

FARM AND DAIRY & RURAL HOME



Toronto, Ont., January 10, 1918

Comm. of Conservation
Asst. Chairman Jan 10



PRESENT-DAY RAPID TRANSIT DEMANDS SWEEPING CURVES AND CLEAR LOOKOUTS IF ACCIDENTS ARE TO BE AVOIDED.

—Photo shows an easy curve on a road in Welland Co., Ont.

The House of Holstein

Are Its Foundations of Sand? Page 3.

Letting in the Sun

Sam Ray Makes His Debut. Page 2.

The First Six Months

Giving the Calf a Start.. Page 4.

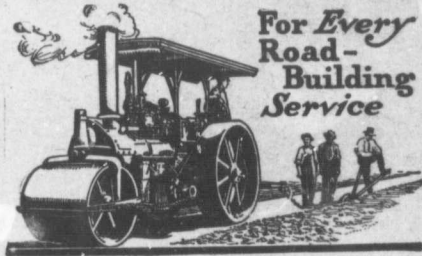
Ontario's 1918 Road Plans

Organizing for After the War. Page 5.

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BRANTFORD, ONTARIO, CANADA



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LETTING
IN
THE SUN

On Getting Started

It is the beginning of a new year, and I have resolved (if the editors of Farm and Dairy are willing) to start a series of chats with you, my neighbors. I think that we on the farms need a bit of sociability. We need something to take the place of the old building bee. And its logical successor is the farm paper. I don't know what subjects your chats may embrace, but I warn you that if you are after boiled down information you'd better arrange to skip my chats—

—if, on the other hand, you ever feel and feel like to talk of "snaps and snails and sea shells," of "cabbages and kings," just to take your mind off your work for a moment or relaxation, then I invite you to drop in every chance you get and pass the time of day with me. My friends, if you ever feel a desire to break into print for a living, take my advice and pressie ahead. It is a faster method of getting to the death. Besides, you will be saved the worry of making a start. That's the whole trouble—getting started. For a long time you sit and stare at the wall, looking for a little for your first article, story or poem, as the case may be. Struggle as it may seem, no little projects itself from the forehead—same result. You try tramping up and down the kitchen floor, and you accidentally step in the spot where the cellar door is when it is down.

But tonight I got an inspiration. I suddenly thought of the spare room at Aunt Mary's. She keeps the blinds down to preserve the wall paper, and any visitor who comes along during the winter season and sleeps in the dampness of the spare room should count himself lucky if he escapes with bronchitis. Usually they take pneumonia. The trouble is Aunt Mary doesn't let the sun in. The same applies, I think, to many of our editors. They put too much "shop talk" between the covers of their papers, or rather too little of the type of reading that takes our minds away from the worries of tuberculosis in the pured herd or black head among the turkeys. So I'm going to try to let a little light into the heavier reading that Farm and Dairy supplies through its various departments. And choosing the title "Letting in the Sun" was me a start.

The difficulties of getting started seem to be many, but I'm writing, but in any new phase of activity in which we may engage. You've got to pluck up your courage and plunge into a new venture whether it be literature, box or goose raising, the way you did the "let" time you went swimming.

And speaking of getting started in good roads—I remember a big white stone that used to protrude from the road opposite our farm. Every ridge that came along bumped that stone for it was well centered in a rather narrow road. How much mud was knocked off buses and wagon wheels by that stone. I would not venture to say, but for 40 years it held steady against it. Careful drivers slackened speed when the stone gave in slight. Always at road-work time the path master talked of blasting it out, but this was never done. Always good earth was drawn to this stone and it was given a decent burial, but always during the next heavy rain the good earth deserted and ran down hill, and the stone resuracted itself. But one day while we were preparing for the annual interment of the white stone, an hoary patriarch came by and stopped to chat. He'd been away from these parts nigh onto 40 years, he said. In the course of his reminiscences he remarked that he

had drawn that identical stone to its present place to fill a hole in the road when he was passing, way back in the cobwebby past. He said it as if 'twere something to be proud of—what reeked us of the scores of trees that had been hewn by his hands. After we'd revived somewhat from the shock of his news, we dug about the white stone, hatched on a chain and with one team of horses 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.

Sam Ray

Milk Distribution Charges

THE formal order-in-council regulating the spread in milk prices between producer and consumer, which came in force January first, reads as follows:

1. That from and after the first day of January, A.D. 1919, and until further order in council, all milk distributors shall not their total cost for milk sold by them than the actual cost of the milk delivered at their premises, and, in addition to such cost, on milk sold in the Provinces of—

Province of	Cents per quart.
British Columbia	5.25
Alberta	5.25
Saskatchewan	5.25
Manitoba	5.25
Ontario	5.
Quebec	5.
Nova Scotia	6.
New Brunswick	6.
P. E. Island	5.

2. That no retail dealer shall charge a higher price for milk than the price a milk distributor charges the consumers in the locality in which such retail dealer is carrying on business.

3. That if the cost of distribution is increased owing to an increase in the price of fuel or otherwise, any distributor affected thereby may submit evidence of such increase to the Food Control Board and ask that the maximum amount herein prescribed for distributors 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 paid at the present time to distributors is less than the maximum amount herein prescribed shall increase the amount without first obtaining the written consent of the Food Controller.

A Hog Production Move

THE Hamilton Board of Trade are planning to provide a small pig pen in every rural school house in Wentworth county—if he wants it. Members of the board are being asked to subscribe to a fund to be spent in purchasing brood sows. These sows are to be kept by members of the agricultural section of the Board of Trade until the litter arrives. The sow can then be sold for more than enough to pay the farmer for the trouble of keeping her. Each school boy will feed his pig until eight months old, when it will have an estimated value of \$35. The lad will then be required to pay for his pig and the Board of Trade for the members who subscribed to the movement. The sows are to be sold for one year. This is only one of many schemes that have been launched throughout Canada to assist in the greater production of pork.

MORE HOMES WANTED.

Homes wanted in good Roman Catholic families; promising children; twin girls seven years; boys three to five years. Homes west of Peterboro desired. For information write Hugh Ferguson, Stratford, Ont.

FARM AND DAIRY

& RURAL HOME

We Welcome Practical Progressive Ideas.

The Recognized Exponent of Dairying in Canada

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

VOL. XXXVII

TORONTO, ONT., JANUARY 10, 1918

No. 2

“The House of Holstein”—Are Its Foundations Secure?

A Criticism of the Short Term Record by One of the Breed's Best Friends—F. H. Stevens in the Holstein-Friesian World

WE read in St. Matthew, chapter seven, twenty-fourth to the twenty-eighth verse, of two householders, one of whom build upon a rock and the other upon sand. We all know the story.

In our short-time official record a foundation of sand?

