

AVOIDED. AND CLEAR LOOKOUTS IF ACCIDENTS ARE TO BE
Photo shows an ellay cutve on a road in Welland Co., Ont.

The Hlouse of Holstein
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"The purchase of a steam roller is too often delayed--The cost of a steam roller is by no means an additional expense, since rolling effects economies in several ways.'

The Government Repart on
Highesag himpresements
used by 150 corporations, muntcipalities

## Waterous



This Engine Wili Cost You Nothing You need an ovilne-get a Gultoon on
our new easy piumment plan, and it our new sasy puyment plan, and it
will pay for turelf. You have the WiII pay for luyelf, You have the
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## Hi L ETITING Bensin THE SUN

## On Getting Started

1T is the heginaing of a new year. and I have rewolved fif the odit. ors of Farm and Dairy are willing) to start a series of chats with you, my nelefibors. I think that we on the farms need a ble of sociability. We need somathing to take the place of the old trueling bee. And tia logical successor is the farm paper. don't know what subjeots our chats may emibrice, but I warn you that if you are after bolled down information you'd better arrange to skip my chats youd, on the other fiand. you over feol -14 , on the other fand, you over salls
you'd like to talk of "shipe and sall and seating wax, of centbages and kings," fust fur the sake of talking, just to take yoir mind oft your work for a moment of retaxation, than I invite you to drop in every chance you get and pass the time o' day with me.
My friends, If you ever feel a desire to break into print for a living, take my advice and prusele acid. It in a faster method than starving to death. Besides, you will be anved the worry of making a start. Thats the
whole trouble-gotting started. For a long thme you sit and stare at the wall, locking for a title for your first article. story or posm, as the case miny be. Strange as tt may seam, no inle prolects ftself from the atoresold wall. Than you look out the window same resolt. You try trampting up and down the kitchen floor, and you acoldentally step in the and where the cellar door is when it ts down.
But to-nizhe 1 got an inspirntion. I suidfenly thenaht of the apare room at Avont Mary's, She henps the blinds down to preserve the wall paper, and saty waltor whe cemes along during the wintor senson and aleeps In the commpess of the epare room should enunt limselt lueky it he escunes with bronchltis Urually they take pneumonia. The trouble is Aunt Mary doesn't let the sun in. The same applles, I think, to many of our elltors. They put too much Fhop tall" between the covers of thelr papers, or mother too lutle of their papers, or miner too wikle of
the type of rendly that takes our the type of reading that takes our
minds sway from the worries of tubereulosis in the paredred herd or Winck head among the turkevm. So Tim going to try to let a little lisht Into the heavier rendine that Fhrw and Dairy supplies through its varkana departments. And choosins the ttte "Lettine tn the Sun" gave me a start.
The atiffentites of retting started seem to be many, not only in writing but fn any new phase of netivity in which we may engage. Tou've got to pluck up your coursze and plunge into in new venture whether it be itterefure, hoy: or good roads, the way you did the cout time you went awimening.
And spenlding of gettine started th good roads-I remember it ble white good roans-used to protrude from the rond opposite our farm. Every ri that cume along bummed that atone for fit was well centred in a rather narrow road. How much mud was knocked off burgy and wagon wheels by that stone. I would not venture to aray, out for 10 yeums the wheels atruek aay, Dut it. Careful drivers slackened speed when the stone hove in sight Always at roadwrork time the path master talked of blanting it out, but thts was never done. Alwnya feon earth was drawn to this stone and it was given a decent burial, but always during the next heavy rain the goon earth denerlud and har down httl, and the stone remurrected fiself.
But one day while we were prepir ing for the annual intermant of the while stone, an hoary matriarch came by and stopped to chat. Held been away from these parts nigh onto 40 year, he sald. In the courne of his remnfnfscences he remarked that he
bed drown that identical stone to kem prasent place to fill a hole in the roed When he wat path master, mey back in che cobwebley past. He salid it as it 'iwe cone something to be proud ofwhat reoked lie ot the scores of thres what reoked ine ot the scores it?

After we'd rerfivot somemhint from the shootre $c$ his hicia, we dug about the white atone, huchisd on a chain end wilth one team of horaes drew the stone from its resting place. And now it stands by the fence, a monument to the difficulties of making a start In any good roads movement.


Milk Distribuion Charges

THE formal orderin-council regulating the spread in milk prices between producer and consumer, which came in force January first, reade as follows:
first, reads as follows: That from and after the firat day

1. That from and after the unril furof January, aiD, distributora shall not ther notice, mink distribus sold them than the actual cont of the millk dethan the actual coat of the and, in addltion to such cost, on milk sold in the Provinces of-

Cents
British Columbia

## Alberta <br> Alberta

| per quar. |
| :--- |
| 5.25 |

Mankatchey
Ontarlo
Ontario
Quebec, Not.
Nova Scotin
New Brmswick
P. 1in tuland..
6.25
. 5.25
5.25
2. That no-retail dealer shall charge a higher price for milk than the price the milk distributors charge the consumern in the loendity in which such retall dealar is carrying on business.
3. That if the cost of distribution is tnereased owing to an increase in the tactoe of lotor or otherwise, any disprilhentor atterted thereby may aubmit trinuter af smeh inerease to the Food eviences at and that the maximum Controiler and ask that the maximum amount herefir presicribe for dis. tributors in the province in which such distributor is selling milk may be increased.
4. That no distributor selling milk In a locality where the amount pald at the present time to diatributors is less than the maximum amount hereia pregerlbed shall increase such amount without frat obtaining the written cobsent of the Food Controllen

## A Hog Production Move

$T$HE Hamiltos Board of Trade are planntng to provkle a amail phe for every rumal fool boy in Wentworth county If he wants it. Members of the boand are bolng aeked to subecribs to a fund to be spent in purchasing brood sows. These sown are to be hept by members of the agricutumi ection of the Board of Trade until the litier arrives. The sow can then eold for more than enousth to pay me farmer for the trouble of treeping the farmer for the kach school boy will reed hits ple until elght monthes old, when it will have an esthmated value of $\$ 35$. The lad wHI then be required to pay for ble ptg and the Board of Trade nanticrs, who subserthed to the orisinal fund, wall be repadd. All they III be out will th interest on $\$ 10$ be out will th, interest on tho for one year. that liave been launohmany schomes chat throurthout canaca to asslost is the ereater production of perk.

## MORE HOMES WANTED.

Homes wanted in good Ro man Cath ic familles; promie. ing ehildren: twin girls seven years, boys three to five years. Homes west of Peterboro desir ed. For information write Hugh Fergusen, Stratford, Ont.

## Trade incroases the wealth and glory of a country; but its realstrength and stamisa are to be looked for among the caltivators of the land,-Lord Chatham

## "The House of Holstein"-Are Its Foundations Secure?

## A Criicism of the Short Term Record by One of the Breed's Best Friends - F. H sever

$W^{\text {B }}$
read in St. Matthew, chapter seven, twenty fourth to the twenty-eighth verge, of two rock and the other unon of whom builded upon a story.
Is our Bhort-time official-record a foundation rand?
The growth of the Holstein-Friesian cow in popuarity has for the past 25 years made history unpre cedented by any race of domestic animals. This popalarit in view as ita foundation the seven-iay at firgt thought of the past achievements it might at inst thought seem unwise to consider nooving our Folstein structure from this foundation
For more than a decade, each year has seen added to the membership of the Holstein-Friesian fraternity dozens of wealthy men who have taken ut the breed ing of Holstein cattle as a fad, as an accessory to a country place, or from the sporting spirit which causes other men to take up the breeding and developing of the race horse. Doubtless, in aearly every case, the matter of financial gain is also considered, and also in noarly every instance these ventures have been a success from a financial point of view. These breeders arways have the worthy ambition to become leaders in their new fleld, as they nearly always were in thelr business, and, beHeving the old adage that ilke heving the old adage that like
begete Hike, they are willing to pay the ever-increasiag prices for the descendants of the largest record animals.
A Grame for Seven-day Records. This demand for the extreme seven-day records has naturally made Its own supply. We have learnet if a cow fon't re. quired to do too much through. out the year, she will, at freshening time, take from her stored. up fat and energy and make phenomenal recordts for a short perlod of time. Expert handling and feeding have been involved and 30 , 40 or even 50 pounds per week records have followed each other so rapidly as to leave the mass of HolsteinFriesian breeders in amaze. See. Friesian breeders in amaze. See-
ing the financlal success attending the financlal success attend-
ing the remarkable achievefing the remarkable achieve-
ments of the few, the breeders ments of the few, the breeders
have, generally speaking, fallen in line, with more or less successful endeavors to keep in the race until I fear the real dairyman, whose business is to make milk continuously at a proflt, has been lost sight of.
How long will such methods endure? Already we are hearing our great seven-day records talked of disparagingly There is no question among Intelligent men that the accuracy of these records is not safeguarded in every concelvable way, and with peasible rare exceptions they peasible rare exceptions they
are correct, but even so their real value from an economic real value from an economic
polnt of view is questionable.


Aren't we building our Holstein-Friesian house upon the sand? Will there not come a time when the buying public will demand more than a seven-day record, and when our present basis of value will be swept away and must be replaced by long-time pro-
duction?

## Real Measure of Dairy Ability.

Almost any breeder now is ready to admit that the long-time production is the real measure of the dairy cow'ri value, but as long as the buying public and not seemingly willing for the short-time tests and not seemingly willing to let long-time records will most breeders their calculations, just so long will most breeders work for the immediate dollar rather than for the future welfare of the breed.

I believe the oflleers of our association should make
great the incentive for long-time teats, and the greatest and most far-reaching incentive would be to evolve some system whereby the cost of making these tests would be greatly reduced. It would seem that this work could be supervised after the prosent method of the cow testing association, and somewhat reduce the cost of inspectora. it misht be advisable to offer money prizes for yearly it be records in which every milking member of the herd would take a part and would member of the herd would take a part and would in that way get a
year's record. ear's record.
What would doubtless arouse even more interest would be a futurity, for sires, classifled as to ages, two-year-olds, three-year-olds, and so on. It might individual animal these futnrities not only for the individual animal, but for groups of five, ter the perhaps even more daughters of the same sire in the name age divisions.
I can concelve no greater honor for any sire than to have ten of his daughters make more milk and butter in a given year than the ten daughters of any other sire.
Perhaps there are Perhaps there are other inducements more practical than these that would practical than these general adopition of the more general add
time tests.

## The Dairy Farmerse Problem.

The problem of the dairyman solve His each day harder to solve. His produce goes largely to a class of people whe must depend on it as a cheap food, and no matter what the cost of production may be there is a limit to what he can sell it for. His labor is con sell it advanctng in cost, as are alno the feeds for his cattle. are also Federal enactment catle. Through duets of the distillery by-produets of the distillery are unavailable, and the proposed enactment of the coming legin. lature will also very Itkely re. nove from the market brewers; Iried grains and malt sprouts se hat a half of our former ton hage of high protein fymer tonwill no longer be avallable. of course, will tend to This, increase the will tend to greatly maining the price of those remaining. We as Holsteindirlesian breeders should be prepared to supply the dairyman with the cattie of proved abitity in long-time production, for the must have animals of this class in order to survive,
I am not sure but It would be the part of wisdom with the
future of our breed in vlew to entirely abandon the soven-day test. Very likely thls would react to our $/ m m$ ediate would vantage. "A moving honse ts not a comfortable habltation is
But the long-time production is the rock upon which the foundation for the permanent success of any breed of dalry cattle must be buik.

