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We are also agents for the

B-L-K Mechanical Milker and all Apparatus and Supplies for Dairies, Creameries and Cheese Factories.

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D. Derbyshire Co., Ltd.

BROCKVILLE, ONT. Head Office and Works Branches: PETERBOROUGH. Ont. MONTREAL and QUEBEC, P.Q. WE WANT AGENTS IN A FEW UNREPRESENTED DISTRICTS

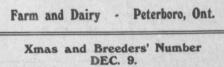
"Think It Over"

FARM AND DAIRY deals editorially with the problems of the great class of dairy farmers in Canada.

The result is that Farm and Dairy circulation is concentrated in the great dairy districts-in homes and on farms where the expenditure for equipment is 10% to 25% greater than in mixed farming sections.

Is your campaign planned to concentrate on such homes as these? Think it over

A.B.C. Member: Any other information gladly sent you





Mulcahy's Goat

H. Percy Blanchard, Hants Co., N. S. was in this wise. Mulcahy was

pleasure and practice on every op-portune occasion o dilate to Mr. Mulcaby, much to the latter's edifica-tion, upon the lagt capabilities of this fine herd, the thousands of pounds of milk produced, the butter-fat records, and many other facts, the thought flowers with pleasurable emotions. The scientific niceties of butter/fat were for a while incomore emotions. The scientific interview of butter-fat were for a while incompre-h nsible to Mike, but finally he grasp-ed the situation. One day, in Steven's grocery store, extolling as usual the grocery store, extoring as usual the butter-fat writes of his much prized cows, Brown finally exhausted the patience of the long suffering Irish-man. "See here, Mister Brown," said Mike at last, "I will bet ye a foive dollar bill that me wolfe, Biddy Mulcheke old nonvotated as heat foive dollar bill that me woife. Biddy Mulcahy's old namy-goat, can beat the best cow in yr-r bar-m in this butter-fat business. Ye take foive dollars an' buy feed wi' it, and me Biddy will do the same, and when each o' us has fed their feed, and on the reas short as it takes, will sy that the moist cuarts o' it." Brown astempoted to treat the challenge as a attempted to treat the challenge as a joke; but the others present, who also had suffered from time to time from the excellencies of those cows, pinned-him down to Mike's dare, and the money was put up, and a fair deal given to Mike by Brown, who, after all, was a square sport. When Manny had finally finished her allotted by visions, plus discultione ther, it was found, to the delight of all but Brown, and to the delight of all but Brown. attempted to treat the challenge as a and to the latter's amazement, that the goat was away in the lead; and Nanny had won. Adorning the Tale that

Adorning the Tale This is a story with a moral. We offen hear about keeping records, and weighing the milk every week, so that on the final accounting we will know just what each cow has done. That is very good, and if it is whole mild, that is sold, that is nearly and the mild that is sold, that is nearly and the mild in kind and quantity. But when it romes to selling cream or making comes to selling cream or making butter, it is the most misleading thing imaginable. Once I had two thing imaginable. Once I had two cows in the barn, and the big one gave half as much again of milk as the little one. Very satisfactory for the big one, until I got a Babock tester. On the test, the little cow yent a shade over five per cent, and be big cow a shade under one per went a shade over five per cent, and the big cow a shade under one per cent. As I sold cream, the result was the little cow was four times as valuable as her big rival. Another viewpoint is that of feed. On a big steamer I saw two engines

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both driven from the same boiler. But the little donkey engine, despite th fact that it had a thousand hors fact that it had a thousand herr power of steam behind it, could all do one donkdy-power. A donk boiler would have served it just well. Mi'se's bet was after hi d best, the most voluable product in the stated quantity of feed. Engine the stated quantity of feed. Engine steam plant, the more economical statem plant, the more economical statem plant, the more that the steam plant, the more her that generally so within the her citing of only it as an arison as an arison as doubt it as an axiom as com different breeds. Really I would to see more tests on the line production, the ratio economic production, the ratio b tween the manger and the milk pi Not only so, but, for the benefit the creamery men, the cost of but fat production in relation to units rather than in gross totals respective of the expense of main ance. On my gasoline engine, a I open a little more, and yet m the needle valve, the added gas gives added power, but there certain zenith point reached which more gasoline means the extra amount wasted, and fina a plethora which slows down and s ally chokes the engine. But that another story, as Kipling used to the

The Value of Screenings

RE weed seeds, screened fm grain at elevators, valuable a a feed? Ever since it becm known that thousands of tons screenings are available at Cana tons screenings are available at Canada elevators every year, farmers ha been asking this question, but wi out any really authoritative infom tion on which to base a reply. pamphlet from Ottawa now any the question. R. Dymond, S. Analyst, is the author. The reof feeding experiments are table by E. S. Archibald and F. C. Els Among the more important con sions are the following :

That on account of the extrem small size of some, and the h flinty seed-coats of others, the m plete pulverization of all of the seeds in screenings cannot be ac plished by an ordinary chopper. That screenings recleaned over one-fourteenth inch perforated a screen to remove the finer weed se (black seeds) may be satisfacting ground by ordinary choppers, if a sonable care is taken in the separat and grinding. That feeding stuffs manufacts

from screenings, not properl cleaned, sometimes contain that properly of vital noxious weed seeds per part Such material should never be fet That feeding experiments proven that the black seeds an

less as feed and expensive as ad ants Their admixture in any siderable quantity to other feed m it unpalatable for all kinds of st That screenings without the is seeds, may be fed freely to he cattle, sheep or swine, but it is a profitable to have such screen profitable to have such screen compose not more than 50 to 60 cent of the total grain ration. B

cent of the total grain ration. h wheat screenings are especially a able as poultry feed. That more attention to the des of grain as it is threshed will the cost of transporting the so ings to the terminal elevators, will leave the grower in possens much valuable feed which, if bu-eneady sale among time stock me. That the growth of weeds ensi-normous loss each year to fam

and the glower of weets the enormous loss each year to fan and while it is desirable to weerything in grain screening good feeding value, it would be to burn them than to permit the in ways that will bring about increase in the number or distribution of noxious weeds.



Trade increases the w

Vol. XXXIV

And Some AN milk be produ

at \$1 a cwt.? N official, even if he be dairyman and have government herd wi work, has ever yet be it. No system of busi ing will leave a balance side of the dairyman' milk must be market price. "Yes, I know Jas. Hotson, "but s other those figures d well with our experies you explain Oxford c Oxford county has b rich agricultural distr by the dairy cow and factory. The milk th the farmers prosperous as a fancy certified p price that only the rie to pay, or even at a sl sumption. There are county and none very n the cheese factory an cts. to \$1 a cwt.

The Transfor "I can remember th Jas. Hotson told me, was not doing anythin ories started. Mortga The price averaged a that does not tell the w sent home and hogs b Years ago the farms. rom Innerkip, Now weeks. Farmers who

ogs in a year, now sh This has been made roduct of the cheese ombined with this wi ough for all purposes As a result of this syst to-day are peopled with

Mr. Hotson himself he "substantial, prog that is the pride of C came acquainted with ears ago, through th ing in improving h esting system advocat Early this spring I di pend the day with Mr. iler. Bus spite the horsevald only donkey just a still the uct from Engine to the international international attional attionattional attional attionalitional atti

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Vol. XXXIV

PETERBORO, ONT., OCTOBER 21, 1915

No. 42

Thirty Years of Herd Improvement Work And Something of What Dairying Has Done for Jas. Hotson, Oxford Co., Ont.-By F. E. Ellis

CAN milk be produced profitably at \$1 a cwt.? No government dicial, even if he be a real expert ayirman and have a high-class government herd with which to work, has ever yet been able to do in No system of business accounties will have a balance on her right milk must be marketed at such a price. "Yes, I know it," admitted in Hotson, "but some way or other those figures don't nick in wide with our experience. How do you explain. Oxford county?"

Oxford county has been made the rich agricultural district that it is by the dairy cow and the cheese factory. The milk that has made the farmers prosperous was not sold as a fancy certified product at a price that only the rich can afford

to pay, or even at a slight advance for city consumption. There are no large cities in Oxford county and none very near. Prosperity came with the cheese factory and prices running from 60 cts to 81 a cwt.

The Transformation of Oxford

"I can remember this section of the country," las. Hotson told me, "when farm after farm was not doing anything. Then the cheese facories started. Mortgages began to be paid off. The price averaged about 80 cts. a cwt., but that does not tell the whole story. The whey was ent home and hogs began to be popular on the farms. Years ago there were no hogs shipped om Innerkip. Now shipments leave every two reeks. Farmers who previously did not ship six ogs in a year, now ship 30, 40 and even 60 hogs. This has been made possible by whey, the byroduct of the cheese factory. Home grains are ombined with this whey, but none of us have ough for all purposes. We are all buying feed. is a result of this system of farming, our farms o-day are peopled with substantial, progressive

Mr. Hotson himself is a splendid example of the "substantial, progressive" type of farmer hat is the pride of Oxford county. I first betame acquainted with Mr. Hotson some five tars ago, through the excellent work he was long in improving his herd, through the cow esting system advocated by Mr. C. F. Whilley, Early this spring I dropped off at Innerkip to pend the day with Mr. Hotson on his own farm.



A Colonial Verandah Has Been Added to the Substantial Stone House. And this is only one of the minor improvements that Jas. Hoteon has made on his Oxford compression of the second by good dairy methods, whit sood dairy coury Thrm. All have been made possible by good dairy methods, whit article adjoint ing? —Photo by an Bditor-of Farm and Dairy.

The scrap of conversation given above, explains Mr. Hotson's firm belief in dairying. He is one of those who have prospered by following, dairy farming during the last three decades. His dairy herd has seldom exceeded 18 to 20 cows, but they have been good ones. He is one of the few men of the district who turns off three score of pigs a year.

30 Years of Herd Improvement

The one factor that, above all others, explains Mr. Hotson's success as a dairyman, is the high standard of production that he has maintained in his herd. It was away back in 1884, just 30 years ago, that Mr. Hotson first started to raise the standard of his cows. He then had a scrub herd, a mixture of all kinds. Shorthorns were the leading breed of the district and the majority of the sires used were of no breed whatever. It was in that year, 1884, just shortly after he had started farming for himself, that Mr. Hotson purchased his first pure-bred sire, a Holstein. For 22 years he bred consistently for higher milk production and at the end of that time found himself with one of the most productive herds in the district. Then he started in to weed as well as breed. He joined the cow testing association and began to weigh and test the milk from each individual cow in the herd on three days of each month. This work has been continued for eight vears.

Four years ago a representative of the Walkerville Farms, buying high-class Holstein grade cows in Oxford county, found just the kind he wanted in Mr. Hotson's stables and took seven of them. This gave Mr. Hotson an excellent opportunaity to branch out into pure-bred and registered cattle. He purchased three good females and, having exceptional luck in securing heifer calves, the natural increase has been such that his herd -is now evenly divided between pure-bred and grade Holsteins. Eventually the herd will be pure-bred entirely.

Grades That Excel in Production But is it to be wondered that Mr. Hotson is loathe to part with the strain of grades that he has been developing for 30 years? To all intents and purposes, his grades are pure-bred cattle, the foreign blood being now only a small fraction of one per cent; and they are high-class products. Here is an

example. A 30 months' old heifer freshened in November, 1914, and in the next seven months produced 6,700 lbs. of milk. When she went on grass last spring, she immediately came up in her flow again and promises to produce between 9,000 and 10,200 lbs. of milk in her first lactation period and freshen within the twelve months. Few pure-bred heifers can make a better showing than this.

A two-year-old pure-bred heifer in Mr. Hotson's herd freshened Oct. 33rd, and in November milked 1.115 hs., and for the next few months her production ran as follows: 1,000 lbs.; 995 lbs.; 1,060 lbs.; 970 lbs.; 860 lbs., and so on. Both of these heifers were well fed, but no attempt was made to push them for heavy milk production. It would seem that there is little to choose between the pure-bred and the grade animals in this herd, judged from the production standpoint alone.

Mature Cows Average 8,000 Lbs.

These are only two of the many good individuals in the herd. An average of all the mature cows owned in the last four of five years would run around 8,000 lbs. of milk a cow. One cow for instance, which had just completed her lactation period shortly before my visit to Mr. Hotson, had produced 10,230 lbs. of milk and 325,76 lbs. of butter-fat in the year. Another cow that freshened or. Jan. 21, 1814, produced 9,740 lbs. of milk and freshmed again in November of the same year. For the next five months she-averaged very (Consistent on page 7)

Alfal^fa Mixtures for Silage

FRED W. UPSON, UNIVERSITY OF NEBRASKA

By Proper Combination with Corn Excellent Silage May be Made

THERE are often times when, owing to a wet season or an early frost, farmers experence difficulty in avaying the last cutting of alfalfa. At such times a method of converting alfalfa into silage may bring about a saving of the entire last crop.

During the fermentation process, which takes place immediately after the silo is f⁰led, the sugar in the green crop is converted by bacterial processes into a mixture of acids. The most important acids formed in silage are lackic acid, the same acid which develops in the souring of milk, and accetic acid, the same acid which gives to vinegar its sour taste. Several othe, acids are also formed in lesser amounts, but they are of little importance in normal silage. These acids serve to preserve the silage mixture from further decomposition. The silage fermentation is similar to the fermentation which takes place

The alfalfa plant is deficient in fermentable sugars. For this reason, alfalfa alone does not make silage which will "keep." Acid is not produced in sufficient quarities to preserve the silage. Because of this deficiency of acid, putrefactive processes set up, and the silage acquires a disgusting taste and an odor somewhat resembling the odor of decaying meat. Connecticut Evidence

Bulletin No. 70 of the Storrs Agricultural Experiment Station, Connecticut, recounts some experiments in which alfalfa and other legumes were successfully siloed when mixed with green oats, rye, or timothy. These latter crops furniah the necessary sugar for the fermentation process.

