delegate, asked the reason for the spread between prices paid here for cheese and those quoted in England. Mr. Alexander re-

plied that ocean freight rates are now \$7 a hundredweight, and the insur-ance risk is another \$1.50 a hundredance risk is another \$1.00 a humo-weight on cheese. However we in Canada have no control over this spread as this margh has been arbi-trarily set by the British Government. In Canada the commissioners worked However we without remuneration and the cheese were handled by the commission at an expense of but .81 of a cent a box.

Deputation Will Go.

Deputation Will Go.

The discussion had the effect of letting the dairymen and the commissioners each see the other's viewpoint. "It is a question of what to produce," said Geo. Smith, of Iroquois. "If the price of cheese does not advance appears, to make the commission of the comm If the price of cheese does not advance enough to make its manufacture profitable we farmers will produce wheat and other things and let the cheese business go,"

Live Subjects Discussed by E.O. Dairymen

(Continued from page 8.) cropped because of lack of labor. The cropped because of lack of labor. The available labor. however, may be made to product more by better planning of the work should be planned now, so that when the work should will be springer to the work should be so that when the work should be so that when the work should be so that the springer of the busy season comes your should be so that the springer white proparation for the busy so that the springer sprin season includes the hauling of manure in winter. As long as the anow is not too deep this should be spread as drawn to the field. When the snow gets too deep the manure should be drawn to the field and placed in small drawn to the field and placed in small piles. The fertility is retained by this method and when spring comes the farmer is not faced with a barn-yard full of manure to spread. Fenc-

ing materials may be prepared now harness and machinery repaired. A seed grains should be prepared and oats treated for smut. These will

cotts treated for smalt. These will save delays next spring. The most important feature, however, is the better utilization of the labor at our disposal by the use of larzer machines. But the use of larzer machines are published in a near issue of twin and being showing a some of the company two cost of cutivating works of the company to the cost of cutivating as worked out by him. The figures showed that much time and money may be saved by the use of two-furnow plows, big double discs, wide harrows and wide seeders, in fact by wide machinery all along the line. wide machinery all along the line.

ON THIS REPORT.

O wing to the disorganiz-ation of train service we were unable to get this were unable to get this report in on time. We were, therefore, obliged to leave out some of the report for this week. Papers not dealt with this week will be used in our Makers' Corner in the near fufura.

Mr. Scott on Butter Grading.

A good start has been made A good start has been made in the grading of Ontario butter by John H. Scott, official grader at the Municipal Abattoir, Toronto. But-ter grading is destined to play an im-portant part in the marketing of Ontario butter within a few years. Buyers will come to the point where they will require a knowledge of what they are paying for. Creameries making inferior butter will soon find it more difficult to compete with creameries difficult to compete with creameries listing advantage of progressive meth-ods. The demand for quarity in but-ter is already making itself felt, and the average quality throughout the during the year.

Twenty-six creameries took tage of the government's grading service, and the 14-lb. box from each churning was shipped for grading. churning was shipped for grading.
These were properly marked and sent
by express, the charges being paid by
the Department. After being held over night at a temperature of 30 de over mind at a temperature of 30 de-press, these were scored, allowing 45-points for flavor, 25 for body and tex-ture, 15 for color, 10 for sait, and five for finish. The basis used was the grade to which the butter belonged commercially.

commercially.

From these 26 creameries 2.290 samples were scered; 82.16 ner cent, were placed in first grade, or scoring over 22 points. It was found that the poorest samples of butter were made during the hot weather of the last 10 cents. days of July, while the cool weather of October gave the highest percent age of first grade butter.

age of first grade butter.

The weakness of the Ontario butter trade is that a large number of creameries accept all the cream they can get and nay the same price for all, recardless of anylty. Competition believes creameries. tion between creamerica seems to be Itatil cream the main reason. Until cream is bought and said for on a quality hasis there will be little improvement. has is there will be little in more remain.

There is much poon for improvement.

In Ontario butter in the better incorporation of maisture, better working to clear up the color, and the better distribution of salt.

While butter made from unpo ized cream may grade first, it frequently develops had odors in storage. For butter intended for storage nee. For watter intended for storage purposes, all cream should be pas-teurized. This has been clearly shown by the year's work.

Dealers Got No Profit.

Mr. A. A. Ayer, the well-known cheese exporter of Montreal, stated at the convention that cheese dealers in Montreal this year wested with-out profit. As an indication of out profit.

(Continued on Page 20.)

117ººIn Cash Prizes Can you solve this problem?

"Canada Weekly" offers a series of cash prizes, of which the first is \$500.00, for the correct solution of the following mysterious message on the scrap of paper. Can

This



Thought to be Message sent by German Spy

ARRESTS FOLLOW KITCHENER'S DEATH

(Continued from Page 1, Col. 7.)

and among the papers seized was a torn folded and worn "scrap of paper." Inspector Donlan for the first time in his many years of service bowed his head in defeat. He was completely baffled and the hiddon message of the uncanny jumble of letters remained a profound swester.

Noted Criminologists Suggest Solutions

Selecting a capital letter as a starting point and counting every second or third letter until all the letters are used up would surely produce some result.—Inspector used scott.

Watsoz and I would procure a mirror and reflecting the "scrap of paper" endeavour to decipher the hidden message.—Sherlock Holmes.

Beginning at a salected one I should read every other letter or every third letter. I believe I should soon solve this mystery.—Arsene Lupin.

