

FARMER'S ADVOCATE

AND HOME JOURNAL

THE ONLY WEEKLY AGRICULTURAL PAPER IN WESTERN CANADA

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JUNE 13, 1906

WINNIPEG, MANITOBA

VOL. XLI, NO. 716



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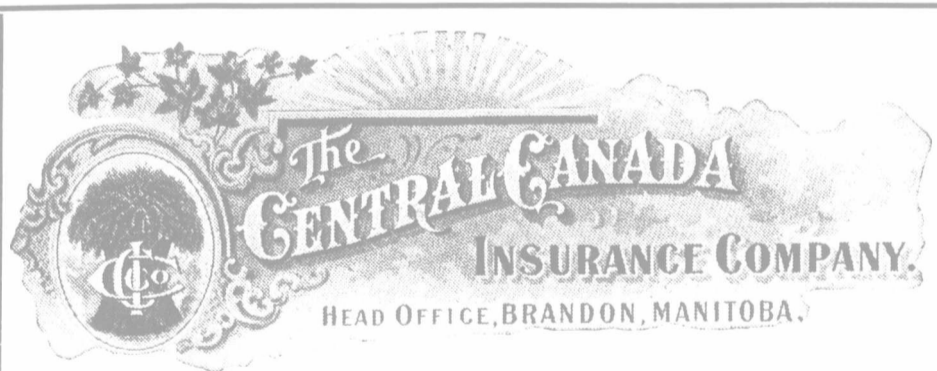
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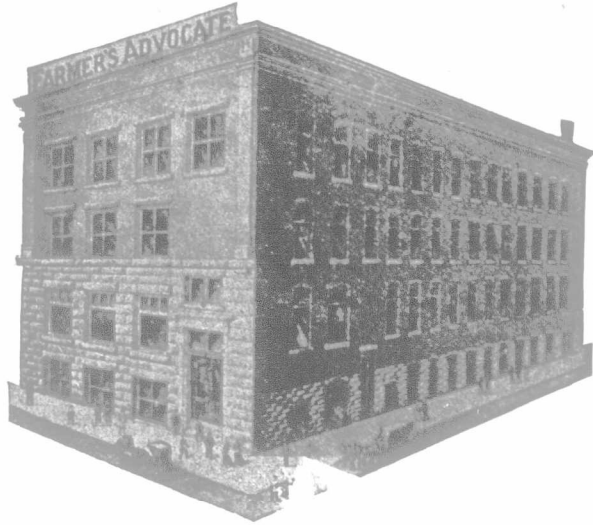
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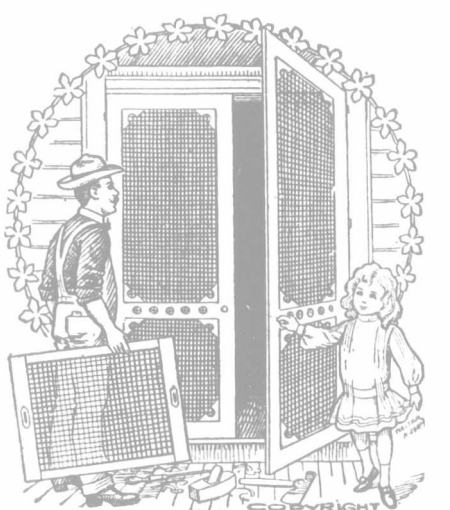
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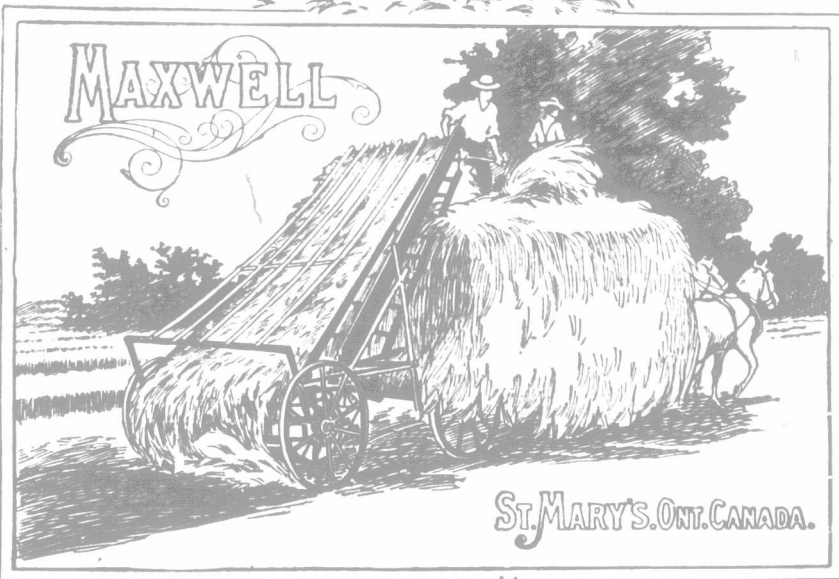
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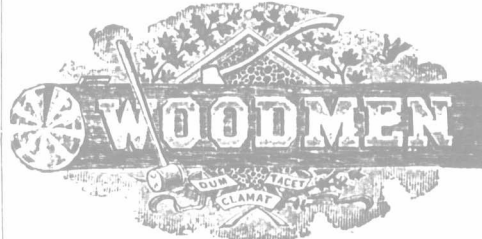
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21	43	75	107	140	1 86	2 22
22	45	77	109	144	1 91	2 28
23	47	79	111	146	1 94	2 31
24	49	81	113	148	1 96	2 34
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27	55	87	119	154	2 06	2 49
28	57	89	121	156	2 08	2 52
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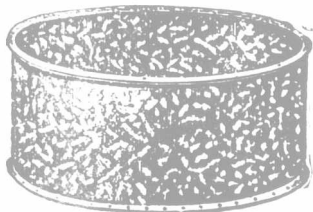
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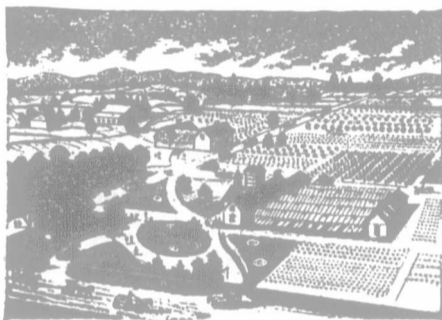
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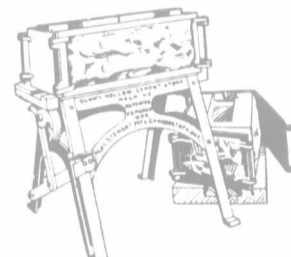
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Farmer's Advocate

and Home Journal

REGISTERED IN ACCORDANCE WITH THE COPYRIGHT ACT OF 1875.

June 13, 1906.

WINNIPEG, MANITOBA.

Vol. XLI. No. 716.

EDITORIAL

The R. N. W. M. P. Must Not Be Disbanded.

If there is any one thing that demonstrates how essential the above force is to maintenance of law and order and the speedy bringing of criminals to justice it is the recent capture and sentencing of the train robbers, who recently operated near Kamloops, B. C.

We again assert that the force should be used to patrol the international boundary from the Great Lakes to the Pacific Coast, in addition to patrolling the shores of Hudson's Bay and the outlying districts where the settlement is very sparse. The rapid increase in population of the West, some of the units of which are not as mindful of our laws as they must be made to be, renders it necessary that a force such as the Royal North West Mounted Police should be maintained; the cost is a mere bagatelle, especially when compared with the loss of good name and prestige to Canada that would arise from criminals going undetected and crime unpunished. Horse thieving and rustling of cattle along the boundary can be practically stamped out by the presence of the Police and a judge, who gives the maximum and not the minimum sentence. With such a great ingress of population, some tough characters are bound to be included and any attempts to break away from the legal code of civilization in force in Canada needs to be sternly suppressed, and the red-coated riders of the plains are the best men, judged by their record, to do the work. Politics does not interfere with the efficiency of this force as it too often does with the appointments to a provincial constabulary.

Encouraging An Agricultural Trust.

In another column is published a letter from an Alberta correspondent lamenting the fact that the agricultural press does not encourage or assist the Society of Equity.

Our correspondent has given voice to the opinions of a large class. The other agricultural papers may speak for themselves, as for us we have not approved of the Society of Equity for two reasons, first, we do not believe that trusts and combinations in restraint of trade should be allowed to exist, and we know every farmer, especially the members of the Society of Equity, would like to see every commercial and industrial trust which operates a monopoly come within the powers of the law. This being our attitude towards trusts, we cannot conscientiously endorse identical methods on the part of our readers. Two wrongs do not make a right, but people too wronged soon make things right. The injustice of the whole thing is that people must suffer before things are righted. Our second reason for not endorsing the Society of Equity is because we do not believe its tenets practicable. The ideals of the society and of all socialistic organizations we admire immensely, as we believe every well-wisher of the commonwealth does, but we fail to see how they are to be operated successfully, and we have given the subject some study. Has anyone ever noticed how universally the creed of the socialists (and that word must not be associated with anarchists) appeals to the young men, and men who have more of the poetical than the practical in their characters? In our very limited observation of men we have seen the young and inexperienced pledge themselves to the advancement of commercial interests and insist that only by intensive combination and co-operation among producers could their interest be advanced, but these same men when riper experience overtook them have always forsaken their creeds or become less ardent supporters of them. By this we do not wish to be understood as being opposed to co-operation in production

and marketing, we believe that by this process an improvement can be effected in quality of product and an enhancement in market price, but we do not believe that any system can be devised and perfected that will enable producers of agricultural products who sell in the open market of the world to set an arbitrary price upon the same. We would like to see the Alberta farmers and all others succeed in their efforts, and to this end reiterate the advice we have offered before, namely, that a complete system of co-operation should proceed the establishment of commercial combination among farmers if this latter step is considered just and right and feasible, which we doubt. To illustrate, if farmers are to be able to dictate prices of wheat by combining to hold it until the demand increases, they should first co-operate to establish farmers' elevator companies, commission houses and the whole chain of what is called middle men. The same applies in connection with dairy products, meats, eggs, fruit, etc. In other words there must be a thorough system of co-operation before there can be successful combination and if the first is established we feel certain that its educative influence will teach the impracticability of the latter.

The Law Must be Enforced at all Hazards.

One of the heritages we have as Britons is the reverence for the law and administration of justice, which generally speaking is well looked after in Canada.

That such is the case is well evidenced by the quick capture and speedy sentencing of the train robbers, who will now be incarcerated long enough for them to reflect, that while such law-breaking may go unpunished in the U. S., not so in Canada. Fortunately also, most of our judges and justices are men of sense and judgement who when handing out sentence keep in mind the proportion and enormity of the crime and the injury to the community. A prominent Eastern man is quoted in the daily press recently as stating that in certain cities, it was unsafe for young girls or children to walk after dark on the streets; lynching does not go in Canada, but the reproach referred to must be done away, either by flogging or emasculation of the offender or both. Either sentence would be a most wholesome deterrent for this species of crime, for which, we believe any man is justified in taking the life of the perpetrator; although we believe that the methods suggested are better, and would have a more permanent deterrent effect against this crime than any other devised.

An unfortunate exception from the usual exemplification of law is the weakness shown recently by the Department of Justice which has just released one of the most despicable criminals, in the person of Desire Brothier, a procurer, that ever infested Canada. It is just such stupid effeminacy that brings law into disrepute, the only explanation being that he has been let off because he is a Frenchman, it is inexplicable in any other way. Never have the Ottawa authorities so outraged Western feeling of decency as in this particular case; it is fortunate that a new minister of justice is to be provided.

The law must protect the women and children, or it has no place in our civilization, and to effectually do so it must be rigidly enforced. We must include under the list of laws, which non-enforced injure the youth of the community, a rigid enforcement of the liquor laws, against cigarette selling, child labor, compulsory attendance at school, gambling at fairs.

Land Speculation

The madcap gambling in western farm lands has countless adventurous devotees. The small farmer running with profit his quarter section dreams of profits which multiply as his acres and eventually lead to vast wealth. The fact is that nowhere on earth does this prove true.

The writer well remembers a gambler of this style. He made a profit on a small flock of fifty hens; then multiplied that profit by twenty to figure out the result from a thousand, but alas, disease, misfortune and death overtook his hopes and his flock and he was left lamenting. On another occasion, from a small field of fall wheat he made a phenomenal profit and straightway he sowed the major portion of his farm to that cereal, but winter killing blasted his prospects and again he found the folly of building castles from imaginary profits computed from previous small trials.

This process is going on all over the west today. Men who are doing well on a half section are attempting to handle four times as much. It may be done but ruin is apt to follow, especially where land is bought on a small margin and where the owner trusts to good fortune to meet his future obligations. The west will never come to its own until production and not speculation becomes the ruling passion of the people.

The Value of Reputation.

For months the press of the United States has been teeming with tales of deep dishonesty and base brutality, on the part of the large packers toward their men, and as a fitting climax to this campaign of malignment a book called "The Jungle" is written describing in vivid detail the lives and work of the men and women engaged in the large slaughter houses. Those of us who have visited the large packing plants in various cities have seen something of the nature of the work the people engaged in killing the stock, cutting the meat, canning the product, making up the by-products, etc., have to do. We have seen men standing in seas of blood, working over steaming vats of scalding hogs, cutting and slashing meat day after day and have reflected upon the brutalizing effect upon character of such labor. We have also seen these same people when off duty, as happy and sympathetic with their families or fellowmen as are the people of the same social caste engaged in other lines of work.

But the impression has gone abroad that all the horrors of brutality, characteristic of slavery days are being enacted at the large packing plants, and orders for meats amounting to thousands of dollars are being cancelled by Europeans. Evidence of various kinds has also been produced with regard to the meat in tins, one prominent military authority being reported as saying that canned meats were responsible for the deaths of three thousand soldiers in the Philippines.

So much publicity of the methods and practices of packers, whether or not it eventually does good, is terribly demoralizing to the stock business across the line. The circumstance offers a splendid opportunity to colonial packers and meat producers since it is from Britain that the greater number of cancellations of meat orders come.

If the packers could only be heard, the revelations they could make in the condition of trade as a result of having an established reputation snatched away, would be one of the most effective sermons on the value of a good name. The situation gives point to the resolution of the grain growers associations asking for a change in the grades of wheat, for it shows the advantage of putting forward the highest grade of product and since we cannot attain to the high grade we set for ourselves the best thing for us to do is to lower the standard of quality and let it be known that we produce the high grades, then leave it to the consumer, who has assured us often that if our arbitrary standards were identical with our competitors we would still have the advantage of inherent quality.

I cannot speak too highly of the ADVOCATE; it is the very thing I need. I wish to thank you one and all for your work as represented by your paper.

Didsbury, Alta. JNO. CATHRO.

HORSE

The Missouri mule is "some shucks" now, buyers are contracting for the delivery of suckling mules this fall at from \$100 to \$150 each.

The spring house cleaning should remind the "provider" side of the family that the horse stable would be much better for a sweeping down and whitewashing.

Foley Bros. recently brought two carloads of horses from Simcoe Co., Ontario, at an average cost of \$180. They have been taken to the Battleford district for construction work.

Warm weather and summer-fallow dust very soon cause sore shoulders. Keep the collar clean, smooth and close fitting and bathe the shoulders at night in cold water, all of which acts as an insurance against galls.

The first foal of some mares is frequently the only good one they have. The reason offered being that during her first breeding season she is regularly worked. The second year having the double duty of nursing and carrying a foal, she is left to run and not fed grain. In the following winter she often rustles on chaff and screenings and consequently cannot do herself nor her owner justice.

How and When to Water.

A good deal of discussion has taken place and considerable diversity of opinion still exists regarding the best order in which to feed and water horses. Many have advocated watering before feeding, to avoid washing the grain ration out of the stomach, an organ which, we all know, is relatively small in the horse. A difficulty is generally met, however, in the fact that many horses cannot be induced to drink much in the morning until they have eaten for a while. The writer has found that the best way is to let the horse eat enough to make him thirsty, and then water and give the grain allowance. This is in accordance with the animal's appetite, and approaches what we might expect his habits to be under natural conditions. People are yearly less inclined to attempt to make nature conform to men's theories, and more inclined to adapt their practice to nature's demands, as indicated by the preferences of the animals in their care. Of course, if we were to press this point too far, we might be at a loss to justify certain methods commonly considered essential. Theorizing is interesting, but not always assuring. However, in this matter of watering, we feel pretty certain of the soundness of our doctrine, having tested it as well as we could in the school of experience, and our advice is to feed hay first thing in the morning; then just before breakfast, water, and feed grain. When taking the team out, water again after breakfast; once, if possible in the middle of the forenoon—on hot days particularly; then again at noon, before going in to dinner; and after dinner, when going out to work. Divide the afternoon, like the forenoon, if practicable, and water again on coming in at night. In the evening, after a good cleaning, give them another drink, and leave them with enough hay to eat during the night. It doesn't take long to hold a pail up to a horse, and if he doesn't drink promptly, it may be taken for granted that he is not thirsty. When watering thus frequently, there is no harm done if he misses once in a while.

One point more, do not stand a sweltering, throat-parched horse in a stuffy stable, and expect him to eat hay all the noon hour, with nothing to drink. Think how you feel yourself. When you come in hot and tired from the field, do you sit down and eat a dry dinner, and then take a drink just as you are going to the field? Not if you are wise. You may take care not to swill down all the ice-water you would like, but you take a drink from the well, at least. So with the horse, a deal of exaggerated fear about watering is shown when warm. In the first place they should be brought in from the field lathering well, so that they are water is the very thing they need. A large amount of perspiration has been excreted while working. This leaves the system parched, and a large amount of water of moderate temperature is the best thing that can be given, and it should be given at once. If the water is cold

take the chill off it by having a drawn pailful or two standing ready when you come in. Horses prefer water not too cold, and if precautions are taken about the temperature, a pailful will not hurt a horse in the least, but rather refresh and do him good. As "Whip" has very well put it, "When a horse is thirsty, he wants a drink."

Economy of Horse Power.

A writer in an English exchange probably touches one of the main handicaps of Old Country agriculture when he refers to the waste of horse-power, indifference of teamsters and other laborers to the value of time, and failure to alter methods readily to meet changes in the times as exemplified by the adherence to labor-expensive implements. "How is it," he says, "that we tacitly agree that an acre per day is too sanguine an estimate even for ordinary two-horse land, and remain content with from half to three-quarters of an acre? Nine-inch furrows are narrow enough, and loose land can be plowed with ten to even twelve-inch furrows. There is, therefore, no difficulty in plowing 1½ to 1¾ acres of loose land in a day, and yet it is generally thought that one acre a day is an overestimate of what may, on an average, be expected from plowmen. Single-furrow plows are gradually giving way to double and triple-furrow implements, drawn by two or three, and possibly in the case of triple plows, by four horses. This is a great economy, as the double-furrow plow drawn by three horses (and many farmers use two) may be relied upon to turn over from 1½ to 2 acres per diem without any difficulty. On light land, or land already plowed, there is no difficulty in two horses drawing a double-furrow plow, and the saving in horse labor is then very considerable. The same principle holds good in all other tillage operations, so that, by using double-furrow plows, two-horse drills, light one-horse seed harrows, spring tooth cultivators, etc., the number of horses may be reduced, or tillage can be more effectively performed."

Two-horse drills and one-horse harrows just coming in! No wonder British agriculture is depressed! The remedy is more energetic application of the principle the writer suggests.

The Yearlings Now.

Like children, the future usefulness of horses depends a good deal upon their early environment. Colts usually make good progress during the first half year of their lives and if they are kept going during late fall will pull through the first winter in fairly good fit. But with the coming of the second spring the yearling is launched upon a crucial period. It is usually during the second summer that habits are contracted and the foundation of the future horse is laid.

Good pasture and good fences generally insure healthy development and good manners. If the grass becomes short and constant nibbling is required to satisfy hunger's cravings the colts will become restless in disposition and will not make sufficient growth or flesh and if the fences are weak they will not be long in learning the habit of breaking bounds.

Horse raisers are often disappointed with the results of the first months' grazing in the spring largely because the grass is soft and the change from winter feeding too sudden. During this time some good horsemen practice feeding grain until the grass becomes more matured, and in times of high prices for horses such as the present, the practice is well repaid by extra gains. Pure water and plenty of it is also an important factor in the raising of young horses.

Later in the season when the grass becomes dry, the days hot and the flies a continual annoyance benefits of shade will be much appreciated. Most pasture fields contain a few trees and where the shade of these are not available it is time and money well expended to build a rough shed where the colts can escape from the heat of the sun for a few hours in each day.

Changing the Entire Horse.

Writing in *Farmer and Stockbreeder*, Cambrian says:

"Horse-breeding is not a case of all blanks and no prizes, but in many instances it comes very near it; indeed, so near that there is endless dissatisfaction on the matter. It is a wide question, but not beyond the scope of discussion at this time, as it forms a theme wherever entire horses are bred with, and that is on every farm just now. Some may be accepted, and others rejected where

no breeding is done, and there the matter ends with them. Those who have in past years put the horse to one or two mares, and had few or no foals, sometimes say they put every mare they possess, and they will be sure to have some. They generally do, but very rarely all the mares prove in foal, and sometimes not one. I believe in giving every horse a chance, and let him serve a mare two or three times in successive rounds. But I think many make a mistake in persisting in adhering to the same horse till the season is over. I consider that any horse that has had two chances, or three at most, is a failure. If a mare does not hold before then, it is pretty clear there will be no results, but it is surprising how a different horse often succeeds; and I would never give up a mare that I was anxious to breed from without trying another horse. This is particularly desirable in the case of mares that have never had a foal, and whom their owner wants to start. The mare may be old or young, and in all cases the change of horses is well worth trying. I was glad to notice one of your readers supported my former contentions on the impotency and abortive work of excessive condition in entire horses."

A Prominent Breeder on Hackneys.

One of the most successful of English Hackney breeders, Mr. F. W. Buttle, who owns the famous sire Rosodor, twice champion at the London show and the sire of several champions, recently gave the *Farmer and Stockbreeder* an interview on the subject of Hackney breeding which, as it expresses the opinion of a breeder in the front rank, we reproduce.

"My idea of a Hackney," he said, "is a horse from 15.2 hands to 15.3 hands, standing on good short legs. We hear a good deal about increasing the size of the Hackney, but if this is done by increasing the length of the horse's legs it is a great mistake. I do not advocate breeding 15-hand horses, but if we Hackney breeders are not careful what we are about we are going to lose Hackney type, and if we once lose it we shall never get it back. When we get to 16 hands we invariably get away from good shoulders, and I attach the greatest importance to good shoulders. Good riding shoulders are essential for the saddle horse. A horse's action requires to come from the shoulder, and if they are upright his action will be underneath him. With riding shoulders he will go with freedom. Colors? Well, if come to the harness horse for the marts, I agree that it is better to have bays and browns without any white. If, however, you have a first-class animal, it doesn't matter if he is blue or green. We read about white legs. If you had a whole-colored horse with four black legs as good as mine with four white ones, I would beat you in the show-ring nineteen times out of twenty. The white legs are more showy, and, as a matter of fact, deceive the eye. The horse for the trade is better without them, but I am trying to breed the other. On this question of color, too, it must be remembered that the best of Hackneys for generations have been chestnuts. If we are to believe that like produces like, then if we are not to breed chestnuts, what are we to breed? The best of the Hackneys of to-day are chestnuts."

I certainly attach great importance to substance, and agree that sufficient attention has not been given to it. A horse's limbs I consider one of the points of the utmost importance. No matter how good he is on the top, if he has not good legs it is of no use.

Yes, this is as important in the mares as in the stallions. I like a long, low, roomy mare to breed from, and such a mare should be mated with a proportionate stallion. I would give them another name when they reach 16 hands, as they lose type, or, rather, reach another type. It may also be said that at 16 hands there are many more unsound horses.

There is a great deal of difference in action. It does not follow that the greatest and highest goers are necessarily the best. There is as much quality in action as in shape. I have said that I like a horse to go from the shoulder, and not to move underneath him, but the importance of hock action must not be lost sight of. A horse is no good unless he flexes his hocks. I may say that since I can remember the Hackney has improved in this more than in anything else. It is, however, very difficult to judge action in a small ring. Some horses give a good show in a small ring, and beat other horses which in a big ring would win easily. Some are able to get going at their best in a few yards, while others require a longer run before they are seen at their best.

"What is your opinion on stallion character? Does it get its due in the show-ring?"

"No, not always. A stallion should be judged as a stallion, and not as a gelding. You must have masculine character in a stallion."

There are undoubtedly soft Hackneys; there are soft horses of all breeds, even soft Thoroughbreds. As a breed, however, they are as good stayers as any other. I may breed you like you will find soft horse. I made a mistake in this connection that the Hackney that I bred last year, say, some ten miles has the action of a good horse, but a great display at first, but afterwards they seem to lose power over their legs, and I know about anyhow."

"Do you think it would be of benefit to bring in a Thoroughbred cross?" we asked.

"Not at all, we will lose action if we do. A Thoroughbred cross might help other generations, but it would do nothing for me. It would take too long to get back the action, if ever we got it back. Yes, for breeding commercial animals I would also keep the breed pure by all means. If you introduce a cross you never know where you are going to get to. We always will have a certain number of misfits, and will continue to have them, whatever be done. I breed them myself, and so does every other breeder. It is well, too, for horse-breeders that it is so. If we could breed them first class our best would be of no special value to us.

"The foreign demand," continued Mr. Buttle, "was never better. No, there is no particular type of horse that finds favor in the foreigner's eyes. Some prefer whole colors, but they take them all colors. They like a sizeable horse."

"Some complaints have been made that showing yearlings is detrimental. Do you think that a yearling must necessarily be injured by fitting it to win?"

"It does no harm whatever to show a yearling provided you turn it away rough when it comes home. They require some corn feeding in the winter in any case, and by a little extra forcing they get well grown; and yearlings are shown in the rough in London, so that very special preparation is unnecessary. It is different, however, in the case of the summer shows,

of the strongest, then the next strongest leaving the weakest ones of the litter to complete the drying off.

Live Stock Importation.

An Ottawa despatch says: "The following new customs regulations have been adopted:—A settler may bring into Canada, free of duty, live stock for the farm on the following basis: If he has actually owned such live stock abroad for at least six months before his removal to Canada, and has brought them into Canada within one year after his first arrival, viz., if horses, only 16; if cattle, only 16; if sheep, only 160; if swine, only 160. If horses, cattle, sheep and swine are brought in together, or part of each, the same proportions as above are to be observed. Duty is to be paid on live stock in excess of the number above provided for."

Why the sapient government officials included swine to the number of one hundred and sixty remains to be explained, and only goes to show the distance between departments, although in buildings a couple of blocks apart. All Canadian live stock associations should protest against this new regulation, as likely to render the ingress of hog cholera easy, which would be regrettable,

needed if we are to have the needed protection from prairie fire.

Calgary, Alta.

L. E. CARP.

Preparing Beef Cattle for Shipment

Professor Munford gives the following pertinent advice on an important question to shippers of fat heeves:

"There are shippers who, by some practices have secured an unnatural fill at the market; or, in other words have been successful in making their cattle weigh more than they should by inducing them to drink an unusual amount of water when they reach the market. It should not be forgotten that there are past masters of the "filling" process at all leading markets, and many of them operating outside the fat cattle division. The trained eye of the buyer of fat cattle is always on the look-out for cattle that have filled unusually well, and when he sets the price on such he is sure to discriminate against them in value per hundred weight, as he knows there will be a heavy shrinkage when slaughtered. Any practice which tends towards securing an abnormal fill, on cattle at the yards is neither a legitimate practice, nor is likely in the long run, to prove a paying proposition from the standpoint of the shipper. On the other hand it is a well known fact that unless some precautions are taken before shipment, the cattle are apt to scour and shrink abnormally. The shipper is justified, therefore, in using legitimate methods in preventing scours, not only to avoid an abnormal shrinkage, but also to prevent the cattle arriving at the market in a filthy condition which from the standpoint of the buyer would not add to their attractiveness.