More .ecently, similar experiments have been carried out by the Kanasa Agricultural Experiment Station. It was found that corn meal or molasses mixed with alfalfa produced excellent silage. Corn was added to alfalfa in the ratios 1 to 10, 1 to 30, 1 to 30, and 1 to 40. Similar mixtures were made with molasses. The 1-0-40 mixture kept just as well as the 1-to-10 mixture. The molasses and corn furnish the necessary fermentable sugars from which the acids are produced.

In September, 1914, the Nebraska Agricultural Experiment Station constructed six small silos

having a capacity of about 1 ton each. These were filled,-one with corn, one with Black Amber cane, one with alfalfa, and three with alfalfa-cane mixtures in the proportion of one part alfalfa to two parts cane, equal parts of cane and alfalfa, and two parts alfalfa to one part cane, respectively. The sorghum cane contains a higher percentage of fermentable sugars and makes up the deficiency of the alfalfa in this respect.

The Nebraska Results

These silos were opened in August, 1915, after having been filled for nearly a year The silage in all except the one containing only alfalfa was found to be in per-

fect condition. The silage made from one part cane and two parts alfalfa was just as good as that containing larger proportions of cane. The silo which was filed with corn contained, at the time of opening, normal corn silage. The moisture content was 67.35 per cent and the total acidity 1.61 per cent, expressed as aceita acid. These figures are normal for corn silage. By means of electrical resistance thermometers, temperatures in this silo were recorded for several weeks after filling. These agreed very closely with temperatures taken in one of the large silos at the Experiment Station. These facts would seem to indicate that the quality of silage is in no way related to the size of the silo.

The amount of acid in the cane-alfalia mixtures was less than that in the corn silage. The silo containing corn gave a silage carrying 67.85 per cent moisture and 1.61 per cênt acid, calculated as acetic acid. The alfalfa two parts, cane one part, mixture gave a silage of 62.15 per cent moisture content and an acid/ ν of 1.90 per cent, calculated as acetic acid. The lower acid content in the alfalfa-cane mixture is a desirablquality.

Alfalfa, two parts, mixed with cane, one part, makes a highly desirable silage. Siloing alfalfa with cane in the manner here described is recommended as a means of saving the last crop of alfalfa whee conditions are such that it cannot be made into hay. Whether or not it will be profitable to silo alfalfa is a question which can only be answered by the farmer himself under the individual cond

How Consolidation Was Achieved

CONSOLIDATED schools cost a little more than district schools. At the same time, the former afford much better educational facilities to country children. This fact often brings ratepayers with children into conflict with ratepayers without children, unless the latter are broad-minded enough to realize that well educated children are an aset to the state, as well as to their parents. An instance of this fact was brought to light in connection with the consolidated school at Guelph.

One district distantly located, separated from the consolidated school because of the expense, but when he vote was analyzed it was found that practically every parent with children of school age, had voted to continue their children at the consolidated school, expense or no expense. When Mr. Lees, who is contributing a series of articles to Farm and Dairy on consolidated schools in Indiana, was in that state recently, he ran across an interesting incident which shows



The Busiest Day of All in the Fall.

how ratepayers with children sometimes win out when they are in the minority.

A consolidated school has been established nearby, but the majority of the ratepayers insisted on keeping the old district school open. Parents then started to send their children to the consolidated school, paying their own transportation charges, until the district school had dwindled down to the proportions seen in the illustration herewith. Finally the attendance got down to



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The Remnants of a District School,

The people of the district voted against acandoning the district school for one of the best Comsolidated school of Indians. Ratepayers with children then found a gr. ferent way of consolidating as told in the artis adjoining.

the point where a decrease of one would dea the school automatically according to the star law. Some one then persuaded the little girl is the illustration that it was not very nice for any girl to be going to school with so many boy, and she too insisted on going to the consolidary school. Then the school had to be closed, de section was merged, in with the consolidary school and the ratepayers, one and all, had y meet their due share of the educational expense

The Selection of a Breed By R. McCann

IN starting a dairy berd, too much stress is not he breed selected, but the individuals of the breed that count. There are many fine is dividuals in all of the leading dairy breeds, and of course, many poor ones. As to the relative production of breeds when compared one with as other, there is no reliable existing data whit will give each breed its distinctive rank according to merit. This question should be settled largby by the purpose for which the product is to be used, the tastes of the breeder and the commission in the lives—nor only local conditions as to altitude, feeds raised and pastures, but the breed predominating in that district.

Instead of selecting a breed because it is not well represented in the community, as is some times done, it is better by far to develop a herd of the same breed which already predominates in that locality. Breeders interested in one certain breed in a community are more inclined to cooperate than where their interests lead seemingly along different paths. Then where one commuity has a large number of animals of the same breed, a better market can be established by that fact becoming widely known and buyers being attracted by the numbers from which they man make selections, that community becoming recognized as a centre for a particular breed. Not only is the outside demand as an avenue of man ket attractive, but the local demand among neighbors is often of a decided advantage, especially when new animals are being brought into the community at frequent intervals.

Pure-Bred Grade

In building up a herd, the production of daip products and not of breeding stock should be made the foundation of business. This is mer especially true of the beginner and man working with small capital than of the more experience and larger investor. The two may be nick combined with no reason against doing so, bu to depend upon stock sales alone is not nearly a

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gestuable or sure und to depend upon produc When production alou grade animals may ark at he purse-breed. Fo may be made at a lower Action may be obtain considering the fact if quired in handling, it to start with good gra higher, then add an o herd, than to try to st mals.

Cross

Many mistakes are bijeet for which bree Certain characteristics into, while establishin transmisslible, and it cossing two breeds ti tip-producing Holstein quality-producing Holstein quality-producing Jers large quantity combinquent result is the lo combined with the low

The outcome of crossing can never be depended upon and the second generation will be more unsatisfactory than. the first. The dairy farmer who selects good animals from the breed which best suits his tastes and locality, and not only selects good individuals, but selects those which will transmit their strong characters, then stays with that breed and continues to grow better individuals by incessantly weeding out the poorer ones, will meet success in due measure of financial returns and in that joy of achievement gas

With The C

CLOSE cooperation fits from the dat tween the man and hi our own community ridecision that so far cerned, this cooperation have been on poor pa are thin in consequent pastures and this is point of the pasture

First let us conside which grows in the colow nutritive value. ed to afford cow feed, the grass roots throug this product must be eing cows, there is a the best grass in the before spring, weeds take its place and the continually declining i

The effect on the of The cows cannot keep dry before the snow when summer dairying (Conclud

October 21, 1915

profitable or sure under average conditions as to depend upon production.

When production alone is considered, the highgrade animals may give equally as good returns as the pure-bred. For the reasons that a st.rt may be made at a lower figure and the heavy prodecion may be obtained from high grades, and considering the fact that less experience fa required in handling, it is usually more advisable to start with good grades and continually grade higher, then add an occasional pure-bred to the herd, than to try to start with all registered animals.

Cross Breeding

Many mistakes are often made in crossing breds. This practice in itself defeats the very object for which breeds have been developed. Ceruin characteristics and tendencies have been incommissible, and it is often thought that by crossing two breeds the desirable characters of each may be obtained. For example, the quantic-producing Holstein is often crossed with the quality-producing Jersey in an effort to secure agre quantity combined with quality. The frequent result is the low quantity of the Jersey combined with the low quality of the Jersey

The outcome of crossing can never. be depended upon and the second generation will be more unsatisfactory than. the first. The dairy farmer who selects good animals from the breed which best suits his tastes and locality, and not only selects good individuals, but selects those which will transmit their strong characters, then stays with that breed and continues to grow better individuals by incessantly weeding out the poorer ones, will meet success in due measure of financial returns and in that

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Why Tile Drains are Profitable

The Principles on Which They Work Simply Explained

" T'S the best 10 acres on the farm." We knew that our friend spoke the truth for we knew that farm well; well enough, too, to remember when that particular field had been the poorest section of the farm with sedge grass as its only crop. One line of six-inch tile through the lowest lying land with three or four laterals of four-inch tile had made the difference. An expenditure of \$50 f ... tile and labor had made the difference between a few tons of inferior hay and 600 bushels of oats. Why did tile drains make such a great difference? The question is of particular interest in the fall of the year when the drainage season is with us again. One of the clearest expositions of the action of tile drains, which makes them so efficient and profitable, that we have ever seen, appeared recently in a report from the Iowa Experimental Station. It is as follows:

FARM AND DAIRY

"As soils are made up of very small particles of irregular shape, it is impossible for them to lie



Her Merit Is Proved by Her Production.

Lass ddth, seen herwerith, is now the champion junior four-year-old of the Jersey world. Her production is 1344.6 Ha. or milk and 2017. Ho. of builter fat. Her typp is well worthy of study by Jersey breeders who value production as the most desirable attribute of a dairy oow. Owned by Hood Farm, Lowell, Mass.

joy of achievement gained from work well done.

With The Cows Nowadays

CLOSE cooperation is necessary to secure profits from the dairy herd,-cooperation between the man and his cows. A drive through our own community recently, forced me to the decision that so far as many owners are concerned, this cooperation is lacking. The cows have been on poor pastures all summer. They are thin in consequence. They are still on poor pastures and this is bad both from the standpoint of the pasture and the cow.

First let us consider the pasture. The grass which grows in the cold weather of the fall is of low nutritive value. This growth is not intended to afford cow feed, but rather a protection to the grass roots through the coming winter. When this product must be cropped short by half starving cows, there is a long chance that much of the best grass in the pasture will be killed out before spring, weeds and inferior. grasses will take its place and the result will be a pasture continually declining in value.

The effect on the cows is equally dishstrous. The cows cannot keep up their milk flow and are dry before the snow flies. I believe that even when summer dairying is practiced, it is the extra (Concluded on page 6) close enough together to form a solid mass; there remain spaces between these particles large enough to permit the entrance of water. After a tile line is established, this water gradbally works its way down to the tile and enters through the opening at the joints. If the tile is laid properly, no dirt will be carried into the tile line which will no pass out with the water.

Wet Soil Prevents Growth

"When soil is saturated, that is, when water fills all the space between the particles, it contains no air and is unfit for the promotion of healthy plant growth. This water of saturation, acting under the force of gravity, will flow through the soil as soon as a portion of it is removed at the point of outlet into a tile drain. In this motion, or freeing of the space between the soil particles, a vacuum is created and the weight of the atmosphere on the surface of the soil forces air to follow the water as it flows out of the ground into the tile.

"In this action, three laws of nature have been followed: first, the law of gravity, which causes the water to flow toward the tile; second, the law of surface tension, which holds the amount of required moisture around the soil particles; and the law of atmospheric pressure which forces air into unoccupied space.

"Now this air, which enters the soil following the water as it leaves the spaces between the soil particle, prevents the packing of the soil particles and thus retards the action of capillary attraction, which tends to bring the soil moisture to the surface where it evaporates in warm, windy weather. It also leaves an open way for the plant roots to reach down to the soil moisture and plant food it contains.

905

"The breaking-up of the surface pack or crust introduces air into the surface soil, holding the small particles from close contact, thus preventing capillary attraction, or the drawing of the moisture from the subsoil to the surface, where it evaporates rapidly on a warm, windy day. The stopping of evaporation means that the water which is held by the small particles of soil, and which contains the plant food, remains it place and the spaces between these film-covered particles of soil, having been drained of surplus or harmful water by the action of a tile ditch, furnish a way for the plant root to penetrate to the lower or subsoil and reach the stored food contained in the moisture held around the soil particles by the force known as surface tension.

Moisture Storage Capacity

"Tile-drained lands are always perfectly propared for the process of plant-food assimilation. Such lands have the greatest storage capacity for useful moisture, take up the full value if Eght rains during dry seasons and, because if their open condition, do not permit of rapid erapy-ation; and provide ample air content for the growing plants. Tile lands are therefore much more able to successfully carry growing plants thr sup a season of drought than are untiled lands.

"Farmers do not always realize that growing plants require large quantities of air. It is always pleniful above ground, but it is needed in the soil quite as much as water. Draining of land is done quite as much for the purpose of putting air in the soil as for removing the harmful water. Any soil would derive a benefit from drainage simply for the purpose of introducing air. Soils breathe, and those which do not breathe proposerly aever produce full crops.

"The drains supply air to the subsoil at all times. The atmosphere contains a large percentage of moisture which condenses when coming in contact with a cooler body. The passing of air through a tile drainage system, which includes the open space between the soil particles which are opened through the action of tile drainage, is a well defined operation and can be readily observed.

Drains Supply Moisture

"At the close of a warm day, air enters the tile outlet, and, flowing through the tile, enters the subsoil through the tile joints. This subsoil being cooler than the warm, moist air entering through the minute openings, condensation takes place and thus *i*. supply of moisture reaches the plant root by means of circulation of air in dry weather.

"When it becomes understood what an immense amount of water, which is estimated to be 36 tons per acre on warm, windy days, is evaporated each day at the surface of the ground, it becomes clear that it is vitally important to prepare the subsoil by drainage to store all the moisture possible in available form for plant growth, and to conserve it during the cultivation period by frequent cultivations until such time as the crops shade the ground and preserve the open condition which prevents evaporation."

There is little nourishment in pasture grasses nowadayo. Winter feeding should begin in real earnest in the next few days.



Don't Dump Your Damaged Grain on the Market for Whatever you can get --- Grind it and Feed it.

Grinding adds 30 cts. a bushel to the value of sprouted or smutty wheat.

WING to its high nutritive value, wheat for feed is worth a dolar a bushel. Wheat that is sprouted or smutty is now selling for jot is or lower, but if ground and fed to be in combination with oats, peas or corn, it practically as high a feeding value as dolar 0 stock in has prac

Damaged wheat sold as grain will only bring you half what It would if converted into beef, or milk or butter

> Our Grinders can run by Windmill or Gas Engline Send power. full particulars of the different sizes.

TORONTO ECONOMY GRINDING OUTFITS

consist of a "Toronto" grinder belted to a "Toronto" or "Chapman" gasoline engine or to a "Toronto" geared Airmotor.