## Feeding for Health and Vitality

## Does High Feeding Result in Barrenness

Ithere any relationship between high feeding and failure to breed regularly? Do some feeds act directly and detrimentally on the reproductive organs? Mr. J. Meradith, a United States dairyman and writer raises these questions in a recent issue of "The lowa Homestead." He writes as follows: quantities of purchased concentrates are fed, complaint is common that many of the cows fail to breed regularly. This complaint is becoming more common from year to year, and is making serious inroads on the profts of dairy farming. This Inability to
withstand heavy grain feeding and breed regularly withstand heavy grain feeding and breed regularly means that some of the cows must be bred severult
times before becoming safe with calf. The result is some of the cows freshen at the least favorable time, thus cutting down the supply of milk when most needed to keep up even production, and causlig a general upsetting of the farmer's plans for the ing a general upsetting of the rarmers in extreme cases abortion and sterility not only sweep away the profits, but ruin the herd for profitable dairy purposes.

Feed for Long Life.
It is high time that farmers began to practice methods of feeding dairy cows so that they will laet longer, instead of feeding hy to feeding are being advised by feeding are being advised by those who assume to be feed-
ing authorities. It is wrong ing authorities. It is wrong that so many dairy experts have divorced science from common sense in giving scientific advice along lines of feeding. But the most discouraging thing we have to contend with is the fact that so many farmers are willing to let these experts do their thinking for them instead of looking at the problem in relation to the health of their lation
cows.

It is not my intention to alscuss the problem of feeding from the standpoint of the veterinarian or scientist, but to present a few plain facts that seem to have a
bearing upon the question of bearing upon the question of malntaining the breeding qualities, of our dairy cows. In the first place, the failure to breed regularly is more common where heavy rations of protein by-products are fed. Many dairy experts explain this fact by arguing that great producing cows convert milk that their reproductive organs are very pourly milk that their reproductive organs are very pocily
nourished. This condition, however, is unquestionably the result, in great measure, of improper feeding, so that the whole question resolves itself into one of improved methods of feeding,

Feeds That Are Injurious to Production.
Unfortunately for the dairy farmer, the feeds that possess the greatest amount of protein are the very feeds that possess the least power in nourishing the organs of reproduction. it can be further stated that some of the feeds that possess extraordinary power as milk producers are positive poisons to those organs, Witness the milk-making value of cottonseed meal, then witness the cows that have been fed upon it to the point of barrenness. Cottonseed meal contains, when at its best, a miedicinal agent which acts directly upon the uterus, and when fed to cows that are large producers it is ilkely to assist in producing an abortion. The fact that so many good producers abort after carrying their calves up to seven or eight months is a pretty good indication that it is not germ abortion. There good indication that it is not germ abortion. There nounced, effect. Sueh foods are very rich in protein, and, while they have a place in the economy of feeding dairy cows, they must be fed along with other feeds that counteract their evil effect and furnish an abumdnnt supply of nourishment for the reproductive organs.
"An even worse mistake than feeding too much rich protein feeds is that of taking the grain rations away from the cows suddenly and not feeding them enough of anything to properly nourish the growing fetus. Such a practice dwarts both the milking and breeding quallities, entalling a double loss. It is between these two extremes that we find a safe and profitable system of feeding that provides an abundance of food thet contains less proteln, even though a perfectly balanced ration for producing milk is not used. In carrying out this plan, oats, bran, corn, clover, and alfalfa hay and silage play an important
part. It is time that dairy farmers heeded the signs of the times and followed the rules of common sense in feeding their cows. When we have a good cow we should strive to feed her and care for her so that her vigor and reproductive powers will be maintained.

## For the First Six Months

Suggestions on Calf Feeding and Management ALIF-RAISINC: is a fundamental part of the dairy industry. The performance of the ma ture dairy cow bears a relation to her develop ment during the calf and heifer perjods of her life. A circular which is being distributed by the dions Department of Agriculture among creamery patronis points out that the small amount of whole milk being fed to calves at present makes the problem of call raising much more complicated than formerly. The
"Immediately loumed be washed with an antiseptic solution and sied with silk thresd in order to prevent infection For the first feed the calf should have the first milk For the first feed the calf should have the first mils from the cow after calving and should have The mother's milk for several feeds thereafter, but or sooner the weaning takes piace the better, ban the
hould use his judgment as to whether an fucrease is justified.

The calf, from the time it is two weeks of age, should always have access to plenty of clean, pure water.
The general practice is to feed calves skimmills for from two to six months. In the latter case, with fall calves the time of final weaning from milk comes in the spring, when pastures are ready. Under this system the calves uaually make excellent growth during the entire period without any brealr in gains. Careful attention during the first two weeks often means the difference between a sickly, undersized, stunted animal and a large, well-developed one when enters the berd as a milking cow

## Should Dairy Bulls Be Tested <br> A Four Years' Wait to Ensure Results

MOST practical dairymen now realize the advantage of breeding to a tried buli-one that has proved his power to sire high-produring daughters, says a bulletin from the Utah Experiment Station. Just what performance these daughters must attain before a bull is considered good in practice, is very indefinite. A bull whose daughters are uniformly above the average as producers is the bull which usually, and rightly, attracts attention. Another bull may be the sire of one phenomenal producer and a large number of rather inferior cows. Such a bull is a good one for the average dairyman o shun. There may be a sertain tomptation to unlicate the extreme production of the one cow up the odds are too much agsinst this for him to samble for this end.
The fact inmediately arises that at some period ven in each good bull's life he was an untested sire. This is very true and someone had to give him a chance to prove himself. There is always it certafn risk in breeding to an untried bull. The chance to tisk in ols value is necessarily delayed not only till the particular heifer is born, but till she in turn il the particular and comes Into mith. Even then, anything tut brea and comesion record is not a sood standard cowaplete to draw conclusions. Alt told. then, it rom which to draw of four years to measure the tases the better pari of lour years to measure the
value of a bull. In that length of time this bull coud have sired five crops of calves, thus completely making over the herd upon which the owner must depend for future profits.
The serlousness and lasting effects of such a move suggest that great caution should be employed. The areful method of testing out a new bull is to breed him only to a few older cows of known breeding eapaclty, then hold him in reserve, using him only when sbsolutely necessary, itl the results of thits wret trial are completed. If the majority of theas frst helfers prove to be satisfactory producers the ull could then safely be used generally in the herd, if not he should be discarded.
Selecting dairy bulis upon their record as breed ors is more certain to result in improvement in dairy cattle than selection elther by ancestry or confor mation.

## Will Cattle Eat Sweet Clover?

## Manitoba Experts Say "Yes"

POBSIBLY no other plant has been more the aubfeet of dispute as to its economie value than white sweet clover. That it will produce heavy crops of hay is admitted by all. That it possesses much feeding value for all animals that eat it is also univereally acceded. That it is a comparatively hardy orop is attested by the fact that it will frequently reseed itself and live in the same spot for years. That it has possibilities as a weed fighter is accorded by those who know its vigor of growth. But as $t 0$ whetrier it is sufficiently palntable to cause animals to eat it-that's the guestion.
The Manitoba. Agricultural College has been exThe Manitoba, Agricultural College has been experimenting ,that enttle have both Heen panturtnt to say that theartily eating it as hay. The advoupon it and heartily eating it as hay. The advecates of sweet clover contend that many animais must acquire a taste for the plant, and after, that they are fond of It. This seems to have been the experience at the college this year. In the panture field was an area of sweet clover and another; area of alfalfa. During the early summer the cattle pat tured down the alfalfa but setrcely totehed the sweet clover. The latter was, then cut for hay, Later is the season the alfalfa was short in growth and the he season the alfalia was Bhort in growth and the green second growth the regult that after they had by the cattle, with the resuit that after they had acquired the sweet clover habit they pastured continuously upon it for the remainder of the seasons: Whether or not the same cattle will eat sweet clover with the same avidity next gpring will be watched with interest. The collese has never had any dim. culty in having animals eat the sweet clover hay, It may be an Interesting statement to add that the particular patch of ground used to grow this sweet clover was an unsatlafactory plot that had refused to trow grain and corn, and was sown to aweet clover in an effcrt to find some erop that would succeed.

## Ontario Good Roads Plans for 1918

An Efficient System of Maintenance Should Be Fstablished to Colit
Perfected to Prepare the Way for Greater Development After-the-What Roads We Have, and an Organization

Tpeople of Canida, and the reating wpon the to win the war and to conditions, social and economic aftere for probable improvement in Ontario at the present war. Roid ander the latter duty-preparedness for conditions after the war. As a public work, in which much em ployment can be given, it can be made to much emful service in protecting industrial and la do a user condtions during the disbandment of the armies. Also of the highest of employment, it is an investment many fold in the progress of canads the expenditure Bad roads are a progress of Canada.
retard effort to bring agricultural conditions, and place as the most desirable of all life to its true thereby reacting on the prozress of occupationsa. whole. Half the the progress of the Province as a whole. Half the time wasted in driving through properly applied, would bring the cause of them, if to a surprising state of excellence roads of Ontario good margin.
Despite present labor conditions, the repairing of roads, as they now exist, should not be neglected. Neglect would mean, ultimately, a serious capital for reconstruction. The proporionate expenditure not that the roads be neglectedy of labor demands, be saved by keeping them in repair. For that time reason, construction of an urgent. For the same carried on, but the present time, with should be labor and high wages, is not favorable scarcity of works of construction, is not favorable to extensive The efforts of then.
will, therefore, in 1918 Ontario Highway Department will, therefore, in 1918, as during the past year, be such as can be me extension of road organization it will not be made effective after the war, when it will not only mean a step in real national development, but will also give much needed emplorment and have a steadying influence needed employsituation. This does not mean thet on the labor war, large bond issues will bean that, following the a hugh pollicy of road construction Onsary to carry on present-day organizationstruction. On the contrary, vision for guch construc for maintenance, with pro-pay-as-you-go principle, will permit a program theconstruction after the war, to which a programme of ciple of finance can be substantially the same prinClosing a review of substantially extended.
the Surveyor (London, Euighway laws of Ontario, municipal matters says: Eug.), a leading authority in It will be obse
principle of main roads being conslideres the national charge been recognizedsidered as a "fairly elaborate system of graduated that a "between township, county and praduated charges "Joint control, has been set and province, with ning with statute been set up. Thus, beginProvince of Ontario has as this country did, the "goal of equitable has arrived earlier at the "ple, in its broad highway finance. The exam. ple, in its broad lines, is one which might well be considered with a view to the adoption of This endorsation is the Mother Country."
those who have sought to perfect the encouraging to


An Excellent Township Road.
Much has been accomplished in the improvement of roads

employ a road superintendent, Ilustration shows ar roads by those townships that rintendent.