It may have been inferred from what has been said that the principal point to be observed in shipping cattle without too much shrinkage, is following some peculiar method of feeding, but the writer believes that the largest factor is the management of the cattle. That is, they should be so quietly handled that they do not become excited or heated. If possible, driving should be done in the cool of the morning or evening. There are some feeds, which, if the cattle have access to them prior to shipment, will be more likely to cause scours than others. These are shelled corn, corn meal, oil meal, silage, clover hay, alfalfa, cows pea, hay and grass. Cattle that are fattened on grass and grain during the early part of the season may well be yarded for a day or two before shipment and fed timothy hay and a considerably reduced grain ration.

Fat cattle shipped from the dry lot, if receiving clover or alfalfa for roughage, should be changed to timothy hay at least twenty four hours before shipment. No full grain ration should be given after twelve hours before shipment, although it is advisable at times and especially if the cattle have been fattened on shelled corn or meal, to add a liberal amount of oats or bran to the feed. Water should be withheld for six hours before shipment.

If in addition to the above precautions, care is taken to bed the car well, and not overload, the cattle should arrive on the market flesh and clean and will fill normally, which, it is unnecessary to say, should be the object of the shipper. Cattle so shipped should make honest weights for the producer and buyer and healthy meat for the consumer.

It is obvious that the management of cattle before shipment will necessarily vary considerably, not only because of differences in their condition and the rations upon which they have been fed, but also the distance from market and the time they will be on the road, and whether it is necessary to unload and feed en route. Some of the suggestions offered will apply only to the preparation of cattle for shipment where they are not to be on the road to exceed twelve hours."

The Eradication of a Cattle Plague.

The perennial question of abortion in live more particularly the bovines, is sufficient excuse for quoting Mr. M'Lauchlan Young, of the North of Scotland College of Agriculture, who in a lecture recently referred to the enormous loss caused by abortion among cows. In abortion the young creature is either dead on expulsion or dies immediately afterwards, but in a premature birth, although it may be weakly and ill developed and die in a few days, many cases are known where the calf was successfully reared. No line of demarcation can be drawn between the two conditions, especially when a premature birth may be due to some of the causes which produce abortion. Abortion may take place in all animals, but there is not the same tendency in the different species. Abortion is described as being of two kinds, viz., sporadic and epizootic. The first is where cases occur over a wide extent of country, only here and there, and without any relationship as to the causation, and each case, although certainly a loss, is to be looked upon as accidental. The second is where the pregnant animals in a neighborhood or on one farm abort in large numbers, and the tantalizing act is evidently due to the same cause; then it is, indeed, a grave misfortune, as it entails serious damage—present and prospective—to the stock owner. That the disease is either infectious or contagious, or perhaps both, and spreads in the same way as do all other contagious diseases, is in itself sufficient proof that the cause is a living organism. In fact, the germ or bacillus has been isolated and cultivated artificially,



LORD NORFOLK AND LADY NORFOLK
A first prize pair of harness horses, at Toronto and Montreal, exhibited by Mrs. Adam Beck, London, Ont.

If a yearling does well in London there is a temptation to keep it up to win at summer shows, and it is here that the danger lies. A young animal may easily be ruined in this way. If, however, they are turned away in the rough after London show it will do them good rather than harm.

I think I have spoken of the improvement in hock action, and undoubtedly the Hackney has got bigger. I remember when the class under 15.2 hands was smaller than that over 15.2, but now the big class is three times the size. I think however we have now got them big enough."

STOCK

Weaning Pigs.

An expert in hog-raising says that the method of weaning will depend somewhat on circumstances. If the pigs are so little dependent on the sow's milk that she is gaining rapidly in flesh and lessening in milk flow, the weaning may be abrupt, the sow being taken away out of hearing. If she is still milking considerably, she may be returned to the pigs once a day for two or three days, or the pigs may be taken away in detachments, beginning with two or three

especially in view of the great sums expended by the Veterinary branch to stamp out the disease. Wake up Mr. Fisher! Who else is supposed to be on the lookout to protect the live stock interests of Canada?

Fighting the Fires on the Range.

EDITOR FARMER'S ADVOCATE:

In your last issue I notice an article from Prof. Linfield on the baldness of the prairie. I do not know the conditions in Montana, but there is not the slightest room to doubt that in Alberta we have, in addition to over-stocking in some places, the curse of prairie fires as the great cause of a bald range. The fire is, in fact, much worse than the other cause. Besides burning of the top mulch, it in many cases injures the crowns of the plants and in consequence we get a very poor growth for a considerable time thereafter. When the grass is not destroyed by fire the snow lies in the winter, the old top forms a mulch and we have an early growth, and what is better still a long continued growth throughout the summer. The ranchmen protest against the fencing of the range, but worse, infinitely worse than a fenced range is a burnt one, and concerted effort is

and when used for inoculation abortion has been produced experimentally. The animal that has aborted must be isolated for at least two weeks. During the isolation the cow must be thoroughly irrigated with some germicide so that the bacillus may be destroyed. Corrosive sublimate is probably as efficacious and convenient as any disinfectant, and it is specially suitable for this purpose, as being made up in pellets containing a definite quantity, a solution of known strength can easily be made. The pellets contain corrosive sublimate to the extent that when one is dissolved in a pint of water the solution is then one part of sublimate to one thousand of water. One in two thousand is the strength to irrigate a cow that has aborted. Although it is difficult—sometimes impossible—to kill all the germs by the flushing, there is a peculiarity in the life history of the bacillus which assists us in our endeavors towards its destruction. It is not very tenacious of life, and seems to expend its powers in a season or two. Many stock breeders have noticed that a cow which has been sterile or has aborted for two or three seasons seldom gives further trouble. Whether it is that the bacilli die out or that their products make the environment inimical to them is not clearly understood, but this peculiarity has suggested a possible preventive. It may be, as in vaccination for smallpox, that an immunity has been produced, and the attempt to induce the violent contractions of the uterine walls is successfully resisted. If this naturally takes place we may be able to imitate nature, and by inoculating the cows with a vaccine prepared from a pure cultivation of the bacillus produce that immunity which would rob abortion of its terrors.

The Economy in Purchasing a Good Bull.

An Old Country contemporary has the following to say regarding the purchase of good bovine sires:

"Money invested in a bull, providing always that such bull turns out fruitful, is about the safest investment that can be made in any herd, and does more towards making money, as well as a name, than ten times the amount spent in any other way. If you invest in a high priced cow she will probably produce you but one calf, and that may possibly be a misfit. You may invest a big sum in feeding moderate cattle in the hope that the old story of breed going in at the mouth will benefit you, and this will be found a failure; but the highest class pedigree bull, with anything like ordinary success, and supposing he has a good herd of cows and heifers to work upon, is likely to beget you from twenty to fifty animals in the course of a year, each one of which will be of great value."

Ventilation Better Than Tuberculin.

In his evidence, recently, before the Parliamentary Committee on Agriculture, at Ottawa, Dr. J. G. Rutherford, Chief Veterinary Inspector, stated that, so far, no change has been made in the policy of the Department re Tuberculosis. Cattle of any kind coming from other countries, were tested in quarantine. With the exception of animals comprising a few herds which were under the control and supervision of officers of the Department, no official testing with tuberculin is now undertaken, although subject to certain conditions, it is supplied free to qualified veterinarians when employed by owners of cattle.

While no one was more firmly convinced than himself of the value of tuberculin as a diagnostic agent, yet it was subject to certain limitations which justified his attitude in counselling a policy of comparative inertia, now being followed. So far no satisfactory and intelligent method of dealing with bovine tuberculosis has been evolved, and he considered it better to await results of investigation being conducted by scientists in different parts of the world, in order that they might be sure of achieving reasonable results, and thus making some progress in the eradication of tuberculosis before deciding upon a policy which would involve universal and promiscuous testing. He believed firmly in tuberculin, when honestly used, as a diagnostic agent, and for specific and definite purposes, but the fraudulent methods adopted by many owners to prevent the occurrence of a typical reaction, the time which must necessarily elapse after infection before it is possible to obtain from the animal a reaction from tuberculin, would require frequent and repeated tests before it is safe to pronounce free from tuberculosis any herd infected, as well as other limitations which must be allowed for and overcome before compulsory testing should be resorted to. In the meantime, no effort should be spared to induce owners of cattle to adopt every possible means of combating the disease by practical common-sense methods. Thousands of animals were yearly becoming affected, owing to unsanitary conditions under which their owners insist in keeping them, and the importance to live stock of thorough and effective ventilation was of infinitely greater value than tuberculin. To put the case plainly, he stated that stockmen were breeding tuberculosis a great deal faster through neglect of this important subject of ventilation than it would ever be possible to stamp it out by promiscuous use of tuberculin and the slaughter of diseased animals. He was carrying on experiments at the present time which he hoped would be productive of results of value to the stock-owning public.

Sheep Nomenclature.

The word "teg," as applied to a Southdown or Romney Marsh sheep, is generally applied in an inaccurate sense, and is misleading to breeders in other parts of the country. Teg is a corruption of the word "tag." An unshorn lock of wool tapers to a point, and forms a fine point very similar to the tag on an old-fashioned shoe-lace. After a sheep is shorn these tags are much less in evidence, and in short wool breeds the wool looks as though it were blocked off square; consequently to call a sheep which has been shorn a tag or teg is an error. In other districts, when a lamb is put on to roots in the autumn, it is called a teg, and is so called until it is shorn; though, of course, there are many districts where the word "teg" is not used at any time. These misnomers are sometimes awkward when dealing with others at a distance. A peculiar inversion of words also commonly occurs among those who keep these two breeds. A hurdle made with slats is called a wattle, but when made of wattle, like coarse basket ware, it is called a hurdle; and if any one accustomed to the words in their ordinary sense were to send an order for wattles into Kent or Sussex, he would find he got an ordinary barred hurdle.

All Wheat Screenings not Good for Sheep.

Dr. Alexander in the *Live Stock Report* discusses in the following words the unfortunate effect of some weed seeds in wheat screenings; it is also a good argument for a weed destruction campaign:

"It will pay sheep feeders to carefully examine samples of wheat screenings before using them in any quantity for sheep that have not been accustomed to such food. We say this for the reason that recently we have traced disease of a flock of sheep to screenings containing almost ten per cent. of corn cockle seed. The seeds of this weed are poisonous and cause an intense inflammation of the bowels accompanied by paralysis toward the end of the attack. The seeds are black in color and hard and gritty, feeling, when wet, like particles of gravel. We have failed, thus far, to find any allusion to this weed poison in English text books at our command but German books describe a disease due to corn cockle and warn against use of contaminated screenings.

The matter came to our notice in this way. A Wisconsin sheep feeder wrote us that his sheep had been doing poorly upon generous feeding on screenings, timothy hay and corn fodder. They gradually lost flesh and at length became unable to use their hind legs and died. On opening the victims of the disease he failed to find any trace of worms or other cause of disease and was therefore at a loss to know what caused the trouble and how it could be prevented. He was asked to send us a sick sheep and on opening it we found a part of the small intestines distended with some gritty material and the exterior covered with large purple blotches. The lining of the intestines was seen to be intensely inflamed. In the mass of impacted matter yellow seeds could plainly be seen and on close inspection the gritty particles were seen to be seeds. The owner was then asked to forward samples of the screenings and sent three of different qualities, two of which were found to be very badly contaminated with corn cockle seed. The dangerous samples were, by Prof. Woll, pronounced the worst contaminated of any that have been examined at the Wisconsin Experiment Station, and while it is quite possible that too much dry food such as timothy hay may have aggravated the trouble by causing impaction, screenings so badly infested with corn cockle could not possibly be fed without danger to sheep, and we are sure that both poisonous effect and mechanical irritation and stoppage due to this weed seed was the direct cause of death of so many sheep in the particular flock in question; while there is little doubt that many sheepmen are feeding similar dangerous screenings at the present time and while their sheep are seen to be doing badly the owner has not a suspicion that cockle is the cause.

It may be possible that where cockle seed is prevalent in screenings its bad effects are partly discounted if succulent food is fed in conjunction with the screenings and hay, and there would be still less likelihood of trouble were the sheepmen to feed generously of other food such as oats and bran, which, however, is seldom done where screenings are used on a wholesale scale.

So far as the writer at present is aware this is the first intimation that has been published in the live stock press drawing attention to the danger-

ous properties of corn cockle seed which usually is not so plentiful in screenings as to cause death from poisoning. It serves to emphasize the importance of carefully examining screenings and we would advise all who are feeding screenings and getting poor results to examine for the presence of corn cockle seeds."

FARM

Dry Farming in Alberta.

EDITOR FARMER'S ADVOCATE:

In response to your request for an article on dry farming I shall endeavor to give you a summary of my observations for a number of years. From Macleod and as far north as Nanton then to the United States boundary and west to range 30, west of fourth meridian and east to Medicine Hat or farther can be classed as a semi-dry district and should be farmed as such.

Although we have sufficient rainfall, it is difficult to retain it, as the prevailing west wind is very dry and rapidly absorbs the moisture. Therefore, in cultivation we should have one aim, and that should be the preservation of moisture. How is this to be done? I would suggest summer fallowing. It should be the watchword of every farmer. It is not only efficient in retaining moisture, but it is the most economical way of working land prior to seeding. The proper time for working summer fallow is from the 20th of May to the 20th of June. This allows the weeds to start and they can then be readily destroyed. I have found fall plowing utterly worthless, as it tends to increase the weeds and lessen moisture. Spring plowing is much better than fall, if it is shallow enough—not more than three or four inches—as the soil dries to the depth of the plowing and the plant has to reach the subsoil for moisture. Spring plowing should be done only as an absolute necessity and not as a principle of good farming.

Wheat is the best crop for dry farming. Both the fall and spring varieties will stand more drought than any other cereal that can be grown successfully north of the 49th parallel of latitude. Oats and barley do well but do not yield in proportion to wheat.

The question of hay is taking the attention of the farmers in this district. Hitherto the supply has been obtained from unoccupied land, but this is now all taken either by purchase or homestead, and so the farmer must face the proposition of hay growing for himself. I have tried brome but found it worthless for hay, though fairly good for pasture. I find that oats and wheat, equal part, sown together make a very good substitute for hay, if cut when the wheat is in full bloom. Alfalfa is being introduced in this section and there are high hopes of its success, but my experience with it is limited and an expression of opinion would be premature. Timothy has also been tried but is a success only under irrigation conditions. When the system of summer fallowing and cropping on alternate seasons has become universal in this section, we shall have one of the greatest hard wheat producing districts in the world.

Macleod, Alta.

D. L. MUDIMAN.

Prepare for Next Year's Fall Wheat.

Despite the prophecy of a dry season, we find this year at the end of May the second largest record of precipitation in the recorded history of the Province of Alberta. During the last two weeks of May a total of nearly seven inches fell over the greater part of the province. Last year during the same month the rainfall amounted to only a little over an inch and a half. These figures seem to cast a doubt over the minds of many and leave the impression that the climate of the sunny province is rapidly changing its ways. Under such conditions in the atmosphere of the optimistic west, there is certain to grow up a feeling of carelessness on that important feature of western farming—the preservation of moisture. "The rain is here now; it looks as if it could rain every day whether it was needed or not, so why worry." This is the doctrine that plays havoc with prosperity.

During the past year we had a heavy precipitation in June and those who kept the land cultivated and thus prevented the escape of moisture until the time arrived for fall wheat seeding, are

to-day rejoicing in the prospect of a splendid crop. On the other hand, the man who lived in hopes of heavy rainfall all the year round faces the necessity of plowing and reseeded large portions of his crop. You cannot fly in the face of Nature. There is in all the world no country where the reward for careful work is greater but here as elsewhere, wilful waste of Nature's showers makes woeful want of needed moisture later on. The time for cultivation is now. As soon as the ground can be touched without puddling, the summer fallow should be worked. Every day's delay allows the evaporation to proceed more rapidly. Prepare for your fall wheat crop, for the harvest of 1907 by proper preparation to-day.

A Saskatchewan Farm House.

EDITOR FARMER'S ADVOCATE:

I have put a few ideas on paper on the building of a farm house suitable for a half section and trust they may be useful to my fellow farmers. I consider that a farm house should have a parlor, sitting and dining room, kitchen, pantry and back or summer kitchen, and about four bedrooms, with some clothes closets off them, and a bathroom. There should be a large basement divided into several apartments.

As to the material used in construction, the cost of the house will depend much on the kind most available. I consider stone, concrete and brick, expensive, because it requires to be well lined inside to make it warm. The material in the walls being of a cold nature, and thick, holds a lot of frost and unless well finished inside is cold. I am more in favor of lumber walls or brick veneered and plenty of good paper, well lapped, especially around window and door frames.

I would consider an approximate amount to spend on a house would be \$2,000 to \$2,500. This will depend largely on the kind and quality of material used, the form or design of building and finish. The nearer one can keep to the square form, the warmer, roomier and cheaper will be the house.

I would consider that convenience, warmth and roominess to be the most essential features in designing and constructing a farm house. Have a good cellar or basement and a stone foundation even for a log house.

A farm kitchen should be, above all others, roomy, convenient and well lighted. A good pump from a large cistern (not less than fifty barrels) should be in the kitchen, and a large cast enamel sink.

The dining room should too be roomy and cheerful. There should be a good sized pantry convenient to dining room and kitchen. The parlor need not be so large. If the house is large there should be front and back stairs. The bedrooms should be a fair size, with a clothes closet off each if it can be arranged. There should be a fanlight over each bedroom door, for ventilation when the door is closed, this can easily be opened by a "Transom rod". A good way to let in fresh air is to have a board one by three inches and as long as the window is wide, place this on edge under the lower sash, the air will then enter upward between the two sashes and be distributed through the room without causing a draught. In the hall should be a trap door entering into the attic, operated by a cord on a pulley, to let up the foul or heated air, which may then escape through a small window or, as in my case, an unused chimney. There should also be a bathroom upstairs fitted with a bath and lavatory. In this room may be placed a tank to be supplied with soft water from the force pump in the kitchen. Hot water may be supplied to the bathroom from a boiler in the kitchen, heated from the range.

The house should be supplied with storm sash and storm doors, well fitted to keep it warm and prevent the ice forming on the windows and then thawing during the day, making a great mess.

Some way should be provided for warming every room in the house, this can best be accomplished by a furnace in the basement. I have had no experiences with the hot air furnaces. I had my house fitted with the hot water system last fall and we have found it very satisfactory. Every part of the house could be heated and kept at a uniform temperature, no matter what the weather was. It is easily managed and very clean, the smoke pipe entering the chimney in the basement. It is said to require less fuel than a hot air furnace. It is expensive to install the plant about two and a half or three times that of hot air, but is more durable. In my house are eight radiators and the plant cost nearly \$400.

My house built last year, is of lumber outside, is boarded with shiplap, over which is laid two thicknesses of building paper, the outside one being tarred. Then drop siding was put on. Inside was boarded with shiplap over which was two layers of building paper, it was then stripped with one by two inch strips and lathed and plastered. The inside boarding and paper was carried up the rafters to the ceiling, the boards were then laid over the collar ties for a floor. I think I have a perfect wall.

Sask.

A. J. LOVERIDGE.

Use Northern Grown Alfalfa Seed.

In speaking of the winter killing of alfalfa in the State of Montana Prof. Linfield claims that the use of northern grown seed will to a large extent remove the difficulty. The same difficulty has been experienced in Alberta in some places. An early thaw followed by a hard frost does the trick. At present northern grown seed is difficult to attain, but some of our southern farmers who have irrigated farms should be able to grow it at a profit.

Grass in Last Year's Breaking.

Now that the spring grains begin to show up, it is interesting to notice the condition of some of the fields, sown on breaking, and to compare that condition with the work which was done on those same fields, after breaking, last season. In some of the new breaking sown in wheat, the grass has come up very rank, and the grain will have a hard time to get the upper hand. Last fall, during the latter part of September, we had a heavy fall of rain, and warm weather following, caused any grass, having any vitality left, to take good root, and it being such a busy time, many neglected further work on their land, the result of which can now be seen in the condition of these fields. We should learn a lesson from this, viz., that it is hard to put too much work on such land, if we do it judiciously and in the proper time. There is not a doubt but these fields will give a greatly reduced yield, just on account of the grass, which could have been entirely avoided by an extra two or three strokes of the disc last fall, instead of detracting from his neighbors estimate of his ability as a tiller of the soil.

There is one question of very great importance to the farmers of this country, which I have not seen discussed in your paper, and that is the production of denaturized alcohol, as a fuel for internal combustion engines. The matter is being agitated in the U.S. at the present time, and as we all know the price of gasoline keeps many of us from investing in this most satisfactory farm power, I trust you will give us some information along these lines, and if necessary, the Dominion government should be memorialized to make a move in this matter, and help the farmer to solve the important question of power, and at the same time sever some of the tentacles which bind us to that colossus of graft, the Standard Oil Co. It is just announced that they have raised the price of gasoline, and of course all other minor companies will follow suit. I think any one at all interested in the matter will agree that it is an opportune time to agitate this matter, so that we may be able to procure at the earliest possible date this means of providing the farmer of our country with a cheap reliable power.

Sask.

H. N. BINGHAM.

Hop Growing Methods.

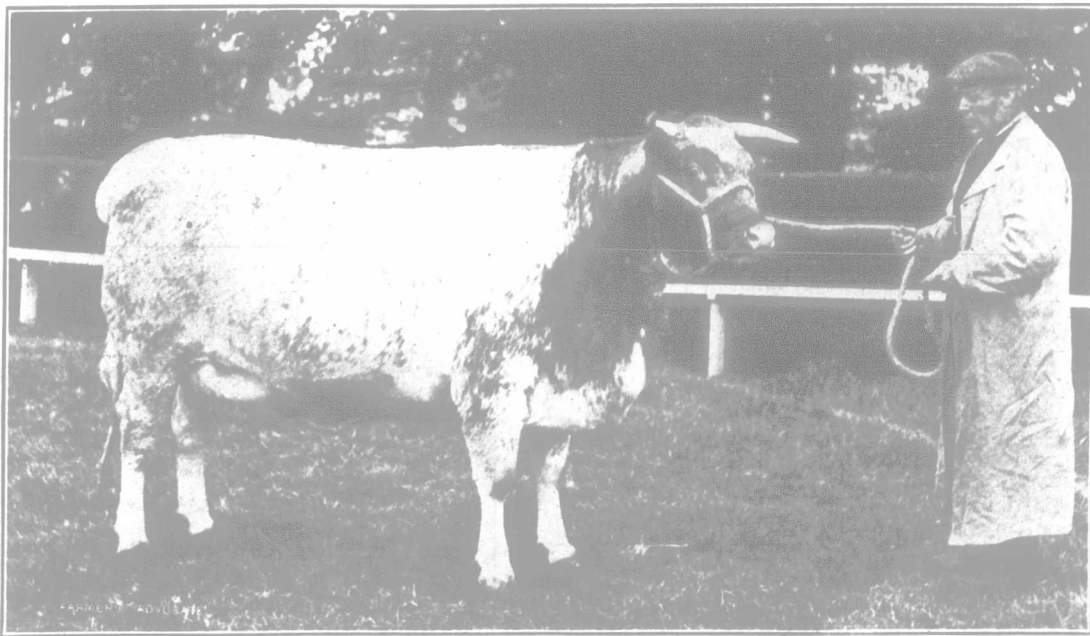
Some U. S. growers follow the courses detailed: As soon as the shoots appear and are about 12 in. high, they commence to train by tying loosely to the poles, nipping off all but two vines, some growers preferring to leave only one. This training is continued until the vines attain the height of about 6 ft. Immediately after the first training a furrow is run with an 8 in. plow on each side of the hills, about one foot from the poles. This being done, the square untouched by the plow at the foot of each pole is worked by hand and a pronged hoe. The rows are then cultivated with a spring-tooth harrow in each direction, the soil being thus thoroughly loosened. When the vines are further advanced, the plow is taken up the rows on each side of the hills and in each direction, being followed by a drag-tooth harrow, and when the hops are in burr and the cones are forming, the soil is twice treated with a spring-tooth harrow in both directions.

In Oregon the yards are plowed early in the spring with a turning plow, throwing the soil away from the hills, and then levelled down with either a cultivator or harrow, the same process being adopted in the cross direction. After this the yards are gone over every two or three weeks with a good cultivator or a disk harrow until about the last week in June, when all cultivation ceases, as any disturbance after that time destroys the small feeders from the roots, which then begin to shoot out and fill the spaces between the hills. After cultivation has ceased, the ground is levelled with a clod smasher or smoother, which makes the soil firm and prevents evaporation during the heat of July and August.

The Californian methods are very similar to those of Oregon, three to five cultivations being given according to the condition of the soil and the growth of weeds. Round the hill the hand hoe is used to kill weeds, and lighten the soil not reached by the cultivator, every possible effort being made to keep the soil open to the depth of four to six inches, and absolutely free from weeds.

New York planters advocate constant cultivation, from the time the poles are set. The cultivators are sent through the rows both ways every week until within about two weeks of picking. Whatever else may be neglected, the cultivation must be persevered in, as that loosens the soil, admits sun and air, releases the plant food, keeps down the weeds, and advances and increases the crop. It is also considered that late cultivation helps to bring the hops out of burr. About the middle of June the application of a good handful of phosphate or fine ground bone directly to each hill, among the vines, is recommended. As soon as the vines are well up to the poles the surplus shoots are cut off. The hills are then dressed with a four-tined fork, and the weeds cleared out. The ground by this time should be in fine, clean, mellow condition, and ready for hilling. A large horse hoe is then run through the center of the rows both ways, the phosphate or bone again applied, and the hilling well up to the crown thoroughly completed. About the middle of July a repetition of the cultivation takes place, and each hill is supplied with a large handful of unleached ashes. About this time the flowers will begin to appear, and cultivating, horse-hoeing and hilling will materially assist to bring the hops out of burr, and push them on to maturity.

The practice of running the cultivator deeply in



RATCHENSH WITCH.
Three-year-old Shorthorn heifer winner of first at Bath and West of England Show, 1905.
Sire, Baron Abbotsford by Abbotsford

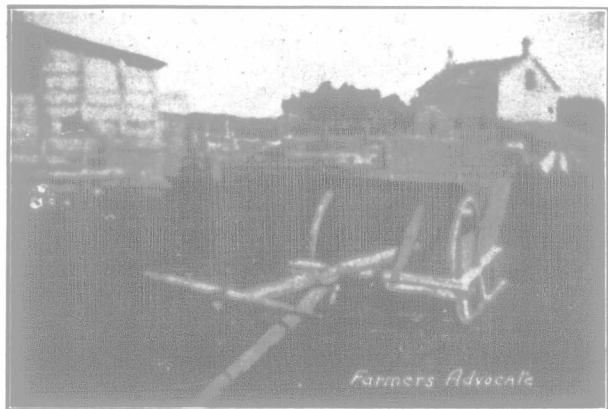
June, so as to break up the mass of fine shoots from the hop roots is recommended by many growers both in England and on the Continent. The scientific reason for this practice has not been given, but probably it is to be found in the theory that such cutting forces a fresh growth of rootlets, and enables the plant thus to extract more nutriment from the soil. This argument has been applied to the culture of corn, but in America the theory finds very few advocates, either in the corn or the hop fields. The approved plan there is almost universally to give the rootlets a fine, mellow bed, in which they can flourish naturally, with as little molestation as possible.

The exhaustion of the soil by a heavy crop of hops is considered to be on a par with that of the production of 40 bushels of wheat; it is, therefore, clear that provision must be made for restoration of the plant food. In New York State, stable manure is preferred if it can be obtained in sufficient quantity, but failing this, the usual chemical compounds are largely used. It is found that in order to secure fruit of good quality, potash is needed to excess, and carbonate of potash as existing in cotton-hull or unleached wood ashes is, for many reasons, preferable, but sulphate of potash is also applied.

The Care of Farm Machinery.