FIRST PRIZE \$500.00

NINETY-NINE OTHER CASH PRIZES

Vou

I. IIII T	T Termina		not Delen \$4 17th Prize \$2
2nd " 200	7th " 20	11th " 5 1 12th " 5 1	3th Prize. \$4 17th Prize. \$2 4th " 4 18th " 2) 5th " 3 19th " 2 6th " 3 20th " 2

21st to 100th-\$1 each.

\$1,117.00 altogether

The first prize will be awarded to the con-tenant who obtains the largest number of points. For instance, 89 points can be obtained by sending in the correct to the myna gives for general neatness, handwriting, spelling, punctuation, etc., and when pot comply with contrast and rules and ditions and rules and the points addi-tions and rules and the points addi-mating the contrast of the contrast of the restriction number.

st prize, and the other cash competiti first prize, and the other cash competitive prizes, where the prizes are the prizes and the prizes are the priz

We frankly tell you of these simple rules in advance. There is no obligation on your part to subscribe or take the magazine or spend any money in order to compete in this contest.

- Compete, nor are employees or "Canada Focula".

 The judging of the entries in this context will be done by three well known business men who have no connection with this firm. Prices will be awarded according to the number of points agained on such entry. Contest will close on alst day of May, 1918.

Wite your solution of the mysterious message on one side of the paper only. Put your address in the upper right had control.

2 Boys and Giris under fourteen years of sige are not allowed to compete, nor are employees "Canada Workly."

2 The judging of the eartists with contest will be dense by three form. The judging of the eartists in the housest will be dense by three form. State your willingness to personal particular to the contest will be dense by the particular to the contest will be dense by three form. Fittees will be averted according to the argument of the particular to the contest will be dense by three form. State your willingness to personal particular to the contest of the particular to the

Dept. 18 VANDERHOOF, SCOTT & CO., LIMITED, 35 Lombard Street, Toronto

Union Bank

OF CANADA

53rd Annual Statement 30th November, 1917

The Fifty-third Annual Meeting of the Shareholders of the Union Bank of Canada, was held at the Head Office of the Bank, in the City of Winnipeg, at twelve noon, on Weineaday, the 3th instant, The President, MR. JOHN GAMI, in the chair,

Report of the Directors.

The Directors have pleasure in presenting their report showing the result of the business of the Bank for the year ending 30th No-

the result of the business of the Bank for the year ending 30th November, 1917.

During the year a branch of the Bank has been opened at Elnors.

Alta., and an agency in the city of New York, U.S.A. Five branches of the Bank, which were not giving satictory results, under present conditions, have been closed as follows: Grimsby, Ont., Robsart, Sask, Glacier, Vanderhoof, and Vernon, B.C. The number of Branches and Agencies is now 308. The usual inspection of head office and all branches and agencies of the bank has been made.

JOHN GALT, President.

JOHN GALT, President.

Profit and Loss Account.

Balance at credit of account, 30th November,

1916
Net profits, for the year, after deducting expenses 93,160.42
Net profits, for the year, after deducting expenses
of management, interest due depositors, reserving for interest and exchange, and making
provision for bad and doubtful debts and for

rebate on bills under discount, have amounted to	63.92
Which has been applied as follows: Dividend No. 120, 2 per cent., paid 1st March, 1917.	\$856,624.34
Dividend No. 121, 2 per cent paid let Tune	
Dividend No. 122, 2 per cent paid let Soutember 100,0	
Dividend No. 123, 2 per cent, payable let Decem	
Bonus of 1 per cent, payable 1st December 1917	
Written off Bank Premises Acet Best 150,0	00.00
Contribution to Officers' Person Florida 75,0	00.00
Contribution to French Wounded 19 5.0	00.00
	00.00
	00.00
	\$856,624.34

General Statement of Liabilities and Assets

AS ON 30th NOVEMBER, 1917

Capital Stock Rest Account Balance of Profit and Loss Account carried forward	\$ 3,400,000.0	0	5,000,000.00
cannot forward	106,624.3	4	
	\$ 3,506,624.3	4	
Unclaimed Dividends	\$ 5,492.6	8	
Bonus of 1 per cent payable to	100,000.0)	
December, 1917	50,000.00)	
			3,662,117.02
		\$	8,662,117.02
Notes of the Bank in circulation Deposits not bearing interest	\$12,779,662.00		
Denosits bearing interest	44.368.804.40		
Dalances due to other Banks to	73,508,157,78		
Canada	372,938.57		
in Canada	1,132,882.08		
Acceptances under Letters of Credit Liabilities not included in the forego	ofng	\$1	32,162,444.80 2,586,609 63 755.75
		\$1	43,411,927.20
ASSETS.			

LIABILITIES

OVEMBER, 1917	
Deposit with the Minister of Finance for the pose of the Circulation Fund Deposit in the Certain Gold Reserves Notes of other Bank Gold Reserves Cheques on other Banks Balances due by other Banks in Canada Balances due by Banks and Banking Correspents elsewhere than in Canada Dominion and Provincial Government Securate of the Canadian Municipal Securities, and British, For and Colonial Public Securities other to Canadian Municipal Securities, and British, For and Colonial Public Securities other to Canadian Rallway and other Bonds, Debentures and Strandard Canadian Caland Strandard Canadian Caland Calandard Canadian Calandard Canadian	260,000,00 8,200,000,00 770,549,00 3,912,030,75 ond 5,193,687,14 tites 9,361,729,52 sign han 16,244,470,99 scks 2,933,212,60 s in
Call and Short (not exceeding 30 days) Loans e	
Other Current Land	
Other Current Loans and Discounts in Can (less rebate of interest) Other Current Loans and Discounts elsewhere to in Canada (less rebate of interest)	ada \$58,791,493.28 han
as per contra	
Mortgages on Poel Patet	370,603,77
Mortgages on Real Estate sold by the Bank	99,974.93
Overdue Debts, estimated loss provided for Bank Premises, at not more than cost, I amounts written off Other Assets not included in the cost, I amounts written off	250,204.91
Other Assets not included in the foregoing	1,106,299.25
mended in the foregoing	51,918.66

...... \$ Dominion Government Notes 19,514,069.00

-\$ 20,468,736.68

\$143,411,927.20 H. B. SHAW, General Manager.