The growth of the Holstein-Friesian cow popularity has for the past 25 years made history unprecedented by any race of domestic animals. This popularity has had as its foundation the seven-day test, and in view of the past achievements it might at first thought seem unwise to consider moving our Holstein 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 up the breeding 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 nearly every case, the matter of financial gain is also considered, and also in nearly every instance these ventures have been a success from a financial point of view. These breeders always have the worthy ambition to become leaders in their new field, as they nearly always were in their business, and, believing the old adage that like begets like, they are willing to pay the ever-increasing prices for the descendants of the largest record animals.

A Gaze for Seven-day Records.

This demand for the extreme seven-day records has naturally made its own supply. We have learned if a cow isn't required to do too much throughout the year, she will, at freshening time, take from her stored-up fat and energy and make phenomenal records for a short period 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 Holstein-Friesian breeders in amaze. Seeing the financial success attending the remarkable achievements 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 profit, 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 conceivable way, and with possible rare exceptions they are correct, but even so their real value from an economic point 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 production?

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's value, but as long as the buying public and not seemingly willing to let long-time records enter seriously into 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 officers of our association should make

great the incentive for long-time tests, 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 present method of the cow testing association, and somewhat reduce the cost of inspectors, and some advisable to offer money prizes for yearly herd records in which every milking member of the herd would take a part and would in that way get a year's record.

What would doubtless arouse even more interest would be a futurity, for sires, classified as to ages, two-year-olds, three-year-olds, and so on. It might be well to make these futurities not only for the individual animal, but for groups of five, ten, or perhaps even more daughters of the same sire in the same age divisions.

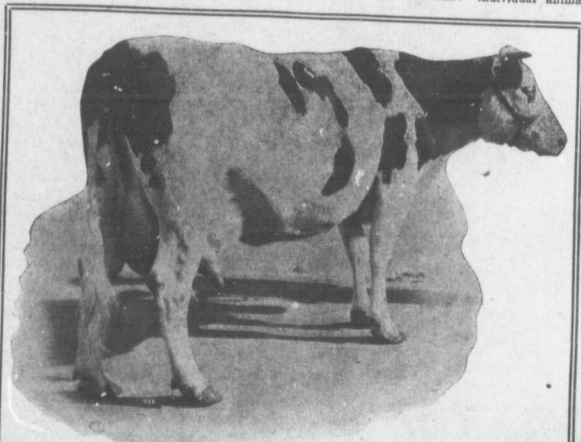
I can conceive no greater honor for any sire than to have ten of his daughters make more milk and butter in a given year than the ten daughters of any other sire. Perhaps there are other inducements more practical than these that would tend to the more general adoption of the long-time tests.

The Dairy Farmer's Problem.

The problem of the dairyman is becoming each day harder to solve. His produce goes largely to a class of people who 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 continually advancing in cost, as are also the feeds for his cattle. Through Federal enactment the by-products of the distillery are unavailable, and the proposed enactment of the coming legislature will also very likely remove from the market brewers' dried grains and malt sprouts, so that a half of our former tonnage of high protein by-products will no longer be available. This, of course, will tend to greatly increase the price of those remaining. We as Holstein-Friesian breeders should be prepared to equip the dairyman with the cattle of proved ability in long-time production, for he 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 view to entirely abandon the seven-day test. Very likely this would react to our immediate disadvantage. A moving house is not a comfortable habitation.

But the long-time production is the rock upon which the foundation for the permanent success of any breed of dairy cattle must be built.



Zarlida Clothilde 3rd DeKol, World's Champion Milk Producer

THE world's championship for milk production now comes to Canada. A likeness of the new champion may be seen above. Her home is the Colony Farm, Essondale, B.C., where she made her great record. When forwarding her photo, the farm superintendent, Mr. P. H. Moore, could send her official record for only 330 ures, as certificates for the last 35 days had not been returned. The tester's figures, however, are given for this period.

7 days' milk	831.31 lbs.	Butter	31.121 lbs. Strictly Official
30 "	3,331.7 "	"	122.23 "
60 "	6,718.0 "	"	233.96 "
90 "	9,940.5 "	"	338.62 "
120 "	13,009.8 "	"	442.28 "
150 "	15,900.7 "	"	544.58 "
180 "	18,572.4 "	"	638.46 "
210 "	21,031.2 "	"	725.32 "
240 "	23,260.0 "	"	806.11 "
270 "	25,292.7 "	"	878.43 "
300 "	27,277.7 "	"	950.28 "
330 "	28,902.9 "	"	1,010.42 "
365 "	30,469.2 "	"	1,071.6 "

Tester's Figures

Feeding for Health and Vitality

Does High Feeding Result in Barrenness?

IS there any relationship between high feeding and failure to breed regularly? Do some feeds act directly and detrimentally on the reproductive organs? Mr. J. Meredith, a United States dairyman and writer raises these questions in a recent issue of "The Iowa Homestead." He writes as follows: "On many dairy farms, especially where large 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 profits of dairy farming. This inability to withstand heavy grain feeding and breed regularly means that some of the cows must be bred several 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 causing a general upsetting of the farmer's plans for the year. 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 last longer, instead of feeding them to get the most milk. By far too radical methods of feeding are being advised by those who assume to be feeding 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 disconcerting 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 cows.

"It is not my intention to discuss 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 maintaining 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 so much of their food into milk that their reproductive organs are very poorly 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 to 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 condition which acts directly upon the uterus, and when fed to cows that are large producers it is likely to assist in producing an abortion. The fact that so many good producers abort after carrying their calves up to some eight months is a pretty strong indication that it is not germ abortion. There are other feeds that have a similar, though less pronounced, effect. Such 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 abundant 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 dwarfs both the milking and breeding qualities, entailing a double loss. It is better these two wrongs than we find a safe and profitable system of feeding that provides an abundance of food that contains less protein, 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 heed 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 best care for her so that her vigor and reproductive powers will be maintained.

For the First Six Months

Suggestions on Calf Feeding and Management

CALF-RAISING is a fundamental part of the dairy industry. The performance of the mature dairy cow bears a relation to her development during the calf and heifer periods of her life. A circular which is being distributed by the U. S. Department of Agriculture among creamery patrons points out that the small amount of whole milk being fed to calves at present makes the problem of calf raising much more complicated than formerly. This circular gives the following advice to dairymen:

"Immediately after birth the navel of the calf should be washed with an antiseptic solution and tied with a silk thread in order to prevent infection. For the first feed the calf should have the first milk from the cow after calving and should have its mother's milk for several feeds thereafter. The sooner the weaning takes place the better, but the dairymen it should not be postponed later than the

should use his judgment as to whether an increase 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 skim milk 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 usually make excellent growth during the entire period without any break in gains. Careful attention during the first two weeks often means the difference between a sickly, underized, stunted animal and a large, well-developed one when it enters the herd as a milking cow."