EDITOR FARMER'S ADVOCATE:

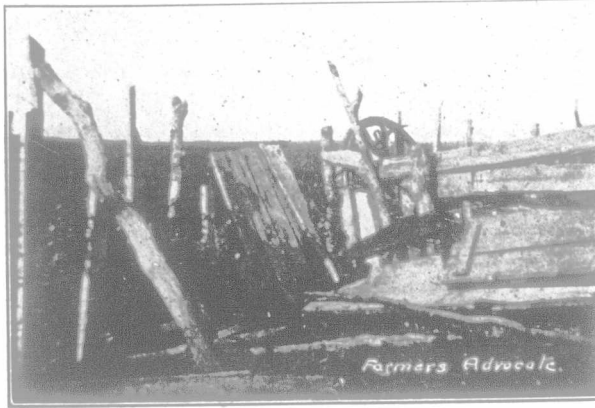
The agricultural genius who in the dim and distant past constructed the first rude plow laid a burden on posterity which they are scarce able to bear to-day, with its complicated mechanisms for the cultivation and harvesting of the land. No census report discloses the tale of ignorance and carelessness. No Utopian legislator has proposed a bill compelling farmers and their laborers to qualify by inspection for the use of agricultural machinery. And yet probably more of the millions in America who yoke up their teams every working day put their lives in jeopardy than "factory hands," in many industries carefully guarded by legislation. A restive horse, a stone in the furrow, a broken bolt, and the inexperienced worker is on his mettle.



A SLEIGH.

With the advent of modern machinery the farmer has fairly outdistanced the long-shore fisherman as the jack-of-all-trades. He must be somewhat of a physiologist, chemist and engineer, if his cattle, his crops and his implements are to be of full value to him. The effect of choosing a poor horse or sowing a wrong crop are too immediate and disastrous to the average farmer to be overlooked, but he has often still to learn that his machinery too needs treating with respect. The average extensive agriculturist has more than he can attend to properly; he has not yet succeeded in apportioning his time and attention appropriately between his live stock, his tillage and his machinery. The latter being his latest care suffer most. The cure for this state of things can only come by observation, no preaching at the farmer can alter it in a night or a season. He has first to learn that, however small his capital, his time is worth money like any other man in business and that he cannot afford to fritter it away year after year on "cheap and nasty" jobs which last for the moment of pressure only and need renewing time and time again. An accountant might be inclined to revise his opinion on what constituted the proper rate of depreciation for plant if he had before him the cost of renewing this picturesque pig fence measured in time, patience and damage to the crop.

The small farmer with little capital with all his independence is a sorely perplexed man in his endeavor to face and solve a hundred different problems, any one of which would call for ability of no mean order. A little elementary knowledge and forethought would however relieve him of much anxiety as regards his machinery at least. First of all, most agricultural implements like modern battle-ships are compromises. They have to combine the utmost efficiency for their work with the minimum of material and tractive effort. In one respect the comparison breaks down, the farmer's machine must be built for a price. It is not the best implement which can be made but the best at a price. The



A HOG FENCE.

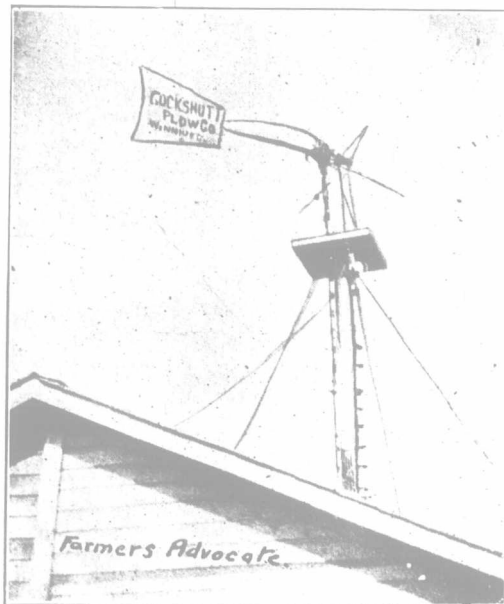
result is an implement calculated to do the average amount of hard work, to bear the average amount of knocking about and to stand the average amount of exposure. A farmer may be forced by circumstances to overwork his machinery, it may pay him well, but only ignorance and carelessness can account for his ill treating and unduly exposing it. Let a horse tread on one of the slender rods which work the levers and they will never work again with freedom—an unnecessary tax on the energy and patience of the man who has to shift them many times a day. A few weeks exposure of a machine to sun and rain may do more to reduce its value than years of hard work. The wood work of a machine is never intended like the outside of a house, to stand all weathers. Once it is warped, like the top of the drill in the picture and its usefulness is over. Hinges are wrenched off, seed far above the value of the lid is lost and the farmer's sense of good order is lowered.

A machinery shed, where the farmer can afford it, is undoubtedly the remedy for this state of things. Some men argue that a machine is better off in an exposed position, where the snow will not gather over it, than in a shed banked up with snow which takes long to thaw out. But they leave out of account the alternate effect of sun and rain at other times of the year, the danger from cattle tramping over the machine and the certainty that if it needs some repairs they are sure to be overlooked till the day comes to use it again. If there is not money enough to spare for a shed, a piece of land near the yard should be fenced in and all the implements drawn there after they have served their purpose for the season. Here they will be safe from cattle, near at hand for repairs. If they have bright metal parts they can be coated with vaseline and tar—not tallow as it goes rancid and eats into the metal. The wood work can be painted if necessary and protected from sun and rain by old boards or covers, so that the air can circulate around the wood. Stored thus, machinery will not take much harm.

The second elementary fact the farmer has to learn is: never discard a machine unless you know why it fails to work properly and have found out from a machine shop that it cannot be mended at a reasonable price. The farmer is not an expert as a rule in mechanical notions and is sorely tempted by the easy terms of some soft-tongued agent to try the newest fad. It is one of the shibboleths of the age that it always pays to scrap your old machinery or trade it off with a bundle of dollar bills for new. The wish for change being father to the thought, is apt to damn a whole machine for some minor defect which may be remedied. It also sensibly diminishes the respect with which machinery should be treated.

The third lesson a farmer should take to heart is the folly of thinking that "any old thing"—a piece of wire, a nail, a three-eighth inch bolt to replace a three-quarter inch will do to mend a machine. These serve for the moment but should be replaced at the end of the day or week.

I have seen all the split keys holding up the spouts of a drill lost from time to time and their places taken

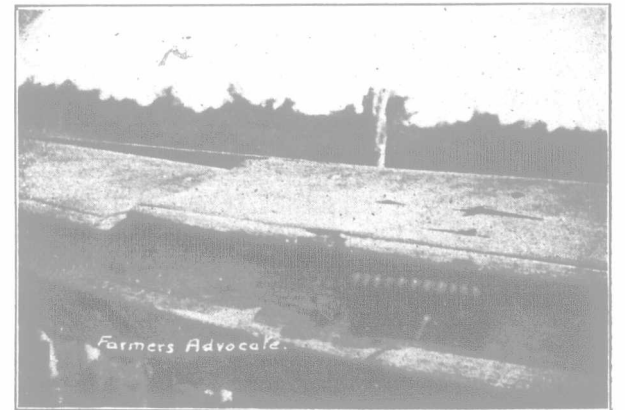


OUT OF WORK.

by wire nails! I do not know at the moment the exact difference in the price per ton between the two, but nothing illustrates the lack of engineering intuition on the part of the farmer more fully than the use of nails when the expenditure to the poorest farmer for a few sizes of split keys would mean so little and insure him against so many accidents, possibly serious ones, from nails dropping out. This is nothing less than a culpable want of forethought for which there is no excuse now-a-days.

Another wrinkle farmers may learn from men of the world is not to be too eager buyers. They are so accustomed to buy and sell their stock and produce in market overt, that they overlook the fact that many sellers to-day are prepared to abide by results. The windmill out of work was probably never properly erected to commence with consequently it fell a victim to every gust of wind and was prepared for the day when a gale put it permanently out of commission and left no redress from the makers for their faulty work.

The fifth lesson some farmers at least have to learn is that the same intelligence which makes them passable carpenters, (and what farmer cannot handle a saw, or an ax?) would make them reasonably expert workers in iron and save them many a ride to town and loss of a day's work. The necessary equipment is not costly—a portable forge, a set of taps and dies, a vice, a small drill, a chisel or two, a few bars of round and flat iron, and a collection of bolts, nuts and washers of various useful sizes and lengths. It doubtless may not pay the farmer who is near a town and a good repair shop to spend too much time fooling round, but the further the farm is from town the more necessary it is for the farmer to become a blacksmith "of sorts." The bright man may go a step further by building a comfortable, well-lighted shanty with a stove in it, in which he can work on wet or winter days. If he can make it at such times the social center of the farm he may get many "chores" in the mending line done to harness and tools and furniture as a pastime and not as a burden to be put off from day to day. The workshop is also the place where all spare parts of machinery can be best stored. The want of a proper store house, no doubt, deters many farmers from having by them split keys, bolts, washers, screws, etc. They have bought them time after time and they have been misplaced. The work-



A SUNSTROKE.

shop is the place also to keep all tools not in use. Where to find a hammer or wrench is one of the problems of a farm. Given a farm yard full of straw and a hundred or two acres of plow land and there is no doubt the only solution is, treat tools on the "cleaning house" principle, insist under some penalty that they shall be invariably returned to a central spot when done with. One experienced farmer attaches a wrench at least to the harness of each team.

The last point the farmer might learn is probably a sentimental rather than a practical one. He gives himself away more freely than the ordinary business man. The city man cannot afford to have machinery which has gone out of use taking up space on his premises and he is careful to remove all evidences of former failure. The farmer, prodigal of space and heedless of criticism, allows useless machines and the wreck of former ventures to stand in the field and the yard year after year. This is the era of "days." The man who can induce the farmer to add a machinery day to their number—a day on which all useless lumber is burnt or sold as old iron and the doubtful stuff put orderly in his implement yard, will add materially to the farmer's respect for wood and iron and raise him substantially in the respect of the townfolk.

Brandon Hills.

G. R. F. P.

Good plowing is essential as a basis of all good husbandry. In days gone by, good plowing had a different meaning to what it has to-day; in those days it was neither deep nor wide, and the furrow was set up with as little break in it as possible, indeed, if it had the appearance of being in one solid piece from end to end the plowman was all the better pleased with his work. During the last thirty years great alterations have been made in the make of plows, with a view to the more thorough disintegration of the land at the time of plowing.—MacLaren.

Horticulture and Forestry

Practical Experience in Strawberry Culture.

I have studied the nature of strawberries for at least twenty years and find that each variety needs to be studied very closely and then be treated to suit its nature if success is to be realized. For instance, if plants are deficient in foliage and strong in yield of berries, great care should be taken to increase the foliage and to preserve a balanced plant as between fruit and foliage. This kind should be cultivated much later in the fall, which will overcome the defect to a large degree.

If plants show signs of being weak at this time of the season their first runners should be cut off to give them time to become more firmly established for the work they are about to perform in producing new plants.

I have been working on seeding plants for sixteen years and find a great field here for experimentation. I don't allow any plant to go on the market until it has been worked on all kinds of soil and been thoroughly tested and proved to be of high quality and perfectly balanced in all respects. After I find a seedling plant that shows a certain number of good qualities I then breed them up by bud selection.

For growing a fine and large crop of berries labor and manure should not be used too sparingly. The good book tells us that it rains on the just and the unjust alike, yet we have our part to perform or nature cannot give us a large crop.

I am growing strawberries on newly cleared land at present and find it less difficult to keep down weeds than it is on old land. I burn the brush and cut-harrow the land first, then take a five tooth cultivator and pulverize the soil thoroughly, after which I harrow with a spike-tooth harrow, and then let it lie through the winter. In the spring I prepare the soil for setting the plants by this method. I find that berries do better than they will when one plows the top soil down and turns the wild yellow soil up.

I have a T-shaped steel which I insert in a shovel handle that I find is a great labor-saving tool to cut the runners after they have been layered and are thick enough set. This can easily be sharpened on an ordinary grind stone.

In cultivating the bed after it has been picked, I find that to mow the vines off, then burn them and narrow the rows to about twelve inches is the better way. I use an ordinary five-tooth cultivator, taking the wide blades off and putting on about one inch or one and one-fourth inch blades. Spread the cultivator so it will cut the soil about every six inches to the depth of about two inches, then when the plants start a new growth the work with the hoe will not be much to thin the plants to the proper number.

We have a label which is placed on all crates of fine berries that has proved to be a great advantage in securing a good trade for our berries. It is a guarantee for high color, fine flavor, and for honestly packed fruit.—A. D. STEVENS in *The Strawberry*.

Poisoning Cut-Worms.

Further experiments in poisoning cut-worms, which have been working on wheat and alfalfa, have shown the following mixture to be superior to spraying with Paris green, as formerly recommended:

Thoroughly mix while dry, one pound of Paris green and fifty pounds of wheat bran, make moist, but not sloppy, by adding water in which a quart of cheap molasses has been dissolved. Place this mixture in spoonful piles where the worms are working. It attracts the worms from the wheat and oats. It is also good grass-hopper poison.

In reading farm papers, I occasionally see the question, "what will stop hens from eating eggs?" and the answers are nearly always try dark nests, with sometimes plans and specifications for the same. If this fails, cutting off the head is suggested.

Here is a sure cure: About one pint of vinegar to a gallon of mash or damp chop mixed and fed, two or three feeds of this will cure the worst egg-eating Biddy on record.

—L. S. BISSERVAIN, Man. DAVID BASKERVILLE.

POULTRY

Constructing a Brooder

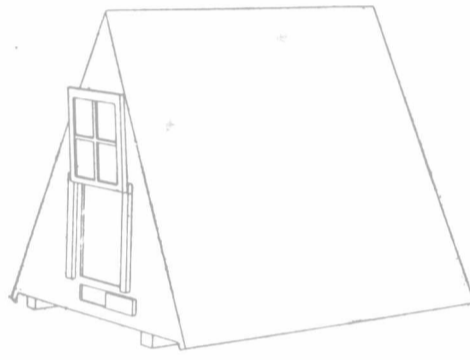
Would you publish a plan of a brooder to hold about fifty chicks that is easily home made? Perhaps some of your correspondents could furnish a description.

Man.

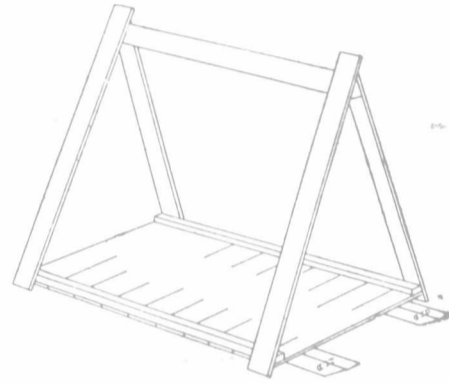
G. J. R.

The illustrations we show herewith were furnished us by F. C. Elford, late of the poultry division, Ottawa. The description is also Mr. Elford's.

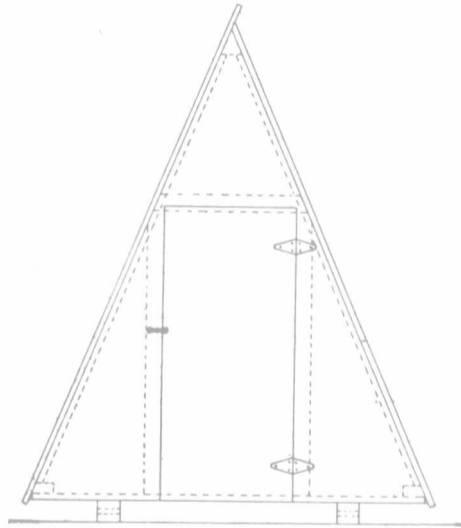
The brooder is warmed by means of a lamp; the fumes of the lamp are not permitted to enter the chick compartment. Warm fresh air continually flows into the brooder and ventilates it. The management of the brooder is simple. It should be placed in a movable house, or in a vacant room or pen. It is not intended for outdoor use. The brooder can be satisfactorily constructed at home; the heater and lamp can be made by any tinsmith; the cost of the complete brooder is small.



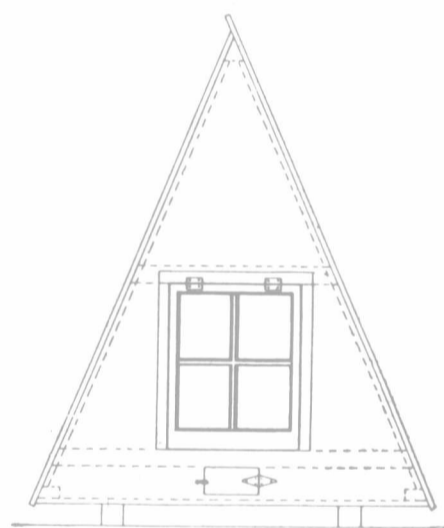
GENERAL VIEW



FRAME AND FLOOR.



REAR VIEW



FRONT VIEW.

Box.—The box that forms the brooder is 34 inches square and 8 inches deep, inside measurement. It is made of 3/4-inch lumber, planed on both sides. A 5x10 inch chick door should be sawed in one of the sides of the box; the chick door should be hinged at the top. The floor is 3/4-inch matched lumber. At center of the floor a round hole (diameter 6 1/2 inches) should be sawed. The heater is placed in this opening, and rests on a galvanized-iron rim (inside diameter 5 1/2 inches.) Four legs, 7/8x2 inch, should be attached to the box; they should project 6 1/2 inches below it. The roof is a light wooden frame, covered on both sides with heavy cotton. It should fit inside the box level with the top, and be supported on 1/2-inch cleats. The roof frame is 34 inches square and one inch deep, outside dimensions. A 2-inch hole is required in the cotton for the upper smoke pipe of the heater.

Run.—The run is 2x3 feet. It should be hinged to the front of the brooder on a level with the brooder floor. A three-section hinged frame, 6 inches high, should be placed around the outside of the run to confine the chicks for the first few days. The floor of the run can then be lowered to the ground, and will form a runway into the brooder.

Lamp.—Dimensions: diameter of the oil fount, 7 1/2 inches; depth, 2 inches; total height of the lamp (including chimney), 8 inches. There should be a small handle on the oil fount; and a screw cap

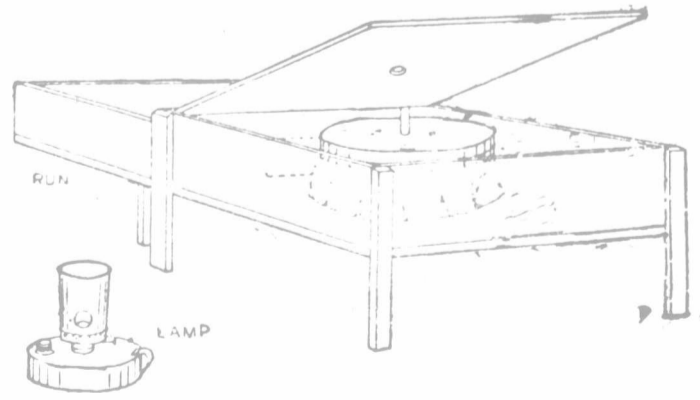
for filling with oil. A large-size burner can be used, or a special water-cooled burner. The burner screws into an ordinary lamp collar, soldered to the oil fount. The iron chimney is about 5 inches high; the diameter of the top chimney is 2 1/2 inches; the bottom diameter is 3 inches. A 1 1/2-inch hole should be punched in the chimney, and covered inside with mica, in order to see the flame. The top of the chimney is placed over the lower smoke pipe.

Heater.—The heater is complete in itself, and can be successfully operated in a box of any size. No separate hover is required, and the chicks are continually supplied with warmed fresh air. In cleaning the brooder, if the heater and lamp are removed, and a pan is placed beneath the hole in the floor of brooder, the litter can be caught and removed in the pan.

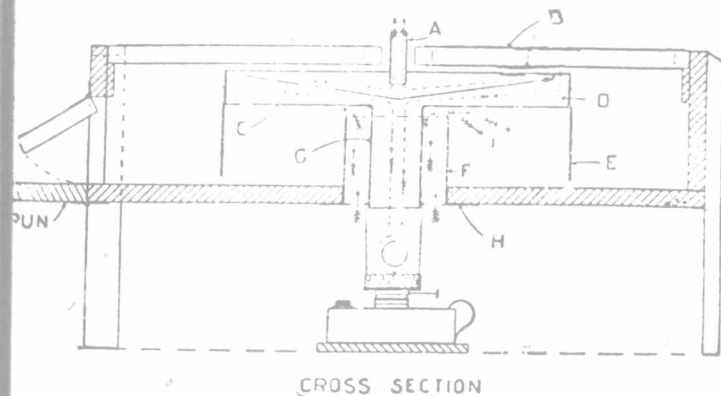
The heater is made of galvanized iron, with the exception of the heat-reflector. This should be cut from bright tin. The dimensions of the different parts of the heater are as follows: Lower smoke pipe, diameter 3 inches, length 5 1/2 inches; fresh-air chamber, diameter 6 inches, length 5 inches. The fresh-air chamber is attached to the smoke pipe at the bottom. In the floor of the fresh-air chamber 1/2-inch holes should be punched for the ingress of fresh air.

The fresh-air chamber is open at the top. Heating chamber, diameter 20 inches, depth 2 inches. A heat-reflector (inverted cone) is placed in the heating chamber. The diameter of the cone is 18 inches, depth 1 1/4 inches. The upper edge of the cone is 1/4 inch below the top of the heating chamber. The apex of the cone is 1/2 inch above the bottom of the heating chamber. The cone is riveted to the heating chamber by three clips at the top. The upper and lower surfaces of the heating chamber should be rigid; they can be stayed to the cone, or held by two wire nails driven through the chamber and soldered.

Upper smoke pipe.—Diameter 1 inch, length,



LAMP

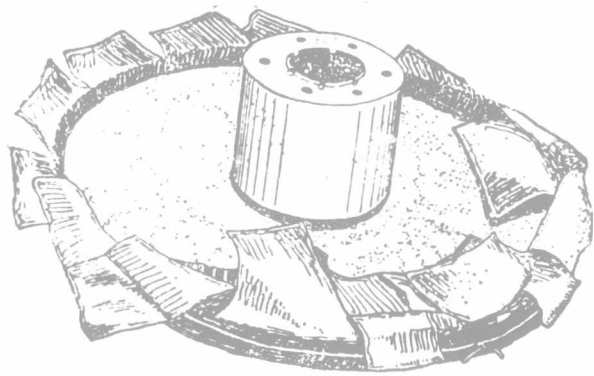


CROSS SECTION

4 inches. The upper smoke pipe should be soldered $\frac{1}{2}$ inch inside the heating chamber.

To complete the heater, two strips of flannel may be placed around the outside of the heating chamber, and tied with a cord to it. The flannel strips should extend four inches below the heater. They reach to within one inch of the floor of the brooder, and form a warm hover to the chicks. The strips should be cut every four inches, and alternately, so as to prevent the escape of heat.

The foregoing illustrations show how the colony houses are constructed. The floor is 6 feet by 8 feet, and the sides are 8 feet high. The material used depends on what the builder may have convenient. The ordinary pine siding, dressed, gives good results. If four pairs of small rafters 2 in. by 2 in. by 8 feet, are erected, half-inch lapping may be put on horizontally.



HEATER - VIEW FROM BELOW

In each house one brooder is placed. The house is bright and cheerful during the day, and when the chicks cannot be allowed outside they scratch for grain among the letter on the floor. The house will last for years. One house and brooder will rear 75 chicks to marketable age. The brooder can be removed from the house when the chicks are six or eight weeks old, and used for a later hatch.

The Preservation of Eggs.

Frank T. Shutt, chemist, Dominion Experimental Farms, writes: "For eight successive seasons experiments have been conducted in egg preservation by means of various fluids, formulae of which had been collated from many sources. Three years ago we concluded that of the large number of solutions and chemicals under trial, two only, viz., lime water and sodium silicate (water glass) were worthy of further investigation and we also stated at that time that these two preservatives lime water was from every point of view the more satisfactory. The examination of the eggs preserved in 1905 furnishes still further evidence in favor of lime water. The salient points in this last test may be given as follows:

"Thirteen months ago (April 1905) non-fertilized and fertilized eggs were put (A) in lime water and (B) in five per cent. solution of water glass, the containers being stoppered bottles. These were kept throughout the whole period in the laboratory, at temperatures varying possibly between 65°F. and 75°F. The eggs were examined May 1st, 1906.

LIME-WATER NON-FERTILIZED EGGS.

"The white compared with that of freshly laid eggs, was very faintly tinged with yellow and somewhat more limpid. The yolk was globular and of normal appearance. There was no adhesion of yolk to the side of the shell and no mixing of yolk with white in cracking the egg preparatory to poaching. Every egg opened was sound and usable. Several of these eggs were poached and not one of these developed any markedly unpleasant odor or taste, though the pleasant flavor of the new-laid egg was not present. In the opinion of some examining the

poached eggs, the flavor was pronounced as "slightly stale or limey".

LIME-WATER FERTILIZED EGGS.

"The tinging of the white was somewhat more pronounced than in the preceding. Yolk, globular and of good color, no marked odor. Though all the eggs examined were sound and usable, they were distinctly inferior, both before and after poaching, to the non-fertilized eggs in the same preservative.

SODIUM SILICATE (WATER GLASS) NON-FERTILIZED and FERTILIZED EGGS.

"The white of these eggs was of a distinct pinkish-red color; the yolk thin, discolored and degraded. On cracking the egg, preparatory to poaching, it was found impossible to prevent the mixing of the white and yolk. From 50% to 70% of the eggs examined might possibly be used for cooking purposes; certainly 30% were thoroughly bad and totally unfit for use as food in any form. The slightly alkaline taste and odor and the distinctly disagreeable appearance of even the best of these eggs, would entirely prevent their use on the table. No difference of any moment could be observed between the fertilized and non-fertilized eggs in this preservative."

DAIRYING

Creamery Man's Ten Commandments.

1. Thou shalt not slumber late in the morning, but shalt rise early and deliver thy cream to the factory, for he that goeth late causeth the buttermaker to use profane language.
2. Thou shalt not cast off all the dirt thou canst brush off the cow into the milk pail.
3. Thou shalt not take any cream for thy tea or coffee, for when thou gettest thy dividends one shall say to another, "Why taketh it more milk here for a pound of butter than at any other creamery?" Then shalt the buttermaker arise and hold thee up to ridicule with the Babcock rotary test.
4. Thou shalt not mix water with thy cream, thou nor thy man servant nor thy hired girl, for so surely as thou doest this thing thy name shall be Dennis, over the length and breadth of the whole province.
5. Thou shalt not feed thy cows too much potatoes, onions, horseradish, mustard, or French weed, for these things, though they may be as cheap as all outdoors, cause the buttermaker to gnash his teeth exceedingly, and the butter eater to buy his butter somewhere else.
6. Thou shalt not set thy can of night's cream in the cellar with the cover off in order to use it as a trap to catch rats and mice therein, neither in the woodshed as a temptation to thy neighbor's cat.
7. Thou shalt not carry away more cream than thy share, lest someone will say concerning thee: "For a wonder, one hog carrieth food for another."
8. Thou shalt not use unclean cans, but shalt cause thy cans to be washed every day, for a filthy can is an abomination in the buttermaker's sight, and he will visit wrath upon him that sendeth it.
9. Thou shalt not trouble the buttermaker saying: "When shall I receive my pay?" for verily I say unto you, he knoweth not nor careth a little bit.
10. Thou shalt say unto another, "Lo, behold, have not these cream handlers a soft snap? They receive much pay and work not very hard at all." Verily I say unto you, this is a whopper. They rise early and toil much, and peradventure the board of directors refuseth to buy another separator, they will be obliged to toil Sunday morning, when other people are fanning themselves within the gates of the synagogue.

The udder consists of two parallel glands lying longitudinally with the body of the cow, and supported by strong muscles. Its interior is composed of tissue interlaced with, and sustained by, ligaments depending from the body. The veins, milk ducts, and glands are interwoven in a wonderful system. Within the gland tissues are the milk cells in which the fat and other elements composing milk are collected and combined. Albumen, fat, casein, water, ash, etc., are here intermingled, stored in little sacks and, at milking, excreted as milk. The cells which contain the milk are broken down at each milking. Every observer has noticed that a cow's udder will fill one-third in the fifteen minutes prior to milking. He has seen a pail filled with milk from an udder which could have been placed in a bowl, milk and all, at the commencement of milking. How milk is secreted is best expressed by an old adage: "Milk is secreted in the udder, and milk is secreted in the udder."

FIELD NOTES

A Cheap Power Fuel.