JOHN GALT, President.

Report of the Auditors to the Shareholders of the Union Bank of Canada. In accordance with the provisions of sub-sections 19 and 20 of Section 55 of the Bank Act, we report to the Shareholders as follows

we have audited the above Balance Sheet with the books and vouchers at Head Office and with the certified returns from the

We have audited the above Balance Sheet with the books and voucaers.

We have obtained all the information and explanations that we have required, and are of the opinion that the transactions of the Bank which have come under our notice have been within the powers of the Bank.

In addition to our verification at the bank becomes the same and the powers of the Bank and verified the securities representing the investments of the Bank it. On the same and the principal branches and found them to be in agreement with the entries in the books of the Bank relating thereto.

In our opinion the Balance Sheet is properly drawn up so as to exhibit a true and correct view of the state of the affairs of the Bank, according to the best of our information and the explanation given to us, and as shown by the Books of the Bank.

T. HARRY WEBB, E. S. READ, C. R. HEGAN,

Winnipeg, 18th December, 1917.

Gold and Silver Coin

shown by the Books of the Benk.
T. HARRY WEBB, E. S. READ, C. R. HEGAN,
Auditors,
of the firm of
WEBB, READ, HEGAN, CALLIGHAM & CO.,
Chartered Accountants.

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five nged were over the made at 10 cent-

they e for meti-to be m is uality ment. incor-orking better steur-it fre-stor-torage

e pas-

(Continued from page 18.) where the spread comes in between buying prices and the prices paid the buying prices and the prices paid the commission, Mr. Ayer gave the items of cost per pound from the times of cost per pound from the times of cost per pound from the the prices of the pri buying prices and the prices paid the

Central Executive Needed.

Mr. Putnam made an important point when he advised the dairymen to work for cooperation among their various organizations. A central executive should bind together the milk producers, cheese makers and cream-erymen. "Your organizations will be

erymen. "Your organizations will be much more offective if they can all get to echer," said Mr. Putnam.

Brimful of information were the addresses by L. A. Zuvelt, Supt. of the Dairy School, Kineston, on "Butter-Making," and by H. H. Dean, O.A.C., on "Exportments in Dairying," These will be dealt with fully under the will be dealt with fully under the "Makers" Corner" of Farm and Dairy in the next few Issues. in the next few issues.

The most important discussion of the convention centered about the

price of cheese.
Mr. J. A. Ruddick, Dairy Commis-Mr. J. A. Ruidick, Dairy Commis-sioner, to the convention pointed out that New Zealand cheese were sold last year to the Imperial authorities at 19 cents fo.b. steamer, and that a new contract has been made with the New Zealand factories to take the current season's output at prices which will not them only between 19 which will not them only between 19 and 19½ cents a pound. Mr. Ruddick believes that Canadian dairymen have been fortunate in securing the price of 21% cents, which has been paid for cheese f.o.b. steamer Montreal. This discussion is dealt with on page 2 of this issue.

Resolutions.

A resolution was passed regretting the absence of the Hon. President, Mr. Dargavel. who was unable to attend the convention on account of the illness of Mrs. Dargavel.

A further resolution was passed, "That in view of the Government having by Order-in-Council allowed the manufacture and sale of oleomar-

garine in Canada as a war-time mea-sure, we request that they strenuously carry out their restrictions under which it may be sold, so as to pro-tect as far as possible the producers of butter. of butter.

of butter.

The main resolution, dealing with
the price of cheese, will be found in
full on page 2 of this issue.

"Plan your work," said Dr. J. W.
Robertson, of the Food Controller's
Office. "By looking ahead you can do
omage efficient work. And on ton of Office. By looking alread you can use more efficient work. And on top of production we must save. Save by bitues. The need of the aliles is great. Use substitutes for wheat, beef and bacon. Eat cheese, potatoes and oather and the substitute of th bacon. Ear cheese possible. Even if meal as largely as possible. Even if peace came this summer we wouldn't be out of the risk of famine until after the 1920 crop is gathered."

The Makers' Corner

Butter and Cheese Makers are in-wited to send contributions to this department, to ask questions on matters relating to cheese making, and to suggest subjects for discus-sion.

Cheese and Butter at E.O.D.A Conv nt.on

66 Tr was the best lot of cheese we've ever gone through." This was the report of the judges, W. H. Barr, of Ottawa, and F. Morton, Belle-ville, who placed the awards at the ville, who placed the awards at the cheese exhibit, held in Perth in connection with the recent E. O. D. A. Convention. The cheese were a remarkably even lot and gave considerable work in the judging. While on some of the exhibits there is still room for improvement in the finish, at least one-third of the phenes are all least one-third of the phenes are supported. at least one-third of the cheese were, in the opinion of the judges, as nearly perfect as will likely be found. The ly gratifying in view of the handicap under which makers worked this year in the matter of coagulants.
"Now let Western Ontario makers

compete with your cheese," said Mr. Barr in his report on the exhibit. You have nothing to fear from them. This would not have been true a few years ago, but Eastern Ontario cheese has certainly made splendid improvement within the past few years." You have nothing to fear from them.