SPECIAL FEATURES OF "TORONTO" GRINDERS

They are built with heavy, solid, com-pact frames, heavy strong arms sup-shaft is 1%-in cold rolled steel sup-ported by three long bearings. The plate adjustment is controlled by a lever above the frame, away from the beit. The grain can be regulated and

the plates thrown into service at the swheth into. This is service fratures wheth into a service fratures are built to give service, to grind stead-ily as long as required, and to stand up under the hardst usage. They have wide heavy bases, which helps to o away wild high shaking. Send for particulars and prices of the different sizes.

ONTARIO WIND ENGINE & PUMP CO. Limited Manufacturers of the well-known " Torents " Lines of Weiner Siles. Head Office: TORONTO. Branches: Montreel, Winnipeg, Calgary, Regina



the matter was discussed briefly and an effort was made to approach the government in regard to it, but lack of time prevented anything being done. While government officials and others have urged the farmers for years to cooperate the fact is that years to cooperate the fact is that every effort hat has been made to have a satisfactory Act passed to facilitate cooperation by farmers has been blocked through the efforts of the Provincial Retail Merchants' Association. Very few farmers under-stand the situation. President R. H. Halbert, of The United Farmers of Ontario, has appointed a committee composed of Messrs, J. J. Morrison, the secretary of the association, H. B. Cowan, of Farm and Dairy, and himself to deal with this matter. This self to deal with this matter. This committee is gathering information which will presently be laid before the various branches of The United Farmers of Ontario with the object of obtaining united action throughout the province. Only united action will enable the farmers of Ontario to obtain the legislation they require.

Recent Organization Work

THE United Farmers of Ontario Tare again active, organizing Farmers' Clubs throughout the province and brir ging other clubs already organized .nto affiliation with the provincial association. Twentyfive members were present at a meet-ing of the Farmers' Club at Melanc-thon, Ont., on Oct. 7. This club is already organized and affiliated with the provincial organization, and the time was given to a discussion of the time was given to a discussion of the business possibilities of the club. The following day a meeting was held at Relessey, at which I. J. Morrison was the chief speaker. It proved to be a wet night, and there were not enough present to organize, but a committee was avacuated contained committee was appointed, consisting of Robert McCutcheon, J. A. Avison, Lyman Waller and Roy McKelvey, to call another meeting on Oct. 22nd and discuss organization and affiliation.

Earlier in the month, a meeting was held at Colbeck in Dufferin county and a club successfully organized with 15 members. P. J. Cunningham was appointed president and S. Mc-Kee treasurer. Both of these officials are ex-reeves of the township. The taking of stock in the United Farm-ers' Cooperative Company, Ltd., will be discussed at the next meeting.

be discussed at the next meeting. Another branch of the United Farmers was orzanized at Violet Hill, Dufferin county, the principal speakers being I. T. Morrison and R. H. Halbert, president of the United Farmers of Ontario, who rendered ex-cellent service in the organization work in his county. Geo. Little, of Elba, also gave an address. The meeting chose as their president, Wm. Ferris, and secretary. Thos. Rulledge meeting chose as their president, wm. Ferris, and secretary, Thons. Rutledge. The following day a club was or-ganised at Honeywood, Messrs. Hal-bert and Morrison again being the speakers. The officers of this asso-cle L. Tupling, corectary sident, and Mr. Morrison regorts that at all of these meetings the audience seemed anvious for organization.

anxious for organization. A great deal of grain is still un-

THE Bar River Formers' Club met at the hall on Wednesday erea-ing. There was a good attend-ance: five joined, and the club is growing. Quite a lot of business wa done. A resolution was passed to place a credit note for \$1,000 in the Imperial Bank at Sault Ste. Maria, for the benefit of the members. Two of the members, Mr. George Broda, and Mr. W. G. Evoy, were appointed to receive and distribute goods.

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A committee consisting of William Hollingsworth, Alex. Stewart and R. Smith, were selected to look after the business, such as the sale of farm probusiness, such as the sale of farm pro-duce, pulpwood and any other bus-ness in the interest of the member, and several other matters of interes were discussed to be taken up again

With the Cows Nowadays (Continued from page 5)

flow that we secure in the winter the reaps the profits of the business. [doubt if any dairy farmer ever made a competence through milking its cows only six months of the year. We have to feed the cows through the winter, we have to tend them and we might as well aet milk enough to premight as well over milk enough to par-tially repay us for both feed and can. Cows on poor fall pasture without supplementary feeding, won't yiel the milk. I have foutsd, too, that a cow goes into the barn thin in he fall, that it requires more feed to key her during the winter than one the solution to have in a good condition goes into the barn in good condition. Such a cow is of low vitality and re-quires good feeding to keep her warn and to enable her to gain in strength Such cows, I might add, cannot be expected to produce healthy, streng offspring.

Autumn care should start in the spring with preparation to meet the short pastures of summer. Dainy ing is a 12 months' job and one card start in the fall to undo the errors of the previous six months. Before w the previous six months. Before we had our summer silo, our plan we to sow at intervals, one-quarter act of a mixture of one bushel of oats an one-half bushel of peas to the are. This was fed to the cows green. In the fall, this soiling crop was sub-stituted for green corn. At the time of writing, most of the corn in the section is in the silo, but the cova in as still on pasture. By all means, one the silo now rather than continue crop the pastures close. Now is the time also to begin grain feeding. The cows will be better out in the yard of small field than allowed to graze our large pastures anyway. There are n nights now warm enough to leave cows out, although they are still be-ter to be outdoors in the day time.

Profit in Road Dragging

OOD roads save money, because They cheapen transportation is markets.

They reduce the drain upon capital invested in horses

They prevent wasts of time, an "time is money." They add to the joy of living, an joy adds to the effectiveness of life.

Good roads may be had by dragging. Use the drag.

ost needy spots on led, but there are s e could put in tile "We never put in a

nimal in his herd for he past eight. This ha ble opportunity to d. All cows are dia not prove their meri heifer is turned do w in her record one ay be some good cau

October 21, 1915

Thirty Years

e to 1,500 lbs. of mi

and so we might go of nances of high production

is whose ancestors of ide were scrub cows, av

ence is the result of eding, consistent wee

Mr. Hotson has the 6

ik and butter product

feeding.

the performance is repeated with the at she goes. With th and Mr. Hotson can al telligently, as only the best cows are used to expense of n

The re-bred bull for the is herd has been exac



a nice little piece or years Mr. Hotson orked together. Ea red Holstein bull. A ond year of use th hus the cost of one

em got two bulls for The Hotson The country arour

undulating ntly ees and occasional st iving the landscape a ke appearance. ike appearance. The pam, a happy mediuu nd clay. Mr. Hotsom f it, 15 of which is and and 140 under it 0 acres of this farm, ndebted to his farm. ears that the presenteen at the helm, the ractically doubled, gs rebuilt and the one house made the addition onial veranda and he grounds with mu brubs and trees. Fr ag point of view, he est improvement th s made has been in le drains, of which e in the land when "We cannot hire a this neighborhood, otson, "but we have e have been doing the with the exception ry tile is of our o



October 21, 1915

als whose ancestors on the female

als whose ancestors of the female dewere scrub cows, averaging 3,000 b. of milk in the season. The dif-creace is the result of intelligent reeding, consistent weeding and bet-

Mr. Hotson has the figures for the Mr. Hotson has Ure figures for the nik and butter production of every simal in his herd for each year of he past eight. This has very him a suble opportunity to improve the end. All cows are discarded which a not prove their merit at the pail. I helfer is turned down for heir

to heifer is turned down for being in her record one year. There

has be some good cause for it. If he performance is repeated, however, at she goes. With these figures to and, Mr. Hotson can also breed more stelligently, as only the progeny of he best cows are used to renlenish the

expense of maintaining

nre-bred bull for the grading up of is herd has been exactly cut in half

w in her record one year. T

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William and R. arm pro-9r bus embers interes again.

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tinue M w is the ng. The yard or aze over still bet time

ging because

ation t n capita ing, and

ragging

"We never put in a tile that did not

(Continued from page 8) pay. The results have been excellent. Land that was of no use before tiling, is now in first-clar: condition. Our general plan has been to run main drains through the low-lying land and then run laterals where they were most needed and other laterals later on as we were able. A part of the ase to 1,500 lbs. of milk a month. as so we might go on, giving in-mores of high production from animost needed and other laterals later on as we were able. A part of the farm that we recently purchased was so wet that we could hardly get a team across one portion of it. We put in a few drains and now you would think it a garden. We were on it early this spring."

Thirty Years of Herd Improvement Work

Tf

The Fruits of Labor

Mr. and Mrs. Hotson are now takart, and Mrs. Hotson are now tak-ing life a little easier than in the strenuous years that have passed. They have a productive farm, a beautiful home and they propose to take time to enjoy it. Just a day or two before my visit, a new automobile arrived to take its place in the fire-proof garage that had been prepared for it. Great things are expected of

that car. Woodstock used to be 10 miles away and represented a long, tiresome drive. Now it will be only a

A One-Armed Man Turning Three Furrows with a Small Tractor.

y a nice little piece of cooperation. for years Mr. Hotson and his father rorked together. Each had a pure-red Holstein bull. At the end of the econd year of use they exchanged. Thus the cost of one bull to each of hem got two bulls for both of them.

The Hotson Farm

The country around Innerkip is ently undulating with numerous res and occasional stretches of bush, genty mutuational attenches of bush, prime and occasione an almost park-image the landcaupt an almost park-tion of the source of the source of the and source of the source of the source of the and source of this farm, Mr. Hotson is madehed to his father. In the 300 ears dat the present proprietor has seen at the helm, the area has been ratically doubled, the farm build-more house made wonderfully as-netice by the addition of a big wide longing verands and a tasty layout of olonial veranda and a tasty layout of he grounds with much planting of hrubs and trees. From a profit-makag point of view, however, the big-est improvement that Mr. Hotson est improvement that are not as as made has been in the addition of le drains, of which there was not ne in the land when be got it.

"We cannot hire a man to lay tiles this neighborhood," remarked Mr. t this neighborhood," remarked Mr. lotson, "but we have put in a few ow and then when we were able to o it with the regular farm jabor. le have been doing this for 20 years, and with the exception of 100 rods, very the is of our own laving. The beau each or the other arm are all rery tile is of our own laying. The lost needy spots on the farm are all led, but there are still places where e could put in tile to advantage."

-Out courtesy M. Rumely Company. little over half an hour's run with the car. Other points of interest and friends everywhere will be reached

with equal ease. Here is one case at least where a very clear relationship can be traced between intelligent dairying on the one hand and a beautiful home with some of the luxuries and all of the comforts of life, on the other.

Another on Auto Lights

E DITOR, Farm and Dairy,-In your issue of Oct. 7th, "Auto Owner," Hastings county, sug-gests that all vehicles carry lights. I would suggest that they all be com-pelled by legislaton to carry lights. I have to drive from the city every

I have to drive from the city every night after dark, and the glare of the auto lights is such that I cannot see where I am goinz. Then I often come near running down a cyclist be-cause he has no light. Rubbertyred buggies are hard to see or hear com-ing on a durk night. I whole the set see somehing when high anter.--F. W. M., Frontenae Co., Ont.

Harvest All Red Clover Seed

DROSPECTIVE supplies of red

PROSTECTIVE supplies of red clover seed are very much re-farmers next year will face an extreme shortdge with high prices. Farmers should endeavor yet this autumn to save every bit of the red clover crop that promises to yield good seed. — Seed Branch, Ottawa.

Is this senson's crop of calves a little more promising either because of an-cestry or individual vigor than the crop of last season? If they are not, why?

GET THE "EMPIRE" SILO ROOF AND PROTECT YOUR ENSILAGE Don't throw away Money. _ The "Empire" Silo Roof is abso-

Get a Roof on your SILO

proof. It is simple, easy to erect and moderately priced-so moderately that it will quickly pay for itself on any farm. Big opening for filling and lots of light and ventilation Write to-day for full information and prices.

lutely weatherproof, tight and fire-

Also Ask For Prices on

"Eastlake" Galvanized Shingles, Brick and Rock-Face Siding, Ventilators, Barn Roof Lights, "Empire" Corrugated Iron, and Art Interior Metal Plates.





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Marco Cure



In for the Winter

- shut away from the foods that nature provides for laying hens. She will lay if you supply her with protein—the material she with proteinwith protein—the material sne needs to produce eggs. GUNNS Shur-Gain Beef-Scrap is rich in protein. It take: the place in the winter rations of the grubs and worms a hen picks up in

mmer. Feed it in the right propor-ons and you will be richly re-

tions and you will be richly re-paid in eggs. Our 32-page book, "The Hen that Lays is the Hen that Pays," tells how to feed for winter eggs. It is a complete guide to success in poultry keep-ing. Mail the coupon for a FREE

Gunns Shur-Gain **BEEF- SCRAP**

GUNNS LIMITED 22 Gunns Road, West Toronto. Send Poultry Book Free.

Clean Turn bush-land in-to cornfield, disk your roadsides and kill the chinchbugs. The Up! Cutaway Bush and Bog Plow

does away with the bushifts, grubhoe and shovei—it's better, grubhoe and cheaper. The *Jorged* above Cutaway disk penetrate deep, cut-ing roots, turied tesh and put viriating the soil. Splendt Reveible. If your caller has not the *creation* writes a caller has not the *creation* write us for our ro us direct. He size to write us for our per book, "The Soil and its Tilage."

THE CUTAWAY HARROW COMPANY Maker of the original CLARK disk harrows and plows 866 Main St., Higganum, Cons.

10010 You Can't Cut Out A BOG SPAVIN, FUFF or THOROUGHPIN,



Books For Winter Get our Catalogue of Farm Books. It is free for the asking. Book Dept. - Farm and Dairy



Orchard and Garden Notes

AVE you noticed the bright fruit on the different viburnum bushes, such as the black haw, highbush, craberry, and Viburnum lantana? The viburnums are worth growing for their autumn fruit and coloring.