The American Senate has been considering a long-deferred bill, finally passed by the House of Representatives, to remove the internal revenue tax from denatured alcohol, i. e., alcohol which has been rendered undrinkable by the addition of some liquid, such as the pungent and poisonous wood alcohol. Great expectations are based upon the probable effect of tax-free alcohol in cheapening fuel, light and power. One gallon of alcohol will give as much light as two gallons of kerosene in an ordinary lamp, and, the cost being about the same per gallon, its use would cut in two the expense of lighting a farmhouse. Besides this, it can be used instead of gasoline in small motors, such as are employed to run light machinery on the farms and in shops. There are over 5,000 of these alcohol engines now used in Germany. Alcohol is much less explosive than gasoline; its vapor does not take fire so readily, and the burning alcohol can be put out with water, while a gasoline fire cannot. Besides being useful for lighting, heating and power, cheap alcohol would be a great advantage to many manufactures, such as hats, varnishes, smokeless powder, photographic materials, celluloid, transparent soap, and the like. Probable sources of cheap alcohol include spoiled corn and beet-sugar molasses, cheap molasses from the West Indies, and lately it has been suggested that unsalable honey, partially fermented, could be turned to good account by conversion into denatured alcohol. Moderate estimates place the probable selling price of untaxed alcohol at from 15 to 25 cents a gallon. Hitherto its cost to the consumer has been increased by an excise tax amounting to about a thousand per cent. ad valorem. The tax was first imposed in the United States in 1862, to raise money to carry on the Civil War, but has since been repeatedly increased, so that while a gallon of alcohol can be made from 20 to 25 cents, the manufacturer has to pay the Government \$2.08 if he sells or uses it. The only exception to this is that alcohol used to fortify light wines, making them more intoxicant, is not taxed. Last year the tax was remitted on 3,500,000 gallons of alcohol used for this purpose. The subject was very thoroughly investigated by the joint committee of the Senate and House of Representatives of 1896, while a mass of reliable information is contained in the British Parliamentary Report of 1904, and in the evidence recently taken by the Ways and Means Committee of the House at Washington. The bill, however, has met stubborn opposition in the person of Senator Nelson W. Aldrich, chairman of the Senate's Finance Committee, which now has the bill in charge. Senator Aldrich is father-in-law of John Rockefeller, Jr., and is himself interested in Standard Oil. Though there is no limit to this session of Congress, except what it chooses to set, he says it is too late for any action "based upon wise principles," and, on account of "faulty" work done in the House of Representatives, he finds it necessary to have extensive hearings on the bill. Of course, the main "principle" which worries the venerable statesman is the effect of cheap alcohol on the prices charged by the Standard Oil Company for coal oil and gasoline. One other "interest," probably of much less concern to him, is the industry of manufacturing methylalcohol, or wood alcohol, of which 7,500,000 gallons a year are now produced. As most of our readers are aware, there are thousands of alcohols possible and hundreds known to the chemists, who give them such names as methyl (wood alcohol), ethyl, propyl, butyl, etc. Most people are acquainted with but two: ethyl alcohol, made from fruit, grain, etc., which forms the intoxicating element of wine and whiskey, and methyl alcohol, made by the destructive distillation of wood. The latter is entirely unpotable, and therefore is not taxed. It is used for many purposes in the arts, and its production has become a great industry, owing to the prohibitive tax on its rival. On behalf of this industry, it is suggested that, for some years at least, the English standard of 10 per cent. wood alcohol be required as a denaturant, instead of the two and a half per cent. used in Germany. It is not expected that much danger will result from the general use of denatured alcohol. A few persons may try to drink it, but, as one magazine points out, they will be those dipsomaniacs who now kill themselves by drinking red ink, perfumery and liniment. Removal of the tax on denatured alcohol has been trifled with for years, but the demand is now stronger than ever, and the bill will not be so easily shelved as formerly. Meanwhile, American farmers are being urged to write their Senators, demanding to know which side of the fence they are on, the farmer's of the Standard Oil's. It is a little way they have on the "other side" of getting their individual representatives on record, and whipping their courage up, if need be, to the point of action.

"The crop of potatoes will usually increase in proportion to the number of times the potatoes are cultivated during the growing season," says W. T. Macoun, of the Experimental Farm, Ottawa, in his bulletin on potato culture. "There was found to be an increase of 40 bushels per acre in a crop cultivated six times over those cultivated three times."

Notes.

Thomas Young, crown timber inspector, died at Dauphin, Man.

J. H. Mac Eachern was elected first mayor of Pincher Creek, Alta.

W. F. Puffer shipped from Ponoka, Alta., to Vancouver and Montreal 243 head of cattle valued at \$12,200 during one week in May.

The *Victoria Colonist* states that a special exhibit at the big fair in Winnipeg will represent Victoria. There had previously been some dissatisfaction expressed at the small attention devoted to Victoria district. To remedy this, a splendid collection of products will be sent to Winnipeg, with a competent man in charge. R. M. Palmer has kindly consented to assist in this work.

The Saskatchewan department of education announces that the annual departmental examinations for standards 6, 7, and 8, will be held at Yorkton, Moosomin, Wapella, Whitewood, Grenfell, Indian Head, Qu'Appelle, Regina, Arcola, Saskatoon, Prince Albert, Carnduff, Oxbow, Weyburn, Moose Jaw and Maple Creek, commencing on Saturday, June 30.

Events of the World.

CANADIAN.

Rev. Dr. Falconer of Pictou, N.S. was elected moderator of the general assembly of the Presbyterian church now in session in London, Ont.

Plans for the electrifying of one hundred and thirty-seven miles of the Temiskaming Railroad are being considered. The cost will be a million dollars.

There have been changes in the Dominion cabinet. Hon. Chas Fitzpatrick becomes Chief Justice of the Supreme Court, Mr. Aylesworth becomes Minister of Justice and Mr. Lemieux, Postmaster-General.

BRITISH AND FOREIGN.

San Francisco was again shaken by earthquake on June 5th, but no damage is reported.

A cyclone swept over a large area in northern Minnesota destroying property in many towns and killing many people.

Three Russian admirals and several naval officers will be tried by court-martial for surrendering to the Japanese in the naval battle in the Sea of Japan.

The director of the Culbena Hospital at Constantinople is reported to have discovered a new method for the prevention and cure of leprosy.

A man, who has been identified as the occupant of the room from which the bomb was thrown during the Spanish royal wedding festivities, committed suicide to escape arrest.

The exposure of the methods employed by the meat packers of the United States has resulted in a lower degree of respect for American business methods in Great Britain.

Alfred Mosely has outlined a plan by which five hundred British teachers are to be sent to America between November and March to study the educational systems of this continent.

Now is a Convenient Time to Overhaul Buildings.

Spring cleaning should be done in the dairy and cow stables and horse stables, not necessarily for the removal of an excessive amount of dirt, but merely follow an observance that is put into practice in all well-regulated dwellings. It is a time of brightness and sweetness in the open air, and the desire to have a correspondency indoors is most fitting. The cleaning consists in making things more clean, or bright. All protectors put up to exclude cold draughts in winter should be removed. The windows should be made to open easily; but the glass should be washed over with a paint-like mixture of whiting and butter milk to tone down the fierce sun rays in the stables. The most ample ventilation must be provided for. Fresh air should be admitted everywhere. Paint is a most objectionable thing in the dairy. Fancy colored washes are not much better, but fresh limewash is sanitary in the extreme. It is clean and wholesome, an excellent disinfectant, and an insect killer. White lime should be used. It should be quite fresh, and capable of bubbling and boiling when put in a bucket of water. If one pound of lard is added to each ten pounds of lime it will make the lime adhere long and closely. Every inch of wall should be brushed over. Do not mix up more than can be put on each day. The dairy where churning is done and butter made up, should be included in this lime washing as well as stables and separator room. In limewashing in the cow stables, not only the walls, but all the woodwork, posts, divisions, outsides of mangers, and such like should all be colored. If any surfaces have had no lime on previously, give one coat, then in a day or two give another, when a durable dressing will be attached.

ed. Wash the stalls, floors, etc., out, scrub them hard, and there will be a satisfaction experienced which points clearly that if it is possible to have the cows in the height of good health and their produce sweet and pure beyond a flaw from absolute cleanliness, there can be no room for fault-finding or insinuation.

To See Plants Growing.

The scientists in the Department of Agriculture are preparing to match in a practical way, by a new application of "moving-picture" photographic apparatus, the miracle of the Hindu fakir who plants a seed, and causes the tree, which springs from it, to grow and come to maturity before the eyes of spectators. Professor Willett N. Hays, Assistant Secretary of Agriculture, is preparing a series of unique stereopticon views with the idea that, in the near future, an "education train" shall be sent out to tour the country, to tell by "moving pictures" and lectures what the Government is doing for the farmers.

To the human eye, plants are motionless. Their life processes are so gradual that we observe the results, but not the action. Yet this action, this growth, can be reproduced by "moving pictures." If a succession of pictures of a quick-growing plant be taken at intervals—say, of one every hour—and are then run through a machine which throws them upon a screen at the rapid rate of sixteen or more to the second, the plant photographed seems to be growing before one's eyes.

In two or three minutes the machine will throw on the screen the life history of a plant which may require many weeks to mature. A cow-pea, for example, is one of the most rapid growers of our latitude. Yet, after a pea is planted in a pot of earth, several days elapse before there is any sign of life. This interval is represented in the moving-picture exhibition by several seconds. Then the first double-leaved shoot presses out of the ground. Two or three more days pass before these two leaves have shaken off their protecting envelope, and spread out. In the moving picture, a couple of seconds suffice to bring them to their full development. Then a third leaf is seen taking form between the other two. This spreads and grows before the eyes of the astonished spectator, followed by a fourth, a fifth, a stalk, increasing in girth and height, branches, more leaves and flowers. These are seen to fall, and in their places the tiny seed pods take shape and grow. These ripen and are picked; the plant dries up and dies. It has all happened—all the changes of a season—in three minutes.

Considerable ingenuity is required to get the pictures to show this process. The plant whose picture is taken must be in a greenhouse, where it will not be subject to the disturbances of wind or other causes. An arc-light burns day and night to furnish light for the exposures. Finally, the moving-picture apparatus is connected with the mechanism of a clock in such manner that a new picture is taken every hour. Thus twenty-four pictures record the history of the day's growth.

There is a general demand in all farming communities for more information about plant breeding. Accordingly, Professor Hays has had the moving-picture camera turned upon the work at the Minnesota Experiment Station, where his assistants are carrying on the work he inaugurated in breeding new varieties of wheat and flax. The views show the men dropping seed into the little checker-board test plots; the test plots in bearing; the process of reaping the test plots; the special miniature threshing machine at work; the process of emasculating the blossom of the wheat; the men in the act of fertilizing one flower with the pollen of another variety; the method of tying and labelling; and, finally, the results obtained. These views will, with others, be used to illustrate the lectures delivered from the "education train" this summer.—*World's Work*.

Agricultural Press Delinquent.

EDITOR FARMER'S ADVOCATE:

I am a reader of the *FARMER'S ADVOCATE* and like your paper, but lately my mind is undergoing a change. May be it is because I do not understand certain things. Most of the agricultural papers, and especially the *FARMER'S ADVOCATE*, have done a lot of good in giving advice to farmers on how to grow good crops, but never give us a word of advice on how to get profitable prices for our produce. Now there has been a society organized among the farmers called the Society of Equity which I think is the best society ever organized, but not a word of praise from the agricultural press, but rather ridicule of the idea that the farmer should set a price on farm produce. I notice a communication from Anti-Trust in the *ADVOCATE* of May 9 where he tries to make out that it is criminal for the farmers to ask \$1.00 for wheat. Do you think that it is wrong for them (the farmers) to combine and set their price on what they create or raise? We know that when the farmers are prosperous all the country will be prosperous. I do not see why the farmers cannot combine as well as all other industries. Take the lumber combine, the worst the farmers have to contend with, they raised the price of rough lumber \$5.00 per thousand the last three months. I saw a letter from head quarters threatening a fine of \$50 on any local dealer who would sell below their set prices.

Now, Mr. Editor, I think that it is time the agricultural papers took up our cause more fully, for they

have to depend for their existence upon the agricultural class. The Society of Equity is growing fast in southern Alberta and I believe that it will not be long until it is organized in every school district in the province.

Alberta. M. R. M.
(See editorial comment in this issue.—Ed.)

Stooling Value of Cereals.

In this country we have been paying much attention to the stooling ability of wheat plants. We have taken it for granted that the more a wheat plant stoolled, the better it was and the greater would be the crop of wheat produced. Investigation however shows that there is a limit to the stooling habit, so far as the wheat crop is concerned, and that when it is carried beyond a certain point it lessens the production of wheat on account of increasing the leaf surface at the expense of the grain. Some German experimenters planted a great number of wheat seeds of different varieties, giving each one all the room it could use with the intention of finding out the most desirable degree of stooling. Each seed produced at least six stems, some seeds producing as high as 22 stems. Medium-stooling plants yielded best.—*Ex.*

The Origin of Clydesdales and Shires Discussed.

EDITOR FARMER'S ADVOCATE:

Sir,—I have just been reading "Whip's" article on Shires in the last issue of your valued paper and would like to hear how he makes out that the modern Shire and the modern Clydesdale have identical desirable characteristics.

They are two different and distinct breeds and have not been crossed to such an extent as "Whip" makes out. Such noted Clydes as "Darnley" and "Prince of Wales" had a considerable infusion of Shire blood but in the case of Shires there is no record to show any admixture of Clyde blood.

Clydesdales are popularly said to have descended from a cross, made by one of the Dukes of Hamilton, between some Flemish stallions, imported into the Clyde valley many years ago, and some Lanarkshire mares, and they derive their name from the valley of the Clyde where they are chiefly found. The story of their origin is, however, denied by Mr. William Aiton who considers them an improved breed of the old Lanark race. Shires on the other hand are popularly believed to be an improvement on the old English breed of cart horses. The "Old English Black," "The Black Cart Horse," "The War Horse" and the "Great Horse" are the different names which have been used to designate this particular breed but the term "Shire" was first distinctively used in Henry VIII's time (A. D. 1509 to 1547). There is no doubt that crosses were made to improve this breed before the appearance of the Shire Stud Book in 1878, notably the improvement upon the original stock said to have been effected by one of the Earls of Chesterfield who, during his embassy to the Hague sent over six Zetland mares to his seat in Derbyshire, whence their descendants found their way into Leicestershire and were further improved by an importation of West Friesland mares, by Mr. Bakewell. The sum total of a Shire horse of the present day is his ability to draw a heavy load of anything up to six tons (of 2240 lbs.).

The Clyde on the other hand has to draw very nearly the same weight at double if not treble the speed.

I am now talking of what is expected of good specimens of these breeds in towns and cities of England.

It is no uncommon sight to see a pair of Shire geldings, yoked tandem, drawing a load of fourteen tons, to say nothing of a heavy lorry, in some of the cities of the Old Country.

These horses walk at the rate of from two to two and a half miles an hour, whilst a team of good sound Clydes will draw very nearly if not quite the same weight at from four to five miles an hour and trot home with the empty lorry, a thing which is never expected of a heavy Shire gelding.

There is no doubt that Shire breeders are now going in more for quality than formerly, but this is more apparent in the northern counties of England than in the south. Apart from conformation, which must be good in any breed, the desirable characteristic of a Shire, as I said above, is his ability to draw a heavy load; whilst the desirable characteristic of a Clyde, again apart from conformation, is his ability to draw a heavy load at a fast rate, which characteristics are certainly not the same. I am not talking at random as I have worked teams of both Shires and Clydes, both on the land and on the road, and know what I am writing about.

My ideal farm horse, however, is a Cleveland Bay, but I must candidly say, that I now keep, as far as possible, Clydes, so as to breed town geldings.

Owing to want of feather, a Cleveland Bay looks much lighter than he really is, and it is surprising the loads he will draw, especially in hilly country like their own native Yorkshire.

G. E. HEMELRYK.

The Canadian Aberdeen Angus Association.

The Canadian Aberdeen Angus Association has been incorporated under the Dominion Act respecting Live Stock Record Associations, Department of Agriculture, Ottawa.

The head office of the association is at Winnipeg, and the record office at Ottawa.

The provisional officers are as follows: President, Hon. Walter Clifford, Austin, Man.; Vice-president, John Turner, Carroll, Man.; Directors, Jas. Bowman, Guelph, Ont.; S. Martin, Rounthwaite, Man.; J. Traquair, Welwyn, Sask.; Secretary, George H. Greig, Winnipeg; Registrar, J. W. Nimmo, National Live Stock Record Office, Department of Agriculture, Ottawa.

The constitution provides for the establishment of a Canadian record, the standard of which will be quite equal to the American standard.

All animals recorded in the American book will be accepted and recorded without charge to owners resident in Canada.

Animals that were recorded in what was known as the "Dominion Polled Angus Herd Book" may be accepted after a searching investigation into their breeding and individual merit, by inspectors appointed by the association. This work is to be proceeded with, with the least possible delay.

Applications for entry should be made at once on forms which will be provided by the Record Office. All correspondence relating to the registration should be addressed to the Accountant, National Live Stock Records, Department of Agriculture, Ottawa.

The executive, at a meeting held on May 31st, decided to hold the first annual general meeting for the transaction of business and election of officers on the grounds of the Industrial Exhibition Association at Winnipeg on Thursday, July 26th, at 9 o'clock a.m., when it is hoped that a large number of those interested in the breed will assemble and thus give an additional stimulus to the breeding of the "Doddie" in Canada.

Members are entitled to reduced rates for registration. The annual membership fee is \$2, payable to the secretary.

A Formula For White Oils.

The Old Country horseman is a great lover of embrocations often termed 'white oils,' the following will be found acceptable:

White oils are made in many ways, but camphor is not soluble except in alcohol, ether, or chloroform, and separates again if first dissolved in alcohol, and then mixed with watery things. The following is a useful embrocation, which can be made for a few pence, if you follow the directions:—Olive oil, 2 ounces; three hen's eggs (whip together and shake in a pint bottle); oil of turpentine, 2 ounces (add slowly and shake well); soft soap, 1 ounce; acetic acid, 2 drachms; water, 1½ ounces; methylated spirit, 2 ounces.

Dissolve the soap in the spirit and water with the aid of a pestle and mortar, and add the acid. Finally add this mixture to the contents of the bottle, little by little, with much agitation, and a nice soft emulsion results. Any multiple of the ingredients may be used according to the amount you require.

The Bacon Hog Making Headway in United States.

Time and again the lard hog advocates have predicted that the invasion of the bacon hog into the States would be an unsatisfactory one to bacon men, in this connection the remarks of the *Gazette* will be interesting, as relating Chicago opinion.

"Old-timers on the hog market who recall the days when light hogs sold at a 25 to 50 per cent. discount under medium and heavy weights are commenting on the fact that for a year past the stuff bacon buyers need has been either on a parity with other grades or selling at a premium. The proportion of hogs of bacon type in the daily supply at Chicago and other primary receiving points is small. An ideal bacon hog weighs 150 to 190 pounds and is rangy in shape as contrasted with the fat chunky butcher pig which is also in the light-hog class. The rangy animal is the one bacon buyers are after and the fact that it is not present in market circles in sufficiently strong force to satisfy demand explains the fact that light and butcher hogs are selling at a parity with every prospect that the former will enjoy a premium during the summer months as it did last year.

Bacon curers have written much on the description of the hog they want. They are renewing that campaign. It is to some extent justified by a wide export outlet for American bacon to which fact the popularity of the light hog in market circles is also attributable. But this the grower is inclined to regard as an abnormal demand due in part to swine plague in Europe. That he is not devoting his attention in the sphere of breeding to producing an ideal bacon hog is a statement not open to dispute. The average-grower detects no more profit in a light than in an extreme heavy hog, his ideal is the butcher weight of 200 to 250 pounds. That is the kind he will endeavor to produce until the bacon curer inspires him to effort in another direction by paying a premium for the animal that yields meat with the desired streak of lean and streak of fat.

There is probably no better authority on the American bacon trade than Chas. Goepper, head buyer for the National Packing Co., whose special task on the Chicago market daily is the purchase of a drove of "assorted light" that goes to the Anglo-American bacon curing establishment. Mr. Goepper regards a premium as essential to insuring a supply of hogs of

purely bacon type. 'Hog growers as a rule start in to make full weight hogs,' he said. 'That being their intention it is logical to assume that but for certain exigencies no light stuff would be marketed. Conditions that send hogs weighing under 200 pounds to the shambles are an outbreak of disease in a neighborhood or fear of it, excessive cost of feed or fear of a decline in prices in the near future. Whenever we get a heavy supply of underweight stuff or pigs it is an assurance that one of these agencies is at work. Disease always starts them. Corn selling above a parity with hogs has a similar effect, and prediction that the bottom will fall out of the market at an early date induces timorous holders to liquidate. Eliminate these factors and bacon material would be a scarce article. As it is, light hogs have comprised such a small proportion of the run for a long time past that they sell as well as anything else on the list. That the most of the bacon made in the United States is too fat is admitted. Its popularity abroad would be enhanced if the right kind of hog could be secured. Years ago when the Fowlers were using singed hogs for bacon for the British market I have seen them sort over a drove of 5,000 to secure 500 that could be used for that purpose. At present such stuff could not be secured at any price.'

Mr. Goepper does not regard a substantial premium on bacon hogs in the near future as probable, but as within the range of possibility. 'No other article in the list of hog product has met such an increase in consumption as bacon in recent years,' he said. 'It is a popular meat and growing more so daily. As producing the ideal bacon hog is a matter of combined breeding and feeding most growers will continue in present paths until an inducement is offered to make a change. If bacon hogs were worth 10 cents per hundred all the year round in excess of other weights breeders would soon take advantage of the fact. They are not accustomed to them as a rule and hog growers are always conservative. When corn can be converted into pork at a profit shipping light weights to market seems to the average grower like throwing money away, and even the so-called bacon hog loses its ideal condition when surfeited with corn. For the present the American bacon manufacturer will experience the necessity of making the best use of what material is available and be thankful he can get it.'

Our readers will also remember the circular sent out by Swift's a short time ago on this matter, which the opinion seems to be that the demand for bacon hogs is an increasing one, which should cause our Yorkshire, Berkshire and Tamworth breeders to take heart.

Flax Fibre For Twine.

There is a good prospect that flax fibre is to take the place of sisal and manila in the manufacture of binding twine. One twine company is now negotiating with farmers throughout the flax-growing district, with a view of buying this year's flax crop in the bundle. They have spent some years experimenting with flax as a material for binding twine, and claim to have perfected a process which is now in operation that gives results which are entirely satisfactory. They also claim they can produce a binding twine that is in every way equal to sisal or standard twine, and at a much lower price. As running the straw through the threshing machine destroys it for making first-class twine they are contracting to buy it in the bundle. Flax for this purpose should not be less than twelve inches in length from the butts to the lowest branches. It should be reasonably free from weeds, and should be cut with a self-binder as close to the ground as possible, thereby giving it the greatest length of fibre. The instructions to the farmers who propose to grow flax for fibre are to carefully shock, and leave it in the field until it is well cured. When sufficiently dry for baling or for stacking, it will be delivered in bundles at the nearest railroad station, where it will be received and paid for according to its quality. The twine manufacturers will buy the entire crop. They can only use the straw when it has been kept straight.—*The Farmer*, St. Paul, Minn.

The Eastern View of Jim Hill's Scheme.

James J. Hill, the Canadian-American magnate of the Great Northern Railway System, threatens to lay a band of steel between Vancouver and Winnipeg, and is already making good by energetic preliminary action. Speculation is rife regarding his ultimate intentions. At first he was credited with a possibly vainglorious ambition to own the fourth Canadian transcontinental railway. Then it was hinted that rivalry and retaliation against the C.P.R. was the moving influence. This suspicion obtained credence from the character of the situation. The Great Northern trunk traverses the northern part of the Western States, and from it parallel spur lines run north-westwardly to the boundary. The C.P.R.'s main theatre is the Canadian West, but of late years it has been doing a large business in transportation of American immigrants, and also of merchandise on the south-eastern branch known as the "Soo" line. Another point, also, it has been dipping down into the preservation, checking and counter-checking in the way of traffic getting, till rumor has it that Mr. Hill has become nettled, and is trying to checkmate his rival with a bluff. While no doubt this figure is an element in the situation, we prefer the more satisfactory presumption that Mr. Hill has

somewhat tardily awakened to the possibilities of the Canadian West, and desires to get a finger in our pie. So anxious is he that he offers to do the altogether Quixotic thing of building without a subsidy. This does such violence to the principles of the orthodox way of Canadian railway building that a sinister design is suspected of diverting Canadian trade to American ports. It is easy to understand why such a consummation should be unpalatable to the C.P.R. and G.T.R., which direct large volumes of traffic to Boston, Mass., and Portland, Maine, two winter ports situated a little south of the International boundary.

But out comes Mr. Hill with a repudiation of the aforesaid malign intention, a declaration that he will spend \$3,000,000 on Winnipeg terminals, and a plausible forecast that his prairie line will prove a feeder in summer of the Canadian water route. In any case, the healthy competition set up in transportation bids fair to result in great advantage to the West, and in lesser degree to the Dominion generally. Experience has been that when Americans enter the Canadian field of business they usually set the pace, and a little pacemaking in railroading promises substantial benefits, in rate reduction and improved service, to those who are at the mercy of the enfranchised corporations. It is hinted that Mr. Hill's prospective venture will not pan out as anticipated. As to that, Mr. Hill is perhaps the most responsible judge. The theory that nation-building, after the railroad company's pattern, cannot be made profitable in this northern country without subsidies, is entirely too welcome to Canadian capitalists, and even the much overworked loyalty cry will not avail to suppress a feeling of satisfaction at the advent of Hill enterprise and the Great Northern lines.—*FARMER'S ADVOCATE*, (London, Ont.)

Reasonable Suggestions Re Homestead Laws.