"The exhibit of cheese at the Perth Convention is the finest exhibition of fine quality cheese I ever saw" This was the statement made by Dr. J. W. Robertson. Coming from such a wellknown authority on cheese matters

known authority on cheese matters this statement carries weight. To Chas. Wilkins, Mills Roche, belongs the honor of making the highest scoring cheese exhibited. His October white scored 98.1. The high scoring cheese in the other classes were: September white, Max. Haley, 97.7; Bat, C. T. Rodgers, 97.3; September of the control of the colored, G. L. Alguire, 97.2; and October of the colored, G. L. Alguire, 97.2; and October of the colored, G. L. Alguire, 97.2; and October of the colored, G. L. Alguire, West, Roggers, Mills; 2, Geo. Alguire, West, Roggers, Mills; 2, Geo. Alguire, West, Roggers, Mills; 2, Geo. Alguire, West, Margardo, Mills; 2, John Snetisinger, Dickinson's Landing, and W. J. Potter, Moulinson's Landing, and W. J. Potter, Moulins

Chaffee, Cornwall B. A. McConner, Marrickville, and J. W. Fretwell, Oxford Marrickville, and J. W. Fretwell, Carlo Cotober colored cheese—I. Gilbert Harricker J. McConnell; 3, T. L. M. Murrick and B. S. Residers (equal); 4, B. G. Honger S. H. G. Hong, Marting and B. S. Residers (equal); 4, B. G. Hong, Marting and J. C. H. G. H.

ter exhibited were creditable in qual-ity and finish, the lutter exhibit on the whole was discouragingly small. The judge, Mr. I. W. Steinhoff, To-ronto, in giving his report advised greater competition in the creamery classes. This will make for improve-ment. He thought it would be a good plan to have a large butter exhibition where all directions of the compete.

Butter Awards.

where all Ontario could compete.

Creamers Butter Awards.

Creamers Butter Awards.

Smith. Brockviller 68 h bon)—1. E. J.

Smith. Brockviller 68 h bon)—1. E. J.

Smith. Brockviller 68 h bons benefit for the Cornwall. and Jos. Small. P. Creamers butter 120 non-B. prints)—1.

Eaton Co. J. S. M. Robinson. Belleville.

Creamers butter 120 non-B. prints)—1.

Smith. 3. E. B. Chaffer Co. J. 2. E. J.

Dairy butter (20-B. crock)—1st. Mrs.

John Carson. Perth. 3. Mrs. Fred Fer
John Carson. Perth. 3. Mrs. Fred Fer
Mrs. John Carson: 3nd. Mrs. H. Sex
smith. Napaner. vib. 3nd. Mrs. H. Sex
smith. Napaner. vib. 3nd. Mrs. H. Sex
smith. Napaner. vib. Mrs. J. Drum
mond, Almonte.



HANNA INSISTS:

The spread in price between that paid the producer and that paid by the consumer must be reduced.

We buy direct from the grower and sell at a small margin direct to the farmer. That is why our prices are the lowest on the marries. Get our catalogue and compare prices.

Timothy No. 1 (Extra No. 1 for Purity) \$6.00 No. 2 (Extra No. 1 for Purity) \$5.00 No. 2 (No. 1 for Purity) \$5.00 Clover. Bus. Write for quotations on turnip nd mangel seeds. Send us your name for a copy of ir 1918 catalogue. Special quotations to farmers'

Mis has in 1 visi 240 in at t and fres days control of the Find Find

Hols

EANAD

FOR SALE AND WANT ADVERTISING

THREE CENTS A WORD, CASH WITH ORDER

WANTED: A qualified man to operate a condensed milk plant. State salary and experience. Apply G. A. Gillespie, Peterboro, Ont.

WANTED.—Cheesemaker for Ridge Tree Factory—married man preferred Free house supplied to formish supplies and state at what preferred hundredweight will make for. Make last season 55 tons. Applications received by the Secretary, Wm. H. Trick, Thedford, Ont. WANTED.-Cheesemaker

LADIES WANTED to do plain and light sewing at home, whole or spare time; good pay; work sent any distance; charges prepaid. Send stamp for particu-lars. National Manufacturing Co., Mont-

CHEESE FACTORY FOR SALE, at Oxford Mills. capacity 270,000 lbs. Ap-ply Box 45, Farm and Dairy.

WANTED-Cheesemaker for Enterprise Cheese Mfg. Co. Tenders will be con-sidered up to January 21st. Cheesemaker to furnish all supplies. Make of cheese about 70 tons per year. Apply W. T. Sine, President, Stirling, Ont.

Pietje Beets SUNNYDAI E STOCK FARM Offers 12 Months Sire, Light in Color His Dam has 62 1/2% same blood as MAY ECHO SYLVIA—Butter 41 lbs., Milk 1005 in 7 Days

A. D. Foster & Sons Sunnydale Stock Farm BLOOMFIELD -ONTARIO

Pure-bred

Holstein-Friesian Cattle

Male

Pietje Beets Posch (33075) Born Dec. 4, 1916

A bull of exceptionally good dairy type light in color; well grown. His dam is a candidate for a much larger record.

Write us early for full particu-lars about this fellow, if you want a choice one to head your herd.