Results of a Road Superintendent. While thin hichway in Mariposa township ts now a
county road, it was put in tis present state of exceltence
while stit under the townshlp road superintendent.
road improvement in Ontario, and justifies the faith that efficieney, coupled with equitable distribution of cost, will result. In considering this organization several facts should be
kept in mind, Important of which are: 1. That roads must be built and main. tained in proportion to traffic-expenditure being in like ratio. 2. That, as Iaid out in Ontario, about 20 per cent. of the rood will carry 80 per cent. of the traftic. 8. That experi enced and competent management is a prine meensity if expendie neces. sity if expenditure on them is to give, with economy, the desired reroads, of di That country roads, of direct benefit to the township are also of benefit to the towns and cities, apd the latter should contribute in some degree. A study of recent road legislation in Ontario will show that none of the foregoing principles have been overlooked; and the a full measure of co-operation in giving effect to these laws, is justified.
To the present, thirty
vince counties of the pro-
vince have passed by-laws, tems. Only three county, creating county road sysham and Northumberland, and Peterbambton, Durnot done so. Provincial aid to this work, when properiy understood, when properiy understood, is adminttedly generous; to refuse this ald cannot be
much longer much longer justified in any county.
Aid to country roads is aid to township roads. Be cause management is, for purposes of organization transferred to county councils, the people of the township do not cease to use the roads-but with their improvement use them much more. The direct benefit is to the townships. With adequate Lrovision under county management for roads of heaviest traffic, radiating from towns, villages and shipping points, the task of developing the remain ing township roads is in the majority of is, in easily within the means of township authoritiesefficiently applied are efficiently applied.
Provineial highways,
such as proposed in On such as proposed in On-
tario, are not intended as a means of constructing an extravagant system of
of economy and more equitably distributing a means This organization is equitably distributing the cost. heavy international and henvy for roads carrying such as local municipalities cannot be tran traffle, provide for. As this heavy cannot be expected to vehicles it is but just that the provincial of motor tion should be made from the provincial contribuAs with county roads, from the motor vehicle fund. ance and gradual development, of efficlent maintenance and gradual development, can be applied, the
work being pald for from work being paid for from annual revenue. When ance of the existing type at any point that maintenance of the existing type of road is no longer economical, a more permanent surface can be laid-but
the foundation work of widenin the foundation work of widening, grading, drainage and culverts, will be already in place-and paid for. Townships will be encouraged during the year to employ permanent road superintendents, toward which the province will pay one-quarter of the salary or wages. This is one of the greatest needs of pres-ent-day township organization, and for years has ciation recommended by the Ontario Good Roads Assoence to bear a means of bringing greater experimore systematic attention road work, coupled with Some of the attention to repair.
Some of the more elementary principles of road
mprovement are stil! continually improvement are still continually dispegarded by pathmasters and road commissioners, with the result that much well-intended effort is thrown away from


A Substantial County Road of Stone Construction.
drained year. Roads should be drained as farms are with drains of capacity, having a coning on the roads or alot, nools of water restage is stili a sin of omission roadside. Poor drainA se
grading machine commission is in the use of the roads. Annually, in the treat of old gravel ruined by using the grading of old gravel roads are and shoulders from the shoulders to to draw earth gravel, so as to "erewn thenders to the of the step in advance will the road. An important learn that gravel she attained when road builders and sod: gravel should not be covered with eart so as to turn the earth grader blade should be reversed it by hand the earth shoulders outward-throwing gravel centre built the ditch. if necessary-and the gravel centre built up by a light coating of new
material.
To prepare for conditions following the war by en road organization, county, township, and provincial the Highway Deparment a leadiag purpose of which canay Department at this time-a purpose which can largely be fostered by establishing efficiwhat systems of maintenance such as will conserve What we already have, and prepare the way for greater future development.

[^0]
## Nitrate Of Soda

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THE coler of the yolk of the egg seems often to be affected very noticeably by a change in the food. When fowls are elosely confined in winter or if a ration is dehappens, espectaily ficlent in green food, that the Wheeler are pale colored, in the amount of meat
says a change in saye a change in the amount of seem
or freeh bones does not alwaye see to have much influence. He says he thas known hens that had the run of a barn and barnyard, to lay eggs with much darker colored yolks than did neighboring hens confined but fed better in moot respects. In one instance, ter in mod resperange color in the yotk a much deeper orange in feeding to green followed a change in one lot, where
clorer and alfalfa. One chover colored yolks were the rule, laid pale colored yoiks colored yolks after eggs with orange given the run of a barn floor covered wichange in color chaff and leaves. A change in in the of butter is often noticeable in to same way when cows are Clover hay pasture after dry feed. Cliover hay and corn otover make oirferfalfa hay ed butter. is good to cannot be had, and may help. fodder cannot be the desired change. There is no doubt that the same cause Which affects the color of bucter the Winter, also alle
yolk of the egg.
We produce a whiter flesh and wheer fat in our fowls when we feed wheat and barley than when corn and grase are given. Protensor Cush-
man telieves that the color of the man believes that is affected in the same


## A Woman's Way

SIMPLICITY is the keynote of the successful poultry plant nowadays whether it contain 100 hens or 1,000 . The complicated feeding, which were once belleved necessary to winter egs production, are now known to be detrimental to the net profits of the business. A systeman in cently described by the south of us, one of the states
comblines the two requisites of simplicity and efficlency to a marked degree. For the past three years in
woman has had eplendk success in procuring eggs from October to March, and her method is very simple, Just mapping out what she intends to do and then dolng it. This is the plan as she describes it hersein: "We have a hopper of ary brall
which our hens have access to at all Which our hens have acent. beef scrap
times. About 10 per cent abundance times. About is added, unless there is an abundance is added, uniess at noon they are given
of skim milk. At a hot mash, which is composed of scraps and vegetable paringat night to we feed corn; this heat.
keep up the bodify the chickens go to roost some kind of fresh litter is placed on the floor, into which is thrown cracked corn, whed this winter The ration will be changed this wiater somewhat. Instead of the whis grain will be used, one part of The Bidto two parts cracked cos industriously at work
dies are up and dies are up the family has built a fire. This latter, of course, applies to the time after hus
work begins."
With the With the exceptron bulky green feed water and some buiky the year, this stored for each mone ration part of this
is all there is to the is all there is to the rathon parisis was
live little plant. Much emphas live little plant. Much aed the hen that placed on the green this necessity is the
is supplied with is supplied
healthy hen.

## The Color of the Yolk

 of the labor involved. Would you adviseme to pat up a allo for alfalfa? How
does aitalfa allage eompare in keeplng valuo with corn silageq Would it make.
aintable feed for datry cown?-P.W.R. Halton Co., Ont.
AYalta has been used most succesefully for the making of ensilage not fully in Canada, but also throughout only in cana,a, It has been found, the Unitad slats.aster care must be however, thate eflage from alfalta or taken to make shac clover than from the flo more caremust be packed in the silo more carefully and mors thoroughly tramped se as to exclude aif 23 quickly as possible and even with these precautions there and even risk from the material beis greater wour or in 'sie presence of coming too sour ouldy and thus unsult. alr bncoming moulalfa alone probably able for feed. Al as good silage as does not make as son or some slmithough mixed with corn or greatest diflar material. One of the greatage from ficulties in making good shage isficient legumes is the absence of sumciovide carbohydrates and ata lactic and acetic the proper amount of solds depende acid, for on these two ane flevor and the keeping qualities, palatability of the anollage.
However, if altalfa sliage is properly made, it whi, undoubtedly keep as well nas corn sllage and will make a it ts suitable feed for dairy cows. not'be doubtful, howevec; if it would not be more profitable to grow at least some corn, not only as a cleaning crop in corn, farm rotation, but also as a materthe tarm rotation, the second and therd tal to $\operatorname{mix}_{\text {ents }}$ alfalfa.-E. S. A.

## FARM CHATS

## Christmas Cheer

H. Percy Blanchard, Hants Co. N.s.

CHRISTMAS is just over. To many people in Canada it has beèn a sad one. In devastated Hatifax it will long be remembered al a cheerless day spent in cold, glassless, shaken houses, or in crowded hospitals. With us in Ellershouse, in the pitais. a woman killed in the disaster. But a woman Bethlehem at its Christmastide was not all joy. Soon came the sweep was of Herods sword, its child-life for the nocent bae firs ones to enter the Christ-the first ones bulld.
Kingdom He camie to bull
Kingdom He came to build.
Aoross the water, in the battle Aorose the water, bright. With the zones, things are not the Italian retreat, the releasing to the Prussians of a milifion men from the Russian frontier million men from our western front, the to fling against our western more than outlook is serious. It seems more that ever a far cry to that "Paace on earth", of which the angels sang. And yel, could we have stood on the Nite banks four thousand years ago, when Moses four ht apparently slone against the fought apparuoh, and when after one "great push" and another the Egyptians recovered and "came back," we would recovered and "eame odds against that
have given long odd have given long odas aka that freebrave oid mint wom liberty might live. But in dom and liberty migit ive, crushed; the end the oppressor was so that, as the Egyptian was spolled, so that, as history tells us, the power of Egypt was only a name for the century hat followed. And if the heart of the Hun is hardened with some let up here and there, it may only be for his stili deeper and more absolute ruin. When the Prince of Peace was born that the Prince of Christmas Day, all the powers of first Christmas great Herould not crush that the great Herod coald for the Desire
little. child that stood little. child that stood Righteousness of the Nattions, for the righ in, in His and Peace He yet wil usier "God with own good time. It is not that should us," but "Us with God, The symbol cheer and encourage us. The symbor of that great and ablaing pence, of kindness and plenty, so scemmas that distant to-day, is the Christmas that has come and gone, but which hope come again. What a message of hope and encouragement and cheer brings us in these
on earth; good will toward men."

## In Union There is Strength

## The Saskatchewan Report

Tswand report of the Sasitatch. pany Coopentive Elevator Com profits of the concern for the net year at $\$ 350,752.83$. of elght per $\$ 350,752.83$. A cash dividend stoek dtvidend $a^{4} \$ 8.50$ declared and a the company there $\$ 2.50$ per share. In the compang there are now 302 local onganimatione, 19,317 shareholders, and during the year the company handiled move than one-ffith of the marketed grain erop of Saalcateh ewan, or over $34,000,000$ bushels.
The company now owns 302 . el vators, and Mr. F. W, Riddell eleseneral manager, F. W, Riddell, the termtnat elevator, etated that the new Fould be bull on, costing $\$ 1,270,000$, would be built out of the funds of the muring.
Diring the "convention a presentation was made to the Hon. C. A. Dunning, provinclal treasurer of Saskatchewan and manager of the Coonerative Elewator Company from its Inreention up to a few months ago. Derfine thet perlod Mr. Denning de. veloped the company from an exper. ment in 1911 to the largest in experi grain handling inetitution on the American continent in 1916.
The directon recommonded that the sum of $\$ 2,000$ be donated to each of the followinn: funds: Provinefal oo the followinn funds: Provincial
Red Cross Soclety, Canadlan PatRed Cross Soclety, Canadian Pat-
rtothe Find, and the Belghan Relle? Fond, all of whith were gladly affirmed.

Croperative Live Stock Shipping $A^{s}$ stated recently in Farm and Dairy, the Omemee and Rea County have commenced in Victoria stock cooperatively on a somewhat large scale. Farm and Dairy is informed that the work is growing and - most successful feature of

## Representative Wanted Good Salary Paid

TV ${ }^{\text {to }}$ are tooking for several men Dalry representatives for Farm and Dairy in various parts of Ontario
Each man will be pald an excellent salary; also a good commision in
addition on all business turned in. As the nature of the work Involves of mandiling of considerable sums of money for us, we expect efteh man to be prepared to give une a amount. security for a reasonable

Applicants are also requested to
furnish three or four testimiontals furnish three or four testimionials responsibie men.