EDITOR *FARMER'S ADVOCATE*:

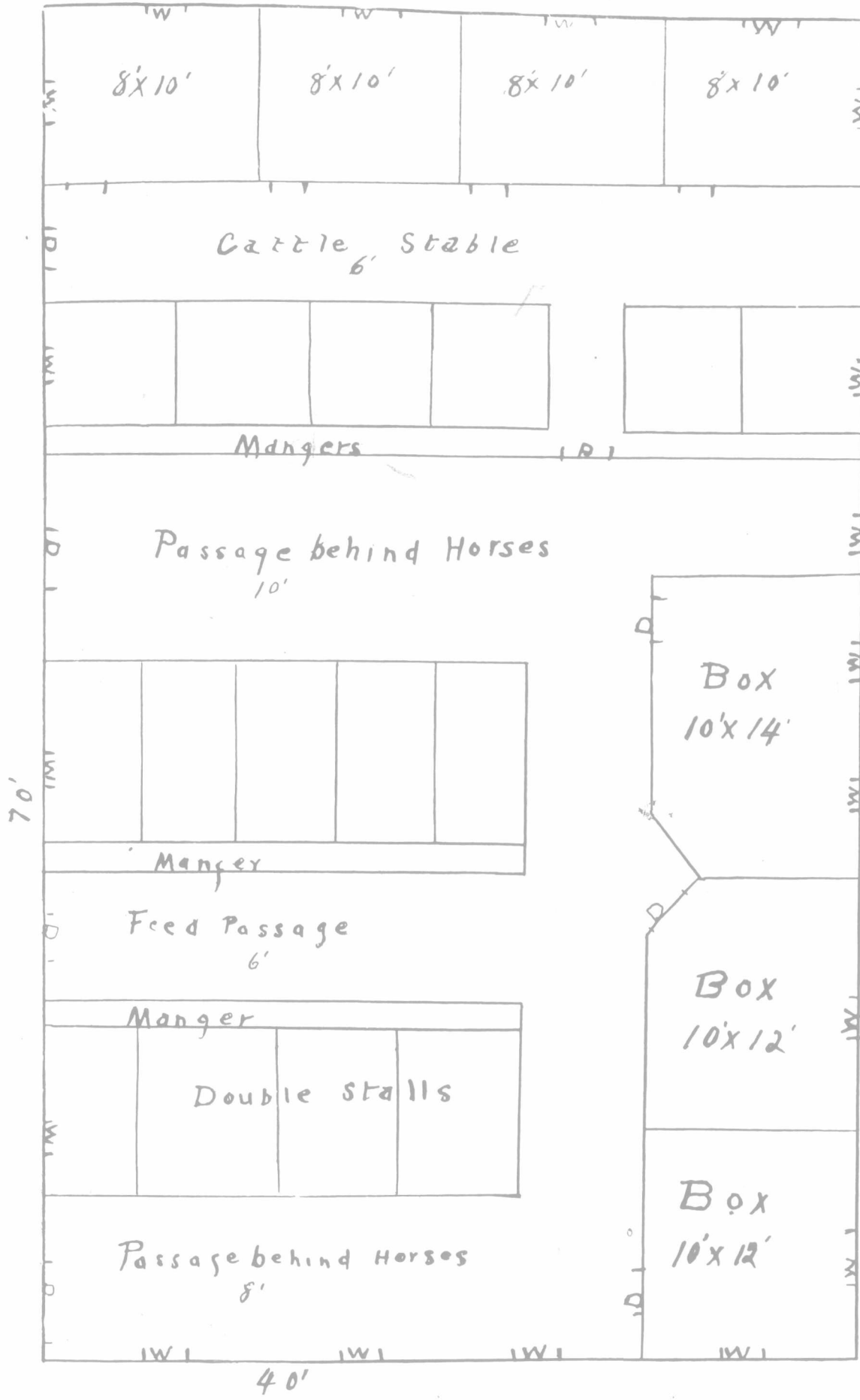
Some time ago I saw an article in your paper advocating more lenient homestead regulations, which I consider a very important question for Canadians and Britons at the present day. I was very glad to see the action the government has taken in putting a stop to the blanket system, as it is commonly called, for none suffered more than Canadians from the sharks that are known as real estate agents. But I think that there still remains a great deal of room for improvement in the regulations regarding the giving away of our public domain. If I understand the intention or the purpose of the government in giving homesteads, it is to induce a development of the country, and to this purpose every phase of the question should be carefully studied. I am well aware that this is a many-sided question and that it is always easier to find fault than to correct mistakes. While in Neepawa, Mr. Black in speaking of the Manitoba Agricultural College said that it was first for Manitobans, second for Canadians and third for aliens. Now why could not, why should not this idea be carried out with regard to our homesteads. Some say "Canada for Canadians," but is it going that way? I think not. In many cases the foreigner is preferred. I am a farmer and likely to remain a farmer, but can see no good reason why a young man entering upon a professional or mercantile business should not have a slice of free land as well as the one who chooses to follow the plow. I think that the present rigid system of compelling a man to live on his land, etc., is to a great extent a farce, or rather a great injustice to many. I know of many at present that, in order to hold their homesteads, are obliged to go on and live in a manner that is not fit for any man to live. Not being able to build and purchase teams and a proper outfit, they are practically handicapped. Now would it not be infinitely better if these men were allowed to stay where they might earn good wages and pay for two or three times the amount of breaking that is now required, say at least eighty acres, before the patent could be procured. Some may say that that is not settling up the country, but can the same not be said of the present system? Is it probable that a man will pay for eighty acres of breaking and fencing, etc., and allow it to run wild again? I think not, and as a rule there is no trouble in getting some one to work land on shares. Going about it in this way many could get their land all under cultivation before going on which would put them in shape to go on and make money at once.

Again let me say Canada first for Canadians, second for Britons and third for aliens. Hoping to hear from others in this matter and to see some immediate action taken by the government, I remain, yours truly,
T. J. W.

Ed. note.—Canadians and Britons (our correspondent evidently refers to the over-sea men and women, should be placed on the same level. The British have paid for our defences, up-to-date and practically contributed all the money for the Grand Trunk and a great deal for C.P.R. and should therefore be given equal privileges with the native born.

Barn Plan Wanted.

A correspondent asks for a barn plan suitable for about twenty horses and fifteen head of cattle, with passages convenient. He states that he wishes to build into a bank. In reply we publish a plan which should answer his purpose and also that of other



intending builders. We would advise our correspondent not to set his barn very far into the bank, as it would be hard to get in sufficient light and the bank very often tends to make the stable damp. If this barn were not set into the bank the passages behind the stalls might be opened at both ends so that a manure boat could be driven through. We are free to admit that the accompanying plan is not perfect and invite criticism of it with the object of arriving at a better one.

On May 22, Hon. W. S. Fielding, Dominion Minister of Finance, presented his budget speech, in which the following figures were presented: The revenue for the fiscal year ending June 30, 1906, was estimated at \$79,000,000, an increase of \$7,800,000 over the year before. The ordinary expenditure was estimated at \$66,500,000, an increase for the year of \$3,180,000. The surplus of revenue over ordinary expenditure is expected to be \$12,500,000. The expenditure on capital account is computed at \$15,500,000, making the total expenditure for the year \$82,000,000. The excess of total expenditures over receipts is \$3,000,000. From this the Minister deducted an available sinking fund of \$2,200,000, leaving \$800,000 to be added to the country's debt as the result of the year's financing. The number of immigrants arriving during the last ten months was 117,585, as compared with 93,369 for the same period a year ago. Mr. Fielding computes the population of the Dominion at over 6,000,000.

As regards the tariff, it was intimated that there is no reason to expect disturbance from the intended revision next November. The only action concerning the tariff at this season is in the form of a couple of resolutions that the existing tariff provision, providing

for the exemption of beet sugar and alluvial-gold-mining machinery, be continued till December 31.

Shorthorn Sale Postponed.

Inclement weather unfortunately interfered with the sale of Shorthorn cattle advertised by Mr. Rodrick McLennan last Thursday. A fair sized crowd gathered at the farm and after waiting for the down-pour to lessen auctioneer T. C. Norris announced that the sale would be postponed for one week, June 14th. Mr. McLennan expressed his regret at the unavoidable postponement. Those present were agreeably surprised with the excellent condition in which the cattle were presented. Seldom does one see a herd of such high excellence and splendid individuality and it is doubtful if there is a breeder of Shorthorns who could look at the herd or attend the sale without purchasing. Any breeder could pick up something of which he would be proud. The sale next Thursday will follow the next day after Prairie Home's annual event and efforts will be made to transpost intending purchasers from Holmfield, Belmont and Neelands.

The Farmer's Advocate, It Would Seem, Fills the Bill!

EDITOR FARMER'S ADVOCATE:

Dear Sir:—Your "Progress Number" certainly indicates the progress being made by your paper. It certainly is up-to-date, as is each and every number. Weekly, it contributes much which is essential to successful agriculture and good citizenship.

It occupies an enviable position in the realm of Canadian journalism—treating as it does every phase of human activity.

May it ever continue to disseminate knowledge and thereby educate to an even more intelligent citizenship.

Daleford Farm. JOS. L. PARKINSON.

Some Things About Denaturated Alcohol.

Alcohol can be prepared so as to render it unfit for drinking, and its advantages as a means of producing heat, power, and light are many and varied:

1. If alcohol catches fire the flames can be extinguished readily by water, while water merely spreads the flame when put on burning gasoline.
2. Alcohol is practically odorless, while gasoline is not, as everyone knows.
3. Alcohol is perfectly safe, non-explosive, and can be cheaply manufactured.
4. It can be used for everything that gasoline is used for.
5. It will give light for the home at less cost than coal oil or electricity; the light is white and steady, and there is no staining of lamp chimneys.
6. It can be used as a substitute for coal oil for summer cooking.
7. It can be made from waste products and roughage from the farms, such as poor potatoes, apples, and grain.
8. Germany, France, Switzerland, Holland, Belgium, Italy, Russia, Sweden, Norway, Austria-Hungary, and Portugal impose no tax on alcohol for industrial purposes, and as a result the fluid is largely used in those countries for the purposes above stated.

Finding Water by Divination.

Our opinion has been asked in these columns time and again regarding the above matter, and while we endeavor to get all possible information on the subject, we confess to a steady scepticism. The *Farmer's Gazette* gives the following condensation of a lecture at the College of Science, Dublin, by Professor F. W. Barrett, F.R.S.: "Who, in introducing his remarks stated that at first sight water finding by the "so-called dowser" appeared to be a relic of ancient superstition. It had been investigated in the light of recent psycho physical research, and had its believers and unbelievers at the present day. Dowsers were by some regarded as charlatans, but by others they were held in the very highest estimation. In the South-West of England whenever owners of property desired to sink a well for water they invariably employed local men, who were called dowsers. These men were not geologists, but rude country folk, who would find out the place at which the water was to be found, and state at what depth, and whether the supply would be large or small. There appeared to be a consensus of opinion in their favor. The origin of the present day divining rod dated back to the middle of the fifteenth century. It was first used for the discovery of metalliferous lodes in the Hartz Mountains, and was not employed for water finding until the seventeenth century. Its use spread from the Continent to England; it was introduced into Cornwall in Queen Elizabeth's reign, about the year 1500, but he could find no mention of its use for water finding in England until about 150 years ago, and it was, and still is, generally used throughout Somersetshire for the purpose of locating underground water supply for comparatively shallow wells. It was, therefore, not a new art; the term "science" was restricted to systematised and correlated knowledge, and hence it was certainly not a science, whether new or old. The result of investigations led men to change from the most complete scepticism to the most complete belief. Lord Lansdowne, the late Lord Salisbury, and others asked him to undertake the investigation of the subject, and he did so, with the result that he found the literature on the subject was enormous. After making an analysis of all that had been written on the subject he found that the whole thing had been based on superstitious ideas. The dowsing or divining rod was of use simply as an index of an unconscious muscular spasm which occurred in the dowser when he was in the neighborhood of underground water, metallic ore, or any other object for which he was accustomed to search by means of the rod. Hence many dowsers did not use the rod at all, but trusted entirely to the sensations which they experienced. The next problem was to ascertain whether illusion or imposture explained these muscular spasms and sensations. Though cases of imposture and illusion doubtless existed here as elsewhere, nevertheless the observed phenomena could not be explained away in that easy manner. Further inquiry showed that the origin of this nervous stimulus was due either to (a) a sub-conscious detection of surface signs and underground water which would link the phenomena of the divining rod on to well-known psychological phenomena, or (b) it was something new to official science, something resembling what was called clairvoyance. This latter explanation appeared to him to be the most probable, and, however foreign it might be to existing scientific opinion, he believed it was justified by certain evidence which he had cited in his second report. In conclusion, he said the extent of our knowledge of nature is so small, and nature itself is so vast and so full of unexpected surprises, that, as Sir John Herschel long ago said, "the natural philosopher should hope all things not improbable, and believe all things not impossible."

The Dominion Output of Bacon Hogs.

While each of the Provinces of Canada contributes hogs to the bacon industry, from eighty to ninety per cent. of the annual pack comes from the Ontario farms. The hogs raised in Quebec up to the present time have been consumed largely within the province. An effort is now being made by the Dominion Department of Agriculture to introduce, by a system of auction sales, hogs suitable to the requirements of the export trade. In the Maritime Provinces the raising of hogs is not as extensively carried on as it should be. In fact only in the dairying sections are any produced for packing. The farmers of Prince Edward Island are doing more proportionately in this line than any of the other Atlantic provinces but the output of hogs for 1905 was considerably less than during the previous year and only a very small proportion reached the export trade. In the West there may be important developments within the next few years. Damaged wheat, cheap, coarse grains and the influx of United States farmers all point to increased hog raising and the consequent establishments of packing centres at Western points.

The production of hogs have made marked progress in Canada during the past fifteen years. In 1890 there were about 200,000 hogs marketed; in 1904 the number was fully 1,700,000. In the former year there were but two packing houses in the export trade with a weekly capacity of perhaps 3,000 hogs; in 1904 sixteen packing houses, with a capacity of at least 50,000 a week were in operation. According to the statements of the managers of these various houses at no time have these institutions been taxed to cope with the hogs offering. In fact the supply has not exceeded from 20,000 to 35,000 hogs weekly, according to the season of the year, so that conditions have favored an active competition for the hogs.

The output of the Canadian packing houses is largely exported. Eighty five per cent. of the total pack finds its way to the English market. Great Britain's weekly supply of bacon during the year comes from the various sources about as follows:—From the United States the product of about seventy thousand hogs; Denmark about thirty five thousand; Canada about thirty thousand; Ireland about ten thousand and continental Europe the product of about five thousand hogs per week.

It will thus be seen that Canadian bacon is about twenty per cent. of the total quantity imported by Great Britain. This, considering the importance of our agricultural and dairying industries, can scarcely be regarded as a satisfactory percentage. Moreover, we are scarcely holding our position in relation to other countries. Denmark has improved her position during the last five years by about forty per cent., while during that time Canadian exports have been practically stationary.

Numerous causes may be cited for the difference in the progress made in hog raising by Canada and Denmark. In the latter country a thorough system of co-operation is in progress not only in a united effort to produce hogs of only the desired weights and form, but also to keep up a regular supply throughout the year and from year to year. In Canada it is quite different. While the improvement in the quality of the hogs produced has for a number of years been very general, it has not been nearly so pronounced as it would have been with greater co-operation. Nor is the supply of hogs in Canada as regular as in Denmark either throughout the year or from season to season. Raising hogs in fair quantity when prices are high, going out of them, in whole or in part, when prices are low, too many farmers deny themselves the advantage of a good average price, and make impossible a steady inroad into the English bacon market which must have quantity—and steady quantity at that—to back it up. Such spasmodic support, now blowing hot, now cold, spells ruin to the Canadian bacon trade, because the English customer is, in the main, a conservative and consistent purchaser of one brand of bacon. If his supply falls short he seeks another more regular source of supply, and as a rule depends upon it as long as it continues to be satisfactory.

The Canadian farmer is not alone to blame for the lack of regular supply which would keep up and steadily increase if a fair price were assured throughout the year. Nor is the packer at all times responsible for the price as in many sections there exists a troublesome middleman known as the "gentleman" drover who in some cases controls the situation. These men engage others who do the actual buying and both have their share of the profits. Then the system of "F.O.B." buying has been inaugurated which to a great extent does away with the culling of hogs which is generally done when they are delivered at the packing houses. This means that all kinds bring the same price irrespective of their suitability for the bacon trade. Another factor which must not be overlooked is the values for bacon on the British market.

In Denmark, by means of the system of co-operation, very generally in practice, the farmers run the packing houses, in fact the packing is as much their own business as the breeding and feeding. This does away with the middleman and other factors which come between the farmer and the market, interfering with the balance of trade and consuming profits which belong to the producers.

In Canada co-operative hog raising and packing received a serious blow a few years ago when a number of quite extensive farmers' packing houses were built and operated as such for only a brief period. The undertaking was so entirely overdone that there were not sufficient marketable hogs in the country to keep the plants running profitably. Competition for hogs was so keen that the prices offered were out of proportion to the market for bacon and only the old established houses could stand the strain. The farmers' plants closed up, and most, if not all, of them have been taken over by joint-stock companies or private concerns. One of the great difficulties experienced by the farmers' packing houses was the lack of loyalty by members of the co-operative movement. If a slightly increased price were offered many hogs pledged to the co-operative plants were allowed to go to the other factories and soon the spirit of co-operation gave place to competition. Whether or not the experience cited is a fair test of co-operative bacon production there is little probability of the system being repeated to any extent in the near future.

During the season of 1905 several features have retarded the extension of our bacon trade. With fair to good prices throughout the season the packing houses have not had sufficient hogs of any sort to keep their plants going at anything like their full capacity.

Another unfavorable feature of the present situation is a growing tendency on the part of farmers to market their hogs in an unfinished condition. Sometimes from lack of grain, oftener through fear of taking lower prices later, hogs are sold in such condition, or at such weights, that the whole trade suffers from a surfeit of light weight or unfinished product.

The bacon industry of Canada worth some fifteen million dollars annually, is surely worthy of the earnest support of farmers. The chief weaknesses are the irregular supply and a failure to meet the requirements of the trade by not producing the type of hog called for. The difficulty regarding supply may be overcome by a closer study of the question of cheaper production. The farmer who feeds his hogs in a close pen on an almost exclusive diet of grain for six months or longer is not going to continue to raise pork for the reason that he cannot make it profitable. He must use green crops, roots, dairy by-products and other refuse, and care for his animals in such a way that the very best returns will be received from the food given.

The most urgent need of the bacon industry is a steady persistent support begotten of the belief that year in and year out hog raising pays when pursued along right lines. If this is done there are great possibilities for the Canadian bacon. Because of distance from market and the demand for an exceedingly mild cured article, Canadian bacon has not, up to the present time, sold on even terms with the best Irish or Danish brands, which are within a couple of days of the market. However, with improved cold storage facilities on steamship and at British ports, the difference in price between Canadian and the more popular European brands may be overcome and the finest Canadian should then bring the top price paid for bacon in Britain. Our bacon occupies a position some shillings per hundred weight better than American and with its growing popularity with the English consumer, it should be the bacon of the people in just the same way that Canadian cheese is the cheese of the people of Great Britain. That it may occupy this position, however, there must be, on the part of the farmers persistent and increased raising of hogs during periods of low prices as well as high; the hogs marketed must conform to market requirements as regards type, quality and weight; there must be on the part of the packers such care in the curing and marketing of the product as will steadily build up its reputation for quality and uniformity, that its position in relation to other brands on the English market may be gradually improved. If in addition, relations of confidence are maintained between packer and farmer, through open fair dealing and intelligent co-operation in the common problem there is no reason why Canadian bacon, like Canadian cheese should not become a prime necessity to the British consumer.

BULLETIN 10. D. of A.

The Annual Grist of Sawbones.

McGill has recently sent out from her hospitable doors in Montreal the following Western men qualified to practise the healing art.—T. B. Green, Virden, Man.; D. P. Harrington, Victoria, B.C.; T. C. Mercer, Chilliwack, B.C.; Samuel Petersky, Vancouver and O. E. Rotwell, Regina. Harrington of Victoria, stood seventh in the grand aggregate.

Steps have been taken with a view to extending the medical course at McGill from the present four years to five years. At a meeting of the corporation of the university held yesterday a resolution was submitted by the medical faculty urging that this action be taken, and the corporation, after expressing approval, appointed a committee to consider ways and means. It is probable that the proposal will go into effect in the session of 1907-08. The extension of the course of study will be in line with methods adopted by leading American and foreign schools of medicine, where the four years' course have been abandoned as insufficient.

The Anchor of the Root Crop.

In the so-called root-crops there is always a primary or tap root, the storing organs of the plant, and, consequently, the special object of the cultivation. The absorbing roots are branched fibres, springing especially from the thin lower end of the tap, and spreading more or less horizontally in the ground. The two kinds of roots are—(1) the storing tap, (2) the absorbing fibres. These fibres are variously arranged on the tap—(1) in two longitudinal rows along the tap, (2) in rings around the tap. The two-rowed arrangement is quite characteristic of cruciferous roots (turnip and swede) and mangels; the ringed arrangement equally so of umbelliferæ (carrot and parsnip). The leaves are arranged as a rosette on an extremely short stem part, called "the crown of the root," although a true stem. This arrangement reduces the distance between place of production (leaf) and place of storage (root) to a minimum; most rapid communication is thus secured. The swede leaf has retained the waxy skin of its wild ancestor, a standing witness of hardy character and slow growth, as compared with cruciferous allies. As the wax disappears from the surface the plant becomes less hardy, vegetates more rapidly, and, to accomplish this, produces more leaf at the expense of the root. The order for leaf surface is—

White Turnip—Most leaf, 20 per cent by weight
Yellow Turnip—Most leaf, 20 per cent by weight.
Swede—Least leaf, 14 per cent by weight.

—McAlpine.

Bonusing Immigrants.

The Department of the Interior has made such a success of the promotion of immigration and of the work of filling the vacant lands of the west that it should be exempt from nagging and unfair criticism. It must be said, however, that the payments to the North Atlantic Trading Company for European immigrants brought to Canada brings up again the whole question of the policy of offering bonuses as an incentive to immigration. The refusal to disclose the personnel of the company makes it the more imperative that that branch of it at least should be closed down. The average immigration from Europe is not so desirable that the ordinary safeguards of government may be ignored in order to secure it. The public do not like secrecy of any kind in the transaction of public business, and if immigration cannot be secured from Europe otherwise, we should try and get along without it. Canada will recover from the shock, if Europe will.

It may have been necessary in order to get the tide of immigration flowing towards the Dominion in the past to employ extraordinary efforts. The time has arrived, and, we think, had arrived some while ago, to trust to the general attractions of the country. The Globe has stated its belief in this regard more than once, and statements have appeared from time to time that the system was about to be abandoned, but it still goes on. If any thing were needed to give it its quietus, the fact that it is necessary to work in secret in Europe in order to get immigrants should furnish the needed force. Mr. Oliver is new to his department. He is thorough, straight-forward, and courageous. His knowledge of the west is unrivalled, and we should be disposed to place great reliance on his judgment, but it will take pretty strong arguments to convince us that it is necessary at this stage to pay immigrants to come to Canada. At all events, there should be no companies with secrets operating in the field.—*The Globe*.

Remember the Seed Train.

"The April showers bring forth May flowers," as the poet says in spring, but practical men cannot fail to remember that not only flowers and leaves and grain come forth, but also weeds of every kind. These are now showing forth everywhere. Last winter we had the seed train with us. We learned then many things about the ordinary weeds of the farm. The lesson has, in part at least, been applied. Better seed has been sown. There will be less rejected grain next year if we watch from now on the growth of weeds and check them on the start.

In this country we have not the hoed crop of the East to help in keeping clean the farm. We work on such an extensive scale that the summer fallow is frequently neglected, but if we are to hold high the standard of agricultural pre-eminence we must move forward to better methods. No longer must our cultivated fields be allowed to harbor the growing weeds, nor should the garden plot and lawn become a nursery for the

improvement of weed seeds. In the early days of summer the work of destruction can be made doubly effective. Let the battle cry be: "Remember the Seed Train," and let us show by our work during the coming summer that we remember what we learned and are applying the principles taught at that time.

MARKETS

Thompson Sons & Co. say:—The last three or four days of May saw an easing off in prices in the U.S. speculative markets with a heavy drop in the May option in the Chicago market. The first day of June saw another sharp drop in all markets, and it seemed as if the decline that had taken place would bring the course of business into a steady current, free from the artificial and abrupt fluctuations caused by purely speculative operations. Those members of the trade who are more interested in the handling of the actual wheat than in gambling in it, hoped this might have been so, but the course of the U. S. markets the last two days has disappointed this hope for we again see a sharp and erratic advance in the midst of conditions calculated to depress rather than advance prices. From the 31st ult. to the 5th inst., the American markets were dull and easy without being actually depressed, and on the five days they made a decline of around 1c. The market sentiment in the U. S. markets however seems to be very nervous and inclined to the bull side, and every piece of news and gossip favorable to that side is given particular heed to, while bear influences are minimized or passed by altogether. This causes those who believe wheat is a sale rather than a purchase to be afraid to sell short freely, and when they have sold some and the market takes a bullish turn they run to cover and thus give double help to advance prices. This is what seems to have happened yesterday and to-day. There is an impression that the winter crop in the United States is not going to turn out as heavy as expected, and as there seems good grounds for the belief that the weather has not been favorable for the oats and corn crops, a good advance has taken place in Chicago on these grains, and the effect of these two factors being suddenly and strongly pushed to the front has stampeded the shorts, and encouraged the bulls and the result is a jump of 2½c. in two days in the U. S. speculative markets, although the advance over a week ago is only 1c. to 1½c. In the Winnipeg market there has been an advance of 1½c. to 1¾c. in two days and an advance of 1½c. to 1¾c. on the week. While the American markets have acted in this way there is practically no change in the European markets during the week, and export demand for the time being is at a standstill. The factor that will in the long run determine the course of wheat prices is the aggregate yield of the European and American crops, and up to the present the experience of the crops so far has been quite free from any widespread damage. Reports from the European crop continue to be favorable in the aggregate, although they do not point to anything better than a good average yield. The harvest in Southern Europe is just beginning. In America the harvesting of the winter wheat has begun in Texas, Kentucky and Tennessee, and is progressing under ideal weather, and will gradually creep northward day by day. In the spring wheat country the crop is progressing favorably and bids fair to produce a large yield. Visible stocks do not show anything other than ordinary changes for the time of year and the supplies in sight and in prospect are ample to meet prospective requirements. There seems nothing substantial therefore on which to build the expectation of higher prices in the near future. Erratic advances in the speculative market will be followed by

erratic declines, so long as nothing serious intervenes with the good crop prospects, and the trade in actual wheat will continue dull and of a hand to mouth character until the weight of the new crop asserts itself on the market. The Visible Supply decreased last week 1,152,000 bus. against a decrease of 2,323,000 bus. the previous week and a decrease of 1,092,000 bus. last year. The World's shipments were 9,968,000 bus. against 11,112,000 bus. the previous week and 12,648,000 bus. last year. The World's Visible Supply according to Bradstreets decreased 5,500,000 bus. against a decrease of 3,073,000 bus. the previous week and a decrease of 3,422,000 bus. last year. Manitoba wheat has been dull with no demand for export and trade confined mostly to speculative dealing. Consequently prices have been influenced by the advance in the U. S. markets. Splendid rains have fallen all over our Western country and crop prospects were never brighter at this date of the season. Prices to-day are 1 Nor. 81½c., 2 Nor. 78½c., 3 Nor. 75c., spot or June delivery. All prices are based on in store Fort William and Port Arthur.

MILLFEED, per ton—			
Bran	15	50	
Shorts	16	50	
CHOPPED FEED—			
Oat chop	28	00	
Barley chop	20	00	
Mixed	24	00	
OATS—No 1 white			
No. 2 white	38	½	
Feed	34		
BARLEY—Malting grades			
No. 3	42	½	
No. 4	40	½	
HAY, per ton, (cars on track			
Winnipeg)	9	00	
Loose loads	10	00	@ 12 00
BUTTER—			
Creamery bricks	20	@	22
Dairy tubs, choicest	16	@	17
Second grade, round lots	14	@	15
Fresh made prints	18		
EGGS—			
Fresh gathered, Winnipeg	16	½	@ 17
CHEESE—			
Manitoba finest	10	@	11
HOGS—The local market holds steady. Prices weighed off cars Winnipeg, are as follows:			
LIVE HOGS.—Choice 150 to 250 lbs. \$7.25; choicest 150 lbs over, \$6.75; rough 250 lbs. over, \$6.50; light, under 100 lbs., \$6.50.			
VEAL CALVES.—Choice live calves wanted and demand is good. Choice 125 to 200 lbs., 4½c.; choice 225 to 350 lbs., 3c.; dressed veal, strictly fresh, 75 to 125 lbs, 5 to 7c.; dressed veal, strictly fresh, light and heavy, 4 to 6c.			
CATTLE.—Market steady. Good demand for good cattle; poor stuff not wanted. Choice steers, 1,150 over, 4 to 4½c.; choice heifers, 1,050 over, 3½ to 4½c.; choice cows, 1,100 over, 2½c. to 3½c.; fat bulls, 1½ to 3c.			
SHEEP.—Good demand; choice 6c. to 7c.			

Things to Remember.

Edmonton Show	June 29—July 1
Inter-Western Exhibition, Calgary	July 4—6
Springfield	July 11
Elkhorn	July 11—12
Crystal City	July 17—18
Hartney	July 1
Minnedosa	July 19—20
Winnipeg Industrial	July 23—28
W. A. A. Ass'n, Brandon	July 31—Aug. 3
Prov. Exhibition, New Westminster, B. C.	Oct. 2—6

Managers of shows whose dates do not appear in our list will confer a favor on our readers by sending in the date.

The Teeth give Trouble During Colthood.

There is no period during which horses should be so carefully fed as between the ages of six months and two and a half years. This is the period when they are shedding their teeth: their gums and mouths are sore, their teeth undeveloped and weak, and they cannot masticate or digest the coarse, hard herbage; they must get stunted in growth, weak in constitution, and will never fetch a good price on the public market. Mares with foals and young stock should be hand fed during this period of the year; a little chop, a little ensilage or green food daily will do wonders, the stock thrive and flourish and the young things are better able to tackle and digest the natural grasses.—Hotham.