Fine specimens of dahlias and ladioli in all colors were abundant his year. These two plants descree this year. to be planted in greater variety than they usually are. They furnish an excellent fall flower for all sorts of purposes

Is the entrance to your home attractive? Things that are always noticed in the country are entrances to farmsteads. These should at least be farmsteads. These should at least be clean, orderly, and well laid out. The lawn is more pleasing if it is kept clipped and if it contains a few shrubs and trees

The value of spraying was demon-strated again this year in spite of the small apple crop. One crchardist strated again this year in spike of this small apple crop. One orchardist who has no fruit this year, on ac-count of the spring frosts, has given his orchard as good care as if it con-tained plenty of fruit. This is the, right spirit and will mean a good crop another year.

Proper grading is necessary in order to get the best prices from many crops. This is especially true of apples and other products that sell or apples and other products that sen on appearance. A few poor apples in a lot will 'ower the selling price to that of the p.or apples. Better sell No. 1 and No. 2 stock in well graded packages

packages. Has any preparation been made to keep birds about the place this win-ter? Birds should be fed when there is heavy snow or at other times when food is scarce. There is a good old Scandinavian custom, which might be followed here with pleasure and befollowed here with pleasure and temperature during the winter to fed occasionally during the winter to feed the birds. Try it. The fun of watch-ing the birds will pay for the trouble.

The Fall Clean Up

N many farms it is the custom to put off the work of cleaning up tops and other crop refuse are left scattered around in the orchard and garden. The weeks that have es-caped the cultivator are left standing and old boards and rubbish are left in the fence corners where they have been accumulating throughout the summer.

By leaving things in this condition the choicest of winter quarters are provided for many of the insect pests which attack our fruits and vegetables during the summer time. Fotato bugs, click beetles and many other bugs injurious insects pass the winter in injurjous insects pass the winter in the shelter of grass, weeds or rubbish in fence corners. Club root of cab-barce, carly blight of potatoes, as-paragus rust and other plant diseases are greatly assisted through the win-ter by leaving the tops of their host plants on the ground for hear host plants on the ground after harvesting. Weed seeds which dron from standing plants during the winter are blown along over the snow and their disper-sion greatly assisted. Many insects pass the winter in the ground. Wire worm and white grub are examples of these. If the garden is left unplowed they are undisturbed, their food sup-ply is not cut off and the best possible conditions are allowed to prevail for bringing them safely through the

In the spring we have Arbor Day set apart for planting trees and shrubs and other desirable plants. In the fall we should have a day for pulling undesirable things up and destroying It is not necessary to wait, them. however, until such a day is legally set apart. Let us each plan to take one day this fall to clean the rubbish out of all the fence corners, gather all the old tops and dry weeds from the orchard and garden and make a great bonfire of them. Let us throw our garden up into ridges with the plow. Old Jack Frost will then have a fair chance at the little pests that cause us so much trouble during the summer time.—R. D. C.

Storing Winter Squashes

E. P. Sandsten, Colorado Agricultural College

QUASH is one of the most valu-

 $\begin{array}{c} S^{\rm ODASH} ~{\rm is one of the most valuable} \\ {\rm able winter vegetables, and when keep until spring. \\ {\rm Oday well repend squashes should be gathered will know a should be gathered to be a stored and those should be gathered will impair their heaping qualities. Never pull squashes from the vines, but out them off with a kinfe, leaving about an inch thick of the store of the store of the store and store about the store of the store and the$ knife, leaving about an inch thick of stem attached. If the skin or shell is

stem attached. If the skin or abell is not hard, keep the squashes in small plies and uncovered during the day, but covered during the night. The furnace room is the best storage, but any dry place having a tempora-ture of 50 to 70 degrees is good. Racks or shelves about he p povided, so that thickness. The success of keeping the sources of keeping the thickness. The success of keeping the squashes from decaying depends large-ly upon high temperature and dryness. The dryer and warmer the air in the storage room, the haider the shell be-comes, and consequently the longer the squashes will keep. A potato or vege-table cellar is ordinarily a poor place to store squashes.



Fattening the Poultry

N England and Canada the favorite method of preparing fowl market is by crate fattening. In the United States it is more common to closely confine the birds in small pens and feed heavily. The most common method of all, however, in both Canada and the United States, is to ship the birds to market with is to ship the birds to market with-out any special preparation. These unfinished birds are always a glut on the market along in the fall of the year and a source of loss to both deal-ers and farmers. Eicher crate fatten-ing or pen fattening are much in ad-vance of no fattening at all.

A suitable fattening ration has as its basis feeds rich in fat, such as corn meal, dampened with sour milk. During the fattening period, the di-gestive organs of the fowl are put under a severe strain and the bacteria under a severe strain and the bacteria of sour milk are particularly valuable in keeping the digestive apparatus in good order. A fattening ration that has been found particularly satisfac-tory and which is recommended by the Experimental Station at Orono,

October 21, 1915

Maine, is made up as follows: Com meal, two parts; ground oats, part; middlings, one part; scrap, one part, all by weight, these with sour milk to make sk

When the birds are first put in fattening coops, they should be ed with lice powder and then br on to full feed gradually. be fed several times daily, and case should food be left before For at after they are satisfied. 24 hours before killing, all food sl be withheld and clean way. plied. No matter what method fattening is used, during the las hours, the birds should stand on di or wire, so that they cannot, becar of hunger, eat their droppings a thus undo the work of the cleans period.

The Black Hamburgs

[•] I want to keep, say, a dozen of the general flurpose hens. I have a of this year's Black Hamburgs to mence with. Are they prollable lays should I get some other kind?-R.b tario Co. Ont.

The Black Hamburg has the re tion of being a prolific layer. claim that under favorable cond they will equal the Leghorn in pro-tion, although as a matter of factor aratively few poultrymen Hamburgs in preference to Leghon Hamburgs are very partial to w range

We would hardly call the Haming a general purpose fowl, in that is go more to vers than to meat. The go more to vers than to meat. In general purpose breeds, such as Rod Wyandottes, R. I. Reds, and so for are perhaps the best all-round has for both table use and egg production tion.

Just About Geese

GEESE have a number of peeds ities which are saterosting. We serves are equal, geese pair a become very much attached to de mates, soldom proving unfailed They have a strong attachment their home. They are grazers, the bills being provided with sharp, in locking, serrated edges, designed readily cut and divide vegetable sues, and the tongue at the covered with hard, hair-like the ti which serve to quickly and surely vey the bits of grass and leaves the throat.

Goose grease from time imminal has been considered a sove remedy for rheumatism, lumbago, joints, sprains, etc., and the Hebra prefer it to lard for cooking purps In Europe the liver of the goos sold to pie makers, who make d the well known pie. As high the well known pies. As high a a dozen in paid in Europe for u livers. Geese are the cleanest alive, being very particular about condition of their food, they a to appreciate the care and attem they receive, and soon learn to h their strendants. In China goose m ure brings a high price, but its m has not become recognized in t country to any great extent.

Mistaken Love

Ganders occasionally take very culiar freaks, such as conceiving violent attachment for some inanim object as a door, a stone, a cartwa a plow, or something of a similar ture, when they will spend the gras part of their time sitting beside is

in its company. Should the gander be separated in his mate and placed with another, will seldom accept the new one so h as the old mate is anywhere will hearing distance, and even when tirely removed from the premises, frequent' takes some time before will become reconciled to his mate

October 21, 1915

What the Farm C

"W HAT the Farr Directly to Directly to Living," is is bulletin containing the study carried on in el 1913 by the Office of I ment of the U.S. Dep ture to determine the part of the farmer's li furnished directly by t data presented concern ducts, fuel, and the use Figures are also given value of the food and fu value of which becom quantity furnished by t facts presented here we mented by a more get the subject.

Studies were made in of which three were is ing sections, two in the in general farming sect in typical dairy section The average annual fuel, oil, and shelter p



The So

This artificial pond is on ed is a great convenie sever, the boys who h "the good old sum

he families visited w hich \$91.97 was fur w the farm and \$37 the average value po 595.08, of which \$45 ished by the farm an The average a hased. use of the farmho be \$125 per family nce of this is fully he family in the town use rent.

The house labor iefly by members of t per cent. being hired nnual value of this l er family.

The average cost of rson, that is the val nd its preparation, wa he cost of board an 14.62. Of this sum, ly 22 per cent. wa nly 23 per cent. ctual cash by the farm The result of these at the farmer's cos tual cash expenditur ially reduced by what ishes in food produ puse rent; in fact, th s source adds as m ealth of many farme et income from the sa

If it were not for atributed by the far ual cash expenditure mers would not have

Extensive investigati e profits in farming e average labor inco er probably differs l 1915

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What the Farm Contributes

"W HAT the Farm Contributes Directly to the Friday W Directly to the Farmers' Living," is the title of a bulletin containing the result of a study carried on in the summer of juld by the Office of Farm Manage-ment of the U.S. Dept. of Agriculure to determine the value of that part of the farmer's living which is furnished directly by the farm. The tarms are also given showing the rame. The data presented concern the food pro-ducts, fuel, and the use of farmhouse. Figures are also given showing the value of the food and fuel boucht, the value of which becomes important when considered in relation to the quantity furnished by the farm. The facts presented here will be supple-mented by a more general study of the subject.

Studies were made in ten localities, of which three were in cotton-grow-ing sections, two in the corn belt, two

nary farm wages, but in addition to this he has the products contributed by the farm. Of the 483 families visited, 72 per

cent. were those of the evenes of farms and 28 per cent. were tenants. The average size of the farm owner's family was 4.7 persons and of the ten-ant's 4.4. The comparison of the ant's 4.4. The comparison of the food products used on pwned and rented farms shows that the tenants buy eight dollars' worth of food less per person annually than the owners. per person annually than the owners. Tenants depend largely on the farm for food. Owners have both labor and capital income and hence have more with which to buy food.

THE annual Provincial plowing match under the auspices of the

The Provincial Plowing Match

Studies were made in ten locatites, of which firee were in cotton-grow-ing sections, row in the corn belt, 'wo geneeral farming sections, and three in vpical dairy sections. The average annual value of food, the, oil, and shelter per person for prizes will be offered. In addition to

The Source of a Neighborhood's Ice Supply.

The points of a resentation how a set of the point of the set of t

e families visited was \$129.74, of which \$91.97 was furnished directly by the farm and \$37.77 purchased. the average value per family was (\$65.06, of which \$421.17 was fur-ished by the farm and \$173.91 pur-hased. The average annual value of ased, the average annual value of e use of the farmhouse was found be \$125 per family. The import-ice of this is fully appreciated by he family in the town or city paying use rent.

The house labor was performed hiefly by members of the family, only per cent, being hired. The average nnual value of this labor was \$203 er family.

The average cost of board for each erson, that is the value of the food ad its preparation, was \$10 a month. he cost of board and lodging was 14.62. Of this sum, on the average ly 22 per cent. was paid out in tual cash by the farmer.

tual cash by the farmer. The result of these studies shows at the farmer's cost of living in tual cash expenditures is very marially reduced by what the farm furshes in food products, fuel, and buse rent; in fact, the income from us source adds as much to the real salth of many farmers as does the st income from the sale of farm pro-

If it were not for those products atributed by the farm without any rual cash expenditure, a great many mers would not have a comfortable

Extensive investigations relative to

the competitions in walking plows, there will be given exhibitions of tractors on November 3rd, 4th and the chowing the competition of showing the capabilities 5th. ath, showing the capabilities of modern machinery in tilling the soil. For instance, some of the light tra-tors will plow several furrows, besides pulling a barrow and seeder all in one sweep. It is expected that this will be the largest and most interesting meeting of the cultivators of the soil ever held in Canada.

Coming Events

The Dairymen's Association The Dairymen's Association of Western Ontario will hold its 49th Annual Convention and Winter Eairy Exhibit at St. Mary's, Ont., Jan. 13-13, 1916. A full list of prizes bas been prepared for the exhibit of but-ter and cheese, and the dairy herd competition awards will be presented as usual.

The annual convention of the On-tario Vegetable Growers' Association will be held at the Parliament Build-ings- Toronto, on Tuesday, Novem-her 9th, commencing at 9 a.m. A her 9th, commencing at 9 a.m. A number of vegetable experts, includ-ing several from the United States, will be present and deliver addresses. will be present and deliver addresses. This association is making rapid progress in all the different lines of work it has undertaken. Twe im-portant features of work undertaken this year are vegetable field crop com-petitions and experiments in the *p*-duction of home-grown seed. Single tore aster on the strength cartification fare rates on the standard certificate e profits in farming indicate that nlar, have been arranged for, good go-average labor income of the far-ing November 8th, returning not tr probably differs little from ordi- Later than the 15th. 8th, returning not

Unlimited Water for every Purpose

t or cold, running water by simply turning a tap. Water for kitchen and bathroom, aveniences in the country, water in barns and fields for stock, water in gardens and ds for sprinkling and spraying. Sunds previx good deem't it?



Pratts Poultry Regulator helps hens get full nourishment from the daily ration, and greatly increases the value of feed.

It brings down the cost per dozen of eggs, because it makes hens lay more eggs to the bushel of feed. It lowers the cost per pound of dressed poultry, because it develops the cockerels quickly.

Pratts Poultry Regulator acts gently but directly on the digestive organs, tones up the liver and puts the birds into fine healthy condition.

The herbs, seeds, and other food elements that birds get in foraging are necessary parts of their feed. Supply these food elements by using Pratts Poultry Regulator and the results are at once shown in improved health and lots of eggs.

Try it on your flock at our risk. Money refunded if you are not natisfied.

25c. packages and larger money saving sizes up to 25 lb. pails, \$2.50. At all de Back Guar



FARM AND DAIRY AND RURAL HOME

PUBLISHED EVERY THURSDAY

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The Rural Publishing Company, Limited PETERBORO, ONT.

"Read not to contradict and to confule, nor to believe and take for granted, but to weigh and con sider."-Bacon.

An Appreciation

M R. J. J. Kelso, who supervises the care of Neglected and Dependent Children in Ontario, writes us as follows:

"Farm and Dairy is becoming famous as a "home-finder and certainly deserves the thanks "of all who love children, for its voluntary and "unremunerated work. On behalf of the Chil-"dren's Aid Societies of the Province, I wish "to express the highest appreciation of your "good services.' The issue of Oct. 7 is most "interesting and attractive."