Pauline Pet Posch, Jr., 2 His sire is brother to	17.24
Hester Pietje Netherland	30
Brookdale P. Thresea	28
Brookdale P. Pauline	27
Pletje Korndyke Queen	27
Mercedes Pietje Netherland	25
May Korndyke Pietje	22
Pietje Beets De Kol	21
Pietje Brookdale Netherland	21
Helena Beets Posch	
Butter Milk	24.60

Pletje Paul, brother to

Helena Beets Posch
Butter
Francy Ormsby Beets
Butter 16.14 Milk 445. As a Jr. 2-year-old.

Pauline Pet Posch, Jr. 2 Brother to Hester Pietje Netherland Brookdale P. Thresea Brookdale P. Pauline	30
Pietje Korndyke Queen Mercedes Pietje Netherland	
Tilly Pauline	
Butter Milk Record made several months calving. Sister to sire of	494. after
Gladys Connor De Kol Nannie Connor De Kol Helen Daisy, 1 yr. 10 mos	
Inka Sylvia Beets Posch, sire e	Iba.
May Echo Sylvia Milk, 1 day Lawncrest May Echo Posch Milk 1 day Lawncrest May Echo Milk 1 day	152 33 105 28
Helena Sylvia Poseh	25 116

Helena Hengerveld Keyes 3rd. Milk 18753 Butter 781 In 1 year as 4-year-old.

Sir Pet Posch De Kol, sire of

e.ieele	Rorndyke	Lad, sire	of	
Hester Brooks Brooks Pietje Pet Pe Butter Milk	Pletje N lale P. T and P. I Korndyke sch De K	etherland hresea Pauline Queen		28 27 27 38
Er.	-year-old	Canadian	Champ	don.
Prince	Pietertje	Pauline,		
Tilly	Pauline .		1	bs. 9.95
Gladya	dsire of Connor D	a Wel		-
Ninnie Tilly	Connor D	e Kol	2	2
Dam o	Tilly Pa	uline		
Butter			49	9.95
SIr Alt	a Beets P	osch, sire	of	
Pete P	osch De E I others or	col		lbs. 38
Butter Milk	three teat	,,,,,,,,		26 605
Keyes (ount De I	Kol, sire d	of	
Helena Milk 1 Queen	Keyes day Keyes			

HOLSTEIN-FRIESIAN NEWS

Farm and Dairy is the leading exponent of dairying in Canada. The great majority of the members of the Canadian Holatein-Friesian Association are readers of the paper. Members of the Association see invited to send tens of interest in the Canadian Holatein paper. It is not seen to be a set of the canadian that is communication in this column.

DIFOR, Farm and Dairy.—i am advive the through preliminary report by the different properties. The properties of the different properties of t

A RECORD AT THE FAIR.

A RECORD AT THE FAIR.

ARIAT Dawn Peep Ind. a pur-bred common process of the sensation of t

DITOR Earm and Dairy:—I am advisthe Holstein-Friesian reports that
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to the terminal re



(Former World's Champion 4-yr-old)

Butter 31 lbs. Milk in 1 dy., 1151/2 lbs.

Butter 281/2 lbs. at 12 yrs. Milk in 1 dy. 1041/2 lbs.

This great young sire is unsurpassed in Canada for type. quality and milking records. We offer 2 of his beautiful sons,

No. 1-MAJESTIC KING SEGIS, 3 months, well marked, very straight. Dam, SYLVIA QUEEN'S COUNTESS, butter 21 lbs, milk 475 lbs.

No. 2-PRINCE WALFORD SEGIS 2ND, 3 mos., straight blocky calf, marked exactly like sire. Dam, ELMCROFT SEGIS RUBY on 2nd calf, 20.76 lbs. butter, 472 milk

Price of each of these youngsters, delivered in Ontario or Que bec, \$125.

Write at once for Dam's photos. Elmcroft Stock Farm Maxville, Ontario

37 - 18 TO YEST

A Cow with a 30-lb. Record made at a Winter Fair. Early Dawn Peep 2nd, owned by Peter A. Small, Chesterland, Ohio, made an official record of 33.82 lbs. of butter in a week, while being exhibited at the National Dairy Show, Columbus, Ohio. Naturally the and of such a record under the trying conditions that prevail at a fair, was one of the senactions of Columbus.

the equivalent butter claimed for Mixa Valley Mead. De Kol Walker would amount to 24.61 bs.—Malcolm H. Gard-ner, Supt. A. R.

FORSTERCREST FARM FURSTERGELS I FARMHOLSTEINS BRED AT FORSTER.
CREST
Were winners at Goelph in the
discovery seast Winners at London,
Toronte seast Winners at London,
Toronte seast Winners at the
Story of Sweepstake at the lond slab
of Sweepstake at the lond dark
Young buils for sale, both dark
with for Particulars.
Write for Particulars.
Write for Particulars.
R. B. BROCK
R. R. No. 8 - Simose, Ont.

FOR MILK, BUTTER, CHEESE, VEAL Holstein cows stand supreme. If you try just one animal you will very soon want more. Write the HOLSTEIN FRIESIAN ASSOCIATION. W. A. CLEMONS, Sec.,



CANADIAM AYRSHIRE BREEDERS'ASSOCIATION BOX CONTUNT TO L. QUE.

meere Belle Hengerveld, whose production for seven days is 577.8 lbs. milk containing 3.1.2 lbs. fat. Computed on the 80 per cent. basis, the equivalent butter produc-tion so far claimed for her would amount to 43.52 lbs.—MALCOLM H. GARDNER. 8upt. A. R.

YORK HOLSTEIN BREEDERS MEET.

YORK HOLSTEIN BREEDERS MEET.