When the Boar is fit for Service

The young boar, if he is perfectly developed and of high quality, may be used without the slightest hesitation from the age of nine months; and we are not alone in our opinion that better stock is got by relying on a comparatively young rather than a very old boar, if his quality is of the highest.—Long.

Sir Ralph, one of J. E. Seagram's horses, established a new Canadian mile running record at the Woodbine track, Toronto. The mark is now 1.39.

The "La Parra" Ranch, Texas.

By John Ashton.

Fifty-nine miles south of Corpus Christi, Texas, on the new St. Louis, Brownsville and Mexico Railroad, is the little ten-months-old town of Sarita, named in honor of the daughter of the head of the great Kenedy Pasture Company. Five miles east from Sarita, on a slight eminence, commanding extremely picturesque view of the surrounding country, is built the homestead and headquarters of the famed "La Parra" ranch. The late Captain Kenedy, father of the present head of the enterprise, made a most judicious choice when he selected this location for a home, for the site is an ideal one. As one sits on the gallery resting after the hot drive, the soft gulf breezes are like a touch of velvet. In this sunny southern clime the ingenuity of man, in collaboration with the works of nature, has produced a home nearer to an earthly Paradise than I have ever seen before.

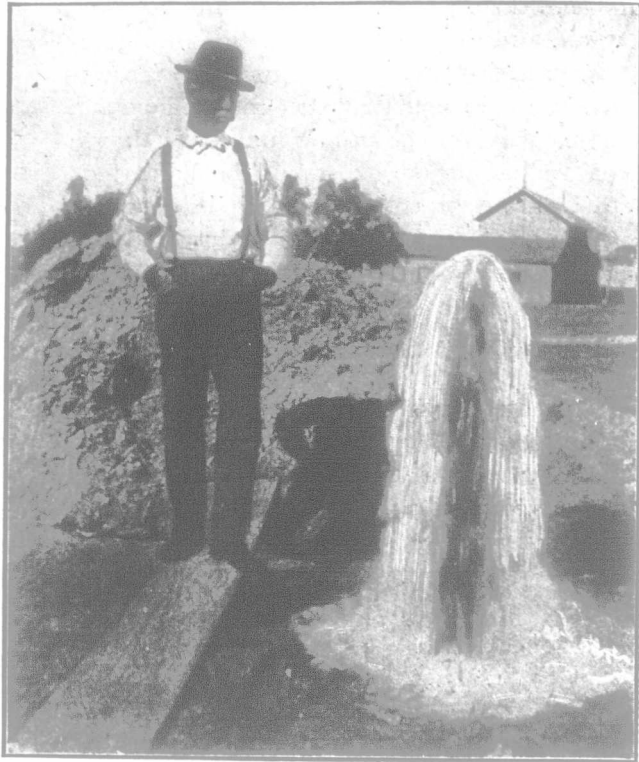
In the rear of the house are built wings joining each other at right angles, so as to form a grassy square, decked with flower-beds, reminding one of the patios, or courtyards seen in Cuba. This square is planted with large hackberry trees, ensuring a delightful coolness at all times to the surrounding galleries, from which can be seen what irrigation will do in this rich, sandy soil and sunny climate. We see the lemon tree, which produced fruit that beat all competitors at the St. Louis World's Fair (even beating California); fruit pronounced by the Government pomologists to be especially rich in citric acid—the true test of the lemon's quality. We see rows of pear trees, and persimmons loaded with fruit. The olive, fig, grape, orange, pomegranate, and even banana, grow here on the same land!

Those championship lemons at St. Louis were grown from cast-away seeds of lemons used for table purposes; in other words, from volunteer trees. Crossing an avenue planted with ash, mulberry and hackberry trees, in the middle of a paddock bordered with eucalyptus trees, and studded at intervals with young olive and lemon trees, we come to the commissary and store, from which dry goods, clothing, shoes, hardware, patent medicines, drugs, provisions and other commodities are supplied the workmen, their wives and families. The store and its immediate vicinity is thronged once a week with groups of men and boys. A short distance from the store brings us to the private electric light and ice plants of the company. Years before the new railroad was built, when the ranch was forty-five miles from the nearest station at Alice, these conveniences were installed. The ice plant has a capacity of 1,000 pounds daily. In another large building are stored thousands of dollars worth of heavy mill and iron work, hay presses, mowers, plows, etc., besides a lot of material used in well digging and other construction purposes. Next is the blacksmith and wheelwright shop, equipped in the most complete manner. When breakages occur, or other contingencies arise, repairs can be effected at once, saving much money in the course of a year. At convenient distances from the house are the barns and stables, for the private saddle and carriage horses, and finer cattle



LA PARRA RANCH HOMESTEAD. OWNED BY J. G. KENEDY, TEXAS.

The company breed all their own horses and mules, and own some splendid jacks and Standard-bred stallions and mares. In a grass paddock near by were as fine a bunch of pure-bred Hereford heifers as could be found anywhere; one or two of them tip-toppers. In a pen of five two-year-old Hereford bulls, probably the best was a \$500.00 "Improver"



TEXAS ARTESIAN WELL.

calf, to be bred to the heifers just mentioned. Mr. Kenedy attaches the greatest importance to "constitution" in a breeding bull for the range, finding that the bull with the best constitution sires calves that make the best feeders and fatten the most profitably. Another of the bulls is by Dale, and a third one is a "Corrector" calf.

On the summit of the hill, in a line with the house, is an artesian well, with a flow of 3,000 gallons a minute, supplying the purest of drinking water to the house. The surplus runs into a reservoir, stocked with fish. Over the hill we come to the iglesia, where the good padre conducts divine service once a month. In the schoolhouse about twenty boys and girls are being taught the three R's. Scattered about are the neat cottages of the laborers.

Almost all the labor is performed by Mexicans, even to the house servants, who move about as silent as Chinamen. Many of them were in the service of the late Capt. Kenedy, a goodly number being born on the ranch. No other labor in this climate could, I think, give as satisfactory results.

Everything is picturesque; four miles to the east are the glistening waters of Laguna de La Madre, separated from the open Gulf of Mexico by that narrow strip of land known as Padre Island, which stretches like a huge snake for 110 miles along the coast. At the edge of the clearing to the west and south the dark foliage of the trees contrasts vividly with the sun-browned grass; beyond the wood lies the rolling, open prairie, broken again by growths of mesquite, chapparal and live oaks, festooned with Spanish moss.



SHORTHORN GRADE COWS TAKE A FOOT BATH.

Everything about the ranch is admirably planned. Incidentally, the ranch is named after a species of long, succulent grass which was introduced here from South America. This parra grass has already spread until it covers several acres. It is very nutritious, and keeps verdant when other grasses are withered. It is cut daily and fed to the pet deer and antelopes which are kept near the house, as well as to the finer cattle.

It is a far cry from the pioneer days of the late Capt. Kenedy, when water for stock could only be depended upon from a few windmills, and from surface depressions fed by rains, and when the cattle were boiled down for their tallow, and the lean meat and offal fed to hogs, which were in turn rendered down for lard, to the present day. Yet this staunch pioneer was a brave man to come into the wilderness—for a wilderness it was in those days—and lay the foundations of a mighty ranch. He had four sons, who helped in the good work, but the present manager is now the only one left, three being deceased. Neatness, cleanliness and good order prevail about the ranch—not even a scrap of paper is to be seen, or any unsightly manure heaps or trash piles—while all the open spaces between the various buildings are covered by a carpet of short grass.

Even the average Texan, who is used to comprehending vast tracts of land and mammoth herds of cattle, is appalled when he learns that 640,000 acres of land compose the holding of the Kenedy Pasture Co., and that in superficial area the State of Rhode Island is not much greater.

Over this vast estate, with its great herds of cattle numbering in all some 60,000 head; its 1,500 to 2,000 head of horses, mules and jacks (kept for work only); its 100 artesian wells; its 115 windmills, and its working staff of about 200 employees, presides Mr. J. G. Kenedy, a fine specimen of manhood, both loved and feared by his employees; modest and unassuming in his manner, shrewd and practical in business matters, and quick and decisive in action, he is the very embodiment of a successful rancher. Our hostess, Mrs. Kenedy, is a gracious Louisiana lady, of French extraction, and their daughter, Miss Sarita, is reputed the cleverest horsewoman in Cameron County.

Going out over the home pastures we found the animals sleek and contented. There were some splendid Shorthorn-Hereford grades. Another pasture brings us to the Whitefaced cows, each of which has a lusty calf at her side. Still another pasture contains Shorthorn and Shorthorn grade cows, and purebred Devon bulls. More Devon blood is being used on this ranch than anywhere in the South. The bulls cross especially well with a Shorthorn cow, and produce a more active animal, which grazes better, and makes a steer of the "pony" order, with a thick back and loin. It would certainly surprise our Canadian friends to see so many thousands of cattle here with the blood of the old Texas Longhorn almost eliminated. From 15,000 to 18,000 cattle are sold annually, chiefly as two-year-olds and yearlings, to feeders and speculators. These buyers in many cases have large tracts of land in Texas but do not raise animals themselves. They buy, let us say, about 3,000 yearlings—as one of his customers is in the habit of doing—keep them on a rich pasture for about two more years, in some cases three, and then market them at from \$4.50 to \$5.25 per 100 lbs. A little "farming" is done on the ranch and about 500 bales of cotton was raised this year—at a low estimate, \$50 a bale, this would be \$25,000.

Regarding the income from the cattle sales, I believe we can estimate:

7,000 yearlings, at \$12 a head.....	\$ 84,000
3,000 two-year-olds, at \$14.....	42,000
3,000 three-year-olds, at \$18.....	54,000
1,000 finished, weighing 950 lbs at 42c a lb.....	42,250
1,000 cows and heifers for stocking, at \$23.....	23,000

15,000 taken \$245,250
I have only taken 15,000 head, as you see, and the prices I have enumerated are for commoner Texas stuff than is raised at "La Parra," therefore my estimate can be considered a safe one.

We visited the cowboy camp at Los Indios, 16 miles away. Accompanied by a guide, through a forest of mesquite, chaparral and young oak trees, we crossed open glades, covered with mesquite grass, trails and wagon roads, then came to a prairie pasture of 37,000 acres, covered with rich buffalo or broncho grass, now dry and withered, over which the frightened calves scamper. Occasionally we see one of those peculiar sand hills glistening in the pale moonlight, where hundreds of tons of sand have drifted up into a long ridge in the middle of the prairie. Half-past four in the morning finds the camp astir and preparations are being made to re-brand 1,500 yearlings with the brand of the purchaser, who will keep them on grass for two more years before he markets them. They are to be branded on the back only, so that it is not necessary to throw them. They were run into a chute, about eight at a time, and the work was finished by noon. The steers were then turned out and herded until next day, then driven to the nearest shipping point, Mifflin, ten miles away. The heat is terrific, and what is worse, we had a hot wind at our backs; we move slowly. Suddenly a large doe jumps up ahead of the herd of cattle and the nearest cowboy rides after it; he turns it in the direction of his companions, who with wild yells join in the chase, until six or seven are galloping after her at a fearful speed. Three of them are very near, and have their lariats in hand ready for the throw—but still the distance is too great. Miguel, the one on the gray mare, urges her forward, and gradually approaches the frightened animal; rising in his stirrups he measures the distance perfectly and ropes her at the first throw. Laughingly the cowboys gather around and examine the doe, after which she is set at liberty; the stork will soon visit her. Presently we arrive at the camp, which has preceded us. The tents have been pitched; the cow that always accompanies the camp has been milked; the fatted calf is killed, so that the corporal

and I are soon discussing veal chops, hot biscuits and coffee; and mighty good it tastes, after seven or eight hours in the saddle. During the night the cattle are herded, the vaqueros coming into camp in relays for food and sleep. Next morning the whole 1,500 yearlings are shipped in three hours without a hitch, and a fine lot of youngsters they are.

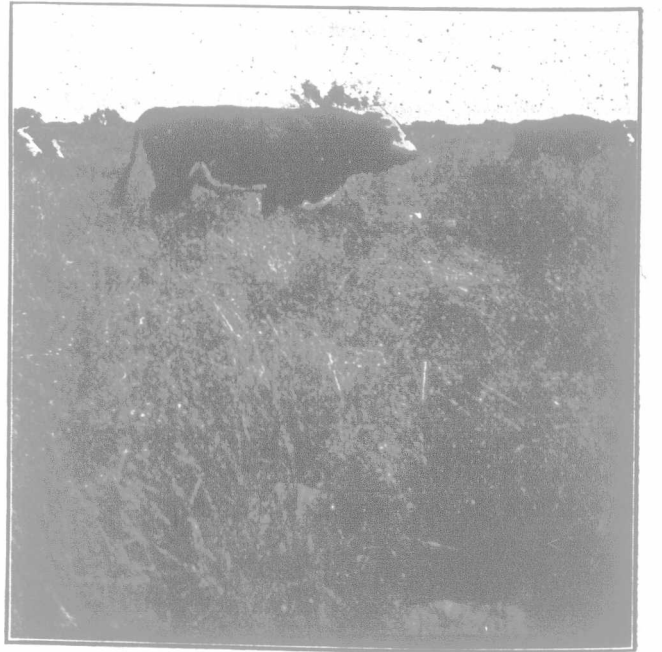


LOADING A BUNCH OF STAGS.

Before concluding this sketch I should like to mention two of the most important problems which confront the modern ranchman, viz., the matter of fencing and of water supply, problems which are solved, in the opinion of those best qualified to know, to a higher degree of perfection on the Kenedy ranch than on any other ranch in the United States. The company have spent already more than \$150,000 in sinking artesian wells, and still the work goes on. It is Mr. Kenedy's plan, now almost accomplished, to have his water supply so distributed that his cattle will not have to travel more than two miles for water, no matter how severe the drouth. The work of sinking artesian wells began at the time of the discovery of the great artesian belt in Southwest Texas about five years or so ago. Authorities differ as to whether this water has its source in Edward's plateau, or in the great reservoir of the Sacramento Mountains. Three distinct streams are found, and wells are sunk varying from 300 to 1,500 feet deep, with flows varying from about 200 to 3,000 gallons per minute. It seems probable that this great flow of water, which for countless ages has been untapped, hitherto found its way by subterranean channels to the Gulf.

The barbed wire fence is conspicuous on this ranch by its almost total absence. Cypress posts with smooth galvanized wire is used. I was shown miles of fences which had been standing since 1882, yet were still in first class condition. In this climate any other wire than galvanized oxidizes very quickly.

At the bay, four miles away, there is a large warehouse and wharf, where, prior to the railroad being built, freight was received in flat-bottomed boats



A LA PARRA RANGE BULL.

from Corpus Christi. Here, too, is moored a superb gasoline launch, about 70 feet long, drawing only 16 inches of water, fitted up in the most palatial manner, with cabin accommodation for a large number of guests. A few more days at the ranch, then with a fond adieu to our host and family, we are soon speeding along the sandy road to the railroad station, taking with us nothing but fond memories of the hospitable "La Parra" ranch.

HOME JOURNAL

Life, Literature and Education

A SHAMEFUL RECORD.

A belated blue book has been sent out from Ottawa which contains facts reflecting no credit on Manitoba. This is the annual book of criminal statistics for 1904, and for convictions for drunkenness in the Dominion for that year Manitoba stands ingloriously at the top. The book states that out of every thousand of Manitoba's population 8.19 have been convicted for drunkenness. This record not only out-distances that of all the other provinces but leaves her own rate of 5.07 for 1903 a long way behind. The standing of the other provinces is as follows: British Columbia, 5.93 convictions for 1904 as against 6.63 out of every thousand in 1903; the Northwest Territories, 4.92 as against 5.06; Ontario, 2.47 as against 2.30; Quebec, 2.34 as against 1.80; New Brunswick 5.01 as against 4.37; Nova Scotia, 5.06 as against 5.9; Prince Edward Island, 2.84 as against 2.68.

This is surely a discreditable showing for the prairie province and the actual facts must be worse. The eight out of every thousand people who appeared in court to answer a charge of intoxication form probably but a small percentage of the number who were intoxicated but whom the special providence popularly supposed to watch over inebriates saved from the public shame of the police court.

If the statistics for 1905 and 1906 were likely to prove less shameful, the statements made in this delayed blue book might have been passed over as too hopelessly out of date, or given merely to show the improvements made in the two years following. But last year there was a marked increase in the number of licenses issued in Manitoba, and so far in this year, the indications are that the number issued will exceed any previous record. So the probability is that the books of criminal statistics issued for these years will contain little comfort for the sober and temperate people of Manitoba. A newspaper item stated a short time ago that a man was being sent out by the Australian Government to investigate the question of inebriates in Canada. If he consults the blue book of 1904, he will have no difficulty in choosing the best location for carrying on his investigations. It is surely time that Manitoba climbed upon the water wagon.

AN IRISH PATRIOT DEAD.

By the death of Michael Davitt one of her most sincerely loyal sons has been lost to Ireland. Throughout a life of hardship and toil he placed the good of his native land before every personal desire; and from all parts of the world messages of regret and condolence are now being received from those who recognized the sincerity of his efforts.

His parents belonged to the west of Ireland peasantry and were very poor. Michael Davitt's earliest recollections were of the eviction of his father and mother from their Irish home and the removal of the family to Lancashire. Here the boy found work in the cotton mills, and here he suffered the loss of his right arm in the machinery. In 1866 he joined the revolution that had been begun by James Stephens, and as a consequence of his connection with this body he was arrested and tried on a charge of treason and felony and sentenced to fifteen years in Dartmouth prison with hard labor. He served half his time and then was released as a ticket-of-leave man. Dublin gave him an enthusiastic reception on his return, and with that welcome his public career began. He entered with Parnell into the land agitation, organizing a branch in his own county. He founded the Irish land league and started

branches of it all over America. Two other terms in prison awaited him, one of fifteen months and one of four. During the latter term he was elected member of Parliament but was not allowed to take his seat in the House. Later he was elected and represented South Mayo. In the House he was an able speaker and a quick debater.

Because of the views he held Davitt was not as popular among the Irish people as he merited. He saw, and tried to make them see, that the evil condition of Ireland did not arise because the land was held by English landlords, but because it was held by landlords of any kind. It was the system of land-holding that was wrong and the country would have been no whit more independent if, without changing the system of land-holding or the laws regarding it, Irish men had been possessors of the land instead of Englishmen, yet, popular or not, his persistent efforts to show them that English rule and landlordism were not necessarily the same thing and that Ireland's distresses sprang not so much from political as from economic evils, were not entirely in vain, and many thoughtful Irish are beginning to look at the matter from his point of view.

An extract from his will is worth quoting here: "To all my friends I leave kind thoughts, to my enemies the fullest possible forgiveness, and to Ireland my undying prayer for her absolute freedom and independence, which it was my life's ambition to try to obtain for her. My diaries must not be published as such, and in no instance without my wife's permission; and on no occasion must anything harsh or censorious about any person, dead or alive, who ever worked for Ireland, be printed or published, or used so as to give pain to friend or relative."

L. L. and E.

IN THE WORLD OF LITERATURE AND ART.

A new magazine entitled *The Golden Age* has come before the public. Bliss Carman, the Canadian poet, is its editor and in its columns his exquisite prose style is seen at its best.

Oliver Wendell Holmes used to carry a horse-chestnut in one pocket and a potato in another to ward off rheumatism. He had a great fondness for trees and always sat under one when he could.

Darwin had no respect for books as books, and would cut a big volume in two for convenience in handling, or he would tear out the leaves he required for reference.

O Love builds on the azure sea,
And Love builds on the golden sand,
And Love builds on the rose-winged cloud,
And sometimes Love builds on the land;
O, if Love build on sparkling sea,
And if Love build on golden strand
And if Love build on rosy cloud,
To Love, these are the solid land;
O, Love will build his lily walls,
And Love his pearly roof will rear
On cloud, or land, or mist, or sea—
Love's solid land is everywhere.

—ISABELLA VALANCY CRAWFORD.

A little volume of verse, containing about eighty poems, will shortly be on sale. These little poems and their dainty illustrations are sure to appeal to Kenora people particularly, on account of superior merit, and because the writer and illustrator are so widely known there. In "The Silver Trail" (Boston: Richard G. Badger), Mrs. W. J. Gunne has a collection of rarely dainty and

interesting poems, several of the themes being quite local, as in "The Lake of the Woods," and "The Prison Chapel" (Stony Mountain). The initial poem, "The Silver Trail," is as wooing as its title. The illustrations are done by Miss Jean Mather, and add greatly to the charm of the book.

* * *

A telegram from Sparta announces the discovery of the famous sanctuary of Artemis Orthia, before whose altar Spartan youths were scourged when initiated into the privileges of manhood. The site is on the bank of the Eurotas. Votive offerings of ivory, terra cotta and quantities of small leaden figures and pottery were also found, which confirm the belief that this was one of the most ancient of Spartan shrines.

* * *

A sensation has been caused in ecclesiastical circles by the publication of what is believed to be the most interesting and important historical document describing the personality of Jesus Christ. It is a letter written to the Roman Emperor by an officer of Pontius Pilate's court, and has been discovered in the library of the Lazarist Fathers in Rome.

Christian churchmen have set to work to prove the authenticity of the writing. Its great moment hinges upon the fact that it contains testimony as to the miracles attributed to Christ.

The letter purports to have been written soon after Jesus had begun to preach in Judea. Its text follows:

"I have learned, O Caesar, that you desired some information regarding this virtuous man called Jesus, the Christ, whom the people consider a prophet, and his disciples regard as the Son of God, Creator of heaven and earth.

"It is a fact that every day one hears wonderful things told of him. To be brief. He makes the dead rise and He heals the sick.

"He is a man of medium size, whose appearance indicates both great sweetness and such an amount of dignity that one feels in looking at him that he must love him, and at the same time fear him.

"His hair, down to his ears, is of the color of ripe walnuts and hangs down on his shoulders as a light blond and clear mass; it is parted in the middle according to the fashion of the Nazarenes. His beard, of the same color, as his hair, is curly, and, although not very long, is parted in the middle like his hair.

"His eyes are rather severe and shine like the sun; it is impossible for any one to look him long in the face.

"When he scolds he inspires fear, but very soon he himself begins to shed tears. Even in his most severe moods he is affable and benevolent. It is said that no one has ever seen him laugh, and that he sheds tears very often.

"Every one finds that his conversation is agreeable and attractive. He is not seen very often in public, and, when he appears, he carries himself modestly.

"His manners are very distinguished; he is even beautiful. It is perhaps because his mother is the best looking woman ever seen in these parts.

"If you wish to see him, O Caesar, as you wrote me once, let me know and I shall send him to you.

"Although he has never pursued any studies, he is well up in every branch of knowledge.

"He goes around barefooted and without head cover.

"Many people make fun of him, when they see him coming, but as soon as they are in his presence they tremble and admire him.

"The Hebrews say that they have never seen a man like him, nor heard teachings like those he imparts.

"Many believe that he is a god and others assert that he is thine enemy, O Caesar.

"These haughty Jews give me much trouble. They say he has never given trouble to anybody, but that, on the contrary, he tries to make every one happy."

CHILDREN'S CORNER

INTERESTED IN THE C. C.

Dear Cousin Dorothy:—This is my first letter to you and I hope to see it in print. My papa has taken the FARMER'S ADVOCATE for the last four years and we think it a very good paper. I take much interest in the Children's Corner and like to read "Glengarry School Days." We live on a farm half a mile from the station. My papa keeps the postoffice. The school house is two miles away from us. I did not go to school for the last year, when I left I was in the fourth reader. I like going to school. I am twelve years old and have five brothers and sisters.

JANE SOPHIA BERNER.

THE VILLAGE MILKMAN.

Dear Cousin Dorothy:—I saw in one issue of the FARMER'S ADVOCATE that you would like those who did not write a letter with the answers to the geography competition to write, so I thought I would. I live in the beautiful little village of Crystal City. Father farms and has ten horses, two colts, and six cows that are milking. We sell milk and I am the village milkman. I go to school and am in the fourth book. We like the FARMER'S ADVOCATE. Mother reads the stories to us out loud. We were sorry to see that "Glengarry School Days" is ended.

ROY ROBERTSON.

A BUSY LAD.

Dear Cousin Dorothy:—I have just been reading the Children's Corner and thought I would like to join too. My papa has taken the ADVOCATE for sixteen years and thinks there is no paper like it. I am going to school and am in the third reader. This spring I plowed for a week and harrowed for a day. We have ten horses, sixteen head of cattle and forty five pigs. I planted nearly all the garden this spring. I am planting peas and beans to-day.

OZRO. H. BERTRAND.

(Age 11 years.)

A TEXAS GIRL.

Dear Cousin Dorothy:—I have now been reading the Children's Corner of the ADVOCATE for some time and like it very much. I was born in Texas but father moved to Strathcona three years ago, for it was not a healthy climate where we were. We are now living four miles east of Strathcona and like it here very much. I have been attending school for three years and I am in the fourth reader. I hope in time to be able to become a teacher. We have ten horses, three colts, a number of cows and eighteen little pigs which are very cute. We have also about seventy five little chickens.

BESSIE BRICKMAN.

(Age 11 years.)

NO SCHOOL YET.

Dear Editor:—I always read the Children's Corner in the FARMER'S ADVOCATE, so I thought I would write a letter myself and I hope to see it in print. I am a little girl eight years old. We moved from St. John, N. B., last spring to the West. It is just a new place and we have no school yet. We are eight miles from our town. I have a little sister four years younger than myself.

GRETA PARLEE.

WOULD LIKE TO CORRESPOND.

Dear Cousin Dorothy:—This is my first letter to the FARMER'S ADVOCATE and I hope to see it in print. I have read "Glengarry School Days," and I think it is very nice. I have three miles to go to school but I do not go very regularly. My chum at school is younger than I am and is a class lower which makes it not so nice. I would like to correspond with any one and I would be prompt in answering if they would write first. I would also like to exchange post cards. I hope this letter won't find its way to the W. P. B.

ETHEL W. OSBORNE.

A BRIGHT LETTER.

Dear Cousin Dorothy:—Papa has taken the FARMER'S ADVOCATE for about nine years. I read the letters in the Children's Corner and now I thought I would write one myself. We have twenty four head of cattle and nine horses. I have a pet heifer named Mabel; she is red with a white face. Sometimes she will not come when I am getting the cows so I just stop and stroke her a few minutes and then she follows me. We have two colts, one is a year old, the other is tiny. The oldest one will shake hands. If it puts up the wrong foot Walter tells it so and it will put down that one and put up the other one. Their mother is quite an old horse, about fifteen. She has quite a little family, her name is Minnie. Her children's names are Frank, Flossie and Queen. Flossie and Queen are the two colts. Flossie is the one that shakes hands. I am reading in the fourth book. We take geography and history. I like history best.

KATHLEEN KINLEY.

(Age 9 years.)

LIKES HISTORY AND READING.

Dear Cousin Dorothy:—I have never written to the Children's Corner before but I have read the letters and stories in it every week and enjoy them very much. My father has taken the FARMER'S ADVOCATE for about five years and thinks it is a very fine paper and I think so too. I am eleven years old and am in the fourth reader. The school is about a quarter of a mile from our place. My father is postmaster here. I like history and reading better than any other of my subjects. I have read "Uncle Tom's Cabin." We have seven horses and about thirty head of cattle. I am learning to milk and I ride sometimes in the summer. I have six sisters and two brothers. My eldest brother goes to Manitoba College in Winnipeg and my other brother works on the farm. We have four calves. I have a little pet kitten. We have about forty hens and a few turkeys and ducks.

CLARA CAMERON.

WOULD LIKE A STEAMER TRIP.

Dear Cousin Dorothy:—This is my first letter to the Children's Corner, though my father has taken the FARMER'S ADVOCATE ever since I can remember and I am now eleven years old. I have four brothers and two sisters. Our land borders on the town site of Craven which is a pretty little village in the Qu'Appelle Valley. We go to school both summer and winter, for it is only a little distance from our home. We are five miles from Long Lake. The steamers have begun to travel up and down. I would much like to take a trip as I have never been in one, though our river is deep enough above the dam for small boats. We are able to get any amount of fish of all kinds except white-fish.

AILEEN HOSKINS.