Should Dairy Bulls Be Tested

A Four Years' Wait to Ensure Results

MOST practical dairymen now realize the advantage of breeding to a tried bull—one that has proved his power to sire high-producing 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 of milk 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 dairymen to use. There may be a certain temptation to duplicate the extreme production of the one cow, but the odds are too much against this for him to gamble for this end.

The fact immediately arises that at some period even 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 a certain risk in breeding to an untried bull. The measure his value is necessarily delayed not only till the particular heifer is born, but till she in turn is bred and comes into milk. Even then, anything but a complete lactation record is not a good standard from which to draw conclusions. It is not until the better part of four years to measure the value of a bull. In that length of time this bull could have sired five crops of calves, thus completely making over the herd upon which the owner must depend for future profits.

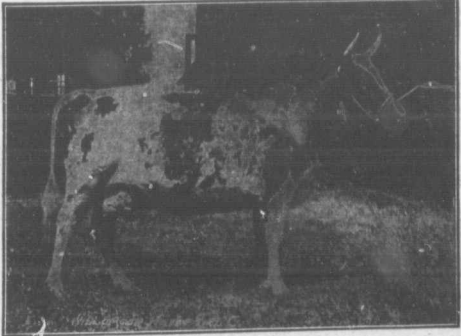
The seriousness and lasting effects of such a move suggest that great caution should be employed. The best only to a few older cows of known breeding capacity, then hold him in reserve, using him only when absolutely necessary, till the results of this first trial are completed. If the majority of these first heifers prove to be satisfactory producers, the bull could then safely be used generally in the herd, if not he should be discarded.

Selecting dairy bulls upon their record as breeders is more certain to result in improvement in the cattle than selection either by ancestry or conformation.

Will Cattle Eat Sweet Clover?

Manitoba Experts Say "Yes"

POSSIBLY no other plant has been more the subject of dispute as to its economic value than white sweet clover. In the past, the production of crops of hay is admitted by all. That it possesses much feeding value for all animals that eat it is also universally accorded. That it is a comparatively hardy crop is attested by the fact that it will grow in places that are not suitable for other crops. That it has possibilities as a weed fighter is accorded by those who know its vigor of growth. But as to whether it is sufficiently palatable to cause animals to eat it—this is the question that the Manitoba Agricultural College has been experimenting with this crop, and they are now able to say that their cattle have both been pasturing upon it and heartily eating it as hay. The advocates of sweet clover contend that many animals 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 pasture field was an area of sweet clover and another area of alfalfa. During the early summer the cattle pastured down the alfalfa but scarcely touched the sweet clover. The latter was then cut for hay. Later in the season the alfalfa was short in growth and the green second growth of the sweet clover was ready for the cattle, with the result that after they had acquired the sweet clover habit they pastured continuously upon it for the remainder of the season. Whether or not the same cattle will eat sweet clover in the same aridity of spring will be watched with interest. The college has never had any difficulty 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 unattractive place used to grow grain and corn, and was sown to sweet clover in an effort to find some crop that would succeed.



A Sr. Four-Year-Old Ayrshire Cow With Three Yearly Records.

This is Willamoor Happy Girl C, owned by J. W. Clise, Redmond, Wash. She has just completed her third term in Advanced Registry with 15,478 lbs. of milk and 52.5 lbs. of fat. Her three years' official production averages 12,159 lbs. of milk and 465.32 lbs. of butter fat as an immature record. Further records of this cow will be found farther back in this issue.

fourth day. The sooner the calf is weaned the more easily it is taught to drink. When first fed from the pail, 8 or 10 pounds of milk a day, fresh and warm from the cow, and divided into two feeds, is sufficient. The feeding times should be as nearly regular as possible, and at first it is advisable to feed more than twice a day. The quantity fed should be constant, to insure which scales should be used, as variation tends to get the digestive organs out of order. At all times the utmost care should be taken to prevent any digestive disorder, as all such trouble hinders the growth and development of the animal. Calf accours is the most common indication of this condition.

"The following named precautions, to a great extent, tend to prevent scours: Feed regularly. Be sure that the milk is always sweet and warm. In feeding use only clean pails. Feed the calf a little less than it wants. Reduce the quantity of milk one-half if the animal becomes sick.

"The quantity of milk fed can be gradually increased until at the end of the second week the calf receives from 14 to 16 pounds of milk a day. At this time the gradual substitution of skim milk for whole milk may commence. Hay and grain should be placed before the calf at this period, and it will be found to nibble at them a little. At the end of the third week the substitution of the skim milk will be complete. By slow changes the milk can be increased thereafter until 20 pounds a day are fed, which will be found sufficient when fed with the grain and hay. If skim milk is plentiful more may be fed, but the addition will not give proportionately better results.

"Corn meal, bran, and oil meal, mixed in the proportion of three, two, and one, make an excellent grain mixture. This grain when fed with plenty of fine clover hay makes an ideal supplement to skim milk in balancing the ration. Calves should be allowed all the grain that they will eat until they consume 3 pounds a day; from this point the feeder

Ontario Good Roads Plans for 1918

An Efficient System of Maintenance Should Be Established to Conserve What Roads We Have, and an Organization Perfected to Prepare the Way for Greater Development After-the-War—*W. A. McLean, Deputy Minister of Highways*

TWO outstanding duties now resting upon the people of Canada, and the British Empire, are to win the war and to prepare for probable improvement in Ontario at the present time comes after the war. As a public work, in which much employment can be given, it can be made to do a useful service in protecting industrial and labor conditions during the disbandment of the armies. Also, while a means of employment, it is an investment of the highest order, and will return the expenditure many fold in the progress of Canada.

Bad roads are a badge of primitive conditions, and retard effort to bring agricultural life to its true place as the most desirable of all occupations—a whole. Half the time wasted in driving through bad roads or spent in idleness because of them, if properly applied, would bring the roads of Ontario to a surprising state of excellence, and still leave a 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 loss, and would involve a proportionate expenditure for reconstruction. The scarcity of labor demands, not that the roads be neglected, but rather that time reason, construction of an urgent kind should be carried on, but the present time, with scarcity of labor and high wages, is not favorable to extensive works of construction.

The efforts of the Ontario Highway Department will, therefore, in 1918, as during the past year, be turned toward the extension of road organization. It will not only mean a step in real national development and have a steady influence on the labor war, large bond issues will be necessary to carry on a high policy of road construction. On the contrary, present-day organization for maintenance, with provision for such construction as is urgent, on the construction after the war, to which the same principle of finance can be substantially extended.

Closing a review of the highway laws of Ontario, the Surveyor (London, Eng.), a leading authority in municipal matters says:

"It will be observed that not only has the principle of main roads being considered as a national charge been recognized, but that a 'fairly elaborate system of graduated charges' between township, county and province, with joint control, has been set up. Thus, beginning with statute labor, as this country did, the province of Ontario has arrived earlier at the goal of equitable highway finance. The example, in its broad lines, is one which might well be considered with a view to the adoption of 'a similar plan in the Mother Country.' This endorsement is exceedingly encouraging to those who have sought to perfect the organization for



Results of a Road Superintendent.