YORK County Holstein Cub heid
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SALE DATES CLAIMFD

PETERBOROUGH COUNTY.
Mr. J. K. Moore, of Peterboro,
Ont. announces Wednesday, Pebruary 20th, 1918, as the date for
his clearing out sale of Holstein
cattle and all other farm stock
and implements.

OXFORD COUNTY. The Oxford District Holstein Breeders' Club will hold a con-signment sale of registered ani-mals at Woodstock, Ont., on March 20th, 1918. W. E. Thomson, Woodstock, is the Secretary.

PERTH COUNTY. The Perth District Holstein Breeders' Club will hold their first sale on March 13, 1918.

= Backed by the Blood of Champions =

We offer our entire crop of 1917 calves, 8 males, 10 helfers, a splendid lot, We offer our entire crop of fair carries, a makes, to neiters, a spichuld lot, sired by a son of what Harold McAllister stamps as the world's greatest transmitting, reproducing cow. This is a breeder's lot, a magnificent start or addition to any herd. Drop a line to

JAS. A. CASKEY

R.R. No. 2

Madoc, Ont-

READY FOR SERVICE

My herd bull is Sir Pontiac Burke, sired by King Pontiac Artis Can-ada and whose dam is one of A. C. Hardy's imported cows.
At present I offer a 17-mos. bull of excellent type, sired by herd bull and from dam of show type with R. of 2. 12,580 lbs. milk and over 500 lbs. butter.

PRICE FOR QUICK SALE, \$125.

J.W. Johnstone, R.R. No. 2 Forest View Stock Farm, Hawkesbury, Ont.

FOR SALE —— Centre View Pontiac Segis =

Woodstock Shipping Station, M. McDOWELL Oxford Centre, Ont.

HIGHLAND LAKE FARMS =

Herd sire, AVONDALE PONTIAC ECHO (under lease), a son of MAY Herd sire. AVONDALE PONTIAC ECHO (under lease), a son of MAY ECHO SYLVIA, the world's record cow. Only one other 41-lb. bull in Canada. We have young bulls for sale, whose two nearest dams (both Canadan champlons) average as high as 35.62 lbs. butter in seven days: another whose two nearest dams are both 100-lb. cows, and one ready for service from a 41-lb. sire and an 15,000-lb. two-year-old dam.

Send for our "Bosk of Bulls." A few females for sale.

Satisfaction guaranteed.

R. W. E. Burnaby

Farm at Stop 55 Yonge Street Radial

Jefferson, Ont.

CHOICE YORKSHIRE HOGS AT RIGHT PRICES Boars and sows, all ages from best prize-winning strains. Several litters of suckers, the best lot we ever raised; good growthy fellows of good typo-Barron's 282-egg strain—\$2 each. T. A. KING Super frague fragmental manufacture MANTANA ANTARIA

(22)

1. Born Dec., 1916, from a 30 lb. show cow which is a granddaughter of KING SEGIS, her sire's dam being a 33 lb. cow, BLANCHE LYONS DE KOL. The dam of calf also has two records of over 29 lbs.

2. Born January, 1917, from a 19.84 lb. granddaughter of KING OF THE PONTIACS, her other grand sire being PRINCE HENGERVELD

Three others born in March, 1917-one from the dam of our great cow LADY WALDORF PIETJE, the dam having over 28 lbs. and over 100 lbs. milk in one day.

All above are sired by our WOODCREST SIR CLYDE, dam 33.07 butter 7 days, and with 22,558 lbs. milk semi-official one year. They are every one extra good individuals, well marked and guaranteed to please. We want to make room for coming calves and are offering them at very low prices.

We have a few first arrivals sired by CHAMPION ECHO SYLVIA PONTIAC. We can sell a few good young females sired by WOOD-CREST SIR CLYDE and bred to CHAMPION.

WRITE FOR PEDIGREES. THEY WILL INTEREST YOU AS WILL THE PRICES

H. Lynn, Avondale Farm, Brockville, Ont.

LENROC STOCK FARM

A few well-bred, young Holstein Bulls for sale. Also a Belgian Stallion, weight about a ton.

Address

W. C. HOUCK - R.R. 1, Chippawa, Ont.

SUNNYSIDE STOCK FARM HOLSTEINS

BCHO SEGIS FAYNE, our herd sire, is by a brother of the world's field. So, we seek Fayne Johanna. He is a grand bull in every way and is not a compared to the seek field of t JOHN M. MONTLE, Prop. Sunnyside Stock Farm, STANSTEAD, QUE.

HOLSTEINS -

We have the only two sons in Canada, of the 44-th bull Orhesby Jane King—only mature son of the world's most famous cow. One of them for sale, also a 30-bb. caif, whose dam and two great-grand-dam sevens 324-bbs. butter in 7 days. Also 11 bull calves of leaser not, and femiles of all ages. R. M. HOLTBY. R. R. No. 4. PORT PERRY, ONT.

KING SEGIS ALCARTRA CALAMITY is living up to his royal breeding. His first daughter made nearly 21 libs. butter at 2 years old. Four sons of King for sale from 5 to 3 months old; also 2 high-class youngsters. Write soldy for our prices.

PETER S. ARBOGAST

- R. R. NO. 2 - MITCHELL, ONTARIO

SOLD AGAIN=

WHO WANTS THIS ONE?

ire—KING SEGIS WALKER. um—EDGE FAPORIT SEGIS. Record at 3 years, 24.56 lbs. buttes, s. milk; average fat 4.3 per cent. A. A. FAREWELL - - OSHAWA, ONTARIO.