Thank you Mr. Kelso. The appreciation of yourself and others who are rendering noble service on behalf of the homeless little ones of our land would be sufficient reward for any effort the editors of Farm and Dairy may have made to assist you in your noble work, were it not that we have already been sufficiently repaid in the doing of it. A good deed is its own reward. And then Our Folks, without whose cooperation we could have done nothing in finding for these little ones, also deserve a larging ion of the credit for the good work done

Land Question at Bottom

GOR a solution of the housing problem in cities, four of the nine members of the Commission on Industrial Relations, which recently investigated social conditions in the United States, recommended that-

Special attention should be given to taxation in order that land should, as far as possible, be forced into use and the burden of taxation be removed from home owners.

For a solution of the agricultural landlord and tenant problem, they found it necessary to recommend-

The revision of the taxation system so as to exempt from taxation all improvements, and tax unused land at its full rental value.

Fer a solution of the problem of unemployment, they found after long investigation that whatever else may seem to be necessary, the one thing that cannot be neglected is-

The forcing of unused land into use by making the tax on non-productive the same as on productive land of the same kind, and exempting all improvements.

In short whatever industrial question they studied relating to social unrest, they found the land question at the bottom.

About Farm Commissioners

WHEN Premier Borden first announced that a commission would be appointed to enquire into agricultural conditions in Canada, a group of Ontario farmers were asked by one of the government's representatives if a certain prominent pork packer would be acceptable as their representative on the commission. It never seemed to occur to this official that the farmers of Canada would desire to be represented on the commission by men of their own calling. Why, whoever heard of such a thing ! Where could even one farmer be found who could qualify for such a responsible position !

The average government official, even among those elected by popular vote, does not seem to realize that the farmer's viewpoint has widened in the past few years to such an extent that the farmer of to-day is interested in all phases of the nation's welfare. They forget that in the organization of great cooperative concerns, farmers have received a wonderful education in questions pertaining to business, finance and transportation. They forget that the greatest grain company in Canada, if not the greatest in the world, was organized and is owned and operated by Canadian farmers. They forget that through their clubs and granges, farmers have educated themselves on social and economic Through these various agencies, problems many farmers have been fitted admirably to take their places on the Royal Commission as representatives of the farming community. What is more, the organized farmers of Canada will not be satisfied to be represented by any, except such of their own number as they may consider qualified for the position.

Mental Food

THERE is a vast volume of reading matter entering Canadian homes that is unfit for perusal by our boys and girls-and the old folk's too for that matter. The laws of the land are very stringent in safeguarding the physical food of the race; so stringent that adulteration and the use of poisonous preservatives is now practically eliminated. The mental food that comes in magazines and books is not so easy to reach through government agencies and a censorship on the impure and the vile must be established by parents themselves. Literature that is absolutely obscene is prohibited the use of the mails, but the plainly obscene in fiterature is not so great a menace as that in which the "devil doth in shining robes appear," and the vilest sins are sugar coated.

These thoughts have been suggested by the casual reading of several stories in a magazine circulating widely in Canada, and, we know, entering the homes of hundreds of Our Folks. There are many magazines in the same class as this one, accepted as standard and their place in the home unquestioned. It was the wisest of all teachers who said, "As a man thinketh in his heart, so is he." The class of reading that we give our children largely inspires their thoughts and, consequently, affects their character. The reading matter that we permit to enter our homes should be more than merely harmless. It should be uplifting and ennobling.

What the Farm Contributes

INDER this heading, we publish elsewhere a study conducted by the United States Department of Agriculture to determine just how much the farm contributes directly to the farmer's living. These studies were made in ten localities, representative of all sections of the United States. It was found that the average annual value of food, fuel, oil and shelter per person for the families visited, was \$129.74, of which \$91.97 was furnished directly by the farm. The average value per family, furnished by the farm, was \$421.17.

A person in the city paying rent, readily sees the dollars and cents value of the use of the house on the farm. The farmer, we believe, seldom considers the rental value of his home as an item to be credited to the farm. Similarly the city resident who pays out dollars and cents to the green grocer, milkman and butcher, recognizes the value of this produce used in the farm home more clearly than does the farmer himself. Both of these items, house rent and food, and on some farms fuel also, should be considered in figuring the relative profits of farming as compared with othe: lines of business. The items that the farm contributes directly to the living of the farmer may often swing the balance in favor of the farm

Farming with Little Capital

" MY brother and I have one thousand dol. lars between us. We have had little er.

perience in country life, but we would like to farm. Our plan is to buy a dairy farm and start easy. We will need no hired help, as both of us are strong and husky. Can we succeed?"

This letter lay on our desk several days before we answered it. We did not want to discourage these young men. Neither did we want to get them into difficulty by ill-advised encouragement. Finally, we told them that starting out as they planned, they had not one chance in a hundred of succeeding on the farm. One thousand dollars might be ample capital for making a start on a grain farm, but it would not go far toward equipping a dairy farm, to say nothing about buying the land in the first place. We gave these young men the usual advice-te hire out with some good farmer and get more experience and more money before making a start as independent farmers.

Farming is becoming more and more a capitalistic business. Twenty or 40 years ago me stood a much better chance to succeed without capital than they do to-day, and even then it was only the ones with unusual ability who succeeded, and they had to travel a road beset with many hardships and privations. The tendency, however, is to forget early hardships, to ignore changed conditions, and consequently the general advice of those who have succeeded to young men who propound questions to them such a are propounded to us, is to go and do likewise! To all who have an ambition to farm, but whe have limited capital, however, we still say, go slow. Better wait and get more capital, along with experience, and then probably it is ad visable to make the first start on a rented farm.

WHEN we think of homes can we refrain from adding a special note of respect for those brave women in the Dominion who have seen their husbands depart for the war and alore keep the home against their return? Many d the Canadian, Australian and New Zealand sol diers are married. There must be women or lonely prairies, remote wheatfields, barren shee farms, who "run the show" with little help, a even alone. News is scant, letters are rare. ! watcher in England has quite to equal th gallant patience which pulls a woman through a experience like that .- The Spectator.

October 21, 19

A Book W "TN Pastures Gr

viting, humor and very read latest book by Pe seer of Ekfrid, and pilation of his lett Globe and The H The book takes the the year's hay Middlesex county author lives. The is explained by the his opening parag who wishes to lear of farming may fin terest him, but the these pages for sci does so at his peri The whole work t

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A Book Worth Having

A Book Worth Having "I" A Battures Green" is fresh, in: and very readable. It is the latest book by Peter McArthur, the seer of Ekfrid, and is largely a com-pilation of his letters in the Toronto Globe and The Farmer's Advocate. The book takes the form of a journal at the year's happenings on the Middlesse county farm where the picture of the the the the the seening paragraph: "The man sho wishes to learn the human side of farming may find something to in-terest hin, but the man who consults terest him, but the man who consults these pages for scientific information does so at his peril."

The whole work thrills with the love The whole work thrills with the love of the open spaces, the joy of com-munion with nature. We who live in the country cannot read the sketches of country life without a new appreciation of the joys and blessings of the farmers' lot. The book is chuck full of optimism and goodwill to all men.

But there is a deeper meaning running all through the volume. It is really an appeal for a real back-to-the-land movement. The concluding paragraph of the preface voices the spirit and object of the work.

spirit and object of the work. "At this time, with the business of the world more completely disorgan-ized than mest neople imagine. I do not hesitate to advise every one who can possibly go back to the land, to go. If I had my way there would not be a vacant farmhouse in all Canada before the snow there would not be a vacant farmhouse in all canada before the snow dies. Men who are out of work and have some resources, would find it cheaper to spend the idle winter on a farm, and they could be ready by sprine to begin to make their living from the soil. At the present time, our cities have many victims of the war who are as Dlameless as the victims of a have many victims of the war who are as blameless as the victims of a great fire or -any similar disaster. They must be cared for, and our government would be making no mis-take in voiting an appropriation for the missing an appropriation for for the relief of disord all for for the relief of disord all for any vers before at home, ness of the world can be resumed in the volume of past vers, and those It will be many years before the busi-ness of the world can be resumed in the volume of pair years, and those who are in authority ears, and those better than get the year and onothing better than get the year and abolic this suggests that rhe holy abolic min in Canada. How are people o get back on the land? My friends of the Single Tax Association need not write to me to explain how this is to be accomplished. I admit all their conclusions, though as a weak human being I resent the perfection of their logic. Nothing in my experience has ever happened logically. If they will stop antagonising people with their perfect theory, they may see their dreams fulfilled much sooner than they expect. The nationaliza-tion of land is immeasurably nearer than any one supposes, and it will be brought about by the blundering logic of events. The people must get back on the land, must must in the work adjuction complexity complexes, is now practically complete. The time has come for action. People must have accome to the land-the one

The set Coore curves and indertasen by how practices and his disciples. It has come for actinplete. The time has come for actinplete. The set source of production. If the propose of the cities turn towards the land, where they can provide for them-selves, it will not k-long before as much justice as is homanly possible, will be accorded to them. Land-hum-yer will force a solution of the land problem. The time for dissertations on abstract justice is past. It is to stimulate the land-humer that I have made hold to trouble readers of this column with so frank a statement of my personal affairs at the present

time. If you are looking ahead with terror to the long winter, you should make up your mind that before anmake up your mind that before an-other winter comes, you will be as well provided for as I am, with the fruits of your own labor on the land. 'Back to the land 'should become a slogan of power. I trust that those who are in authority, and who will have the task of caring for our vic-tims of the war, will give it their ims of the war. will give it their tims of the war, will give it their earnest attention."

The volume may be had through T. M. Dent & Sons, Ltd., Toronto, at \$1.50. We know of no book issued in recent years more well worth read-ing.-F. E. E.

Do We Want City Farmers?

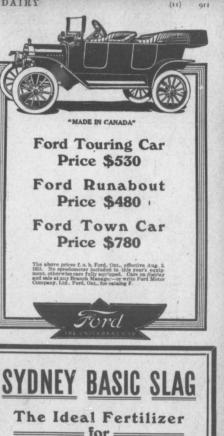
E DITOR, Farm and Dairy, --- The mayors of cities and municipali-ties of Canda in convention as-sembled a few months ago, recom-nended that the problem of the unem-ployed be solved by assisting men to the land by a zift of 40 acres of virgin soil and a \$500 loan. Since that re-commendation was made, many disoil and a \$500 loan. Since that a commendation was made, many dis-cussions have appeared in the pro-section of the section of the section of a to whether or not do acres of land with the loan ment of the farmer's advection of the section of the section of a word have I seen of the farmer's advection of the section of the section of a word have I seen of the farmer's desirable to crowd the sity's unem-ployed on to our farms? Eives the section of the

First let us consider the economic side. Every man who leaves the city to take up a farm means that I, as a farmer, lose a customer and have another competitor. It is coolly pro-posed by the mayors of our munici-palities that the government assist to provide this extrement assist to posed by the mayors of our munici-posities that the government assist to provide this extra competition for the farmers. How, I would like to ask, would manufacturers meet a similar proposition? Would it not be just as easy for the government to establish a few big manufacturing concerns as to lay out and finance a few thousand small farms? But they would never think of doing so. The Canadian Munifactures? Association would im-munifactures? Association would im-munifactures? Association would many divise heard in protest. They wondy divise investments would be endangered by out the fact that the profits out for a short the still greater sams mord about the still greater sams would establish be rendered upprofitable by such as be rendered unprofitable by such an increase in the production of farm products as these city farmers would cause. We as farmers should oppose any such measure.

any such measure. Just a word on the possible profits. A 40-acre farm might be all right if situated near a large and rood mar-ket. The city man would then stand a chance to make a decent living. But the proposal is that these 40-acre farms be out on the prairie, far from markets of any kind. Under these conditions, city men might eke out an existence not quite as good as conditions, city men might eke out an existence not quite as good as that enjoyed by the lowest pessant-ries of Europe, but they could not raise a family as self-respecting Canadian citizens would like to do I claim that we do not need any more men on our farms. The fact that the profits of farming are so low, how that there is no undergroude.

that the profits of farming areas low, show that there is no under-produc-tion of farm products. If there were under-production, prices higher and the profits of farming would increase to the point where people would be flocking to the land without any other inducement or assistance from the inducement or assistance from the structure of the structure Philain Farmer."

Corn cannot be ripened properly in the greater part of Quebec province, but it can be sufficiently matured to make excellent silage.



WE are spending thousands of dollars to get you started using our product. Every ton sold in Ontario has cost us in advertising and other expenses four times the profit. We are not philanthropists but we know that once you start using our goods you will continue to do so and that your neighbors will also begin. Our bread which has been cast upon the waters will come back in due time. If we are not already selling in your district send us your name and address and our General Sales-Agent will call and tell you all about Sydney Basic Slag. If you still remain honestly sceptical as to the merits of our goods we will with pleasure send you one ton for trial purposes free of charge.

Pastures and Meadows

THE CROSS FERTILIZER CO. Ltd. SYDNEY, NOVA SCOTIA



(DORALS and manners must be sown like spring wheat .- Capt. J. W. Gambler. . . .

When to Lock the Stable By HOMER CROY Copyrighted 1914, Bobbs-Merrill Company (Continued from last week)

"HEY stood awkwardly a moment, her house and had turned in and seatwhile Brassy stepped over to speak to Hulda and the judge.

912

(12)

Just the sight of Clem brought up Mary's pulse. A few hours before she had thought that he had passed Now out of her life forever. Now the familiar square face with its myriads of lines running into the corners of his eyes brought a new feeling over her. She thought of the many things the people of Curryville had said about him after his disappearance. He had stolen into their hearts more than they had realized. Once Mrs. Kiggins, when she wasn't telling about her remarkable psychic powers, had said that he could be of more comfort than anybody in the world when a person had the toothache. And one time Marshal Jupes had said that there was some comfort even in Clem's beating a person at checkers he never crowed about it afterward. Slowly all this dawned on her, and though her heart tingled at Clem's presence she still hesitated-a femin ine something still held her back. As she looked at him she could not help remembering how he had car-ried her out of the flaming house in his arms, saving her life, and how she never thanked him. She wished to tell him this, but still something kept her quiet.