While this highway in Mariposa township is now a country road, it was put in its present state of excellence while still under the township road superintendent.

road improvement in Ontario, and justifies the faith that efficiency, coupled with equitable distribution of several facts should be kept in mind, important of which are: 1. That roads must be built and maintained in proportion to traffic—expenditure being in like ratio. 2. That, as laid out in Ontario, about 20 per cent. of the roads will carry 80 per cent. of the traffic. 3. That experienced and competent management is a prime necessity if expenditure on them is to give, with economy, the desired results. 4. That country roads, directly benefit to roads, of direct benefit to the township are also of benefit to the towns and cities, and 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 that a full measure of co-operation in giving effect to these laws, is justified.

To the present, thirty-four counties of the province have passed by-laws, creating county road systems. Only three county councils (Lambton, Durham and Northumberland, and Peterborough) have aid to this work, when properly understood, is admittedly generous; to refuse this aid cannot be much longer justified in any county.

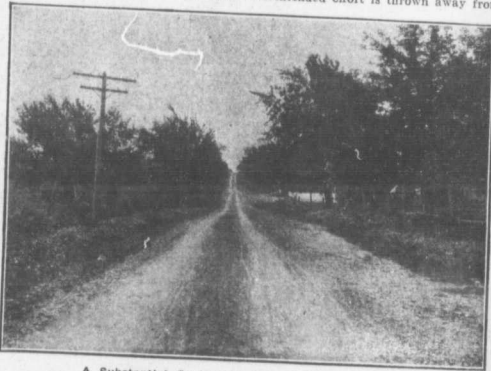
Aid to county roads is aid to township roads. Because management is, for purposes of organization, transferred to county councils, the people of the township do not cease to use the roads—but with their improvement use them much more. The direct benefit is to the townships. With adequate provision under county management for roads of heaviest traffic, radiating from towns, villages and shipping points, the task of developing the remaining township roads is, in the majority of cases, easily within the means of township authorities—when such means are efficiently applied.

Provincial highways, such as proposed in Ontario, are not intended as a means of constructing an extravagant system of

pavements at high expense—but rather as a means of economy and more equitably distributing the cost. This organization is intended for roads carrying heavy international and heavy interurban traffic, provide for. As this heavy traffic is that of motor vehicles it is but that the provincial contribution should be made from the motor vehicle fund. As with county roads, a place of efficient maintenance and gradual development, can be applied, the traffic becomes so great at any point that maintenance of the existing type of road is no longer economical, a more permanent surface can be laid—but the foundations will be already in place—and paid for and covered by the motor vehicle fund.

Townships will be encouraged during the year to employ permanent road superintendents, toward or wages. This is one of the greatest needs of present-day township organization, and for years has been recommended by the Ontario Good Roads Association. It is a means of bringing greater experience to bear on township road work, coupled with more systematic attention to repair.

Some of the more elementary principles of road improvement are still continually disregarded by pathmasters and road commissioners, with the result that much well-intended effort is thrown away from



A Substantial County Road of Stone Construction.

—Photo taken in Frontenac Co., Ont.

year to year. Roads should be drained as farms are drained—with drains of ample capacity, having a contour on the roads or along the roadside. Poor drainage is still a sin of omission.

A serious sin of commission is in the use of the grading machine, in the treatment of old gravel roads. Annually, many miles of old gravel roads are ruined by using the grading machine to draw earth and shouder from the shoulders to the top of the step in advance will be attained when road builders learn that gravel should not be covered with earth so as to turn the earth shouder outward—throwing gravel centre built up by a light coating of new material.

To prepare for conditions following the war by encouraging effective county, township, and provincial road organization, is, therefore, a leading purpose of the Highway Department at this time—a purpose which can largely be fostered by establishing efficient systems of maintenance such as will conserve what we already have, and prepare the way for greater future development.

Better results are obtained by feeding young calves three times a day, with the practice of even feeding as nearly equal as possible. When fed in this way the calf does not overload its stomach, and the digestibility in feeding is important. When calves are fed but twice a day, the feeding should be as nearly as possible 12 hours apart.



An Excellent Township Road.

Much has been accomplished in the improvement of roads by those townships that employ a road superintendent. Illustration shows a good gravel road in Seymour township, constructed under the township superintendent.

High Grade Men With Farm and Dairy

THE response to our announcement stating that Farm and Dairy is appointing district representatives in various parts of the province has been most gratifying. Some of the very best type of men in the farming districts have signified their desire to represent Farm and Dairy in their district. Amongst these are a couple of county councillors and a former township reeve.

It is men such as these—men of high standing in their respective communities—tho. we want to have. Farm and Dairy stands for big ideas and ideals—for the advancement of the farmers' welfare and it is only right and natural that men of similar calibre should want to be its standard bearers.

There are a number of districts in which we have not as yet appointed a representative. Perhaps yours is one of them. If you feel farmers, and want to tie up permanently with a first-class proposition, read and reply to our advertisement elsewhere in this issue.

The Makers' Corner

Butter and Cheese Makers are invited to send contributions to this department, to ask questions on matters relating to cheese making, and to suggest subjects for discussing.

Marketing Saskatchewan Butter

F. M. Logan, Dairy Commissioner.

IN cooperative dairying there is no feature of more marked advantage than the cooperative marketing of the butter. It is practically impossible to satisfactorily supply the coast or foreign markets unless the seller is in a position to fill orders on short notice of from one to ten cars. Few if any creameries in Canada have sufficient output to meet these requirements, so the only practical way for the butter from a number of creameries to be assembled at central points and after grading have it sold through one office. With our system of grading cream and the careful grading of each churning of butter it is possible to have fifteen or twenty or even more creameries produce butter which is almost uniform. When a dealer buys five or 10 carloads of the same grade practically uniform in quality. This feature cannot be duplicated anywhere else in Canada. In the other provinces the creameries are practically all privately owned and operated singly, so there is not the same opportunity for purchasing in large quantities butter that has been manufactured, graded, and sold under the control of one office. By following this system the butter made by the cooperative creameries of Saskatchewan enjoys a reputation of which any province might well be proud.

Four years ago the dealers on the Pacific coast were willing to pay from two to five cents more for New Zealand butter than they would for any Canadian make. During recent years a gradual improvement has been made in western butter and I am informed on good authority that to-day the same dealers will pay as much for the butter made by the cooperative creameries of Saskatchewan as they will for the best New Zealand grades, and at the same time will pay from one to two cents more than they will for the once famous Eastern Townships butter.

The Pacific coast, however, is not the only place where this butter can be marketed. A carload was sent to Montreal in March of this year on consignment and the brokers found it so satisfactory that they were able to dispose of it at one and a half to two cents in advance of local makes, writing that "the flavor was excellent and the workmanship about perfect."