ON THE MOVE

Dear Cousin Dorothy:—This is my first letter to the FARMER'S ADVOCATE, Daddy has taken it for three or four years. We are only going to be in Qu'Appelle for four or five days now. We are going to live on a farm forty miles from Edmonton. Daddy and my smallest brother have gone in the car. We are taking all of our furniture with us. We have two nice horses, Toby and George are their names, and we have two little pups. One belongs to my eldest brother, and the other to mother. Their names are Rover and Johnny Bear. I am eleven years old and I am in the third reader at school. I have a lot of little fish that I caught on Wednesday. I have two brothers—a big brother and a little brother, and two sisters. I hope my little letter will find its way to the Children's Corner.

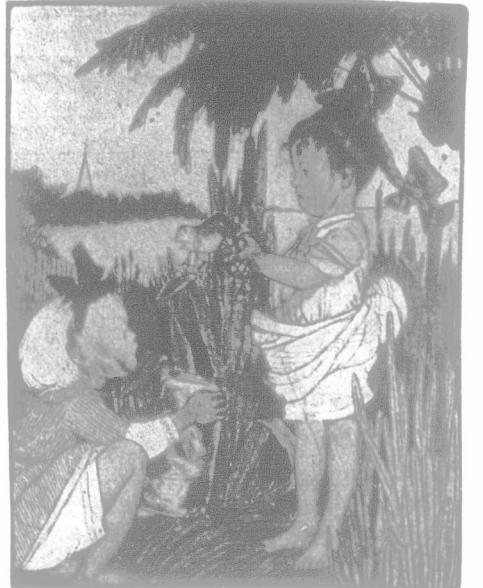
HANNAH C. CARTHEW.

FUN WITH THE BABY

Dear Cousin Dorothy:—I've been reading the children's letters and thought that I would like to write a letter too. I like to read the Children's Corner. My father is a farmer. We live a mile and a quarter from the school. The teacher and I walk to school mornings and nights. I am in the third reader. We have one dog, (it is my dog) and three cats. I have one sister and four brothers, the youngest is a year and a half old. I have lots of fun with him.

BESSIE A. PETERS.

(Age 10 years.)



HOLIDAY JOYS. Harper's

WELCOME TO THE CORNER PEGGIE

Dear Cousin Dorothy:—As I have never written to you before I will write to you a very short letter now. I read all the letters in the Children's Corner and I would like to see mine there too. We have taken the FARMER'S ADVOCATE for a long time and I like to read the stories in it. The school I go to is two miles and a half from our house but I go nearly every day. I am thirteen years old and in the fifth class. I have read a great many books and am now reading the "Elsie Books." As this is my first letter I think I will have to close, wishing the FARMER'S ADVOCATE every success.

PEGGIE NEIL.

DRIVES TO SCHOOL

Dear Cousin Dorothy:—This is my first letter to the FARMER'S ADVOCATE. I was glad to see my name in the list for the geography contest. We live two miles from town but we go in quite often. We drive to school with a pony and cart. It is a small school in the country. I have two brothers, one four and one six. I am eleven.

EDNA WALLACE.

A VICTIM OF NEGLECT.

Dear Cousin Dorothy:—In looking through the Children's Corner I came across some letters and thought I would write too. I sent you a story named "Mary's Dream" but did not see it in print, but I sincerely hope to see my letter in print. Norah Dobbs wrote one named "Lillies Sacrifice," there were two girls beside myself, Norah Dobbs and Lulu Metcalf. I did not see hers published either. I sit with Norah Dobbs; she is my best girl friend. We are in grade five and these are the subjects we study: arithmetic, spelling, composition, history, geography. I wish the Children's Corner every success and will try to help myself.

(Age 13 yrs.) HATTIE FRAZER.

(You will have to forgive, Hattie. I think your story came when Cousin Dorothy was having some holidays and just about moving time. You know how things can get strayed away at such a time. However, I shall see that it does not happen again. You have the right idea about making the Corner a success. If every one tries to help it will be a fine corner. C. D.)

LIKES TO READ THE FARMERS ADVOCATE

Dear Cousin Dorothy:—This is my first letter to the FARMER'S ADVOCATE and I hope to see it in print. I am ten years old. I have a little brother one year old, and a little sister. My father takes the FARMER'S ADVOCATE and I like to read it. I go to school every day, I like to go to school. My father is a baker.

E. LAURINE HODGENS.

A PUZZLER FOR THE BRIGHT CORNERITES.

A father sent his three sons out to sell apples. A had 85, B had 50, and C had 15. The father instructed them that they were to sell their apples at the same rate and yet all bring home the same amount of money. How was it accomplished?

Do not send in the answer to this conundrum to the office but work it out carefully and watch for the answer in the next issue. There is no catch or trick in the conundrum, but just simple reasoning. C. D.

"They've started a queer restaurant downtown; no tables, no chairs, no food, no waiters."

"What are they running it on—air or water?"

"Neither; Christian Science. You think you eat; so much a think."
—Brooklyn Life.



ALL ABOARD.

THE QUIET HOUR

THE GLADNESS OF ENTHUSIASTIC SERVICE.

I will very gladly spend and be spent for you; though the more abundantly I love you, the less I be loved.—2 Cor. XII: 15.

"O the rare, sweet sense of living, when one's heart leaps to his labor, And the very joy of doing is life's richest noblest dower! Let the poor—yea poor in spirit—crave the purple of his neighbor. Give me just the strength for serving, and the golden present hour!"

There are plenty of people in the world to be pitied—among them many miscalled "rich" people who are finding God's great gift of Time a heavy burden on their hands—but don't let us waste pity where it is entirely uncalled for. Pity, if you please, one whose "soul" is starved and dressed in rags, "a beggar with a million bits of gold," but never think anyone who is enthusiastically devoting his life to the service of God and man is to be pitied. St. Paul's gladness was not dependent on the gratitude of those to whom he so willingly devoted himself. If he had been working for wages—even the wages of gratitude—he would not have poured out loving service so joyously when it was often met by coldness, indifference or active opposition. Our Master, who came to be the King of servants, must have found joy in stooping to wash His disciples' feet, the joy of willing service which He calls us to share.

No one can read the wonderful story of the gentle Francis of Assisi without feeling the childlike gladness which was the natural result of his crystal-purity of soul and whole-hearted devotion to his fellows for Christ's sake. It is only a very shallow critic who will dare to call him a fanatic just because his methods are not exactly what we approve of in this century. Though we may not feel that it is our duty to fling away all worldly possessions, and walk the earth barefoot and homeless as he did, yet all Christians are called to copy him in his life of enthusiastic service. No story or romance could be more full of intense interest than his, and if it is interesting to read about his burning zeal, how much more interesting it must have been to live such a life of active love. No wonder he drew hearts after him by thousands, when he was continually drinking in the love of God, and pouring it out everywhere with a reckless prodigality that reminds one of the sun that shines alike on the evil and on the good. Each day was a true resurrection day—a day of joy and gladness—for it was crammed with opportunities of service. He saw Christ everywhere, not only recognizing Him in the persons of men, but even in birds and flowers; and to recognize Him was to spring instantly to serve Him in every possible way. His wonderful joy—a joy that rested not at all on external circumstances—has for hundreds of years been an object lesson to the world, a lesson that will never lose its effect. As the writer of "Adventure for God" boldly declares: "The Christian life is not a life of renunciation, but a life of consecration,—a life that means giving up only in so far as giving up is giving upward,—giving upward of the whole self, its gifts, its present and its future. It is the life of courageous freedom, the life of security in peril, the life of abundance in the midst of want, the life of peace in the midst of care, the life of large fellowship in the heart's loneliness. . . . Let none dare pity the missionary; for that man stands exultant, with the emblem of his vocation bound to his brow as a monarch wears a diadem." God is faithful, and the promise to those who take up the cross and follow the King is continually being fulfilled: "Whosoever will save his life shall lose it; and whosoever will lose his life for My sake shall find it. . . . We cannot be happy unless we are climbing up after higher and ever higher life.

"A greater light puts out the lesser light— So be it ever!—such is God's high law. The self-same Sun that calls the flowers from earth Withers them soon, to give the fruit free birth:— The nobler spirit to whom much is given Must take still more, though in that more there lie The risk of losing all:—to gaze at Heaven, We blind our earthly eyes:—To live we die!"

If life is not interesting to us—if we find in it more prose than poetry—let us try this plan of enthusiastic service. Then, unless the fountain of joy is choked or poisoned by some cherished sin, we, too, shall find life full of glad interest. The other day I was talking to a Jew who had been for fifteen years engaged in relief work among his own people. He is very enthusiastic in his plans for uplifting the poor, flinging himself into the work seven days in the week, utterly regardless of the strain on his own body, mind and spirit. I told him he was following in the steps of Christ, and was a Christian without knowing it. He replied: "I wish Christ were alive now, for He is greatly needed, and if He were alive to-day every Jew would be a Christian."

"But," I said, "that is just where you Jews make a great mistake, for He is alive and in the world to-day." That Jew is living a life of service, and has found the secret of an interesting life, though he is not as glad as he would be if he knew the Master he is so faithfully serving.

The Church is the Bride of Christ and must rejoice in preparing for His return. "Behold, I come quickly," He says. Why, He may come to-day! Indeed He surely will come to-day in the person of some of His brothers and sisters. Let us hurry to meet Him, let us minister to Him of our best, and gladness will certainly spring up in our hearts. Bring darkness and light together, and the light must always conquer; bring sadness and joy together and joy will be victorious too. And joy is not only a pleasant thing to possess, it is a positive sin to live our lives without it. If we have no joy in our hearts, then there must be something wrong with our Christianity, for we are commanded to rejoice in the Lord "Always." That means when you are serving Him by scrubbing His floors or washing His windows, just as much as when you are waiting on a sick person, or preparing a sermon. Holiness is health of soul, and should reveal itself by the outward signs of vigorous health—glad activity, a free, quick step, sunny face and cheerful voice, and hearty interest in your everyday work and in the people around you. Everyone is interesting if you can only get through the shell and touch the person underneath. In every soul we may see something of God. Some are like polished mirrors reflecting His face, so that the slightest contact with them, or even the thought of them, sends one's heart upwards almost involuntarily; while in others the image of God is very dim and distorted. But, even then, we know it must be there, know that in serving them we are serving our Master and Lord. With this glad thought in our minds, the ordinary routine of daily work is changed to the grand and glorious sacrifice of a martyr—a true witness for Christ. Then every duty becomes an inspiring opportunity, and every day is a red-letter day—a holiday because it is a holy day. This is the Midas-touch which can change common earthenware into bright and shining gold. I have no patience with the pessimists who tell children that youth is the happiest time in life. It is an instinct with us all to press forward to something better than we already have, and it is a true instinct. Those who consecrate their lives to God in childhood will surely

find that their path shines more and more until the Sun of Righteousness floods every day with inner sunshine—deep joy which is infinitely more satisfying than the gay lightheartedness of childhood. Every day brings fresh opportunities of touching other lives, and of growing in the knowledge of God, which, as our Lord tells us, is "life eternal." Then there is the joy of making real progress in spiritual growth; for it is false humility to shut one's eyes to that progress when there is a steady struggle after God and holiness.

We hear a great deal in these days about "strenuous life." Well, that is the kind of life we should live. Those who settle down to a half-hearted kind of Christianity are sure to find life dull and disappointing. Christianity is not just the conscientious doing of one's duty, it is enthusiastic devotion to the only Master who can fully satisfy the hungry heart. Though He is out of sight, He is not a long way off. You can find Him in the person of the dear father or mother, husband, wife or child, in the neighbor or visitor, or you may even serve Him by throwing crumbs to His birds or watering His flowers. If all other service be denied you, there is a rich field of your own being to cultivate. The body should be tenderly cared for and kept clean and healthy, because it is God's holy temple, and the soul should be held always in the light of His Presence until it grows with the radiant beauty of holiness.

With all these doors of opportunity standing wide open, surely no one should find life narrow, commonplace or uninteresting. And no one can walk through life with the fearless, happy trust of a dearly-loved child in his own father's house, without radiating brightness. Joy is very infectious and we can render grand service to our brothers and sisters just by being happy. It is no use pretending to be happy. The gladness must spring like a living fountain ever fresh from the Christ within the heart, if it is to be real service. We must walk with God every day in the week if we are to be mirrors reflecting the Sun of Righteousness. The Sun is always shining, but the trouble with us is that we don't always walk with faces upturned to reflect His light. We can get to God through serving man, and we can get to man by serving God. Our duty—and privilege—towards God, and our duty—and privilege—towards our neighbor are so intimately joined together that it is impossible to separate them. We cannot really serve God without serving man too; we cannot really serve our neighbor without climbing ever nearer and nearer to God, where only true and living gladness is to be found.

"There's heaven above, and night by night I look right through its gorgeous roof; No suns and moons, though ever so bright, Avail to stop me; splendor-proof I keep the broods of stars aloof: For I intend to get to God, For 'tis to God I speed so fast, For in God's breast, my own abode, Those shoals of dazzling glory, passed, I lay my spirit down at last."

HOPE.

Dear Hope:—I have often thought I would like to write and tell you how much I enjoyed reading the Quiet Hour, but there has always been something to hinder me from doing so; but, after reading the poem on the "Crosses," and your article on "Climbing the Ladder of Pain," I thought I would at least say, "Thank you." But the article on pain reminded me of having heard that suffering might have three different effects upon one subjected to it, producing first rebellion, or, "I won't stand it!" second, a kind of stoicism, or "grim and bear it" kind of spirit, and, thirdly, acquiescence, or submission to the Divine will, which I trust will be the effect produced upon any of your readers called upon to endure it. And I trust that those of us who, for the present, are exempt from it will have our sympathies enlarged or increased.

Estevan, Sask.

J. J. LAMB.

CAN YOU ?

Can you put the spider's web back in place
That once has been swept away?
Can you put the apple again on the bough
Which fell at your feet to-day?
Can you put the Lily-cup back on the stem
And to cause it to live and to grow?
Can you mend the Butterfly's broken wing
That you crushed with a hasty blow?
Can you put the bloom again on the grape,
And the Grape again on the vine?
Can you put the dewdrops back on the flowers,
And make them sparkle and shine?
Can you put the Kernal back in the nut,
Or the broken Egg in the shell?
Can you put the Honey back in the comb,
And cover with wax each cell?

You think my questions are trifling,
Let me ask another one,
Can a hasty Word e'er be unsaid,
Or a Deed unkind undone?

E. A. B.

Church Mission House, Malakwa, B. C.

WHEN IGNORANCE IS NOT BLISS.

Once I dined with an English farmer, says an American. We had ham for dinner, a very delicious ham, baked. The farmer's son soon finished his portion, and passed his plate again.

"More 'am, father," he said. The farmer frowned.

"Don't say 'am, my son," he said; "say 'am."

"I did say 'am," the lad protested, in an injured tone.

"You said 'am," cried the father, fiercely. "Am's what it should be. 'Am, not 'am."

In the midst of the squabble the farmer's wife turned to me with a little deprecatory laugh, and said:

"They both think they're saying 'am."

THE APPROPRIATE HYMN.

Before he ascended the pulpit in a country church a special preacher was asked if he would like any particular hymn chosen to agree with his sermon. "No," he replied; "as a matter of fact I hardly ever know what I am going to say until I get into the pulpit." "In that case," replied the vicar, "we had better have the hymn, 'For Those at Sea.'"

NOR INDIANS WITH INDIAN PUDDING.

Simeon Ford tells of a woman in a Chicago hotel who was known as the most inveterate "kicker" the hostelry had ever known.

One evening at dessert, the lady who was always complaining asked the waiter why the dish served her was called "ice-cream pudding."

"If you don't like it, ma'am, I'll bring you something else," suggested the polite negro.

"Oh, it's very nice," responded the lady. "What I object to is that it should be called ice-cream pudding. It's wrongly named. There should be ice cream served with it."

"Yes, ma'am," replied the waiter, "but that's jest our name for it. Lots o' dishes that way. Dey don't bring you a cottage with a cottage pudding, you know."—*Success Magazine.*

NOT SO SILLY.

Weary from the chase, the ostrich of the desert had stuck his head in the sand. "You silly bird," said the hunter, coming up, "do you imagine I can't see you?"

"You mistake my purpose," replied the ostrich, with dignity. "Of course you can see me, but you miserable, feather-stealing, egg-hunting land pirate I thus relieve myself of the necessity of seeing you."

Conscious that he had the better of the argument, the ostrich yielded \$40 worth of plumes without a murmur.—*Philadelphia Ledger.*



DELICATE INDIAN PIPES AND FERNS ARE EASILY DESTROYED.

might well be followed in Canada is that of the Massachusetts Society for the Preservation of Native Plants. This Society has sent notices throughout the state urging people to spare the Mayflower which is becoming extinct and giving this caution: "In picking, please cut the sprays, do not pull and tear them. If the roots are destroyed there will be no flowers here next year."

A UNION EMPIRE DAY CELEBRATION IN THE MIDDLE WEST.

The Union Empire Day Celebration held in the Lash section of the Rainy River District, by the combined schools of Lash and surrounding country proved an unqualified success, and an event that will long be remembered, not only by the children, but the parents and friends who were present in large numbers from Emo, Aylsworth, Devlin, Big Forks, Black River, Fort Francis, and other places.

The Lockington school where the celebration was held, was handsomely decorated for the occasion with evergreens, flags and large pictures of the King and Queen, the late Queen Victoria the Prince and Princess of Wales, Lord Roberts and other famous defenders of the land, while an ample platform, shady seats, games and refreshments of various kinds and a local string quartette provided accommodation and amusements on the grounds for those who wished to remain for the picnic following the celebration. The school was crowded and a large crowd standing on the grounds outside before the time set for the opening of the programme, which was a most enjoyable and interesting one. It was as follows: Chairman's address; What is Empire Day?—historic paper by senior pupil; The A. B. C.'s Welcome—chorus by Primary class; The Union Jack—recitation; Home, Sweet, Home—chorus by school; The Battle of Waterloo—entrance pupil; The Soldiers of the King—chorus by school; A United Empire—Historic paper by senior pupil; When we First Came on this Campus (Varsity Glee)—chorus by school; What is the Flag of England—reading by senior pupil; Second to None—solo by a school cadet with chorus by school; The Primaries Entertain their Friends—Lley, each primary pupil being re-

quired to sing a song, recite, or tell a story; When the Empire Calls—solo and chorus by school; The Colonials and the Flag (March Song)—sung as chorus by the school and used as march during the cadet drill and march past saluting the flag. Speeches by prominent men. God Save the King.

Owing to the late arrival of Reeve Fisher and the Rev. Mr. Florence, Secretary-Treasurer Mr. John Locking acted as chairman for the meeting. The programme had been prepared under the supervision of Miss Hoskins, who is an accomplished musician, and proved the thorough nature of the progress made under her tuition, both in the regular public school and musical courses. Every number on the programme was cleverly rendered, but especially charming was the march song, "The Colonials and the Flag," which is under the approval of the King and the immediate patronage of Earl Grey, and was enthusiastically rendered by the school cadets, who looked very smart and soldierly in their new uniforms. The marking time during the chorus of this beautiful march song, and the military evolutions gone through with during its playing, especially the march-past saluting the flag, could not have been better done, and was especially commented upon by the speakers who followed. The historic papers were well done, and the whole programme also, such as could not fail to leave in the minds of those who heard it a keener appreciation of the majesty of the Empire, of the bond of brotherhood that ought to exist among its scattered members and of the grandeur of their heritage as British subjects, this was the main object of those who had given their time and energies towards having a celebration in this comparatively newly-settled district.

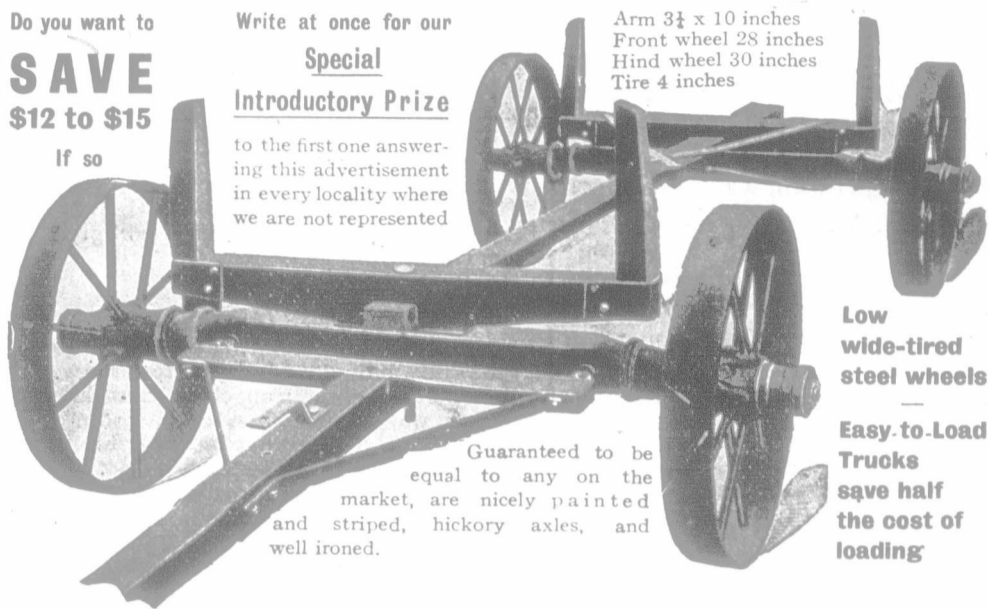
After a most enjoyable day spent on the school grounds, the most of the participants in the celebration retired to the residence of the secretary-treasurer, Mr. Locking, "to chase the glowing hours with flying feet" till daybreak. The handsome uniforms of the cadets being conspicuous among the most zealous of the dancers. The Aylsworth school had, much to the regret of their youthful friends, left in a body at the close of the day on the school-grounds, and were therefore absent from the night's festivities. W. KYDD.

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AN EMBARGO ON HUMAN SYMPATHY.

Just as soon at the overwhelming magnitude of the Californian earthquake that overthrew San Francisco and adjacent towns became known, the Canadian Parliament, without a shadow of dissent, voted \$100,000 for the relief of the stricken community, whose losses were doubly aggravated by the conflagration that followed the seismic overthrow. The vote voiced the national sympathy of this country for the sufferers in the Republic. Official intimation was in due form sent through the channel of the Government at Washington, but the offer was just as promptly and decisively declined. President Roosevelt's reply, coupled with

the usual diplomatic thanks, was that the United States was in a position to fully care for the situation, and we believe a couple of similar offers from other nations were also declined. Behind the official reason handed out was, perhaps, the national self-sufficiency that would not permit the Republic to be under obligations to anybody. This almost bumptious attitude has not been well received in Canada, and we are glad to find that it has not universal approval across the lines, either.

Later a report from Ottawa says the appropriation has been accepted as has also a large contribution from Japan. National self-respect is all right, but it is a mistake to put an embargo upon an expression of national sympathy, the touch of nature which makes the whole world kin.



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Questions and Answers

PATENTS.

How am I to find out if a certain device has ever been invented or patented?

2. How should I proceed to get a patent?

3. Where is the U. S. patent office?

Sask. E. A. T.
Ans.—You had better write the patent offices of Canada and the U. S. at Ottawa and Washington; they will give you the information.

LUMP JAW.

Noticed about March 1st on steer, one year and a half old, a lump on lower jaw, about five inches from chin. At that time it was about the size of a robin's egg, and a discharge coming from it of a white color. Blistered it with a liniment, but at present it is as large as the bowl of an eggcup, and very hard, and cannot move it, as it appears to have grown to the bone. There is no matter coming from it at present, as it is scabbed over, but when it knocks the scab off, it is raw and sore looking. Have it closed in stable at present, as I have been told that there is a danger of infection to the other cattle if let out on the pasture. Is this the case? Will it smite others, if running with them in pasture field?

A SUBSCRIBER.

Ans.—There is not much danger of infection of other cattle from lump jaw, unless it is discharging, and the matter drops on the pasture or feed of others. The iodide of potassium treatment has been successful in many cases. Give iodide of potassium three times daily, commencing with one dram doses and gradually increase the dose by say ten grains, until the appetite and desire for water fails, tears run from the eyes and saliva from the mouth. When any of these symptoms appear discontinue the drug. Repeat in six weeks if necessary.

HAND FEEDING YOUNG FOALS.

I have a valuable Clyde mare which had mammitis last year and I fear lost both teats and will be unable to raise the colt which she will soon have. In case this should prove to be the case will you kindly tell me the best way to proceed so as to save the colt and at the same time prevent a recurrence of the disease in the mare? Is the first milk of the mare absolutely essential or can a substitute be made from cows' milk?

Cochrane. G. G.
Ans.—Information on the above will be found from time to time in the horse column.

LEUCORRHEA.

1. Please prescribe for a mare about 14, thin and dull. She acts as if she was in season as there is a white fluid passes from her frequently, it was darker before giving her condition powders about two years ago. Last year she was bred. Did breeding her have anything to do with her condition? She seemed to be better and have more life previously.

2. What causes grease leg and suggest treatment?

3. What is good for worms in dogs (probably tape worm)?

Sask. R. L. K.
Ans.—1. The mare has gotten into a debilitated state, and tonic treatment is necessary. Give her the following

powders: Rod gentian pulv., 8 ounces; ferri sulph. pulv., 2 ounces; pulv. nuxvomica, 2 ounces. Divide into sixteen powders, and give one morning and evening in the feed; repeat prescription if necessary. Give also one ounce fluid extract of black haw, along with two drams of fluid extract of ergot, once a day for ten days.

2. This can be considered an advanced stage of cracked heels, or pustular eczema. Dirt, ammonia from accumulations of urine in the stables; too frequent washing especially with alkaline preparations, want of exercise, high feeding. Would recommend that the parts be cleaned thoroughly, applying oxide of zinc ointment. When washing the limbs use carbolic soap or put some coal tar dip in the water. Raw linseed oil containing enough sulphur to make a cream is also good. Areca nut is considered a good vermifuge for dogs, given fasting. The dose is two grains for every pound the dog weighs, given in milk.

GETTING AN INVENTION PATENTED.

Where shall I write to get an invention patented in Canada, and also what will it cost to have it patented?

Homewood. E. G. S.
Ans.—Write Fetherstonhaugh, Can. Permanent Bldg., corner of Portage and Main streets, Winnipeg.

FORUMLA FOR HARNESS POLISH.

Kindly give receipt for harness polish.

NEW READER.
For a good quantity you will find either of the following efficient and economical.

Harness paste:—Mutton suet, 2 ounces; beeswax, 6 ounces; spirit of turpentine, 8 ounces. Melt, and add while warm spirit of turpentine eight ounces. Add the mixture to the following, previously reduced to powder, and mixed: Sugar candy, 6 ounces; lamp black, 2 1-2 ounces; Prussian blue, half ounce; soft soap, 2 ounces.

Liquid harness blacking:—Yellow wax 4 ounces; linseed oil, 2 ounces; yellow resin, 1 ounce; ivory black, 4 ounces; Prussian blue, finely powdered, 1 ounce; copal varnish, 1 ounce; spirit of turpentine, 20 ounces. Melt the wax, resin, and linseed oil by heat; to this add the turpentine and varnish previously mixed. Mix the black and the blue in a large warm mortar, and to them add the oily mixture gradually, and stir to form a homogeneous product. To be applied with a brush and rubbed with a soft cloth.

WANTS HYDRAULIC RAM.

Give address of any reliable firm manufacturing hydraulic rams. I have a valuable spring that I want to utilize both in stable and house and to do so will have to lift water probably fifty feet and a wind mill would not answer the purpose in this case.

A SUBSCRIBER.

Ans.—Write Ontario Wind Engine and Pump Company, Winnipeg, or H. Cater, Brandon, Man.

INVOLVED VOCIFEROSITY.

"Gentlemen of the jury," erupted the attorney for the plaintiff, addressing the twelve Arkansas peers who were sitting in judgment and on their respective shoulder-blades, in a damage suit against a grasping corporation for killing a cow. "If the train had been running as slow as it should have been ran, if the bell had been rung as it ought to have been rang, or the whistle had been blown as it should have been blew, none of which was did, the cow would not have been injured when she was killed!"
—Puck.

"Such an amendment," said Senator Tillman during a debate, "would destroy the bill's meaning even as the meaning of the epitaph on old John Skinn's tombstone was destroyed."