LAKEVIEW FARM

is now offering a choice young bull almost fit for service, sired by KING CANARY SEGIS, whose dam PET CANARY COUNTESS 2nd, has for 3 consecutive years held the Canadian Record for butter in 7 days in the 8 months after calving division, best 7 days butter 27.73 lbs. as a 3-year-0id. His dam at 4 years, 15.65 lbs., is a full sister to the Highest producing 3-year-0id in Canada, LAKEVIEW DUTCHLAND ARTIS, 34.66 lbs. butter from 567.7 lbs. milk. average test 4.68%.

Major E. F. Osler, Prop.

BRONTE, Ont.,

T. A. Dawson, Mgr.

MARKET REVIEW AND FORECAST

ORONTO, Monday, January 14.—The feed situation is the point of finterest prowedays. Coarse grains are terest prowedays. Coarse grains are the situation of the point of the po

weather.

WHEAT.

Transportation difficulties are holding up all trade with the West and putting a damper on interest in western wheat. Ontario wheat, with good sledding in country districts, is coming to market a little more freely. There is a very little more freely.

NO. 3 WHEAT FIXED AT \$2.19.

O N January 11 the Board of Grain Supervisors issued an 3 Order fixing the price of No. 3 Order fixing the price of No. 3 Order fixing the price of No. 3 Order fixing the price; Montreal, to be effective from Jan. 10 until Aug. 31, The following is order fixing the price;

The following is order fixing the prices:
Order No. 21—Says It is hereby ordered by the board—No. 3 On-tario winter wheat shall be fixed at \$2.19 per bushel, basis in store, Montreal.
Montreal.
Montreal.
Montreal.
Montreal.
(3) That the precipitation of the data inclusive shall be offered to the process of the shall be offered to the shall

general opinion that the price of wheat by applicable to this order.

general opinion that the price of wheat the price of wheat the price of wheat the price of the price of

MILL-FEDS.

There is a scrious shortage of mill-feeds in rural Ontario, and dealers quive much higher prices than those set by the Food Controller would seem to warrant. The prices quicted by the To-ronto Board of Trade, \$35 for bran and \$46 for short, are away below the asking price of all dealers. Apparently further action will be needed to guarant.

test feed to prospective hog raisers at a fair of the product. Help the product of the product. Help the product of the produc

- LAKESIDE AYRSHIRES -

A choice selection of young bulls for sale from Record of Performance dans, imported and Canadian bred. Sirsal Auchenbrain see Foam (Imp.), 39758; many times grand champion. Pairield Mains Triumph (Imp.), 5137; a son of the noted Hobsland Perfect Piece. Write for catalogue.

Proprietor:
GEO. H. MONTGOMERY
Dominion Express Bidg., Montreal.



OUR GREAT HERD SIRE Photo taken at 2 years and 4 months.

HIS SIRE-

Netherton Neptune 11395

HIS DAM-

Chapmanton Duchess 2-A-264

Messrs, J. & C. C. Ballantyne, proprietors of the well-known "EVIE STOCK FARM," the home of the Ayrshire Cow, in Chesterville, Ont., Rural Mail Delivery No. 1, Bell Telephone Main Line, Chesterville, have the following young bulls and heifers to sell, all from Imported Dams and Sire.

The following is a list of the offerings we have to sell, and you will notice the high production of milk and butter fat shown from the Dams of this young stock, under ordinary feeding: all of these animals are under the R. O. P. Test at Ottawa, with the following results:

	HERE	'S OUR O	FFERI	NG	S -						
CALF Evic Baronet	DAM	SIRE	FRESHENED	Test Required by Government.	Actual Milk Production to Dec. 31, 17	GOVERNMENT TEST OF BUTTE FAT PER CENT.					
				Reg		Mch	Apl.	June	Aug.	Oct.	Nov
55412 February 3, 1917	Balmangan Queen 48431 February 15, 1913	Chapmanton Barone 48420 February, 1915	Feb. 3, 1917	7472	7547	3.9	3.9	3.6	4.3	4.0	
Evie Sir John 55413 February 16, 1917	Auchenfad Mysie 48425 February 17, 1913	Chapmanton Barone 48420 February, 1915	Feb. 16, 1917	7497	7688	6.3	5,4	4.4	4.5	4.1	4.8
Evie Admiral Jackie Fisher 55644 March 20, 1917	Hall Minnie 6 48422 February 28, 1913	Chapmanton Baronet 48420 February, 1915	March 20, 1917	7545	9028	-	4.0	4.3	4.5	4.2	4.2
Evie Sir George 55411 March 1, 1917	Hall Kate 4 48421 February 28, 1913	Chapmanton Baronet 48420 February, 1915	March 1, 1917	7503	8872	4.0	4.0	4.3	4.2	4.0	3.8
Evic General Haig 55414 May 24, 1917	Auchenfad Primrose 48426 March 22, 1913	Chapmanton Baronet 48420 February, 1915	May 24, 1917	7700	5467	-	-	-	4.0	3.5	3.4
Evic Barba-a 54640 February 20, 1917	Lessnessock Snowwhite 484338 November 21, 1913	Chapmanton Baronet 48420 February, 1915	Feb. 20, 1917	6727	5166	4.5	4.2	4.5	5.6	4.4	-
Evie Lady Betty 54647 February 20, 1917	Auchenfad Brownie 48424 February 18, 1913	Chapmanton Baronet 48.20 February, 1915	Feb. 20, 1917	7506	8132	4.7	3.9	4,4	4.2	3.4	_
vie Heatherbell 54648 March 31, 1917	Chapmanton Henny 48427 February 5, 1913	Chapmanton Baronet	March 31, 1917	7649	8772	-	4.1	3.8	4.2	4.1	4.0
vie May Mischief 55415 June 20, 1917	Chapmanton Punch 48428 April 23, 1913	Chapmanton Baronet	June 20, 1917	7663	6214	-	-	-	-	-	3.6

Evie Heather Bell, Registered No. 34548, and Evie May Mischief, Registered No. 55415, are great grand-daughters of the noted Garclaugh May Mischief, who holds the World's Record, and is now owned by Mr. Percival Roberts, Jr., Narbeth, Pa.