As further evidence of the quality of Western Canada butter, I might mention the result of a trial shipment sent to England last fall. The Dairy Commissioners for Manitoba, Alberta and Saskatchewan made up a carload

and forwarded to the Bristol market. The brokers to whom it was consigned wrote that the butter gave excellent satisfaction and they considered it "the finest lot of butter ever received from Canada." With such a reputation for quality the butter produced by the Cooperative Creameries of Saskatchewan sells at a premium of at least two cents a pound in advance of what it would bring if each creamery were operated separately and the butter marketed in the same way. With an output of two or three million pounds an additional two cents per pound amounts to a sum of considerable size. Under the cooperative system the farmers who produce the cream obtain the entire benefit of this premium, for it costs no more, in fact, less, to manufacture butter under this system than it would if each creamery were operated singly.

Dairy Commissioner Wilson Resigns

W. A. WILSON, who has been Dairy Commissioner for Saskatchewan since 1907, was organized, and who represented the Dominion Government in the Territorial days, has resigned to become General Manager of the Saskatchewan Co-operative Creameries, Limited. Under the guidance of Mr. Wilson, cooperative dairying has proved a great success in Saskatchewan. Mr. Wilson is a big man in every way, and those who know him will look for big things from the co-operative company with which he has identified himself. Mr. F. M. Logan, who has been Deputy Commissioner, now becomes Dairy Commissioner in the place of Mr. Wilson.

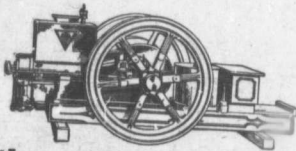
Cooperative Creameries Ltd.

WHILE the cooperative creameries have been satisfactorily operated during the past ten years it was decided that under the system followed they were not on as permanent a basis as they might be. The custom has been for the Dairy Branch to obtain an annual lease of these creameries, and while the tendency in all cases has been to renew the leases there was no guarantee that this would be done. It is sure that the development of permanent butter markets under such conditions would be far from satisfactory. In addition to the immediate operation of these creameries, their future development had to be considered. Work of a permanent nature could not well be undertaken on the basis of an annual lease, so the amalgamation of all these creameries seemed to offer a solution to the difficulty and has been undertaken.

I predict a big future for the cooperative creameries of Saskatchewan. Their ability to provide an unlimited and profitable market for all the cream the farmers can produce is only one of the services this company can render. This work was taken over by the new company about November 1st. Its future will be watched with keen

(Continued on page 12.)

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An Alpha will saw more wood in a day than you can saw by hand in a week.

It will pump water all day long without watching.

It will run your separator, churn or washing machine.

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NOTHING 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 walked to his side. He swung her to the saddle, adjusted the stirrups carefully, then fastened her securely to the saddle with a strap about her waist. Rhoda watched him in silence of utter fear. Having settled the girl to his satisfaction, he mounted his own horse, and Rhoda's pony followed him tractably up the trail.

The trail rose steeply. After the first few dizzy moments, Rhoda, clinging to the saddle with hands and knees, was thankful for the security of her new seat. The scenery was unnecessary to her terrorized eyes. To the left were great overhanging walls with cactus growing from every crevice; to the right, depth of canon toward which she dared not look but only trusted herself prayerfully to her steady little horse.

As the trail led higher and darkness settled, the cold grew intense and Rhoda covered and shivered. Yet through her fear and discomfort was creeping surprise that her strength had endured even this long. In a spot where the trail widened, Kutie dismounted, took her and she felt warm folds of a Navajo blanket about her shoulders. Neither she nor the Indian spoke. The madness of the night before, the fear and dissent of the afternoon gave way, slowly, to a lethargy of exhaustion. All thought of her faithful protectress, of her friend's anxiety, of Kutie's treachery, was dotted by a yearning to greet that she could only cling to the saddle and pray for the trail to end.

Kutie, riding just ahead, glanced back constantly at the girl's dim figure. Her Rhoda was beyond pleading or protesting. The trail twisted and undulated on and on. Each moment Rhoda felt less certain of her seat. Each moment less motion of the horse drew more painful. At last a faint odor of manure from a crowd of stinking senses and she opened her heavy eyes. She had left the glowering eyes of the canon and Alchise was looking down into a beautiful growth of vines where the powerful hooves of wild cows gave a pronounced sadness to the moon-flecked shadows.

Here, in a long aisle of columnar pines, Kutie called the first halt. Rhoda reeled in her saddle. Before her horse stopped, Kutie was beside her, unfastening her waist strap and lifting her to the ground. He pulled the blanket from his own shoulders and Molly stretched it on the soft pine-needles Rhoda half-drooled, looked up into the young Indian's face with the pathetic unconsciousness of a sick child. He laid her carefully on the blanket. The two squaws hurriedly knelt at Rhoda's side and with clever hands rubbed and manipulated the slender, exhausted body until the girl opened her languid eyes.

Kutie, while this was being done, stood quietly by the blanket, his fine face stern and intent. When Rhoda opened her eyes, he put aside the two

squaws, knelt and raised the girl's head and held a cup of the rich broth to her lips. It was cold, yet it tasted good, and Rhoda finished the cup without protest, then struggled to a sitting position. After a moment Kutie raised her gently to her feet. Here, however, she pushed him away and walked unsteadily to her horse. Kutie's hands dropped to his side and he stood in the moonlight watching the frail boyish figure clamber with infinite travail into the saddle.

From the pine wood, the trail led downward. The rubbing and the

as he sat! If only his Indians would turn on him and kill him!

They were riding through the desert now, desert thick-grown with cactus and sage-brush. Suddenly a faint caw 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 little 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 last "W" light with burning eyes. Kutie led the way from the difficult going of the desert to the road-bed. As Rhoda saw the long line of rails the panic of the previous night overwhelmed her. Like a mad thing, un-mindful of the strap about her waist she threw herself from the saddle and hung against the stolid pony. Kutie dismounted and undid the strap. The girl dropped to the ties and lay crouched with her face against the steel rail.

"O John! O John DeWitt!" she sobbed.

"Alchise, go ahead with the horses," said Kutie. "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 wish I could have managed differently



Hauling Logs to the Sawmill—A Winter Occupation.

A scene such as the above is becoming somewhat of a rarity in the older section of Ontario, but hauling logs is the bearing his land in New Ontario. The above illustration was taken at Monteith, in New Ontario.

somehow of a rarity in the older section of Ontario, but hauling logs is the bearing his land in New Ontario. The above illustration was taken at Monteith, in New Ontario.

broth had put new life into Rhoda, and for a little while she kept a clear brain. For the first time it occurred to her that instead of following the Indians so stupidly she ought to watch her chance and at the first opportunity make a wild dash off into the darkness. Kutie was so sure of her 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 again the blur of weakness that threatened her.

As the trail widened in the desert, Kutie rode in beside her.

"Feeling better?" he asked cheerfully.