Clem looked at her scherly a mo-ment. "Have they had a good fires since I have been away?" Mary laughed and the feminine

Mary laugned and the feminine something was wiped away. "No, we haven't had anything good since you went away." They started down the street to-

gether.

"I ran away to enjoy myself," said Clem, "and nearly every hour of it has been misery. I am so glad to get back that I don't know what to do. You couldn't run me out of Curryville now with a prod. But an hour ago I didn't think that way. An hour ago I was sorry that I had come back. an you guess why?" Mary knew that he meant the way

she had turned aside at the hal "Yes," she whispered, "I think hall. can. I don't know how it is that people have that stubborn thing in them that makes them fight back when they know that they are wrong. Tell me about everything." "Well, I left, and the rest of the

well, I left, and the rest of the time I have been trying to get back. But that ain't what I want to talk about. Did you really miss me, Mary?"

Mary reached over for answer and did what women have done for so many ages: she patted him on the arm. And he understood, as men have for so many ages. Before they knew it they were at

ed themselves on the porch. They sat in silence for a few minutes, then Clem leaned toward her, and as the light from the window cut across his face Mary could read a new expresface Mary could read a new expres-sion in the lines. Suddenly Clem spoke, so suddenly as to startle her. "I am a fool. That's what I am— a plain unvarished fool. Nobody but a fool like me would have run away from Curryville trying to find happiness. I learned a lot of things

had you to help me I could be another man-sometime. Now I am going to say something else that may make me a bigger fool than ever. It is this: Mary, I love you, and I want you to mary me!" Mary's mind wented to give her-self to him at our set unbling off into space. She wanted to give her-self to him at our I am yours." But neared our creat a hand that gilded

instead, out crept a hand that glided into his. That was her answer. That was all that was needed. Not a word was spoken.

Just then two figures appeared on the lawn. One was stout and swung along with joyful abandon; the other was slim and came noiselessly - as befits detectives. The stout one was Brassy

As the steps of Brassy and Rencie As the steps of Brassy and Rencie crunched on the lawn there was a stir on the porch, and when the two came up Clem's flushed face was in shadow, while Mary s.t at the other end of the bench demurely fingering the end of a ribbon. But her father's eye had not been deceived.

"Jumping crickets, but I never saw

"Jumping crickets, but I never saw two people get acquainted the way you two have," breezed Brassy. "I won't bother you, don't worry. "Mary, my girl, do you know I am real dippy about Curryville? One thing, it's cot Clem, and another would like to live bere-in a little vine-covered cottage with a cat sleep in' in the sun on the front porch?" "She would love it!" exclaimed Mary, and the three drew together to



Where the Near East and the Far West Meet.

An immigrant from Galicia, the scene of some of the fiercest fighting of the war, in his peaceful surroundings on the prairie.

-I found out that a fellow can't go out and hunt for happiness. When he swabs out his gun and goes out he won't ever get a shot at it; but if he will hang his gun over the door and be patient happiness will come and settle down on his gate-post.

"I was a fool for running away, and I suppose I will be a bigger one in another minute. I am going to tell

in another minute. I am going to tell you something that will surprise you. This is it: I love you!" Mary looked properly surprised. "From the day I showed you through the fire house I have loved you." At mention of the fire house Clem straightened up with pride. 'But you seemed so far away that I did not dare hope for anything better than just a smile now and then. I ain't much on education-I ain't goin' ain't much on education-1 aint goin-to say that I never had a chance, be-cause that's no excuse for a man to make-but I am studying and trying to be somebody. It's mighty hard trying to be somebody, alone. If I had some one to help me--if I just

make plans. But Brassy had feeling enough not to stay long. In a few minutes after Brassy left

Clem got ready to start home. That is, it seemed like a few minutes. Beis, it seemed like a few minutes. Be-fore he got up to his own house he realized how late it was and he ap-proached in fear and trembling, for he knew Hulda of old. At the door Clem paused in sur-

prise, for Judge Woodbridge was just aving

Hulda was smiles all over.

'Come over and set down," said she after the door had closed on the judge, "and ic.'s have a good talk. I feel barrels of it coming."

She drew Clen's rocker up to his side of the table and freshened the cushion with a shake. Then she leaned back in her own chair and folded her hands across her waist.

Clem placed the lamp squarely over the yellow crack and sank back in peace and contentment. "By jooks! --there I'm saying it, too-but any-way I'm mighty glad to get home.

had you to help me I could be another You couldn't get me away again if man-sometime. Now I am going to you tied my feet." say something else that may make Hulda's hand crept up to the yellow crack, and Clem's slipped across to meet it.

"I'm not a fit sister for you "I'm not a nt sister for you to come back to, but I'm going to be. And I'm not going to be so picayun-ish and faultfinding any more and I'm not going to wait till you're dead to let you know that I love you, either. This thing of waiting till the horse is stolen to-

A step sounded on the porch and A step sounded at the door. "You answer it, Hulda," said Clem, having an idea who was coming.

Hulda gave her skirt a straighten-

ing shake and opened the door. It was Rick Oody with one shoulder sagging down. "It's a present for you, Miss Pointer," he said, and backed off the porch.

"Land sakes alive, what can it be? And who'd be givin' me a present this time of night?"

Eagerly she pulled off the wrapper, revealing a cannel-coal smoothing iron.

"Clem Pointer, ain't that just like you!" she exclaimed, turning her head away and raising the hem of her dress to her eyes. "You just shut your eyes!"

Clem closed his eyes, Hulda tiptoed around the table and bent over him.

"Now," she said, "you take this in the kitchen so I won't look at it any more till morning. If I was any more till morning. If I was any happier I'd-" but she could say no more.

and started for Clem rose kitchen. At the door he stumbled and gasped in astonishment. With a shrill cry of delight Garibaldi had leaped on his shoulder. THE END.



Common Birds Useful to Farmers

H OW many of us are familiar with the various bird families which are most common around the farm? As a rule we do not consider these birds of much value; in fact, we think of them more frequently as destroyers of property. Much valudestroyers of property. Much valu-able information to the contrary, how-ever, is contained in Farmers' Bul-letin 630 of the United States De-partment of Agriculture. In order that Our Folks may become more familiar with the subject, we inted publishing from week to week a brief description of various brief as clear. description of various birds as glean-

description of various birds as glean-ed from this bulletin. Whether a bird is beneficial or in-jurious, depends almost entirely uo-on what it eats. Within certain limits birds eat the kind of food that is most accessible, especially when their natural food is scarce or wanting. Thus they sometimes injure the crops destroyed their natural food in his improvement of swamp or pasture. Many species live almost entirely up-on insects. It is thus evident that in the course of a year, birds destroy an incalculable number of insects and it is difficult to over-estimate the value of their services in restraining the or their services in restraining the creat tide of insect life. Many, too, maintain life practically on weed seeds, and here again is another useful function of birds. The Bluebird

The first species we shall study is the bluebird. The eastern bluebird, one of the most familiar and welcome one of the most rammar and we come of our feathered visitors, is a common inhabitant of all the States east of the Rocky Mountains from the Gulf of Mexico to southern Canada. In the Mississippi Vallev it winters at far north as southern Illinois, and in the east as far as Pennsylvania. It is one of the earliest northern mirrants, and everywhere is hailed as a harbinger of spring. Very domestic in habits, it frequents orchards and gardens, and builds its nests in cavi-

October 21,

ties of trees, cr. ings, or boxes p The bluebird 1 so far as known of preying upon stitute 21 per ce grasshoppers 22, various other in number of spic about six per ce mainder of the a are more or les few predacious b to nine per cent large consumpti and caterpillars done this offense called. The de

hoppers is very

and September, make up about 53

So far as its vi



The or ful product in the of a few blackbern these probably rather than cultiv lowing is a list o which were found : berry, juniperberry tridgeberry, gre creeper, bitterswe berry bush, fals sarsaparilla, suma rose haws, sorrel, asparagus. This l the bluebird depen or garden to supply easily, by encourag some of these plan are highly orname be induced to mak premises.

****** **OUR HON** 400000000000000

Why Girls I

LIVE on a farm of a country town tory or two, but our town is support I will not give the a because I would be this neighborhood if to become known of published. That is good enough to give Home Club,

I am a young ba choice, but necessity prefer to be a young are many young me in the same boat wi are found on the far and in the factories. myself, I will give

Many of these yo as I have intimated, There are any young ladies in the want to get marrie are right. The stan damsels was express one of them: "I has good home, and I d marry until my husba as good a home as leaving."

This stand does n able to us. Our lad ently want to start in k

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of preying upon crops, Beetles con-stitute 21 per cent of the whole food stitute 21 per cent of the whole food, grasshoppers 22, caterpillars 10, and various other insects nine, while a number of spiders and myriapods, about six per cent, comprise the re-mainder of the animal diet. All these are more or less harmful, except a few predacious beetles, which amount in nine Der cent. In view of the to nine per cent. In view of the large consumption of grasshoppers and caterpillars we may at least con-done this offense, if such it may be called. The destruction of grass-hoppers is very noticeable in August and September, when these insects make up about 53 per cent of the diet, So far as its vegetable food is con-

the bluebird is positively



harmless. The only trace of any use-ful product in the stomachs consisted of a few blackberry seeds, and even these probably belonged to wild rather than cultivated varieties. Following is a list of the various seeds which were found : Blackberry, chokewhich were found: Blackberry, choke-berry, jungerberry, pokeberry, par-tridgeberry, greenbrier, Virghia creeper, bittersweet, holly, straw-berry bush, false spikenard, wild sarsaparilla, sumac (several species), rose haws, sorrel, ragweed, erass and asparagus. This list shows how little b blacking damende upon the force asparagus. This list shows how little the bluebird depends upon the farm or garden to supply its needs and how easily, by encouraging the growth of some of these plants, many of which are highly ornamental, the bird may be induced to make its home on the premises

******************* OUR HOME CLUB \$000000000000000000000000

Why Girls Don't Marry

LIVE on a farm near the outskirts of a country town. We have a fac-tory or two, but for the most part our town is supported by farm trade. I will not give the name of the town, because I would be very unpopular in because I would be very unpopular in this neighborhood if my identity were to become known once this letter is published. That is, if the editor is good enough to give it a place in the

I am a young bachelor, not from choice, but necessity. I would much prefer to be a young husband. There are many young men in this locality in the same boat with myself. They are found on the farms, in the stores, and in the factories. In speaking for myself, I will give the grievance of

Many of these young men, myself as I have intimated, want to get mar-ried. There are an equal number of young ladies in the locality who also want to get married-if conditions are right. The stand of all of these are right. The stand of all of these damsels was expressed recently by one of them: "I have always had a good home, and I do not intend to marry until my husband can offer me as good and me as the one I am This aread

This stand does not seem reason-able to us. Our lady friends apparently want to start in where their mo-

ties of trees, crannies in farm build-ings, or boxes provided for its use. The bluebird has not been accused, so far as known, of stealing fruit or already married. They inherited farms or were taken into partnership in the business. The most of us are not so happily situated, and knowing the athappily situated, and knowing the at-titude of the girls on the question, we are too proud to ask them to marry us and work with us to estab-lish homes. The most of us will have to remain single a good many years before we can marry on the showe before we can marry on the above conditions

I find also that there is a prejudice against the farm, and the majority of the girls who were born on neighboring farms are now in the town, and very few of them care to go back to the farm. This problem of getting a wife is beset with difficulty on every hand. Kind Home Club readers, can you offer us any suggestions?-

. . . An Opinion from Another Quarter

A FTER perusing Percival B. Walmsley's letter in reply to "Mignonette," which appeared in the September 16th issue, I would like to ask him a question or two. The first one is, does he think that the average working man, under The first one is, does he think it would be average working mean the average working means the average working means the average working means the second to the second cuestion is, the second the se

trace out the evolution of man from as far back as we can get a trace, to , his present position in the world, we find that scientists roughly /ivide that period into four parts. F /st, savag-ery; second, barbarism; third, feudal-um and hash, the science of the day ism, and, lastly, the system of to-day dominated by capital.

dominated by capital. Under savagery we are told that the tools with which man produced his necessities of life were very simple and that the product of the toil of the tribe was shared in common. Under barbarism a triffe higher state of life was reached. Under feudalism the feudal lord and his retainers were the feudal lord and his retainers were the ruling class and the majority of the people were serfs. It would take too much space here to trace the descent of man in detail from the free man of the savage age to the seri of feudal-im Rut the fact tremains. At that the savage age to the seri of reudal-ism. But the fact remains. At that particular period when feudalism was merging into capitalism, we find the tools with which the wealth of the period was produced, very simple compared with the complex machinery compared with the complex machinery of to-day. The average working man of those days owned his own tools, and the product of his toil when ap-plied through those tools to raw material was his own. In contra-dis-tinction to that, what do we find to-day? That the workers have gradu-ally been deprived of their machine ally been deprived of their machine of production and that that machine has become the property of another class, who have the sole right to say whether that machine shall be used or not. What is the result? That the workers have only one thing that they are do. Thus are forecast to call their can do. They are forced to sell their power to labor to the class which owns can do. the machinery which produces their necessities of life, and that class only (Concluded on page 15)





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********** The Upwa 200000000000000 Travel Thou God's I

"THE everlastin did bow ; H

lasting."-Heb. 3: That morning I across and down in yon of the Colorad moment to which had looked forward had dreamed. I h those, who had see had asked to descri said it was indesc knew

No human tongu give an adequate d stupendous canyon. less deep canyons, r plateaus, sheer cliff lofty peaks and g mile after mile, st than the eye can s realize.