Any one wishing to get started in high-class pure bred Ayrshire stock, will never have a better chance than now to buy some of these young animals. Approved note with interest from responsible buyer will be

For further detailed particulars about this young stock, please apply to James Ballantyne, 163 Nazareth Street, Montreal.

-CHESTER VILLE J. & C. C. BALLANTYNE, Proprietors

R. R. I.-L. D. PHONE, CHESTERVILLE



Gasoline engine pumping water to tank. An attractive form of farm power

Farmers Work Less Who Make Machinery Work More Here is Proof that Wider Machinery and More Power Pay

The following data is the summarized experience of 8,152 farmers who kept accurate records. Hours in field averaged, daily, 9,65.

Ploughing: Two horse teams drawing 10 in, 12 and 14 in, ploughs turned over 1.60, 4.70 and 1.80 acres respectively. There horse teams drawing 12 in, and 14 in, bottoms ploughed 2.10 and 2.30 acres respectively. The plant of th

Harrowing: The relative costs of this important operation were as follows: small disc harrow, 90 cents an acre; three horse disc. 70 cents; wide deable cutaway disc harrow, 45 cents. Two sets of narrow drag harrows, hitched together behind four horses, save a inan's labor.

Seeding: It was found that an average of 3 feet of drill should be allotted to each horse and that 4 acres a day could be accounted for. Four horses on a 12 foot drill, therefore, would make a profitable combination by lowering the hours of man-power required in seeding.

Harvesting: The same principle holds good here, too. With the exception of the side draft and addition to the length of cutting rod and table does not add materially to the load. Each horse on the machine will cut about four acres. Ample horse power in harvest pays well.

New Machinery is not required to apply this principle of more power to a profitable extent. The practical farmer shown in our illustration is replacing man-power by the most efficient use of the machinery he already owns. Mechanical Power Can Still Further Assist in Economizing Man-Power.

Motors can be made to do much of the work formerly done by man or horse. Where electricity is not obtainable the gasoline engine can be used to run a dyname to protect the engine can be used to run a dyname to protect there is a good sized stream on the farm it is often possible to dam it and obtain fall enough to generate all the power need for stationary purposes, including running dyname to provide electric lights and power.

There are two chief advantages in introducing motor power to supplant man-power The work can be done much more quickly and much more cheaply. These same considerations also apply to the supplementing of the power by the motor, in many operaand marketing. This is also becoming true of field work since the advent of the light tractor.

Grinding at Home Saves Time: With gaso-

What Three Horse Power Used One Hour a Day Will Do on the Average Farm.

Grinding Grain—20 days of 10 hours each, using 3 h.p., or 10 days using 6 h.p. Pumping Water—1/2 hour every day, using 1 h.p.

Cutting Straw—3 days of 10 hours each using 3 h.p.
Pulping Roots—½ h.p. 1 hour per day

for 6 months.
Sawing Wood— 1 day of 10 hours,

using 3 h.p.
Milking Machine—2 hours every day,
using 1½ h.p.
Separating—1-6 h.p. 1½ hours every

day. Churning-1-6 h.p., 1½ hours per week. line at 40 cents per gallon, grain can be ground fine at 4 cents per 100 pounds. At 20 cents per 2100 net cost would be 2 cents per 109 pounds, which represents the cost if the engine burns coal oil at 20 cents per gallon. A farmer buying a gasoline earlies should investigate the once that will

The farmer should make a special study of the gasoline engine so as to be able to get the most out of it. An improperly adjusted carbureter may easily burn twice the lear length encessary to do a given amount of work. And when-the mixture is too rich, earbon deposits in the cylinders more quickly than with a correct mixture, thus still further reducing the efficiency of the engine. If a farmer uses 1 horse power I hour a day on the average, this can be provided by the gasoline engine at 5 cents per day or \$15.25 per year when gasoline is worth 40 cents per gallon, or at \$9.12 per year by cold old at 20 cents per gallon.

With electricity at 4 cents per kilowatthour the cost of grinding 100 pounds of grain would be 1.88 cents and 1 horse-power 1 hour a day would cost 3 cents per day or \$10.95 a year.

With electricity at 4 cents per kilowatthour the power for all this work will cost only about \$85. Any overhead charge for transmission line must be added. With gasoline at 40 cents per gallon the gasoline engine will do the same work at about \$110 and the oil engine burning coal oil at about \$55.00, assuming the latter to cost half as much as gasoline.

For full information regarding the efficiency, management, installation or troubles of any practical farm machinery, write the Office of the Commissioner, Ontario Department of Agriculture, Parliament Buildings, Toronto.

More Horse Power permits the use of two implements at one time. A saving in man power.

Ontario Department of Agriculture

Parliament Buildings, Toronto

SIR WM. H. HEARST, Minister of Agriculture, DR. G. C. CREELMAN, ommissioner of Agriculture.



The farm tractor is doing splendid work in the rapid cultivation of the soil.

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