Rhoda made no reply. Such a passion of hatred for the man shook her that words failed her. She turned a white face toward him, the eyes black, the nostrils quivering with passion.

Kutie laughed 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 or ennu now."

What fend, thought Rhoda, ever had induced her to make a friend of this savage. She clung to the pommel of her saddle, her eyes fastened on him. If only he would drop dead

your brain. Don't act like a child. I love you, Rhoda!"

"I loathe you! I loathe you!" whispered the girl.

"You don't—ah—" He stopped abruptly and set the girl on the ground. They were standing beside a side-track near a desert water-tank. "I've caught my foot in a saw-bro-frog," muttered Kutie, keeping his hold on Rhoda with one hand while with the other he tugged at his moccasined foot.

Rhoda stood rigid.

"I hear a train!" she cried. "O dear God, I hear a train!" Then, "The other Indians are too far away to reach you before the train does," she added calmly.

"But I'll never loose my grip on you," returned the Indian grimly.

He tore at the imprisoned foot, ripping the moccasins and tearing at the road bed. The rails began to sing. Far down the track they saw a star of light. Rhoda's heart stood still. This, then, was to be the end! After all the months of dread and sorrow, was she to be upon her in a moment! This, then, was to be the solution! And with all the horror of what life might mean to this, she cried out with a sob.

"Oh, not this way! Not this way!"

Kutie gave her a quick push.

"Hurry," he said, "and try to remember good things of me."

With the cry of "Go!" 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.

"I can't let a human being die like a trapped animal!" she panted, and she threw herself wildly against him.

Kutie fell at the unexpected impact of her weight and stood stock-still. He lifted Rhoda, leaped from the track, and the second section of the tourist train thundered into the west.

"You are as fine as I thought you were—" he began. But Rhoda was a limp heap at his feet.

The girl came to her senses partially when Kutie set her in the saddle and fastened her heavy waist strap and blanket. But happily she was practically unconscious for the hour or two that remained till dawn. Just as day was breaking the Indians made their way across the arroyo and up a long slope to a group of cottonwoods. Here Rhoda was put to bed on a heap of blankets.

Sometime in the afternoon she woke with a clear head. It was the first time that she had not had wakened without a headache. She stared from the shade of the cottonwoods to the distant lavender haze of the desert. There was not a sound in all the world. Myosotis, remote, the desert stared back at her, mocking her little grief. More terrible for her than her danger, Alchise's hands, more appalling than any death threat that had hung over her, so long, was this sense of oppression, of barren nothingness with which the desert oppressed her. Instinctively she turned to look for human companionship. Kutie and Alchise were not to be seen. Only the heavily mottled Rhoda's blankets and the thin bag Coeca was curled in the grass near by.

"You awake? Hoop hungry?" asked Molly suddenly.

Rhoda sat up, groaning at the torturing stiffness of her muscles.

"Where is Kutie?" she asked.

"Gone get 'em supper. Alchise come 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 fingers up to Rhoda's sweet face. Molly?

(Continued on next page.)

THE UPWARD LOOK

Our Share Comes First

AND the Lord said unto Joshua, Get thee up; wherefore liest thou thus upon thy face?

There is a time for pleading and intercession, but it almost invariably must have been preceded or accompanied or followed by work. God wisely and mercifully does not do His part until we have done ours to the utmost. If it were otherwise, what a race of dependents we would be!

Joshua had been praying long enough. It was now time for him to act. There had been a great sin committed. The evildoer was among his people. He must be searched out and punished. That was for Joshua to do.

Many people seem to feel that once they have prayed for a certain person or about a certain matter their responsibility ends, and thus they have often shirked a solemn responsibility, if they have done nothing when action was in their power.

Often it really seems an easy way of relief by saying we will remember a certain field of work in our prayers, whether that field be in the Antipodes or as very near at home.

What would we think of a father whose son came to him for help in arithmetic who worked out the whole question for him? Never should the father help until the son had done his best first.

We cannot honestly ask God's help in overcoming a sin, unless we ourselves are making a heroic struggle. Sin was written purposely, because so often one mistakes himself by calling sins faults. So in all problems and difficulties and struggles, however small and however great, God expects us to do our part first. Pounce at us some times and at long times we may have to prostrate and humbly, but with hearts full of faith.—I. H. N.

The Church Habit

"N O," said Mrs. Jenkins, "the children do not get to their church very often. They go to their Sunday school, and I think that's enough."

Doctor Brown did not seem to be convinced, so she continued: "Of course I should like them all to come with me to the church service, but they are not much interested, and I do not insist."

"You insist on their going to day school, whether or not they are interested," I supposed the minister asked.

"Why, certainly!" Mrs. Jenkins answered, with some indignation.

"But why should you leave this other matter, which seems to me of at least equal importance, to their caprice?"

"It isn't wholly a matter of caprice," Mrs. Jenkins returned, with some spirit. "I think it is too much to ask little children to sit through that long morning service."

"That 'long morning service' averages about an hour and a half," I answered the clergyman. "The same children sit through two sessions at school every day, each session longer than that. You and I, in our youth, sat through much longer services every Sunday, and our nervous systems developed rather well with those of the children of to-day!"

"Do you really think it so very important for the children to attend church?"

"Certainly do!" replied Doctor Brown. "The tendency of the day is for children and parents to have less and less in common. It is the parents and children played together, and studied together, and stayed at home together, and went to church children as possible nowadays, to the great loss of us all. But at least we

can go to God's house together on the Lord's day. The children would soon enjoy going if it were a family custom, and if they didn't enjoy it, it would be a wholesome thing for them to discover that there are lots of things in the world to be done, whether we enjoy doing them or not. That is the kind of lesson the coming generation particularly needs.

"But going to church has above all a religious value," I told you, if you were setting deliberately about abolishing the church altogether at the end of another generation, the surest way of doing so would be to let that generation grow up without the habit of church attendance. Whether or not you help them to form that habit certainly seems to me important!"

Mrs. Jenkins no longer smiled. "And so it seems to me," she said.—Youth's Companion.

Not Tough If Properly Cooked

THE saying "Tough as an old hen" has made old hen uninviting to most of us. However, old hen may be made most tempting by proper and thoughtful cooking.

Instead of putting the hen in a large quantity of water and boiling the flavor out into liquid, try steaming. If you have not a regular steamer, make one out of a kettle and colander. Steam the fowl from one to two hours until tender.

It may then be stuffed and roasted, basting with some of the liquor in which it has been steamed, and is very tender and tasty.

After steaming, the fowl may be cut into pieces, the bones browned in a frying pan, then covered with a gravy made from the liquor, thickening and seasoning, and allowed to cook until well flavored. The gravy may be varied by using in it tomatoes, green or red peppers chopped fine, browned onions, celery seed or salt, or mushrooms. In recommending this method it is assumed that a home-canned or home-made product be used.—Colorado Agricultural College.