Representatives, will be given ex. ciusive territory, consisting of sev. eral counties.

The work wilf consist of securing new readers for Farm and Dalry among the farmers: also getting renewale of present subscriptions.
The dtutrict representative will be permitted to appoint local agents on commission wherever he seep
fit, and on all business turned in by these local agents, the district re oresentative will recelve a commle.

A member of the regular staff of the diatrict representative at first for the purposep of astative at first
petting started getting, started, and giving him ouggestlons and training in the best
methods of business getting methods of business getting.
The men we engage as staff repre jobs, and the opportunity of perment Ing up a profitable income for bulldeives in thele chosen territory.

Write us at once. Yeu may be
the man for your territory,
FARM AND DAIRY, PETERBORO, ONT
the activity of these two clubs October these clubs shipped some $\$ 13$. 400 worth of hogs, and during Novem-
ber over $\$ 17,000$ ber over $\$ 17,000$ worth. An officer of the Reaboro Club, in a letter to Farm and Dairy, atates that he belleves farm Work is in the right directioves this Was through the cooperation, as it their wheat that the farmers sale of ern Canada have been able to Westgreat success of thel able to make a live stock is one of the prement. As tucts of our Ontario principal prolieved that there fe farms, it is besale of live stock in opening for the broad lines.
C. E. Eckert, of the Fraser Valley Mik Producers' Association, writes hasm and Dairy that his association has just completed a canvass of their members for three-year contracts for the handling of their milk, and expect to have very close to 100 per cent rect newals, as well as a good percentage of non-members who have been shy
about coming about coming Into the association the
first year.


Farm and Dairy stands foursquare against everything that is detri either advertising ors interests, and whatever appears in its columns,


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## Read not to contradict and to confute, nor to believ

 and take
## The House of Holstein "

AWe have all read of the man who builded his house upon the sand and everything went well the storms came and beat upon that house; then till the storms camis neighbor who had builded on a rock, came through with flying colors,
The Holsteln Friesian breed is being built upon The Holsteln Eriesian breed foundation is of two differing materials, some breeders preferring to nall the flag of their faith to seven-day work, and others placing their confidence in yearly work. Are these short time records comparable to the sand of the parable? And are long time records comparabstructure to withstand the fiercest attacks of the tempest? F. H. Stelvens, of New York State, asks these questions in a recent issue of the Holstein Friesian World and answers in the affirmative. Mr. Stevens views are reproduced
The storm which may sweep away all that is useful from our dairy record systems is already breaking. The commerclal dairyman is finding it hard to pay the high wages that help demand and buy costa feed for the production of a necessarily limited by the antagonism of consumers, who have come to expect milk to remain what it always has been in the past, one of their cheapest fooda. The dairyman who can "earry on" under these conditions is the man with extra good cows; the kind that work year in and year out; the heavy, persistent milkers.
Utility value is what the commercial dairyman is demanding. Pure bred valnes are based ultimately on utility demands, and if seven day records do not meet with the favor of the commercial dairyman
they muat go. Then he who has built his herd and his reputation on short term records will discover the instability of his foundations. But the breeder

T

FARM AND DAIRY
who has worked for heavy, persktent milkers, will know that he has indeed builded upin a rock. "I am not sure," Writes Mr, Stevens, "bet it won!t be the part of wisdom with the future of our breed in view to entirely abandon the seven-day live disFarm and Dalry columns are
cusslon of this very live tople.

## It Hinges on Capital

 he Annual Report of the Sackutchowan cooperative Elevator Company, Limited, Juast to hand, states that the net pronts of the comfany for the financial year $1916-17$ are $\$ 350,752.88$. Speaking at the recent convention of the United Farmers of Ontarlo, Mr. John Kennedy, second vicer president of the United Grain Growers, Limited, estimated the profita of the latter company at $\$ 800$, 000 . This represents well over $\$ 1,000,000$ of profits 000 . This represents weil over two companles. Theto the pralrie farmers on the two to the prairie farmers on the two companive, Cooperative Company, Limited, of United Farmers Cooperative on the other hand, operating in a mith Outher country than aither of the prairle companies, in the laat year declared pronts of only $\$ 1,213.80$. Why the difference?
In part the superior showing of the Western companies may be attributed to greater experience and skill due to longer operation. In still sreater degree it is due to the single orop system of farming followed, making the marketing of their pro-
duets comparatively stmple. A still grenter factor in Western success, however, In the loyal cooperttion that prairle farmers have given to their companies. In, no way has thle loyalty bven better expressed than in the amount of capital that they have subscribed for their cooperative Institutiona. The paid-up oapital of the Saalcatchewan company was $\$ 176,580$, during the first year of its existence and since then the paid-up eapltal has been Increased to $\$ \$, 060,482,60$. The paid-up capital of the United Grain Growers, Limted, is $\$ 1,440,160$. In strong contraat with these well finanoed companies is the Ontario company with a capital of less than $\$ 12,000$ now, and during most of last year of less then $\$ 6,000$. The officem of the United Farmena' Cooperative Company, Limited, have done wonders on their amall capltal. In the past 10 monthe their business turnover has been over $\$ 900,000$. It is anfe to say that the Ontario company has saved the farmers of this province in the last 10 monthe tens of thousands of dollars through its effect on the prices of goods sold farmers. The company's activities, however,
are hampered on every hand by lack of capital and the value of their nervices will always be in proportion to their assets. The authorized capltal of the United Furmers' Cooperative Company, Limited, now stands at $\$ 250,000$. If most of this were to be subscribed by Ontario farmers In the next few months thefr company would progress at a rate that would be an eye opener, both to its own shareholders and to our friends in the Went who have such good cause to be proud of their own aticcess. Ten thousand farmers, each owning five to ten shares of stock, would solve the finanelal problems of the central company. Why not a stock selling committee in every local of the U, F, O. this winter?

## Railway Rate Increases

MANrToBA is the first province in Canada to take a decided stand against the deecision of the Board of Rallway Commleationera which would allow a ten to arteen per cent. increase in freight and passenger rates on all Canadian roads. In a vigorous statement laat week, Premier Norris denounced the decimion of the Railway Board and stated the determinacion ocourt if neceseary. From
the case to the Supreme the case to the supreme Court if necosary. a purely provneial cencerned with the action of
miler is particularly the commiaston in bruehing aulde what is known as the Manitoba agreement with the Canadian Northern Railway. By that agreement the province pledged tis credit in support of certain undertakings of the railway company, and in return was
guaranteed fixed freight rates for a number of years.

The partial nationalization of the Canadian Northern Rallway, the premier contends, has not relleved them of their bond guarantees, but it does deprive them of the benefts with which their guarantees were to be repald. One nattonal aspect of the case is convincingly atated in the following parigraph:
"Personally, I am amazed at the action of the Commisalon in ignoring the points raised with reterence to the poerition of the Canadian Pacific Raflway in this case," writes Mr. Norris. "hat company is so prosperous that it cannot make use, for the present at least, of the millions and milions of additional revenue that will come to it if these inadditional revenue allowed to stand. Even its own creased rates are alicly explained that the acoumuofflciala inve publiciy explus has been due to the lation of an the company to spend the money for Inability of the company ioments. If they cannot maintenanoe and they nak for it? No fovernment epend it, why do they taxation for the purpose of would think of levying taxation tor se purpe at eome aecumulating a large surplus to be spent at a rallfndeffnite time in the futura. right to levy taxation way company has

## for that purpose.

We might add that not many monthe since a leading raflway executive of another system stated fhat the difficulty of the railway companies in handing freight, was not so much a caae of lack of capital as absolute inability to secure sufticient skilled labor, flow dellvery of new rolling stock ordered and shortage of ocean space, which kept cars loaded at ocean terminals whem they were badly needed to relleve Inland freight congeabion. None of these conditions that are hindering freight movement will be rellewed by increased freight and pasenger rates. The worlelng out of the rallway board's decielon will be, in effect, the further enrich two smaller impecunlous rivals; or really only one, as the C. N. R. Is now under public control, and any loss on its operation coutd be met with less coet to the Canadian people by a direct bonus from the Dominion treapury. No more wastefal system of aiding the combined Ines of the Grand Trunk and Grand Trunk Paclfic rallways could well be devised than a general incresse in rates, and Manitoba will not be alone In oppoettion to the ratification of the order. Prestdent Wood, of the Canadian Councll of Agriculture, has already forwarded his proteet to Ottawa. That protest will be backed up by all of the strength of the farmers' organisations. The ralway situation In Canada calls for some such effective policy of national control es has already been adopted in both England and the United States.

## Keep Up Registrations

REGISTERED pedigree will not make a cow give a stingle extra pound of milk. Perhapa this explatns whiy many dairy farmers, owners pure bred animals, are careless with their regittration papers and trequently neglect altogether the registering of their young stock. They wish to avoid the small expense connected with the tranasaction. In the long run this neglect is bound to be a losing policy. Just the extent that the loss may assume is well illustrated by the case of the cow Lilly that won the dairy test at Guelph.
Lilly is a pure bred Holstein. She was bred in a herd where registrations had long been neglected. Animals have died unregistered. Breeding records were not available and finatly the herd got into such a condition that registration was impossible. As a result, Lilly, with several generations of unregistered pure bred ancesters, must be regarded as a grade cow. Had the registration of her ancestors been continued she would be worth probably $\$ 600$. As it is, she is not worth over $\$ 200$. Her male ealves will be vealed and her heifer calves sold at the prices usually realised for good grade helfers. Nor is the loss on Lilly alone the only consideration. With the splendid showing she made at Guelph, all pure bred Holsteins related to her, which had been registered,
would have increased in yalue and the total resulta of ber win at Guelph might easily be counted in thou sands of dollars. It was costly carelessness when Lilly's papers were neglected. But still there are hundreds of dairymen who are continuing to take the same risk in their herde?

## High Grade Men With Farm and Dairy

THE response to our announceinent stating that Farm and Dairy province has been mast gratifying. Some of the veryta of the of men in the farming districts have signifiee of the very best type sent Farm and Dairy in their diatriot. Amangst thesesire to repreof county councillors and a former township Amot these are a couple It is men such as these former township reeve.
communities-this we want to have. Farm and in their respective ideas and ideals-for the advancement Farm and Dairy stands for big is only right and natural that men of sime farmers' welfare and it is only right and natural that men of similar callbre should want be its standard bearer.
There are a number of districts In which we have not'as yet ap pointed a representative. Perhaps yours is one of them. If you apfarmers, and want to tie up perm Farm and Dairy among your brother read and reply to our up permanently with a first-class proposition and reply to our advertisement elsewhere in this isaue.

## The Makers' Corner <br> vifed to and Cheese Makers are in. vifed to aend contributions fo this department, to ask questione on mad to sugating to ehoove maliting: slom, suggest subjecte for diaeus.