My first impressie tense fear: I could p that mile depth. I near the edge. In light, the effect of vivid, so glaring, the by afternoon, as th down and softened. able to appreciate beauty of the whole. on the very verge, it a memory-picture of that it would never shadows crept up as enveloped each gleaburnished crest. T the early morning wa the early morning wa beautiful of all the effects, before the r deep reds, the soft brought out in the r

Over and over aga kept coming, that a wonder, majesty ver work. Whether it ages, the erosion goi working its way do year, whether it wa heaval, when those de made by the sunder God's power that cau All the time His f

All the time triang, in ioning, changing, of fullding. Strong in this, can we not with faith know that it is ioning our lives, more sight than any of Na however awe-inspiring Then also amid all t or sorrow, conquest or or failure, His ways a everlasting .- I. H. N. ...

The Conservation Mrs. J. E. M., in F Home.

W^E are living on only a small h the foot of a

hill, but, as a cowbo "have things fixed up ket in a shirt," so he personal note will be sunk a large tank in of the kitchen, with little lower than the refrom the bottom the sink level. Adjoining a little lean-to in whi parator and washing n a 1% horse-power eng and pulleys being so can easily run the s Just a few feet of pipe rom the washing mach into the drain pipe. J from the corner of the revolving clothes line

The Upward Look platform, two posts with wide board ar top for the clothes basket. We also utilized the hill as a step-save Travel Thoughts-No. 4

God's Power

THE everlasting mountains were scattered, the perpetual hills did bow: His ways are ever-ting."-Heb. 3:6. lasting.

That morning I had my first look across and down into the Grand Can-yon of the Colorado River. It was a yon of the Colorado River. It was a moment to which for many years I had looked forward, and of which I had dreamed. I had wondered why those, who had seen it and whom I had asked to describe it, had always said it was indescribable. Then I

No human tongue nor pen could give an adequate description of that stupendous canyon. There are countless deep canyons, river gorges, great plateaus, sheer cliffs, dizzy heights, lofty peaks and grand mountains, mile after mile, stretching, farther than the eye can see, or the senses realize

My first impression was one of in-tense fear: I could not look down into that mile depth. I could not even go near the edge. In the bright sun-light, the effect of the whole was so vivid, so glaring, that I hated it. But or formore as the intent of it. But down and softened, I began to be able to appreciate the wonder and beauty of the whole. By sunset I was on the very verge, trying to imprint a memory-picture on the mind sc that it would never fade away. The shadows crept up and up until they enveloped each gleaming peak and burnished crest. The deep blue of the early morning was one of the most eautiful of all the wonderful color heautiful of all the wonderful color-effects, before the rich oranges, the deep reds, the soft browns, were brought out in the rising sun. Over and over again the thought

Over and over again the thought kept coming, that all that beauty, wonder, majesty were God's handi-work. Whether it was the work of ages, the erosion going on, the river working its way down, year after year, whether it was a mighty upheaval, when those deen abysses were made by the sundered earth, it was God's power that caused it. All the time His fingers are fash-

ng, changing, destroying, up-ding. Strong in the thought of building. this, can we not with calm and brave faith know that it is He that is fashioning our lives, more precious to His sight than any of Nature's marvels, however awe-inspiring they may be. Then also amid all the changes, joy or sorrow, conquest or defeat, success or failure, His ways and His love are everlasting.--I. H. N. . . .

The Conservation of Mother

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Mrs. J. E. M., in Farm, Stock and Home.

W E are living on a claim, have only a small house nestled at the foot of a big north-west hill, but, as a cowboy expressed it, "have things fixed up handy as a pocket in a shirt," so here's hoping the personal note will be pardoned. We sunk a large tank in the hill back of the kitchen, with the top just a little lower than the roof. By piping from the bottom the water is at the sink level. Adjoining the kitchen is a little lean-to in which are the separator and washing machine run by a 1% horse-power engine; the belts and pulleys being so rranged that I can easily run the engine myself. Just a few feet of pipe and the water rom the washing machine was tapped into the drain pipe. Just a few feet from the corner of the lean-to is the revolving clothes line and a strong

by digging our cave into it a few feet from the kitchen door and on a level with the house. A roomy home-made kitchen cabi-

net, made of left-overs from building and boxes, sand-papered and varnish-ed outside, and enamelled inside, with built-in flour box and sifter, and white ilcloth covered bread board, ranks

high among my step-savers. Next is a little light home-made "double-decker" table, with a little railing around each deck, mounted on rollers. Our living-room also serves as dining-room, and with the "double-decker" the whole meal goes at once. bread-mixer, fireless cooker, food A bread-mixer, fiteless cooker, lood chopper, and self-heating iron are other cherished labor-savers. But par-adox as it may seem in home-making, servation can be best accomplish ed by elimination.

Eliminate every single bit of work ossible. Eliminate so much ironing by using crepe for underwear for the kiddies' rompers, for cushion covers, kiddies' rompers, for cushion covers, sash curtains, and so on, and by us-ing sheets, pillow slips and towels, as taken nearly folded from the line. Eliminate all dust catching orna-ments, all 'too-good-to-use'' things. Eliminate so much cooking by educating the family to eat simple puddings, fruit raw and stewed and well done cereals and stews a la fireless cooker. reveals and stews a la neuess cooker. Provide three wholesome well-cooked meals, but eliminate those between lunches to be taken or sent to the field. This may not be easy where it is the custom, but keep cheery, be so glad that they all realize how clad that they all realize how much better it is in every way, and after a little they really will your point of view and think they down all along. Eliminate that 'bugbeag' all along. Eliminate that 'bugbeag' all along. Eliminate that 'bugbeag' all what people say.'' Live as befas what people say.'' Live as befas years and pocketbook in serveryour strength and pocketbook in serveryour concern of what 'they say.'' Lastly, place the 'Conservation of Mother.'' and the happiness of the family above all else.

. . . AnOpinion from Another Quarter

(Continued from page 13)

(Continued from page 13) buys their labor when they are able to make a profit out of it. A slave is a man who is forced to work for the benefit of another. In the face of those deductions, how can the statement be true, "That the grouthe face of those deductions, now can the statement be true, "That the gov-ernment of President Kruger was suc-ceeded by real freedom." Capitalism reigns supreme in the Transval to-day as it did of yorg. Wealth producers of Canada; remember that statement of Canada, remember that statement applies to you too, and my advice to you is, fight for Canada in every meaning of the term, but be sure when you have fought for and saved it that you get it and with it your full share of the wealth that you produce her over they in it. Do not come share of the wealth that you produce by your labor in it. Do not come back and allow the now owning class to give you a job if they want you, but take all jobs over by putting men in Parliament with that intention. in Parliament with that intention. Then operate Canadian industries by all for the greatest benefit to the maand hot the greatest benefit to the ma-jority. Do not allow conditions to re-main as they are to-day with all in-dustries operated by the working class so that the greatest benefits fall to nother class while the working class abouter chass while the worsting class themselves have to be astisfied with a wage that very often is below the standard necessary for a decent ex-istance. If you allow the present system to continue after the war, the present of your negations will greater part of your privations have been in vain.-H. E. B.

Mildew has been Mildew has been removed from white goods by soaking the cloth in strong soapsuds and then wringing out the water, spreading the fabric on the grass in the sun. Repeat this if necrem essary



ringing up the people who must get out early, and telling the right time of day to those who stay 'round the house. Big Ben works 24 hours at

without extra pay, and never botches up a job.

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Ben





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

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A Few "Reminders"

Frank Herns. Chief Dairy Instructor for W. Ontario

N OW that the cheesemaker's many "warm weather" worries are over, a few may be inclined to Yover, a few may be inclined to relax somewhat in their efforts and instead to the second second second second finest quality of fall cheese. The cheese business requires that human frailities be as far as possible guard-ed against. Mistakes are costly, not ed against. Mistakes are costly, not only in dollars and cents, but in re-putation as well. Constant vigilance only brings success. Turnip Flavor

M 'k known to be flavored with turnips should be rejected. The marips should be rejected. The ma-rity of patrons do not feed turnips. few persist in doing so. It is un-A few persist in doing so. It is un-fair to the other patrons for a few to be the means of not only lowering the quality of the cheese but probably responsible for a cut in price. Pasty frestured Obesene, not retting a low of too much before suffi-ctions much moisture left in the curd) sore the chief causes. It is better to

(too much moisture left in the tarts) are the chief causes. It is better to wait a little longer for the milk to be-come ready to "set" than to use an excessive amount of culture. "Set" excessive amount of culture. "Set" sweet enough to have the curd "firm" before it is ready to dip. These prinbefore it is ready to dip. I need the vear ciples apply at any season of the year and should not in any case be neglect-ed during the fall months. Raise the "cooking" temperature a degree or two if necessary. The Culture

Continue to pasteurize the milk used for the culture, noting carefully the "setting" and subsequent tempera-ture. Do not on any account depend ture. Do not on any account depend upon the natural starters (raw milk allowed to sour), as uniformity can-not be obtained. Avoid slow work-ing, poor flavored cultures. Avoid by ut Milling and Saiting It is important that tests for acidity to be both milling and salting.

be made for both milling and salting. Acidity tests at these stages in the Acidity tests at these stages in the cheese making process are a check on the acidity at dipping and a factor in turning out uniform cheese from

day to day. Temperature in the Curing Room Every fall, buyers complain that some makers are careless regarding some makers are careless regarding this important point. Keep a little fire in the curing room. A uniform temperature of about 400 degrees will get a start in curing before they leave the factory. The rind will dry and the factory. The rind will dry and there is less danger of pasty testures and insipid flavor. Finish

Every cheese should be properly finished and well boxed. Use plenty of hot water when bandaging. us make a special effort to have every fall cheese from every factory free of defects.

Specifications for Cheese Boxes

J. A. Ruddick, Dairy Commissioner S UPPLEMENT No. 5 to the Cana-dian Freight Classification, No. 16, which contain the new specifi-16, which contain the new specifi-cations for cheese boxes as approved by the board of Railway Commission-ers has just been issued, and the specifications are reproduced herein: Note. - When cylindrical cheese

boxes are used as outside containers, they must meet the following requirements:

October 21, 1915

(a) Tops and bottoms (headings) to be not less than 56 inch in thick-ness, and consist of not more than three pieces.

(b) Hoops and bands to be not less than 1-5 inch in thickness. (c) Hoops to overlap at joint not less than five inches and to be fas-tened with staples or nails not more than one inch apart and firmly clinch-

(d) Bands to be nailed to the heading (top and bottom), as follows: One nail on each side of every joint, with additional nails not more than four inches apart. (e) Bottom rim to be not less than

(c) Exotion run to be not ites than 1% inches in width, and top run rot less than three inches in width. (f) Covers must fit closely and boxes must be trimmed flush so that the heading of the cover shall rest on the cheese.

Cheese in cylindrical boxes net meeting these requirements not taken. The order of the Board of Railway Commissioners makes the foregoing specification effective on Dec. 1, 1915.

Dairy Situation in New Brunswick By J. B. Daggett, Secretary for in

culture. EALERS in butter in Nor Sruns Dealers in outer in asson for complaint that the buster precomplaint that the bucker pro-duced in this province was often poor in quality and especially lacked uni-formity. There has been no system of inspection or means by which the poor butter maker could be marked, the

poor butter maker could be marke, and his butter recognized on the mar-ket. The good and careful butter-makers, of vhom we have many, have The Dairy Act of the Federal Gor. The Dairy Act of the Federal Gor. Was very generally welcoad by those producing a good article of butter, and is generally opposed by the poor and carelese maker. The 4. ficials in this province are carnetic endeavoring to enforce the law, and endeavoring to enforce the law, and

they believe good results will follow. In 1906 there were forty-one cream In 1906 there were forty-one crean-eries in operation in the province. These produced 967,203 pounds of but ter during the year. In 1909 the creameries had been reduced to sizteen and the product had fallen off to 644,779. That was the "low water" mark in the dairy business in the pro-vince. There has been an increase 644,779. vince. each year until we now have twenty creameries, with an output last year of 1,090,501 pounds. The Department of Agriculture has adopted a new policy, discouraging the establishment of mall creameries and advocating the large, central creamery, with cream routes, with the idea of remedying the conditions of the past and produc-ing a better and uniform quality of butter. The farmers in Madawaka county have taken up the idea of their amalgamation and several of creameries have been abandoned and a large central creamery has been a a large contral creatmery has been as tablished at St. Hilaire. It will be in operation this year and we are watching the experiment with much interest. If it works out as well a it is h ped for this policy will be gun-erally adopted throughout the prevince and large creameries at centra points, serving as large an area possible, will be established.

This Department has placed a dairy instructor and inspector in the territory served by the oreamery in Made tory served by the createry in any wasks county, and during the same mer months"all his time will be give to assisting and instructing the fam-era in the proper method of producia and handling their milk and creat Dairy superintendents now make re ular visits during the producing as vince, and are endeavoring to ove come man- of the faults in butterpa duction of th past .-- Gazette.

October 21, 191

HOLSTEIN-FRIES

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HOLSTEIN-FRIESIAN NEWS

Farm and Dairy is the leading exponent of dairying in Ganada. The great majority of the members of the Ganadian Holstein - Friesian Association are readers of the paper. Members of the Association are invited to send items of inter-st to Holstein breeders for pub-lication in this column.

SEMI-OFFICIAL RECORDS OF HOLSTEIN. FRIESIAN COWS FROM AUG. I TO SEPT. 39, 1915, Mature Class.

1. Lena Mercena, 10668, 5y.; 18738 lbs.milk 556 lbs. fat, 695 lbs. butter.-T. H. Dent woodstock.

is dema factorized have, by 1, size iten allity conditions.
is dermagnelline burker, erf. R. Densk, social and the second s

Odessa. Three-Year Class.

Senior Pour-Year Class. 1. Netherland Vaforit, 14766, 4y, 11m. Id.: 50.3 lbs. milk, 18.41 lbs. fat, 23.01 lbs.

FARM AND DAIRY

7. Colony Pauline Canary, 21207, 3y. 10m. 9d.; 386.9 lbs. milk, 11.75 lbs. fat, 14.68 lbs

30-day record: 3y. 10m. 9d.; 1607.7 lbs. dlk, 48.50 lbs. fat, 60.62 lbs. butter.-Col

mills, wax the training of the second 14-day record: 3y. 1m. 20d.; 1289.0 lbs. milk, 41.72 lbs. fat, 52.15 lbs. butter.