HOME CLUB

A New Year's Resolution

THE beginning of the year is a good time to introduce new methods into our system of housekeeping. One of the problems which I have never been able to succumb to is the keeping of accounts, receipts, and other forms of amusement. Every few months I solve that a change must be made. I clip and write up new recipes which have an opportunity of trying them out, go into a cook book already bulging with tried and untried recipes; and the accounts and receipts are very silver butter diet on the sideboard, and clippings, such as forms of advertisement, go—well, any place that seems convenient at the time they are clipped.

My idea is to use a miniature filing cabinet. The fact of the matter is, I presented myself with one as a Christmas gift. It is a small drawer file, similar to those used in some of the offices. It contains and holds 3 x 5 inches in size, and the cabinet is divided into several compartments and subdivided so that everything can be filed alphabetically if desired. My recipes are gathered in one file, arranged under various headings: such as cakes, meats, soups, etc. I will have one compartment for untried recipes, and as I try them out, if good, they will be either typed or written on a card and placed in their proper compartment, and if not good will be destroyed. "I will apply in connection

We enter

tain the young people of the community quite often, and it is difficult to vary an evening's fun unless one has a fund of ideas at their disposal. I will keep all the methods of entertainment which I consider worth saving in my filing cabinet, where they will be easily available.

For accounts and receipts, which necessarily assume a vertical letter file with an alphabetical index. I will place as they come in and on occasion go through the file and destroy those of no further use.

What do Home Clubbers think of my idea? Will be glad to hear of any others who have a better scheme in mind, as mine may be faulty, and I am open for suggestions.—John's Wife.

The Heart of the Desert

(Continued from page 10.)

was a squaw, dirty and ignorant. Rhoda was the delicate product of a highly cultivated civilization, egotistic, refined Rhoda, looking into Molly's deep patience and fortitude and gentleness which is woman's without regard to class or color. And not knowing why, the white girl bowed her head sobbed a little. A strange look came into Molly's face. She was childless and had worked fearfully to justify her existence to her tribe. Few hands had touched her in tenderness. Few voices had appealed to her for sympathy. Suddenly Molly clasped Rhoda in her strong arms and awayed back and forth with her gently.

"You no cry!" she said. "You no cry! Little Sunhead, you no cry!"

"Molly, dear kind Molly, won't you help me to get back to my own people? Suppose it was your daughter that a grizzly bear had stolen! O Molly, I want to go home!"

Molly still rocked and spoke in the soothing voice one uses to a sobbing child.

"You no run 'way Kut-le catch right off! Make it all harder for you!"

Rhoda shivered a little.

"I once get away, Kut-le never will catch me alive!"

Molly chuckled indulgently.

"How you run? No asho how eat, how drink, how find the trail! Better stay with Molly."

"I would wait till I thought we were near a town. Won't you help me? Dear, kind Molly, won't you help me?"

"Kut-le kill Molly with cactus torture!"

"But you go with me!" The sobs ceased and Rhoda sat back on her blankets as the idea developed. "You go with me and I'll make you—"

Neither noticed the soft thud of moccasined feet. Suddenly Alchise seized Molly's black hair and with a violent jerk pulled the woman backward. Rhoda forgot her stiffened muscles, forgot her gentle ancestry. She sprang at Alchise's angry, catlike fury and struck his fingers from Molly's hair.

"You fend! I wish I could shoot you!" she panted, her fingers twitching.

Alchise retreated a step.

"She try help 'em run!" he said sullenly.

"She was no! And no matter if she was! Don't you touch a woman before me!"

A swift shadow crossed the camp and Alchise was buried six feet away.

"With the murder!" cried Kut-le. "Has he bid it ever on you, Rhoda? He strode to her side and looked down at her with eyes in which struggled anger and anxiety.

"Oh!" blazed Rhoda. "But he pulled Molly over backward by her hair!"

"Oh!" in evident relief. "And what was Molly doing?"

(To be Continued.)

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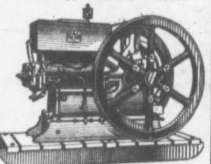
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"Choker" Collars for Those Who Like Them

Farm and Dairy patterns shown in these columns are especially prepared for Our Women Folks. They can be relied upon to be the latest models and include the most modern features of the paper pattern. When sending your order please be careful to state your waist measure for adults, or for children, and the number of the pattern described. Orders are filled within one week to 10 days after receipt. Price of all patterns to Our Women is 10 cents each. Address orders to Pattern Dept., Farm and Dairy, Peterboro, Ont.



FOR the past two or three weeks, the majority of us have not had much time for sewing, as other duties pertaining to the Christmas season have claimed our attention. Now that Christmas is over for another year, however, things will gradually work back into their usual routine. It is a good idea to get as much sewing done as possible during the months of January and February and in this way, when the spring rush 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 seen to this. It is evident, however, that many do not favor "chokers," as for every high collar one sees, there are probably 20 or 100 low ones. The low full collars with deep points in front is one of the favorites. The popularity of square cut blouse and dress necks has brought forth many dainty collars in Georgette, satin, or organza, maslin, etc., shaped for wearing with square necked dresses.

2316—Junior's Dress—This dress while simple, has the appearance of good style. The braid trimming is worked out very attractively on collar, cuffs, belt and skirt and this model should appeal to many of our young school girls. Three sizes: 12, 14 and 16 years.

2317-2313—The design here shown is very simple and yet if worked out in harmonizing materials should look very dainty. A blouse of silk or Georgette fashioned from this model would go nicely with a skirt of contrasting material made from the skirt pattern shown. This design calls for two patterns, 10 cents for each. The blouse is cut in sizes from 34 to 46 inches bust measure and the skirt from 24 to 28 inches waist measure.

2296—Lady's Dress—For the home dressmaker who desires a particularly attractive one-piece dress, why not try out this stylish model? As will be noted in the small back view, the blouse cut in points to come out over the skirt, thus making it from one. This style would no doubt look well on the tall skin figure. Six sizes; 34 to 44 inches bust measure.

2220—Girl's Dress—The little girl in the home is usually quite as anxious to have pretty clothes as her grown-up sisters and herewith is shown an extremely dainty costume for the young girl. It can be made either with or without the jumper or bolero effect, and such a dress could probably be worn in both ways and thus one would really have two distinct costumes. Either long or short sleeves may be utilized and unadorned or plain material may be used for the skirt portion. Five sizes: 4, 6, 8, 10 and 12 years.

1604—This apron is a complete coverall, and should be just the thing for such tasks as washing or many other duties, when one wishes to protect the dress. It can be fashioned either with or without the belt. Three sizes: Small, medium and large.

2307—A set of New Collars—In our opening paragraph we mention something about collars. Here are three designs, each one entirely different from the others. No. 1 would probably make a good coat collar. No. 2 is decidedly unique, forming a panel to the waist line and with a belt effect as a finishing touch. The seam is in the centre back, and here buttons are used for trimming. No. 3 is also rather out of the ordinary, and should make quite an attractive finish for a one-piece dress.