## Marketing Saskatchewan Butter

 , Logan, Oairy Commissioner.${ }^{\mathrm{N}}$N cooperstive teirytnimissioner. feature of mone mariged advant no than the cooperative merlvantage the butter. cooperative marketing of to sastiater. it is practically imposarble toreten mathoty aupply the coss: or a position to in unless the seller is in tice of from one orders on short noany creamering in tan cars. Few if clent output to meet these have sumfmeats, so the only praet these require the hetter from only praotical way is for tes to be from a number of creamer les to be assembled at central point and after grading have it sold through one office. With our system of grad Ing cream and the careful of grad each churning of butter it is pongitio to have fifteen or twenty it is possible ereamertes prod twenty or even more shonot aniform. When ater whleh fa ave or 10 earloade of then dealer buys he knows thet the of the same grade he knows that his entire purchase is practically uniorm in qualtty. This feature cannot be duplicated This where else in Canada. In the anyprovinces the creameries the other cally all privately owned and operactisingly, so there is not the operated portunity for parchasing the same optlties butter that has in large guantured, graded, and sold been manufactrol of graded, and sold under the conrol of one office. By collowing this ystem the butter made by the co operative creameries of Saskatchewn enfoys a reputation of which any prov. fnce might well be proud.
Fonr years ago the deat
Pacifle conat were willing on the from two to flye cents more to pay Zealand butter than more for New Zeeland butter than they would for any Canadian make. During recent years a sradual improvement has been made in weatern butier and $T$ sm in. formed on good authority that to-day the same dealers will pay as to-day for the butter made by the coppora tive creamerfas of geslknto cooperathey will for the best New Zealand errides, and at the best New Zealand from one to two cents more than they from one to two cents more than they
will for the onee famous Eastern will for the onee
Towaslps butter.
The Paclfic Coant, howerer, is not the oniy place where thls butter can be marketed. A carlotd wis sent to Montrenl. Ie March of thls year on consignment and the brokers fourd it so satlefactory that they were zuble to diapose of it at one and a half to to diapose of at at one and a half to
two cents in advanee of loctl mulkes. two cents in advanee of locit mukes,
writing that "the flavor was excelWriting that "the flavor was excellont and the workmanship about per-
feot." feet."

As further evidence of the quality of Western Canada butter, I might mentlon the result of a trial shipment sent to England last fall. The Dalry Commianloners for Manitoba, Alberta Commianloners for Manitoba, Alberta
and Sealcatchewan made up a carload
and forwarded to the Brigtol market The brokess to whom it was consign ed Wrote that the butter gave excel lent satisfaction and they considered It "the finest lot of butter ever recefved trom Canada." With such a raputation for qualtty the butter produced by the Cooperative Creameries of Saskatchewan sells at a prameries of at least two cents a pornd fn al vance of whef it would bring if ad. creamery, wer? operated separately and the butter marketed in the same way. With an output of two or three mfllion pounds en edditionst two cents per pound smounts to a sum of conatderable aise. Under the cooperative syatem the farmers who produce the cream obtafn the entire bencht of thla premfum, for it costs no more, of fact less, to manufacture no more, fo thls system than it would if each creamery were operated slngly.

## Dairy Commissioner Wilson Resigns

WA. WIISON, who has been Dairy Commiseioner for-Saswas organized, and who the province the Dominion and who reprasented ritorial days, has restened in the TirCleneral Manager of the Saslcntchewse Co-operative Creamerie Saskntchewan Tinder the Greameries, Limited. co-operative guldance of Mr. Wilson, co-operative dalrying has proved a Great auccass in Sankatehewan. Mr. Wilson is a blg man in every way, and those who know him will look for big things from the eo-operative company with which he has identified himsele Mr, F. M. Iogan, who has been. Deputy Commissioner, now becomes Dairy Commissioner in the becomes Mr. Wilson.

Cooperative Creameries Ltd.

Wles have been conve creameroperated durlog the patisfactorily yearg it was flectifed the past ten system followed they that under the permanent a basls as were not on as The custom has bean for might be Branch to obtain an for the Dairy theee erenmertes, an annual lease of dency in all cases and while the tenthe leases there wes mos been to renew this would there was no kuarantee that this would be done. It is sure that the development of permanent butter markets under sinch conditlons wont be far from satisfactory. In additlon to the immediate operation of these creameries, their future develop these had to be constdered We Wevelopment manent nature could not well be undertaken on the basis of an annus! lease, so the amalgamation of all thesel creameries seemed to offer a solution creameries seemed to offer a solution taken. I pre
I predtet a blg future for the cooperative creamerles of Saskatchewan Thefr ablity to provide an unllmited and profitable marlset for anll the cram the farmers can produce is only one of the services this company can render. Thls work was taken over by the new comnany about November 1st Its future will be watched with keen
Ist.

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2OTHING is more common than our anxiety to reform other people, while we do not even make a beginning on ourselves.-Thomas A. Kempis

## The Heart of the Desert

## (Continued from last week.)

IN her weakness and misery Rhoda's
cleft chin quivered There was only merciless determination in the Indian's face. Slowly the girl waked to his side. He swung her to the saddle, adjusted the stirrups carefully, then fastened her securely to the shoda with a strap about her waist. Rhoda watched him in silence of utter fear. Having settled the girl to his satisfaction, he mounted bis own horse, and Rhoda's pony followed him tractably up the trail.
The trail rose steeply, After the first few dizzy moments, Rhoda, cllnging to the saddle with hands and knees, was thankful for the security of her new seat. The scenery was uncanny to her terrorized eves, To the
left were great overhanfing walls with cactus growing from every toward which she dared not lnot but only trusted herself prayerfully to her standy ittlo haree
As the trail led himer and darkness etho, the cold shivered and thronom her fenr and discomfort w"s aranine surnrise that ber streneth hed endured evan this ion $\sim$. IT a sunt oet hook beidide her and she folt warm OlAs of a Novato blanket about hof Han snoke. The madneen of the nioht porare. the fear and dianst of the fethermer nf exhavation. All thomaht of her frehtful preltinamant, of her
friands' anxient. of Kut-lo's treacherv, friands' anx'etv, of Knt-la's treacherv,
waa fulled hv a wanrinnes so praat thot she rould rntv elline to the saddle and nmay for the trall to end. Kut-le, rifince fust ahead planned back constantlv ot the girl's dim ing or nrotesting. The trall twisted and "whulatal in and on. Fach moment Rhana felt leas cervain of her harae rrew more minful. At last a sinking senses and she onered her fing estoe of the ponnn and Alrifice Wee loolinc tham into a besutifyl bnottre of nwla save a proverard sadnese to the mnon-flenked shadows.
Here, in a lona plale of enlumnar mines. Kut-le reeted in her salldie. Refore her borae stonned. Kutio wos beside har, unfastening her waist stran and liftine her to the pround. He milled the hlontret from his own shoulders and Molly stretched it on the soft pineneenlas phadn hall doltminns, looked un into the young Indian's face with the nathetic unconsciousness of a slch child. He laid her carefully on the blanket. The two squaws hurriedly knelt at Rhorda's slde and with clever hands rubbed and manloulated the
slender, exhausted body untll the sfri opened her tanculd eses
Kut-le, while this was belve done, stood quletly by the blanket, his fine face stern and Intent. When Rhoda opened her eyes, he put aalde the two
head and held and raised the girl's to her lips it a cup of the rich brota good, and Rhoda finished the cup with. out protest, then struggled to a sitting position. After a moment Kut-le raised her gently to her feet. Here, however, she pushed him away and however, she pushed him away and
walked unsteadily to her horse. Kut-le's hands dropped to his side and Kut-le's hands dropped to his side and the frail boyish figure clamber with the frail boyish figure clamber
From the plne wood, the trail led From the pine wood, the trail led
downward. The rubbing and the


Hauling Logs to the Sawmill-A Winter Occupation.
A scene such as the above ia becoming somewhat of a rarity in the older sec-
tions of Ontario, but hauling logs ts the winter occupation of the farmer who is clearing his land in New Ontarla, The above Mustation was taken at the
broth had put new life into Rhoda, and for a little while she kept a clea brain. For the first time it occurred to her that instead of following the Ifidlans so stupldly she ought to watch her chance and at the first opportunity make a wild dash off into the darkness. Kut-le was so sure of ber weakness and cowardice that she felt that he would be taken completely by surprise and she might elude him. with a definite purpose in her mind she was able to fight off again and she was able to fight off again and again the blur
As the trall widened in the descent, Kut-le rode in bestde her
"Feelling better?" he asked cheerfully.
Rhoda made no reply. Such a passion of hatred for the man shook her that words falled her. She turned a white face toward him, the eyes black, the nostrils quivering with passion.
Kut-le lauzhed softly.
"Hate me, Rhoda! Hate me as much as you wish! That's a heap more hopeful than indifference. I'll bet you aren't thinking of dying of ennui now"
What fiend, thought Rhoda, ever had induced her to make a friend of this zavage- She clung to the pomnel of her saddle, her eyes fastened on $\mathrm{b} / \mathrm{m}$. If only he would drop dead
as he sat! If only hls Indians would turn on him and kill hlm!

They were riding through the desert now, desert thickgrown with eactus and sage-brush. Suddenly a tar away roar came to Rhoda's ears. There was a faint whistle repeated with increasing loudness. Off to the north appeared a light that grew till it threw a dazzling beam on the strange uittle waiting group. The train passed, a half-dozen dimly lighted Pullmans. The roaring decreased, the whistle sounded lower and lower and the night was silent. Rhoda sat following the laat Sim light with burning eyes. Kut-le led the way from the difficuti Kut-le led the way from the doadbed. going of the desert to the roadded. As rhoda saw the long line of rails the panic of the prevous night overvWhinful of the strap about her waist mindful of the strap about her waist she threw herself from the saMidle and hung against the stolld pony. Kut-le dismounted and undid the strap. The girl dropped to the thes and lay
crouched with her face against the erouched
steel rall.
"O John! O John DeWitt!" she sobbed.
"Alchise, go ahead with the horses," said Kut-le. "Wait for me at the painted rock."
Then as the Indians became indistinguishable along the track he lifted Rhoda to her feet.
"Walk for a while," he said. "It will rest you. Poor little girl! I
your brain. Don't act like a child. I love you, Rhoda!
"I loathe you!
"You don't-ah-" He stopped abruptly and set the girl on the ground. They were standing beside a slde-track near a degert water-tank. side-track herr deot in a awltch from" " mittered Kutle, keeping his frog, muthere Euthe, leeplag hold on Rhoda whe one hand while with the other he tugged at his moc casined foot.
Rhoda stood rigid.
"I hear a train!" she crled. "O dear God, I hear a traln!" Then, "The other Indians are too fär away to reach you before the train does," she added calmly.
"But l'll never loose my grip you," returned the Indian grimly.
He tore at the imprisoned foot, ripping the moccasin and tearing at the road bed. The rails began to sing. Far down the track they saw a star of Hght. Phoda's heart stood atill. This, ther, was to be the end! After all the months of distant menace, death was to be upon her in a moment ! This, then was to be the solution! And with all the horror of what life mipht all the horror of what life might mean
sob:
Oh, not thls way! Not thls way!" Kut-1s gave her a quick push.
"Hurry:" he sald, "and try to remember good things of me!"
With a cry of Joy, Rhoda Jumped from the track, then stopped. There flashed across her, inner vision the face of young Cartwell, debonair and dark, with unfathomable eyes; young Cartwell who had saved her life when the scorpion had stung her, who had spent hours trying to lead her back to health. Instantly she turned and staggered back to the Indian.
"T can't let a human belng die like trapped anfmal'" she panted, and the threw herself wildly against him. Kut-le fell at the vnexpected $\mathbf{~ m}$ Kact of her welght and his foot was preed: He lifted Rhoda, leaned from freed! He lifted Rhoda, leaned from the track, and the second section of the tourist train thundered into the west.
"You are as fine as I thought you were ${ }^{\prime \prime}$ he began. But IImo heap at hls feet.