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Braeburn Artis Korndyke, 25259, 1y.
11m. 26d.; 277.9 lbs. milk, 9.49 lbs. fat, 11.87 lbs. butter.—Ben. H. Thomson.

(17) 917

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SALE DATES CLAIMED. Clearing out sale of Holetian, William Blacht, Maple Stock Parm, Bealton, Ont. Gueber 27, 395, warts will hold a suite of Guernesey cattle at Butherland Parm, Ob-burg, Ont. the latter part of October. Bello of purched stock attributes and College, Guntph, Ont. Oct. 28th. 555. H. Bollert, Maple Grove Stock Parm, Tavitacck, Ont. Dispersion Sale of Hol-stein, December 794, 382.

DILLON STANCHIONS

DILLON STALLS

bolt which holds and tightens the clamp, goes through the pipe, making it impossible for the joint to pull apart. Either stalls or stanchions can be supplied separately. Stalls

ing our stalls we use our new patented steel clamp, which only requires one bolt to make the joint absolutely rigid. This

"HE simplest and strongest style of stall made.

the cow puts on the stanchion, the tighter it holds. The hinge at the bottom is forged out of

HE lock is constructed in such a way that the more pressure

ILLON

CARRIERS

SALE DATES CLAIMED.

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Our

Guarantee

CHAPTANCEC We grannette Dillon Balle and Stanebious to be mote of efforts and the standard st

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the bars of the stanchion so that the bars form the hinge, making the strongest

It is impossible for the cow to open the stanchion, and yet it is easily opened with one hand even with a heavy mitt on.

Stanchions made in 8 sizes, 8 in., 7 in.

Fittings supplied for either cement or

also furnished for wood floors, but unless otherwise ordered we will send them for

We supply the end to complete the stalls at the end of a row, without extra charge.

DILLONS' SELL DIRECT You Save The Agent's Profit When buying from us you don't have to

help pay an agent's salary or his expenses. Send for our catalogue on any of our lines. It will give you a good idea of what im-provements you can make for a small outlay.

R. DILLON & SON

27 Mill St. - OSHAWA, Ont.

We also manufacture-cow pens, hay tools

hinge on any stanchion made.

and 8 in. wide.

wood floor.

cement.

WE PAY

FREIGHT

IN

ONTARIO



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(18)

Makes Hens Pay, Makes Them Lay !

The cost of a daily ration of Gardiner's Ovatum for every hen in your flock would be covered by one extra egg per hen per month. The grain from feeding Ovatum will average several immes that much-Very often, expectably in winter, Ovatum will start a good daily pro-duction from a flock that has not been laring at all. The U does by Invitegrating the

been laying at all. This it does by invigorating the digestion and the reproductive organs, so that the hens get more good out of their feed, and turn more of it into

of it into eggs. It will certainly pay you to feed Ovatum. Get it from your dealer in 25c. and 50c. packages or 10-lb. bass. If he han't it, srike us for prices on Ovatum, Ontario Feeders' Cotton Seed Meal, Sacas-Fat, Pig Meal and Calf Meal. 2

GARDINER BROS., Feed Specialists, SARNIA. Ont.

MARKET REVIEW AND FORECAST

OBONTO, October 18.-Recent fine, mild weather has had a dampening in-fluence on fail trade. Wholesale

Tomorrow control of the second fragment of the second seco

call be parenthese to prove screening inter-ling and straw hold steels." The muchet is contribut up and down in a way which shows that wheat brokens have not yet gotten their bearings as ac-othe worldwide situation. each the strains are ac-ble "Univert. They estimated the What even of the lates at open a libe history els a orop never the immediate effect of the report was a dealine of wheat prices in all markets. Camelian market have even strong argin, corable wather reports how strong argin, corable wather reports from the Camelian West, where threahing

is in progress, have still further strength-ened the market. Spot wheat is quoted as follows: No. 1 Northers, \$1.15; No. 2, \$'.135', immediate shipment, No. 1 North-ent, \$1.135', No. 5, \$1.10; Office which \$26 to 74 or smulty, file to 80: to 85: sprouted or smulty, file to 80: to 85: COARSE GRAINS.

COARSE GRAINS. Western cash have declined a triffa, but Ontario grains generally show slight spins in quotations and this in the face of in-creating receipts. Oats, C.W., No. 2, 460: Ontario cats, No. 3, 36 to bors: No. 4, 36 Composition of the state of the state of the log orne, 75: Canadian, 76: peas, SI.G to 81.70; hereive, mailting, Scivio Soci feed, 46 to 460; pres, 87c; tongh, 66 to 75c; buckwheat, Soc. On the Moritrain mar-ker, 4, 56; No. 8, 56; local white, 44/56 to 46; to 67c; peas, 82.40 to 82.75. MILL FEEDS.

shorts, F2; madings, see to 84; modifie, 820 to 83. Beeslpte of bay at central markets are not large; farmers are too busy without their fail biowing models of busy without their fail biowing models are delivered in indilinent to revernments contracts, A few case loads confinue to leave the Back erm markets contracts and the second state of 82.60; No. 5, 817 to 818, No. 5, 15.50 to 82.60; No. 5, 817 to 818, No. 5, 15 Back enders, 85.60; 16 Back, Back erw, 85.60. HONEY

Honey is quoted wholesale as follows: Buckwheat, barrels, 6%c to 7c; tims, 7c; Buckwheat, barrels, 6%c to 7c; tims, 7c; Buckwheat, barrels, 6%c to 7c; tims, 7c; Buckwheat, barrels, 7c; FRUIT ARD VEGETABLES. Wholesale quotations follow: Appendic ables, the 10 Sc; cataba, 8% of the for-ables, parts 11 cg, bdt, 46c to 56c; peach-es, 11 cg, bdt, 56c to 56c; peach-to 56c; potatores, has, fatose, bas, 81.85; remen, bdt, 36c to 36c; peach-es, bt, 36c to 36c; remen, bdt, 36c to 36c; remen, bdt, 36c to 36c; rollow, bdt, 36c to 36c; rollow, bdt, 36c to 36c; rollow, bdt, 36c to 36c; Bage and Poultry.

Eggs and Poultry. Receipts are larger than a ware are at this time here a strengt an unit of the treak and storage eggs. Increased activity treak and storage eggs. Increased activity week, its con Montreal. On this market specials are quoted at 36 to 360, extra-ted to 160 and Montreak and the treak and the streak and the streak to 160 and 160 and 160 and 160 and the streak and the streak and the treak and the streak and the streak and the streak and the treak and the streak and the treak and the streak and treak are treak and the streak at 390 to the

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October 21, 1915

activity, the market tended to be easy, although there was a strong undertone. Dairy bost questions that is the strong of the strong of the strong old at 14% of 154 house butter sold at 3 13.0cm, Ont. Oct. 11-760 house cheese and an at 95cm.

¹² Machae, Ont., Oct. 13.-769 boxes cheese sold at 19(5); Woodstock, Ont., Oct. 13.-068 relations were gool houses solver cheese: likibest Md 19(2); Littowel, Oct. 15.-808 cheese: the hiri-est hid on the board. 15(5); was refue the Joint board. 15(5); was refue the Joint Control of the Joint Control ored cheese sold at 14 31366; jub house of board at 15(2); Joint Control of the Joint ored cheese housed at 14 31365; jub house of board at 15(2); Joint Control of the Joint ored cheese housed at 16 31366; jub house of board at 15(2); Joint Control of the Joint ored cheese housed at 16 3136; jub house of board at 15(2); Joint Control of the Joint ored cheese housed; solver all at 15(2); Margandria, Oct. 15.-664 white hold at 15 7156.

Ascentaria, volt. as-wer white soud at 15 7-156. Oct 13-620 colored and 4 have boarded; 250 sold at 15%. Molano sold on curb at 15%. Octower date bar at 15%, Bailow at 15%. Octrward, Oct 13-2500 bores of date bar at 15%, Bailow at 15%. Bit Hyneithe, Que, Oct 15-130 bores cheese sold at 15%: 150 packages butter sold at 35%: 156-2500 bores white data 15%. 156-2500 bores white Sale Waterdown, N. Y. Oct 15-Oberse units (530 bores at 36.

Watertown, R. Y. Oct. 10--000600 main. 200 hores at 200 performs the performance of the perform. This week for the first time in the hi-ory of the local live stock markets, hus-ness was transacted on Priday. Furthaus he extra day's harger resolution. 200 performance have for the overe firm, however, and a the olonium market on Priday have a hand of the wave firm, however, and a the olonium market on Priday have and a stock of the stock and the stock of the top could \$5 to \$6 build, \$4 to \$6.75 media to perform \$5 to \$6 to \$6.50 media to perform \$5 to \$6 to \$6.50 media

MAN WANTED A First Class General Farm Hand, who has had some experience with Hoistein cattle, is wanted at the High-Lawn Holstein Farm. Contract by the year. State wages in first letter. JOSEPH O'REILLY - ENNISMORE, ONT.



ELLIS NGINE Suilt by ire , *uality* engines, speits, sturdy, dependable ingl, always on the has to be counted and d. Vertical and d. 14 to 18 H.P. ELLIS ENGINE COMPANY 2846 E, Grand Boulevard, Detroit, Mich



October 21, 1915

ers. 85.50 to 87; stocke canners and cattern, 85.7. With course users alow the principal stock and the stock term with the stock and the stock stock and the stock and the stock stock and the stock and the stock in the week stock and the stock in the stock that the we prices ranged from 86 to 97 in the issue that the which stock and the stock in the stock stock and the stock stock and the stock in the stock stock and the stock stock and the stock in the stock stock and the stock stock and the stock and in the stock stock and the stock stock and the stock and in the stock stock and the stock stock and the stock and in the stock stock and the stock stock and the stock and in the stock stock and the stock stock and the stock and in the stock stock and the stock stock and the stock and in the stock and in the stock stock and in the stock and in t

A NEW RE

EDITOR, Farm and D. Ethrough preliminary cow Milanhurst Am has broken the record in the junior four-year on covering tests begu days from freshening, in overane code new vero consecutive days #7.3 lbs. milk. 8be fr d years, 5 mohls, 9 lest 29 days from Ice 27.5 days from Ice 27.5 db, da far from 6 sire is fir Hengered Kol 5966, She we hav 27.5 her dan is Neth Kol 5966, She we hav 27.5 her dan is Neth Kol 5966, She we hav an oversel by Hr. Oliv ma Center, New York, and outplace Maple of the bightness Maple and 17.12 lbs. milk.-Malcolm H.

A FIVE YEAR AYE A FIVE YEAR AYB LILY OF WILLOWM ed by J. W. Ollz-ington, has just fi secutive official record istry, making a cumula [bs. of milk, and 3,662. 3,64 per cont. fat avera making her the five ye breed.

making her the five ye bred. This record is worth is shows to a remarka. In unity of the second in the second second second in the second second second in the second second second the second second second the argument second second constitution mechanics and second se

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Shorthorn bull For Shorthorn bull junior, which are ad the prize list, there a ning from \$30 to \$ prizes for Hereford and junior, and to ea beef breeds, another Three, get of one size For grades and o breed, the prizes have



CORRUGATED 0 ľ Wood invites fire, lightning, rot, vermin. The modern farm build ing is made of everlasting Acora Iron. If you are building, we have a book you will want to read ... "Better Buildings." FREE to Farmers. Write for it.

PRESTON -



Under instructions from the Minister of Agriculture, there will be held at

The Ontario Agricultural College GUELPH, ONTARIO

ON THURSDAY, OCTOBER 28th, 1915

A Public Sale of Cattle, Sheep and Swine, comprising Shorthorn (including Dairy Shorthorns), Holstein, Ayrshire and Jersey Cattle ; Shropshire and Leicester Sheep, and large Yorkshire Swine.

The sale will be held on the College Farm, and will commence at 1.00 o'clock p.m.

For Catalogues apply to G. E. DAY, O.A.C., Guelph, Ont.

VOLUME IV OF THE CANADIAN HOLSTEIN-FRIESIAN YEAR BOOK Will be ready about October 20th. Price \$1.00 per copy. Apply to W. A. CLEMONS, Secretary ST. GEORGE, ONT.

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A FIVE YEAR AYRSHIRE RECORD. A FIVE YEAR AYANSHIKE RECORD. LLY OF WILLOWNCORE, bred and own-been and by J. W. Olfan, Redmond, Waab-sentires official record for Advanced Res-ietry, making a cumulative record of 64,591 be, of milk, and 3,563,56 be, of fat, with 3,54 per cent, fat average for the five years making her the five year champion of the

and her cells, a storage role use are very seed. This record is worthy of study, it that is a start of the area of the start of the analysis of the area of the start of the start of the area of the start of the start and the start of the start of the start area of the start of the start of the start are start of the constitution meessary to give a remark-able mit and butter fat record, with a train a calf each year, a cow must have constitution amount of mills meet area the start of the start

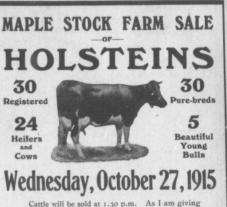
ten 85.9 to 97, non-born 45.7 to 65.0, The second second

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William Slaght, Healton, Ont.

William Slaph, Haghton, Ont. DITOR, Farm and Dairy, Volume 1V, DITOR, Farm and Dairy, Volume 1V, di the Canadian Holsein, Friesian tion about October 20th. In accordance with the motion passed at the last annual meeting of the Association, a charge of 31 Phone desirous of obtaining same should make Application to the secretary, W. A. Olemons, St. George, Ont.

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Cattle will be sold at 1.30 p.m. As I am giving up farming, everything will be sold. Now is your chance to get cows and heifers which we have carefully bred and selected for the past eight years. You buy them on Oct. 27th, at your own price. There are also eight head of splendid horses besides implements and machinery of all kinds to run a large farm.

Send for catalogue and get the breeding of these cattle. Sale will com menos at 10 a.m. Lunch provided at noon.



FARM AND DAIRY



920 (20)

FARM AND DAIRY

October 21, 1915