2144—Lady's House Dress—This is simple but practical. The yoke effect should make the dress wear longer. Seven sizes: 34 to 46 inches, bust measure.

2294—is this not a dainty frock for the little tot? The belt just goes around the back and sides, while the front is in a wide panel. The collar fitting is also quite chic. Four sizes: 4, 6 and 8 years.

2302—Child's Underwaist and Drawers—This pattern of underwear will no doubt come in useful for many home dressmakers. The drawers and waist may be made very simply for everyday wear, or if desired can be trimmed quite daintily. Five sizes: 4, 6, 8, 10 and 12 years.



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HOLSTEIN-FRIESIAN NEWS

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

RECORD PRICES FOR HOLSTEINS IN GREAT BRITAIN

AMONG dairy cattle breeders and dairymen in Great Britain, the present chief topic of conversation, apart from the war, is the wonderful prices being realized at public sales for the black-and-white dairy cattle. Commencing in July, there have been a number of prominent herds either shorted or reduced, mainly owing to the fact that the prices have succeeded in their mother and producing her, all having answered the call to the colors. Some of the outstanding features of these sales were the strong demand for the best, even districts of the cattle, which were scattered from the extreme north to the south of England and parts of Ireland; the number of new addresses to the breed, whose names figure in the list of purchasers.

On July 24th, fifty-two head owned by John Bromet, a breeder of high repute at Tadcaster, Yorkshire, were month for the price of \$1,150 per head; top lot, a bull, bought by Mr. Bromet in 1914 for \$2,450. Mrs. Putnam, a lady enthusiast, paid top price for females at this sale, securing Garton Fulpall, a show cow and a splendid producer, for \$3,000.

Cow Average \$340.

The next important sale took place on August 7th, when the herd owned by Major D. A. Spence, Kincardineshire, Scotland, was dispersed, 72 head bringing an average of \$310, 16 cows averaging \$240 each.

Another sale of 18 head the reducing sale of A. Munro at Dal of Innes, Inverness, when 41 females averaged over \$40 per head, \$4,000 before the sale, the bull, Hollander (the purchaser's bargain), \$5,000 for a four-month-old son of Hollander; \$4,100 for the cow, Dal Estate 2nd, and a number of other young females going for well over \$1,000 each.

The upward trend in prices for good specimens of the black-and-white breed continued and on September 28 the Duches of Hamilton's Redford herd was dispersed at Eaton, Wickham Market, Oxford. At this sale 100 bulls sold at an average price of over \$1,300 each, 74 cows and heifers averaging \$950. The bull, John, was sold for \$3,000 and in possession of the cow, Jockie, the bids went fast and furious until she was knocked down at \$5,250. This animal was described as a magnificent, typical, well-bodied, heavy-smilking young cow with depth and vessel, her milk record for 285 days, with first calf, being 996 lbs. of milk and 28.15 lbs. of butterfat. A month-old daughter of Jockie brought \$5,250 and a yearling daughter (full sister to the first) was also sold for \$5,250. The imported bull and hisifer (John and Jockie) cost the Duches of Hamilton, in 1915, £48. They and

their produce realized in the sale \$35,400. Four bulls averaged \$4,750.

During the month of October, further evidence of the demand for Holsteins was forthcoming at the sale of a pedigree stock held by A. and J. Brown, owners of the Hedgus Farm herd at St. Albans, near London. Fifty-nine head were sold at an average price of over \$1,500 per head, and the total sale amounted around \$47,500 each. The top price was \$12,000 for the yearling bull, Hedgus Second Series, his sire being also sold for \$5,000. Seven cows and heifers were sold at prices ranging from \$1,000 to \$1,500 each.

Commenting editorially on the tremendous interest that has arisen in Great Britain in connection with the Holstein breed, the London Times of London said in a recent issue: "There seems to be no limit to the prosperity of the Holstein-Friesian, for after beating all records for any dairy or dual-purpose cattle the sales in this country by the average of Mrs. Munro's herd at Dell of Innes, Inverness, showed an average of \$172 1/2 in 40 (over \$50 per head.) The breed is phenomenal to the participants of the breed, who openly boast there has been nothing like this in the whole history of pedigree stock breeding. Who, they think, in 10 years ago would have imagined that the Holstein-Friesian would beat the dairy Shorthorn in the matter of pedigree stock? They, therefore, they also ask, would have dreamed that the number of breeders would be multiplied by ten, and who would have thought it possible for a calf of this breed to realize 1,000 guineas at public auction? Yet all these things have actually happened, and it is asserted that had a certain telegram been delivered before the close of the proceedings at Dell of Innes, the average for the whole sale would have been higher. The whole was written before the sale of the Hedgus Farm pedigree stock, when an average of over \$1,200 was reached with a top price of \$12,500 for a yearling bull.

WILLOWMOOR HAPPY GIRL

WILLOWMOOR Happy Girl C. 2261, bred and owned by J. W. Cline of Washington, completed her third Advanced Registry record on August 21, 1917. These averages, 12,169 lbs. milk and 465.32 lbs. butterfat, as immature records. As a two-year-old she produced 16,478 lbs. of milk containing 656 lbs. of butterfat, making her the second highest in her class.

Her sire is the famous imported bull, Morton March, who has 36 Advanced Registry records that average 3,429 lbs. of milk and 28.15 lbs. of butterfat; only 7% of these records being completed by a mature cow.

Her dam is the improved cow, Barcheskie Happy Girl 23374, who has two other daughters, Willowmoor Happy Girl 23328 and Willowmoor Happy Girl 23449, a full sister to Willowmoor Happy Girl C. which have completed very creditable Advanced Registry records.

Uniformly so, the production of every daughter is characteristic of the Ayrshire and is of far more importance to the development of the dairy industry and of the breed than a phenomenal world record by a single individual, advertising as the latter may be for advantage and demonstrating the latent possibilities of the different breeds.—C. M. Winslow, Sec'y American Ayrshire Breeders' Association.

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Time and time again this film was flashed on the screen only to be demanded back. Many of the audience are still trying to solve the mysterious names. Can you help them?

If you are not familiar with the names of the popular moving picture actresses, the list below may help you.



WHO ARE THEY?

- ① I PARCK MY FORD
- ② I FOUND A GASSBRIK
- ③ I MAKE A CUTER GIRL
- ④ I A BAD HEART
- ⑤ I WET A SATIN RAT
- ⑥ I ROAM OR DIE
- ⑦ I FUN MUST DRAIN
- ⑧ I A LETS BEN CHEW
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13th Prize, \$5.00; 14th Prize, \$5.00; 15th Prize, \$5.00;
16th Prize, \$5.00; 17th Prize, \$5.00; 18th Prize, \$5.00;
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