The girl came to her senses partlally when Kut-le set her In the saddle and fastened her there with strap and blanket. But happlly she was practleally unconsclous for the hour or two that remained till dawn. Just as day was breaking the Indians made thelr way across an arrovo and up a long slone to $\Rightarrow$ group of cottonweods. Fiere Rthoda was put to bed on a heap of blankets.
Sometime in the afternoon she woke with a clear head. It was the first itme in months that she had wakened without a headache. She atared from the shade of the cottonwoods to the distant lavender haze of the desert. There was not a sound in all the world. Mysterious, remote, the desert stared back at her, mocking her little grief. Mare terrfble to her than her danger Tut-Je's hands, more appalling death threat that had hune
thls sense of
so long, was this sense of $\quad$ ce, of barren notessed her Tastinctively desert oppressed her. Instinctively she turned to look for human companionship. and Alchise were not to be seen but Molly nodded beside Rhoda's blankets and the thin has Cesca wras curled in the grass near hv, aaleen.
curled in the grass near hv, anleed.
"You awake? Heap hungry?" asked Molly suddenly.
Thoda sat up, kroantng at the torturing stiffness of her muscles.
"Where is Kut-le?" she asked
"Gone get "em supper. Alchise gone too."
"Molly," Rhoda took the rough brown hand between both her soft cold palms, "Molly, will you help me to run away?"
Molly looked from the clasping finsers up to Rhoda's sweet face. Molis (Continued on next page.)

## THE UPWARD L00K

## Our Share Comes First

AND the Lord said unto Joshua, Get thee up; wheretore liest hua $7: 10$.
There is a time for and Intercesslon, but it almost floving and must have been preceded or invariably panted or followed by wor accomwisely and mercifully by work. God part until we have does not do His utmost. If it were done ours to the a race of $h$ were otherwise, what Joshua tiadendents we would be! enough. It was now praying long act. There had now time for him to mitted. The evild a a great sin com. people, He must ber was among hte punisbed. Thast be searched out and
Many people seen to feel that do. they tave prayed for a certain once ana-or about a certain matter perthey responsibility ends, and thus amn responsibultimes ahirked a sol nothisponsibsicy, if they bave done nothing when action was in thelr ower,
Ofien it really seems an easy way of rothet by aaying we will remember whether field of work in our prayers, Whether that field be in the Antipodes
or one very near What would we thome.
whose son came to him of a father aplthmetle who worked for help in question for him ${ }^{4}$ Never the whole father help until the son had done his best first.
We cannot honestly ask God's help selves ara mating a sin, unless we our Selves are making a herole strugste. so often one fustifen purposely, because ing shas one fustifies htmselt by calling strs faulta. So in alr problems and risffentites and struggles, how. ever small and however great, God
expects us to do our pant fint expects us to do our part first, thoueh at some times and at long timen we may have to lle prostrate and humble. but with hearts full of
felth. -I. H. N.

## The Church Habit

${ }^{6} \mathrm{~N}$ohndren do Jenkins, "the church very often. get to
They go to thelr Sunday sehool, and I think that's enough.'
Doctor Brown did not seem to be convinced, so she continued: "Or course I shouk like them all to come. they me to the charch service, but they are not much interested, and I
do not inshts." "You inshet.
"You Insist on their going to day sehool. Whether or not they are inter. ested 1 suppose9" the minister asked. "Why, certoinly!" Mrs. Jenkins answered, with some indignation.
But why abould you leave the other matter, which seems to me of nt Teast equal importance, to their caprice?"
Mra. Jenkins returnet of caprice," mira. Jenkins returned, with some little ehplAren to is too much to ask litie ehliAren, to sit through that long "That service.
"That Tong morning service' aver. oges abont an hour and a hall," answived the clergyman. "The Rame ahtitren selt through two sessions at sehool every day, each sesslon longer than that. You and 1. In our youth, every Sunday, and longer services tems commered rather well wous sys. of the ehllidren of todartn wth those
"De you reallv think it
portant for the chlidren to serv Imcharch ${ }^{\text {m" }}$ for the chlldren to attend "I ce
Trown. "The tendency of the doctor for chlidren and parents to have less and less in common. In my youth parents and children played together. and stndied together, and stayed at tome together, and went to church tomether. We see se little of our chilidren as poesible nowadays, to the kreat low of un aht. But at least we
can go to God's house together on the
Lord's day! The children would and enjoy golng it it were a familly cus tom, and if they didn't enjoy it, it would and if wholesome didn't enjoy it, it Would be a wholesome thing for them
to discover that there are lots of to discover that there are lots of
things in this world to be done, things in thls world to be done,
whether we enjoy doleg them or not Whecher we anjoy doleg them or not.
That is the kind of lesson the coming generation particularly needs. ag generution particularly needs.
"But going to church has above a religtous value. And let me tell you, if you were setting deliberately you, if you were setting delliberately
about abollinhing the church aftogether abolishing the church afto-
at the end of another genera. tion, the surest way of doing so would be to let that generation grow up without the habit of chureh attend ance. Whether or not you help them to form that babit certainly seems to me important!
Mra. Jenkins no longer smilled. "And so it seems to me," she mald.-有的's Companton.

Not 'Tough If Properly Cooked

Thas made old hen an old hen" most of us. However, may be made most temptlig by proper and thoughtful cooking.
Instead of putting the
large quantity of water and in a the flavor out into water and bolling ing. If you have not a regular steamer, make one out of a regular steamander. Steam the fowl from one to ander. Steam the fowl
two hours until tender.
It may then be stuffed and roasted, basting with some of the lifuor in Which it has been steamed, and is very tender and tasty.
After steaming, the fowl may be in a frying pan, then pleces browned in a frying pan, then covered with a gravy made from the liquor, thickencook until well favorand allowed to cook until well flavored. The gravy may be varled by using in it tomatoes, green or red peppers chopped fine. browned onlons, celery seed or salt, or mushrooms. In recommending mushiooms it is alsumed that a home. canned or home-dried product be used. - Colorado Agricultural College.

## HOME CLUB

## A New Year's Resolution

THe beginning of the year is good time to introduce new housekeeping lane our syntem of which I have never of the problems cesaffully comber been able to suc. cuistuble ple combat has been to find a recipes, accounts keepling cooking gested gamess and other also sug. gested games and other forms of amusement. Every few months I re. solve that a change must be madebut somehow the new reolons made, I clip and wish to put awnay which have an opportunity of trying the I out, go into a cook book trying them Ing with tried and antrinady bulg: the accounts and untried recipes; ant to find thetr thay inplan rect very silver butter dima tato my favorite. and clippings, such on the sideboard, telnment, so-well an forms of enterfeems eonventent, any blace that kre ellpped kre olitpped.
My idea is to use a miniature filing it presented myself whe matter is, Chrlatimans gift. It is a simall one as a file, stmilar to th is a small drawer fices. It contains cased in some of. Inches in size, and the cablnet is diFided into several compartments and sub-divided so that everything van be Aled alphabetically if desired. My recipes are going into this file, aras onkes, meats, soups headings, such have one compartment for untried reclpes, and as I try them out, if good. they will be elther pasted or written on a card and placed in thele proper compartment, and If not good will be destroyed.
connection

Lain the young people of the commun-
ity quite often,
and it is diffoult vary an evening's iun unless one to a fund of ideas at their disposal. will keep all the methods of enter taining which 1 consider worth saving in my filing cablnet, where they will be easily a vailable.
necersarily acounts and receipts, which have purchased be kept on hand, 1 with an alphabetical atical letter file slmply an aliphabetical findex. I will place as they come in thelr proper sionally go throued in and can oceastroy those of no the file and deWi at do Home further use.
my idea? Will be Glad to thentink others who have a glad to hear of any mind, as mine may be faulty mind, as mine may be faulty, and I
am open for suggestions, John's Whe," ${ }^{\text {open }}$

## The Heart of the Desert

## (Continued from page 10.)

Rhoda was the delicate and ignorant. Rhoda was the delicate product of a
highly cultivated civilization highly cultivated civilization, egoistle, yet Rhoda, looking into Mod. And brown eyes, saw there that dillep patience and fortitude and limitless which is woman's without rezard to class or color. And not knowing Why, the white girl bowed ber head on the squaw's fat shoulder and sobbed a little. A strange look came into Molly's face. She was childless and had worked fearfully to fustify hands had tou to her tribe. Few Few volces had hers in tenderness. sympathy. Suddenly Molly clasped Khoda in her strong arms and swayed back and forth with her gently. "You no cry!" she eald. " "Sitte Sunhead, you no cry!" "Molly, dear kind Molly, won't you help me to get back to my own peothat a white it was your daughter Molly, I want to go home! ${ }^{\prime \prime}$
Molly atill rocked and
singsong voice one uses to ake in the child.
right off! Man 'way Kut-de catch you!" oft! Make it all harder fo Rhoda shivered a little. "If I once get away, Kut-le never will catch me alive!
"How chuckled indulgently
"How you run? No sabe how eat, how drink, how find the trail! Better
stav with Molly." stav with Molly.
"I would wait till $\mathbf{I}$ thought we Were near a town. Won't you belp me? Dear. kind Molly, won't you help me?"
"Kut-le kill Molly with cactus tor"But
eased and go with me!" The sobs blankets as the Idea developed. "You go with me and I'll make yon-." You Neither noticed the soft thud of moccasined feet. Suddenly Alchise vioteat ferk pulled the woman'back. ward. Rhoda forgot her stiffened museles, forgot her gentle stifened She sprang at Alchise with catilike fury and atruck his flagers from
Molly's hair. Molly's hair.
"You fiend! I wish I could shoot you!" she panted, her fingers twitchfing.

## Alchlse ratreated a step.

"She try help "em run!" he sald sullenty.
"She was not! And no matter if she fore me!" ${ }^{\text {wh't }}$ you touch a woman be-
and Alchise was hurled shed the camp "What's was hurled six feet away "Has he latd fincer on you, Rhoda?" He strote to her side and looked down at her with eyes in which struggled anger and anxiety.
ad Molly blazed Rhoda. "But he pull"Oh!" In evident rellef by her hair! Was Molly doing?"


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Choker" Collars for Those Who Like Them

$\mathrm{F}^{\mathrm{OR} \text { the pat pot two or threo weake, the }}$ tainime for mewing, as other duties per-
to the Christmas season have taining to the Christmas season have
claimed our attentlon. Now that Christmas is over for another year, however,
things will sradually work hack into things will gradually work back into
their unual routine. It is a good ides their unuai routine. It is a good Ides
to get as much sewing done as posalble during the monthe of January and February and in this way, when the spring
rush comes on, we will not be behind rugh comes on, we will not be behind
with our sewing and can thus go ahead with other duties. Anyone who wants high collars this
winter may have them. The designers of frocks and neckwear have meen to this. it is evident, however, that many
do not favor "ehokers," as for every high collar one sees, there are probably 00 or 100 low ones. The low roli colfir with deep points in front is one of the fav ur-
ites. The popularity of spuare cut blouse and dress necks has broupht forth many dainty callars in Georgette, satin, organdy, muslin, etc., shaped for, wearing
with square necked dresses with mquare necked dressen
2316 Junlor's Dress-This dress while stmple, has the apprarance of goos wityle. The brald trimm ing in worked nut very attractively on collar, cuffs, belt and
aknt and this model mould appan to many of our young schos girls. Three many of our young scho.
sizes: 12,14 and 16 years.
2317-2313 The design here nhown is
very slimple and yet if worked out in harmonizing materials should look very dainty. A blouse of silk or Georgette
fashloned from this model would go nicely with a mikrt of contrasting material made from the skirt pattern nhown. This design calls for two patterns, 10 cents for each. The blouse
34 to $\mathbf{4 6}$ inches bust measure and the skfrt from $2 t$ to 34 Inches wafst meanure, $2296-L a d y ' a$
dresmaker who desires For the home dressmaker who desires : a particularly
attractive one-plece dress, why not try attractive one-plece dress, why not try
out this styllist model? As will be noted in the mmall back view, the blouse to cut in points to come out over the akirt, thus
matching the front. This style would no doubt look well on the tall alim agure.
Six slzes: 84 to if inches bust measure.
$9320-$ Girlia Dress sue uitlle girl in the
home is usually quite as anxlous to have pretty clothes as her an anxious to have and herewith is ahown an extremely dainty. contume for the young sirl. It jumper or bolero effect, and wuch ant the could probably be worn in both wress ind thus one would really have two dilsleeves may be utilized long or short or plain material may be used for the or plain
akirt port
13 years.
160 t This apron is a complete coverall,
and should be and should be fust the thing for much
tanks as washing or many other duties. tamks as washing or many other duties,
when one wishes to protect the dreas. It can be fashigned elther with or without the belt. Three slaes: Small, medhum and lirge.
2307-A set of New Collars-In our opening paragraph We mentlon some-
thing about collars. Here are three dethigng about collara, Here are three dothe others. No. 1 would probably make a grood coat collar. No, 2 is decldedly unigue, forming a panel to the waint Ing toueh. The sesm fetin is the centre back, and hore buttons are used for
trimmlag. No s is also rather out of trimming. No. 3 is also rather out of the ordinary, and ghould make quite an
attractive finish for a one-plece dress. Three slaen! small, medium and larke. 2114-Indy's House Drems and Thise; in simple but practical. The yoke effect should make the dreas wear longer.
Seven sises: 34 to 65 fnches, bunt measure Little tot? The belt just goes around little tot? The belt just goes around
the back and iddes, whille the front is in a wide panel. The collar finlsh is almo quite
8 years.
zsol-f
abol- Child's Underwalst and Drawers
This- pattern of underweer will no doubt This. pattern of underwear will no doubt
come in ueptul for many home drenscome in usful for many home droms-
makers. The drawers and waist may be made very simply for everyday wear, or If desired can be trimmed quite
daintily. Five sizes: $4,8,8,10$ and 18


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## Creamery Men Will Meet

5 DITOR Farm and Dairy:-At a
meeting held in the Carla-Rite tive of the Canacember 28, the execuolation die Canadian Creamery Assomeeting on Tueeday 1.30 o'clock, meeting to be hell 15, at Carls-Rite Hotel, Toronto held at the ary men and others infereat creamsordially tryited to be preirested are of interest, such is present. Items Butter Graditg Putting Anargarine, by Creamery Patronting Away of Ice anged. Rer
Tuase present at the meeting on DeRoberten, were President, Mack Wm. New, Mellevile: Vice-President, Treasurer, W, Lornaville; SecretaryTrectors, S , W. G, Jackson, Simeoe; DIWectors, B. R. Bull, Teeswater: M. Waddell, Strathroy,-Mack Robertson.

How to Prevent Mold in Butter "Mold can be effeotively destroyed by hot water," stated Mr. M. P. Mor ry, Dairymore the State Convention of It seemeld in St. Paut, recentls. that seems to me," said the speaker, lies on ple more the butter-maker-rethe scrutbing brush in all heam, and and the less brush in all his work, fectants, common well-known disinstances such as bleaching pown suboommereial products, the powder, or will be off, both in pocket better he quellyy of his product, "Prom now pon, wet.
preach at the State Creall practise and of a small tank of Creamery the use scald the the water, in which to ${ }_{175}$ cald ierrees at a temperature of same degrees for one minute, at the same tume, with a forugh remove any dust or spots inside and out; also the dirt on the edge of every bottom for in each tier. Next steam the tub for one minute and then give it a very thin coat of parafin with a good machine paraflner. The tub will then be free from mold or mold spores, and care should be taken that it is not noculated again from dust, molature dripping from the pipes and, ceilling. belts or hands.
While this is being done, the 40 pound parchment sides and bottoms chouid be bolled in a saturated salt far - for a few minutes in a stone or Betore the operator puts liners carefully so he should rinse his hands again. ${ }^{7}$ "The
ter-is thaken source of mold-the butthe cream effectively, by pasteurizing the cream effectively.
ber: No do not want mold rememwater No more soaking tubs in cold water over night, elther by stacking or by complete submersion. Mold developed averywhere present, but not developed mold. Salt prevents the seraination of the apores, but does not kill or destroy them, nor does it materially retard the growth of the ungi. Water at a temperature of 175 degrees will destroy both the rege ative mold as well as the spores it produces. - It is net enough to treat the tub only. It is not suffient to boil the parchment only sumeient to enough to pasteurize the it is not You must do all three of cream only. temperature and gree of these. Low in the refrigerator retards circulation ment of mold. Mold in the developwhe the tesaly Mold in salted butter Tubs and paper of vegetative growth. dry, clean paper should be stored in a dry, clean place. There can be derelaped fungi on tubs and paper even though you can't see them.

## A FORTUNE IN POULTRY


 Choice Cock or Cockerel of our high record
Rocks, wyandottes,
Lestorns, Lephorns or Redas
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talning 65 . taining 65 photos of build atock, buildings. Froed
and tonic formulas
Our 264 Egr Kin
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##  <br> Will remove them and leave no blemishea, Reduces any puff or swelling. Does not blister or remove the hair, and horse can be worked. $\$ 2$ a bottle delivered. Book 6 K free. ABSORBINE, JR., the antisppte linimest for man.   Abserbtat and Abtorthe it, are mote in Cur Can <br> A SHOE BOLL, CLPPEI HOCR OR BURSITIS FOR

## ECRFAMFDY AND ICE CREAME <br> usiress. Estabilished SMiAE. Doing a good wholesale and retail The creamery building, with years ago by the present proprietor. stable room for eing, with an eighthundred-ton ice-house and electrfe 1 g ght and natuml and Just at the head of the Located cpposite the C.P.R. station, be sold with everything in main business street of the City. Will ness and rent the property. <br> C. E. LISTER <br> Chatham, Ont.




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## AVONDALE FARM <br> Highly Bred Bulls Fit for Service

1. Born Dec., 1916, from a 30 lb . skow cow which ts a granddaughter KING SEGIS, her sire's dam being a 33 lb , cow, BLANCHE LYONS DE KOL, The dam of calf also has two reconds of over 29 lbs
2. Born January, 1917, from a 19.84 lb . granddaughter of KING OF THE PONTIACS, her other grand sire being PRINCE HENGERVELD PIETJE.
Three others born in March, 1917 -one from the dam of our great cow Lady waldorf pietje, the dam having over 28 lbs and over 100 lbs , milk in one day

All above are sired by our WOODCREST SIR CLYDE, dam 33.07 butter 7 days, and with $22,558 \mathrm{~ms}$. milk semtofficial one year. They are every one extra good individuals, well marked and guaranteed to please. We want to make room for coming calves and are offering them at very low prices.

We have a few first arrivals sired by CHAMPION ECHO SYLVIA PONTIAC. We can sell a few good young females sired by WOOD CRDST SIR CLYDE and bred to CHAMPION
WRITE FOR PEDIGREES. THEY WILL INTEREST YOU AS WILL THE PRICES.

H. Lynn, Avondale Farm, Brockville, Ont.

## LAKEVIEW FARM

Is now offering a choice young bull almast fit for service, sired by KING CANARY SEGLS, whose dam PET CANARY COUNTESS 2nd, has for 3 consecutive years held the Canadtian Recond for Dutter in 7 days in the 8 months after calving division, best 7 days butter 27.73 lbs, as a 3 -yearold. His dam at 4 years, 19.56 ibs , is a fuh sister to the Highest produc-
ing 3 -year-old in Canada, LAKEVIEW DUTCHILAND ARTIS, 34.66 the ing 3 -year-old in Canada, LAKEVIEW DUTCHLAND ARTIS, 34.66 bs. butter from 567.7 lbs , milk, average test $4.88 \%$

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T. A. Dawson, Mgr.
$\square$ WESTERN ONTARIO CREAMERY FOR SALE
Bufldings and equipment in first class condition. Malre last season
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## AYRSHIRES


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ST. ANN'S, ONT

$$
\begin{aligned}
& \text { Young Stock for sale ACH BLO AYRHIRES }
\end{aligned}
$$

Three fine young Sires ready for service. Get particulars of these if you
need a aire. R. T, BRCWNLEE, Peach Blow Farm, HEMMINGFORD, Qut.


Please Mention Farm \& Dairy

## HOLSTEIN-FRIESIAN NEWS

Farm and Dairy is the leading exponent of dalrying in cannda
The great majority of the members of the Canadian Holsteln-Friestan paper. Members of the Ansociation are luvited to send toms of inter ilication in this column.

AHD PRICES FOR HOLSTEINS I GREAT BRITAIN. dairymen farmers in breeders and matlon, apart from the war tof of conver. derful prices being realized at wonsales for the black-and-white pubilc
cattle. Commencing cattie. Commencing in July, the dairy dispersed or of prominent luerds have shortage of labor; In one case, three sons who together with their mother had and producing herd, dil having answer ath the call to the colors. Some of answered standing features of these sales wert the strong demand for the best, the even distribution of the cattle, which were south of England and parta of Ireland: the number of new adherents to the breed, whose names ngure in the list of On July 21
John Bromet, a breeder of high rewned by Tadcaster, Yorkahire, were sold for an average price of $\$ 1,150$ per head; top price of $\$ 8,500$ being paid for the bull
Botermist, bought by Mr. Bromet in for $\$ 2,550$. Bought by Mr. Bromet in 1912 thuslast, paid top price for fomales at this sale, securing Garton Fomlpall,
show cow and a splendid $\$ 3,000$.

The next Cowt Average $\$ 340$. August 7th, when the herd owned Major D. 'A. Spence, Kincardinesh;
Scotland, was dipersed, ing an averase of $\$ 310,16$ head brif ing sis average of sech. August 18 cows averas the reductlon anle of A. Munro at Deil of Inghes, over $\$ 340$ per head, $\$ 4,000$ being averaged over $\$ 990$ per head, $\$ 4,000$ being paid for
the bull, Hollander (the purchaser re. celving an offer of over $\$ 5,000$ for re*
his bargain; $\$ 5,000$ for aver $\$ \$ 0,000$ for his
son of Honths old son of Hollander; $\$ 4,100$ for the cow, Dell Eeke 3rd, and a number of other
young females going for well over $\$ 1,000$ young females going for well over $\$ 1,000$ The upward trend in prices for good continued and on September 28 the Dushess of Hamilton's Rochford herd was dispersed at Easton, Wiekham Marat an average price of over $\$ 1,300$ each: bull, Johan. was sold foring $\$ 950$. The bull, Johan, was sold for 3.900 and for waxed fast and furlous until she was knocked down at $\$ 8,250$. This animal Was described as a magniticent, typical Well-bodied, heavy-miliking young cow with dopth and vessel, her milk record
for 295 daym, with firit calf, boing 996 gallons. A month-old daughter of Joukcje brought $\$ 5,950$ and a yearling daughter
(full sister to the frat (full sister to the flrat) was also sold for 35,200 . The imported bull and helfer Jofian and Joukje) cost the Duchess of
Hamiliton, in 1914. i1.425. They

| their Droduce realized in the ane |
| :--- |
| Four Bulls Average $848,40 \mathrm{~m}$ | During the month of October, further was forthcoming demand for Holetelns Was forthcoming at the sale of surplus

stook held by A, and J. Brown, owneri of the noted Hedges J. Brown, owneri Abbans, near London. Fifty-nine head Were sold at an average price of over
$\$ 1,200$ per head, four bulls averaging $\$ 1,200$ per head, four bulls averaging
around $\$ 4,750$ each. The top price was around $\$ 4,750$ each. The top price was
$\$ 12,500$ for the yearling bull, Hedges $\$$ econd Series, his sire being also seld for 85,000 , Seven cows and helfers were
nold at prices ranging from s1,000 to commenting editorially on the tremenBritain in that has arisen in Great britain in connection with the Hoistein said in a recent lamue: wThere London bo no limit to the prosperity of seems stein-Friaalan, for, after beating all reto sales any dairy or dual-purpose cit recelved at Mr. Beomet's sale averages caster, Mr. Munro's herd at at Ta Inshes, Inverness, showed an average of Q172 ls fd fover $\$ s 50$ per head.) The progress made by the black-and-white breed ia phenomenal to the partisens of been nothing quite llike it in the whole history of pedigree stock breeding. Who, they ank, six years ano would have would theat the the Holstein-Friestan matter of herd averages at sales? Who they ailso ask, would have dreamed that the number of breeders would be multi plied by twelve, and who would have breed to realize $1,000 \mathrm{gulneas}$ at pubil auction 7 ret an there things have achad a certain telegram it is asserted that tore tho dose tegram been dellvered beof Inshes, the average for the whole sule would have been higher." This was written before the sale of the Hedges Farm surplus stock, When an averake of oyer $\$ 1,200$ was reached with a top price
of $\$ 12,500$ for a yearling bull.

WILLOWMOOR HAPPY GIRL
W
HLOWMOOR HAPPY Y bred and owned by 3. W. Glise of Advanced Registry record on her third 165 . Theae average $13,169 \mathrm{jbs}$, mill sid cords ibs, butterfat as immature re. Cords. As a sentor four-year-old she pro6 ceed 16,478 the of mitik containing tecond highest in her clasiling her the Her sire is the famous
Morton Mains Queechy. who has 26 daushters that have completed in Adanced Registry recorda, that average only $7 \%$ of these records being completed by mature cows. Her dam is the improved cow, Rar-
cheskie Happy Giri 2397, who has two
other daughters, willownoor Hapl other daughters. Willowno has two Girf 25398 and Willowmoor Happy Gippl 2949, a full sister to Willowmoor Happy creditnble Advanced completed very creaitnble Advanced Recletry recorda. every daukhter la eharacterlatle pion Ayrahire and is of far more Imporiance to the development of the dalry induetry and of the breed than a phenomenal World record by a sinele individaum, aAvantageous as the latter may be for nd-
vertising and damonatatinr possibilities of the different breeds. Breeders ' Winstow, Secty American Ayrahiro

## CALDWELL'S Canada Depends Upon Its Farmers <br> You are the backbone of this coun-ry-upon what you produce, the rest Dairy Products are needed in Iarger Dairy Products are needed in larger guantities. It's simply a case of intensive production of food stuffs, and ellmination of waste. A maximum milk yield can only come from feedmilk yield can only come from feeding a balanced ration such a <br> Caldwell's Dairy Meal <br> 

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STANDARD FEEDS

## MARKET REVIEW AND FORECAST

 roads are any parta of the country,
much ad, there has not $y$, guite a while movement in grain. For boen looking forwird to the desiers have slelghing would wilow the the time when
busy markers to get busy marketing their croparmera to get however, as if it win taks. mo seems, the grain in thelf barns to part with several reasons for berna. Thla reluctance are marketing their frain cropis. The chitef reason is that prices are golng the chief a farmer in Enstern Ontario notice woere man come to hlarn Ontario had a It it ory
for 100 buahes ond pay hlm for 100 buikels of onts in hls pay him granary.
Another reaso Another reason la that the farmersary, did
not set nearly so much grain them
durtne durtne the fall so mush grain threshed localities the amount of and in mand many is rinning low. And hath, farmers arain feeding that the well erop of oats is not that ts as well as they had expected, not seem to go as far as one oats does year's orop
Farmers whe in abundance of feed locking forward United statec in esply December, from the
far been dimapmetnted so Wheat.
acted mund markets have not yet trans season. There are a few enquilies for Account of transportation is avallable on account of transportation difticulties. No
ansuranees are held out for
within within a ron annable tlme. The de delivery prices of other mrains has the tendency oo make farment hold baok a tendeney other aralns wheat, for if the pricen of
he more nrnifline hirth enoush, it may be more nrantebte to feed whent, it may
farm. Quotations: farm. Quotations: Mantiobs Whent-In
totre. Port VIltam, nominal (Includint

 Cearse Grains.
There fs litte nikvement of oata to the
market.
Prices are hlith and hisher. Several cars of kiln and may fo
can corn hava cost is over \$2. This puts it out of rasch of the feeder of The stock. A gut of reach
ereane in the price of in . crease in the price of, all A coarse tral in-
charneterlyes the market.
Quntations.

 Amerlean conn-No. 3 yellow, nominn.

 treni-Ouotatlonn: Corn-American, Mon-
 feed, 914 c : đo No. 2 local white, $871 / 2 \mathrm{c}$

##  AUCTION SALE

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Cows, Now Milkers and Springere
Lot 12, Concession 9 DEREHAM
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you try just one antmal you will
 TION REAN TRESIAN ASSOCLA:
85. Georys Follow

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Stockers,
Canners

##  Mill Feeds.

atill quough the pricess of mill feeds are sull quoted at the low rates soe by the
Food Controflor two whelks ago, there is
not not much movement weeks ago, there is
tiea. The demand to these commoditien. The demand for theae commodi-
briak, but anillers who will
foeda


 Der bas. Montreat good feed thour, ${ }^{31.25}$

## Quotations Hay and straw,

the quatations on the hay market remain weeke now. Tor have been tor semaral
 straw, car lots, 89 to 89.60 .
pricen for seed are paying the following Alaiko. No. 1 taney, bush. 112 po to
do No. 1, ordmary
do No , 2 , per buahet
do No. $\frac{2}{2}$, per buaht
do
do
$\frac{1}{2}$, per bushe
do No. ., per bushel
do rol retected, per bult
Red elovered, Nor bushail,
do Nush
do No 3 , per bushol
do rejeated, per bushel
Timothy
do $\begin{aligned} & \text { do } \\ & \text { do } \\ & \frac{2}{3} \text {, per } \\ & \text { eve }\end{aligned}$

Flax, buishel per owt..........

Canadian beans aro moving more
than they weres are moving more freely
large percentart time ago, but ${ }^{\text {poor qually. The }}$ They the recelipts are of mand from thel. Thero is a better deplocked brom the trado for foreign hand prices, Ontar quotes potato ${ }^{57}$ wares, Ontarlos seliling at tzit unchangea toes have Advanctreal and Grioes for potabag of seiling ex-atore at f2.zs per sound potatoes ass the the supplies of mostly touched by frost. arrivals are are Anding briak demand. Good potatoes Eggs and Poulter
Ninued laid eggs are acarce, and the continued cold weather is not holptng mat-
ters very much. They are bing Toronto in cartons, 550 to 70 cing . Case run on bats of cases returnat country points 50 c , Whill most of the trado is ${ }^{48 \mathrm{c}}$ to The up of storage esges trado is, boing The market has poutitry is very good.
holiday pricen sid thed down to after prices and Toronto is quotink: Chlekenh, spring Hye welght. Dremed.
 Roontors over 4 lbs.
Douckilings
Turkeys
Turkey
Geese
 The advent Datry Produce.
Tulted advent of oleomargarine has sulted in chenper doomargarine has re-
ereamery butter for buter. Good It would look as ir the only dirm prices.
ter that need feor but. garine is buttor of inforior grado from marthes creamery srin5 wholesalo at tic frem meamery mrint, 45 c to 46 c, with
 dairy printa bring only 3 sje to olle. ordinary
Offeringa still remain lis.
wack market, thourh the caint one live the past week from pricen nuectuated market
 cosing day: for the past week are as Butchers export stears ha.... $\$ 11.60$ to $\$ 12.50$
do kood
do medtum
Bo mon
Butchers balls, chole.e
Ao mod
do mood ...
do medhum
Butchery
do Eond

## 

Steckers, roind
do medtum
Mankers. nood to cholice
do com
Calves, veal, chotece
do medlum
Sarine heavy fat

do heavy and bucks
Hoge fod and watered
do off, cara


King- have the only two sons in Canada, of the $46-\mathrm{lb}$. bull Ormaby Jane sale, aiso a $30-\mathrm{-tb}$. calf, whose darm and two great-grand-dame of them for iba butter in 7 days. Also 11 bull calves of leaser noice, and females of R. M. holtey,
R. R. No.

ORT PERRY, ONT

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Sunnyside stock Farm, STANSTEAD, QUE.
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and to the oplntion that a poor animal is dear

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ada and whone dam is one of A. C. Hardr's imported Pontlac
and from dam of atrer a 17 -emon buil of excollent type, sired.
butter. PRICE FOR QUICK SALE, $\$ 12 \mathrm{~s}$,
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Theatre the names
of the famous playof the famous players who would soon be appearing in the pic-
tures were each night tures were each night
flashed on the screen. On this particular night the operater, wanting to play a littie joke on his audthe players and so mixed up the letters in each out the funny sentences you see above. Time and time again this
film was flashed on the screen fitm was llashed on the screen
only to be demanded back.
Many of the audience are Many of the audience are
atill trying to solve the mys. teriousnames. Can gou help
thom? Incace you are not familiar
with the names of the popylat moving picture atersand These Magnificent Prizes given for the Best, Correct or Nearest Correct Replies !


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your name and addrens (stating Mr. Mrs. of Mis) right-hand corner. If you wish to write anything but your anvwert, use aseparate sheet of paper Threeindependent jodges, having no connection whatever with this
firs, will award the pies, and the answer gaining 160 points will take
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[^1]:    Farm \& Dairy
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