"An amendment was tacked to John Skinn's epitaph. It consisted of one word, the word 'friends.' It was put on in the dead of night. The epitaph, previous to the amendment, read: 'He died here.'"



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GOSSIP.

FEEDING DAIRY COWS.

J. H. GRISDALE, TO THE WESTERN DAIRY-MAN.

What I want to draw to your attention today are three lines along which we might work. There are three ways of improving every dairy herd. First, by feeding the cattle as well as we can; second, by improvement in breeding; thirdly, by selection.

It has been said that it was no use to feed unless you had the breed, but there is a whole lot of room for better feeding, even with the cattle we have. We cannot get to work and change our herds at once. We have to work with what we have, and you would be more than astonished at the improvement you could make by better feeding methods if you gave your cattle all they could eat, and paid particular attention to the kind of food you gave them. Do not try to give them lots of straw and think that will satisfy, but give them a sufficiency of good food.

To prove to you that a sufficiency of food is not generally given, and that a sufficiency of food is a profitable thing to give, let me give you an illustration of what was done in the State of New York. A professor of dairying over there, some four or five years ago decided that he would investigate the dairy work that was being done by some of the farmers in the immediate neighborhood of the Agricultural College. He inspected a large number of farms, and at last settled upon one where there was thirty odd head of cattle. He took notes of the work that was being done, and after a few days interviewed the farmer, and asked him if he would have any objection to allowing a man to come in there and weigh the milk from each cow, and take samples, and if he would be willing at the end of the year to sell his herd.

The farmer agreed, and for one year an exact record of the feed given these cattle and the milk produced was kept. At the end of the year it was found the cattle had consumed \$28.50 worth of feed, and produced \$25 worth of milk. That is, the farmer had lost \$3.50 on each cow in his herd, a matter of something like \$100. That was a losing proposition, and I venture to say that on an average the dairy cattle in Ontario to-day are not one whit better. We are not getting the full market price for all the feed we are giving our cattle. True, we get good prices for the feed and a large amount of manure, but it does not more than pay for the work, as we have found out over and over again in our experiments at Ottawa.

This state of affairs is not right, when a good dairy cow will produce as much as 10,000 lbs. per year. That herd in New York was bought, and the next year it was fed under the direct control of the Experimental Station in that State, and the cattle given all the food they would eat. I regret one feature of this experiment, and that is, that the food given was not such as we generally give to our dairy cattle. It was food that was very rich in fat, that they fed the cattle all they could eat, and at the end of the year found the cows had eaten something like \$28 worth of food and had produced \$38 worth of milk. That is, for the extra three or four dollars worth of feed the cows had increased their milk production by something like \$13. Now, it is the last little bit of food that makes the increase. The farmer who had been giving these cows just what he thought was sufficient to keep them going had been feeding them at a loss, and in the Station where they gave them what food they could consume, regardless of economy, they feed them at a profit. These cows were just a mixture of all sorts and conditions, just such animals as you would find on an ordinary farm. That shows that if we give our cattle sufficient food the average cow will give profit. Sometimes we neglect the cows in the summer. When they are in full flow of milk there comes a dry spell, and the first thing we know the cows that were giving one thousand pounds a month are down to five and six hundred pounds, and what do you do? Generally speaking, the farmers of this country say, "We will have rain pretty soon, and we will have more milk then," instead of having things ready to give them a whole lot of food they let them do without. We ought to be prepared for

all such emergencies and be ready to give our cattle any amount of green food in the summer, and in that way we could keep up the flow away into the fall months, and have them giving a thousand pounds of milk in September and October. Then in the winter time we neglect our cows by giving them, as a rule, too much dry feed. All our experiments go to show that if we are going to succeed in securing lots of milk in winter, economically, we must feed succulent food. In an experiment conducted at Ottawa last year, we have proven over and over again that a succulent ration is the proper ration. In the case of a dozen cows fed a ration of dry feed, clover hay and meal, they kept falling off at the rate of about ten per cent. per month and in some cases as high as 15 per cent. The average cow that has advanced more than a month from the lactation period decreases at the rate of about ten per cent. per month if the ration is not such as will keep up the flow, to prevent a decrease a suitable ration must be supplied. In nearly every case where we feed dry ration the decrease was at a greater rate than ten per cent.; in some odd cases it went as high as twenty per cent. where only dry food was given. We had another dozen cows on the other side that were receiving a succulent ration, roots, ensilage and a little bit of straw and the same quantity of meal and a little bit of hay, and these cows only decreased at the rate of eight or nine per cent., and where we varied the succulent ration and gave sugar beets in place of mangels we sometimes got them to hold their own. Where turnips alone were fed we had practically no decrease. Where mangels alone were fed not quite as good, and where mangels and ensilage were fed they did a little better. So that you see if you have any particular preference for any one of these kinds of succulent foods, you may anticipate good results from any one of them. Probably sugar beets and sugar mangels will give the best results, but any one of them will give good results.

As to the economy of these different rations. If we value our ensilage and roots at \$2 per ton, and our clover hay at \$7 per ton, we find that the ration of clover hay is more expensive than the succulent ration. Therefore, you can see there are two reasons why we should feed a succulent ration in winter and a succulent ration right through the spring season until the grass is in full flow.

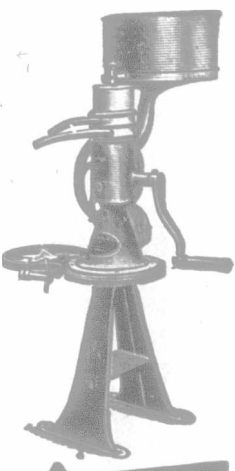
I think that is one point which we ought to try and emphasize and drive home to the farmers, and one that we cannot say too much about, and that is to have succulent food for the cattle all the year round. We have experimented in the use of different soiling of the crops and none of these have proven quite so economical or quite so handy as silage. You cannot keep roots all the year round; therefore, you have to have some other succulent feed, and in summer we have found silage is probably as economical a class of food as any you can grow. It will grow in large quantities, and is in better shape for feeding. There are very many reasons why the up-to-date farmer should have a summer silo in addition to his winter silo.

The question of the number of times a day we should feed is one of considerable importance. I was inclined to think a few years ago it was necessary to feed three times a day in order to get the best results. Since then we have been experimenting each year, more or less, upon this line, and without going into the results of our experiments, I may just say that we only feed twice a day now. Early in the morning a succulent ration of roots, silage, straw and meal mixed with it. Immediately after feeding this ration we give them a portion of hay, say about three pounds of clover hay per cow. They are through eating about half-past eight or nine, if you feed them about half-past five, as we do. From that time on till half-past three they are not bothered, but are allowed to lie still the livelong day, unless we have a lot of visitors, when they have to get up. We like to see them lie right through till half-past three when they receive the same ration over again. They are allowed about an hour or an hour and a half to eat the roughage, during which time the men

Dairy Talks by the EMPIRE Dairy Maid—No. 7.

It's The Easy Separator

What's the use of doing a thing in the hard way when there's an easy way that is better? What's the use of breaking your back turning a hard cream separator when you can get an easy turner that will do better work? What's the use of taking an hour to clean a separator when you can get one that you can clean thoroughly in a few minutes? What's the use of having tainted, off-flavor cream, when you can have cream of perfect flavor? No use, of course! Well, then, why don't you get the separator that turns the most easily, that is the most easily cleaned, that can be kept sweeter and purer than any other, that produces the highest quality cream? That separator is the



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as you can readily see for yourself, if you will compare its construction with others. It's easier than other cream separators in every way, because it is so much simpler. That's the whole secret. In the Empire the work of separating is done in a small, light bowl, with a few light cones with perfectly smooth surfaces, instead of the heavy bowl with many complicated interior devices used on other separators. Being lighter the bowl requires less machinery and less labor to turn it. Having fewer parts and being perfectly smooth, they are much more quickly, much more easily, much more thoroughly cleaned. Being easily kept clean, there is no danger of off-flavor cream. I can't show you the Empire construction here, but if you will go to an Empire agent or write to the manufacturers, they will send you a catalogue which shows just how the Empire works, and you can see for yourself. That's better than a lot of talk, anyway. Write to-day. Tell how many cows you keep and what you do with your milk, and they'll send you some mighty interesting books on dairying. Address

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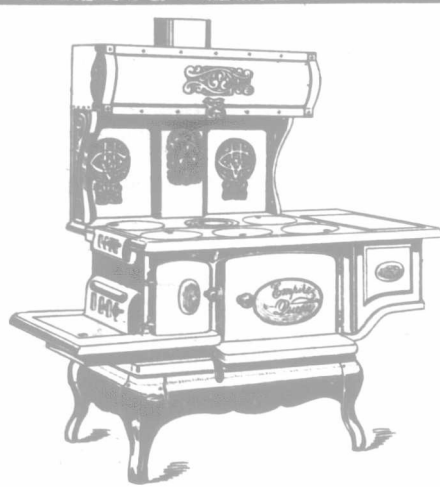
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Christie Bros. Co.
238 King Street, Winnipeg

Such a nice young man took me out to dinner last night—such a well-mannered man. D'you know, when the coffee come and 'e 'd poured it in 'is saucer, instead of blowing on it like a common person, 'e fanned it with 'is 'at!'—Punch.

Pease—How do you like that new beauty doctor?

Mrs. Ques—He's perfectly horrid. I asked him what I could do to develop my arms, and he said I'd better go home and knead my own bread.—*Detroit Free Press.*

are milking, and then they are given the feed and long hay. As to whether hay should be fed long or short is a matter of taste, to a certain extent; but we find that if a certain portion of the hay is fed long it has a beneficial effect on the digestive organs of the animal, and there is very little danger from scouring or bloat, and the cattle are less likely to go off their feed. We find that about as profitable a proportion of meal as we can give is about one pound for about five pounds of milk produced. The cow producing forty pounds of milk per day should get about eight pounds of meal.

Another thing in connection with the feeding of cows is that we find it pays us to study the likes and the dislikes of each cow just as it pays a good boarding-house keeper to study the likes and dislikes of his boarders if he wants to keep them. We find our cows are just as fickle in their tastes as any class of boarders, and we can do a great deal to increase the milk flow by studying their different tastes.

In the year 1899 we kept an exact record of the milk from our cows, and gave them a uniform meal ration of about eight pounds a day of mixed oats, bran, shorts, and a little bit of oil meal. The oats, bran and shorts were about equal parts and the oil meal about one-tenth of the others. With this ration we were able to produce from an average herd of grade cows about 6,100 lbs. of milk per cow. Next year we changed this and watched every cow and studied her likes and dislikes, and the second year we were able to bring up the average of that herd by 1,100 and some odd pounds just by studying the likes and dislikes. To feed each of these cows during 1899 cost us \$35, and during 1900 it cost us only \$33; that is, we saved \$2 by catering to the tastes of the individual cows, by watching very carefully the possibility of each cow and by getting the very best out of each cow that there was in her, and it is impossible to do this without keeping a record of the individual animals.

Here is another point where this keeping of records comes in and proves invaluable to the man who is taking an interest in the development of his dairy herd. He cannot get the best out of them unless he knows what every cow is doing all the time.

We have water before the cattle all the time. We never think of watering the cows; it is always there, they drink whenever they like, and that is the way I would like every farmer to do. I have a stable of my own, and I am not very rich, but the first thing I did was to put water in, and I think any farmer can put water in his stable for about \$60. I had to bring it about five hundred feet, and raise it about twenty-five feet, and the whole thing cost me only \$60, work

included. I have a pump in the stable and I have to pump it by hand. We pump it right into the troughs, and we have a long trough in front of the cattle. That is not, probably, the best plan. Some people advocate having individual boxes, others have boxes for every two of the cattle and others have one trough for the whole string. I have two troughs, one on each side of the stable and I find it just as convenient as any other way. At the Experimental Farm we have a bucket for each animal, but I do not see any particular advantage. The troughs at my farm are wood. I do not think it makes any difference whether you let the cattle have soft water or hard water. That seems to be largely a matter of taste in the animals. Once they get accustomed to hard or soft water they like the water they are accustomed to better than the other. If it is for growing animals, I think probably hard water is better than soft.

We keep troughs from getting mused with dirt by keeping such pretty high, and the cow has to raise her head to get a drink and I think that is the best plan. I have tried covers on the boxes that would go up and fall as soon as the cow took her nose out and I found they were a nuisance. They were always wet and dirty looking, and I find when the trough is high very little gets in it; but it won't do any harm to wash them out every second or third day. One of the greatest troubles we have with individual drinking vats is that they are eternally getting full of dirt and have to be cleaned out. Still if a cow is eating ensilage or chaff she is apt to come up with her mouth full of chaff or ensilage and leave a portion of it in the vessel, and if you have it high she is not so apt to do that because she has time to get rid of a portion of the loose stuff. We have salt before our cattle all the time. If I did not have that I would insist upon their being salted once a week, at least, and I should prefer twice a week. A good plan is to give them a little bit in the food; but an objection to that is that some cattle do not take nearly as much salt as others, and if you mix it with the food each cow has to eat the same amount. We have the water trough on one side of the cow and the salt on the other. It is a little wasteful, because we find that if we keep the salt nice and clean we have to change it every week, and they use about twice as much in that way as they should; but salt is very cheap, and it does not make a difference of more than four or five cents a year, and it is much more pleasant for the animal. I prefer common salt. Rock salt is nice to have out in the field, if you have a place where the rain won't get at it. There is practically no difference in the composition of the two. In the stables if you have a manger you can put a little bit of rock salt in the corner, but there is danger of more or less moisture gathering around the salt, and it never looks clean.

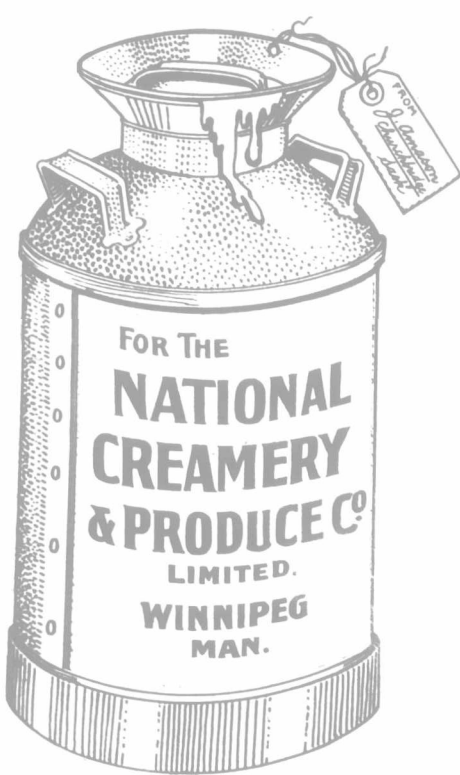
Our average cow's returns do not show any profit, and what we want to do is to waken up and make the average cow profitable, and then waken up still further and put away the average cow and keep only the good ones. In other words we must have a better average cow, one that would give 6,000 lbs. of milk. The average profitable cow ought to make \$50 a year in returns. If she gives 6,000 lbs. of milk a year you will have \$50 or a little better every year, and that will give you a profit of from \$10 to \$20 clear. You can feed a cow at \$30 a year, and you can give her \$40 worth of food a year, and you will not necessarily receive more from the cow getting \$40 worth of food a year than you will from the cow getting \$30 worth of food a year. You can lose more by feeding than you can by not feeding, if you feed them extravagant foods.

HUMOROUS

A lady going from home for the day locked everything up well, and for the grocer's benefit wrote on a card:

"All out. Don't leave anything."
This she stuck on the front door. On her return home she found her house ransacked and all her choicest possessions gone. To the card on the door was added:

"Thanks; we haven't left much."
—*Sacred Heart Review.*



334,000 lbs. Butter

is an enormous quantity but we manufactured that much last year and we paid on an average of 22c. per lb. for the butter fat. The high grade of butter we manufacture has established a reputation for our products, and we supply more butter to retail trade in the city of Winnipeg than any other dealer or company in the province.

We Want Your Cream

as we are going to increase this year's output over 1905 and are willing to pay high prices for good cream so that we may get enough to allow us to break last year's record.

The National Creamery and Produce Company, Ltd.

- Q Is the largest creamery in Western Canada and has two branch creameries.
- Q You receive your money from us on the 3rd and 18th of every month.
- Q You are paid by Express or Bank money order. This insures you against loss, also against inconvenience in cashing as is the case when cheques are used.
- Q Our testing system has proven itself infallible.

Ship us a few cans on trial and we are sure that our methods of doing business will so please you that you will become our permanent customer.

Write for booklet A at once.

The National Creamery & Produce Co. Ltd.

Head Creamery: WINNIPEG. Branches: GLENBORO & GLADSTONE.

PIANOS & ORGANS

Highest grades only. Prices reasonable and easy.

J. MURPHY & COMPANY CORNWALL ST. REGINA.



ECONOMY

is a great consideration and a big factor in success. The Eclipse Fire Extinguisher has prevented thousands of fires and will do the same for you. Every farm house, barn or building of any description should be provided with them. It is a protection cheaper and more easily operated than any other fire appliance, hence the economy in having them. The Eclipse demonstrated at the Winnipeg Industrial Exhibition before 15,000 people what it can do. The C.P.R. have installed them throughout their system. It does not deteriorate with age or damage anything but fire. Write for prices at once as it may save you much money.

Haverhill Eclipse Fire Extinguisher Co., Ltd. 519 McIntyre Block, Winnipeg.

Wedding Invitations Wedding Announcements Visiting Cards

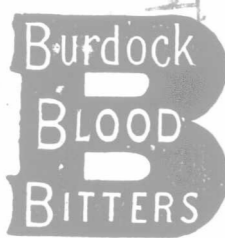
LATEST STYLES. LATEST TYPE Prompt attention to mail orders.

LONDON PTG. & LITHO. CO. 144 Carling St., LONDON, Ont.

STAMMERERS

The Arnott Method is the only logical method for the cure of Stammering. It treats the Cause, not merely the Habit, and insures natural speech. Pamphlet, particulars and references sent on request. Address

The Arnott Institute Berlin, Ont., Can.



CURES

Dyspepsia, Boils, Pimples, Headaches, Constipation, Loss of Appetite, Salt Rheum, Erysipelas, Scrofula, and all troubles arising from the Stomach, Liver, Bowels or Blood.

Mrs. A. Lethangue, of Ballyduff, Ont., writes: "I believe I would have been in my grave long ago had it not been for Burdock Blood Bitters. I was run down to such an extent that I could scarcely move about the house. I was subject to severe headaches, backaches and dizziness; my appetite was gone and I was unable to do my housework. After using two bottles of B. B. B. I found my health fully restored. I warmly recommend it to all tired and worn out women."



ADVERTISING WITH US PAYS.

GOSSIP.

SASKATCHEWAN POULTRYMEN ORGANIZE.

On May 16th, a meeting was held in the City hall, Regina, for the purpose of forming a poultry association for the province. There was a fair attendance of poultry enthusiasts, these including Mr. G. H. Higginbotham, of Virten, Man., who had been invited by the Department of Agriculture to give an address.

Mr. J. R. C. Honeyman, Deputy Commissioner of Agr., presided, and in the course of his remarks said the Department of Agriculture felt that the time had come when the poultrymen of the province should do something towards organizing. As those present knew, we were importing a large quantity of dressed poultry every year for our own use, and we had a province which ought to be exporting it. Up to then there had been no chance of getting the poultrymen together, and after talking the matter over with those interested in the industry in different parts of the province, the Department decided to call a meeting for them to organize as they saw fit. A circular had been sent out, and he had a number of replies which he would read. He was sorry the commissioner of agriculture was not present to take the chair, but the legislative assembly was sitting, and he had some important measures to introduce that afternoon. He was, however, thoroughly in sympathy with the objects of the meeting. Mr. Honeyman then read letters from a number of poultrymen who had promised their hearty support to the movement.

Mr. Higginbotham spoke of the work of the Manitoba Poultry Association, which, he said, had been an established success from the very commencement, until it was now one of the important institutions of the province. He expressed the opinion that it should not have been left to the government to take the first step, and he was surprised that the poultrymen of this province had not tackled the government before in reference to the industry. The Manitoba government had always been friends of the industry no matter what side of politics they were on. A person did not need to be long in a town or city before he saw the necessity of an organization of some kind. It was an industry which had never been equal to the demand. Almost every other kind of stock met the demand, but in poultry he had never seen the time when the supply had been greater than the demand. In Manitoba they imported carloads of poultry from Smiths Falls, when they might all be reared in their own province. That was one commercial reason for organizing. But the reason which always appealed to him was the fancy side of the question. He had heard people ask, what good was the fancy side? It had always been his idea that it had a great deal to do with the keeping up of prices. It had been proved at the government stations that purebred stock was a great deal more profitable than any other. One object of the Manitoba organization was for men to get together and make a better condition of things and show the farmers and others that poultry growing could be made more profitable and more successful by getting a good breed, raising it up to its best standard, sorting out the old products and properly packing the eggs. Mr. Higginbotham spoke of an experiment which was made by the Dominion government in the way of fattening up birds, which had been very successful, the birds fetching good prices on the market and not meeting the demand there was for them. He urged the importance of this side of the question, and concluded by remarking that no one could be in a poultry association a year without becoming an enthusiast.

Mr. James Murray, Superintendent of Fairs and Institutes for the province, spoke of the importance of the province exporting poultry, and to show what could be done in educating the public taste, mentioned the fact that many years ago there was a good deal of poultry exported, but two or three years ago a certain amount went up to Montreal and Toronto, and as soon as the people there got a taste of it,

they wanted more of it and now, instead of exporting poultry, they could not meet the demand from that part. There was ten times the quantity of poultry raised now that there was ten years ago. He wished the new organization great success, and hoped to hear a good deal of it later.

Mr. S. Chivers-Wilson then moved "That we do now hereby form an association to be called The Saskatchewan Poultry Association." Mr. J. W. Pritchard, of Wapella, seconded, and the resolution was carried.

The following officers were appointed: Hon. President—His Honor Lieutenant Governor Forget.

President—S. Chivers-Wilson, Regina.

1st Vice President—Seymour Green, Moose Jaw.

2nd Vice President—John Peacey, Regina.

Executive Committee—W. J. Tudge, Regina; W. N. Mitchell, Moose Jaw; J. D. Bragg, Davidson; J. F. Davies, Grenfell; J. Pritchard, Wapella; W. H. Gee, Regina; Mrs. J. Morris, Tyvan; Mrs. Geo. Page, Moosomin; with power to add to its number.

It was decided to adopt the constitution and bylaws of the Manitoba Poultry Association provisionally, and that it be provided in the constitution, when framed, that the minister of agriculture for the province be ex-officio a director of the association. It was also decided that arrangements be made to hold a provincial poultry show in January next at Regina.

THE FUTURE OF THE TAMWORTH.

The Tamworth breed of pigs, which is not in so many hands in this country as it really deserves to be, derives its pseudonym from the town of that name in the Midlands of England. It is believed to be one of the oldest and purest breeds. A century ago they were known for their lean meat, but they were by no means the most gainly of pigs. Their improvement was taken in hand, and from a long-legged, somewhat razor-backed, and therefore flat-ribbed and long-snouted pig, breeders have produced a first-class bacon pig, with an aptitude to grow in weight, and a big proportion of lean meat. As far as can be judged, there has been very little outside blood used in the improvement of the Tamworth. It was in 1847 that the Royal Show first included the breed within its prize list, but it cannot be said that much was done in the way of improvement, from a show point of view, till within the last thirty years. They have been exported at various times, and are very numerous bred in the northern continent of the new hemisphere.

Most breeders and farmers are familiar with the appearance of the Tamworth. A good type of pig when the best of them are procured, and certainly from the light fore-end which he possesses, as well as the lean undercut, they seem to represent many of the best ideals of the bacon pig. It is true that they might be somewhat deeper in their hams, and perhaps less aggressive with the snout, but their good tops and deep sides are features which must have impressed those who have seen the best specimens at agricultural shows. It is not necessary to describe a typical Tamworth, but we can conceive few better crosses with a breed, say, like the Berkshire, than that of the Tamworth sow. The Berkshire can show just as much adipose tissue as any breed we possess, and the cross of the Tamworth, while not belittling the weight, produces a fine type of all-round pig; and although the sow population of the Tamworth breed in the country is not so extensive as to make this cross very general, yet its merits must be recognised. Naturally with the Berkshire, breeders cross the White, because they are more widely distributed, and the cross is better known. Breeders have urged that to give the breed a proper chance they should be permitted the privilege of re-importing from the States. The breed is in such few hands in this country that some of its most powerful supporters suggest that this is the most satisfactory method of obtaining the reconstitution of the breed, and disseminating it more widely as a general farmer's pig.—F. and S.

\$12 WOMAN'S SUITS \$4.50

Suits to \$15. Silk jackets, raincoats, skirts, waists, and linen suits at manufacturers' prices. Send for samples and fashion. Southcott's Hair Co., Dept. 37 London, Can. Send for our catalogue, which lists everything you use wholesale.

Watch Repairs

All watches entrusted to us for repairs receive the attention of careful and experienced watchmakers.

We guarantee all work done by us and make ourselves responsible for the accurate running of each watch leaving our stores.

Mailing boxes will be forwarded to persons who wish repairs done on their watches.

D. R. Dingwall, Ltd. Jewelers and Silversmiths 424, 584, 588 Main St. WINNIPEG

WANTED 5,000,000 Muskrat Skins

Also all kinds of Raw Furs Send for our price list. The Canadian Raw-Fur Exchange 66 River Street, Toronto, Canada

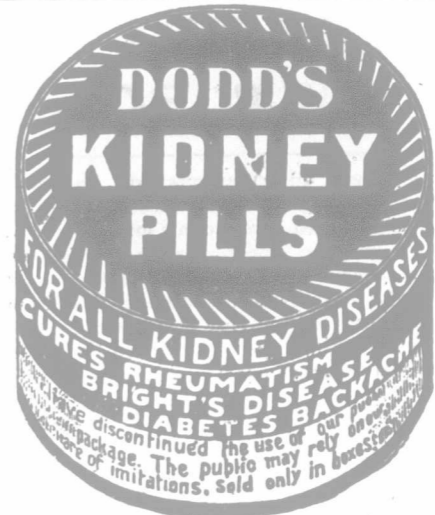
AMUSEMENT FEATURES OF THE INDUSTRIAL.

The amusement features of the exhibition this year have been especially attended to by the management.

Many of the best bands of music in the Canadian West and United States Northwest have been engaged for the week of exhibition and many special amusement features will distinguish the fair.

The Knabenshue Air-ship, one of the wonders of the world, the fore-runner of aerial navigation will be one of the leading features of amusement and instruction and will probably be the chief spectacular event to the thousands who will be present to witness its daily progress in mid-air high above the city. This monster air ship or balloon is propelled by a motor engine and the course for a long distance is directed by the inventor Knabenshue, either with or against the wind. This wonderful achievement in scientific aerial locomotion is a sensational feature that has been the great attractive feature of the metropolitan cities of the East.

The Winnipeg Industrial Exhibition, July 23-28, promises to be not only a great success, but the great instructive and entertaining event of the year in Western Canada.



WANTS & FOR SALE

Advertisements will be inserted under this heading, such as Farm Properties, Help and Situations Wanted, and miscellaneous advertising.

TERMS—One cent per word each insertion. Each initial counts for one word and figures for two words. Names and addresses are counted. Cash must always accompany the order. No advertisement inserted for less than 25 cents.

FARMS—For rich farming and fruit growing. Write J. D. S. Hanson, Hart, Mich. 14-37f

THE ADVERTISER likes to know what paper you take, so mention the Farmer's Advocate.

FOR SALE—Alberta lands, many good bargains, write to-day. Patmore and Jamieson, Calgary, Alta. 27-6

WESTERN FARM lands for sale—Correspondence solicited. McKee and Demeray, Regina, Sask.

WHEN ANSWERING advertisements on this page do not fail to mention the Farmer's Advocate.

FARMS—Improved and unimproved in the famous Gilbert Plains district. Apply Farrer and Nichol, Gilbert Plains. 20-6

ROULEAU—May 24, bay gelding, weight 1,000 lbs., one white hind foot, scar inside left front foot, foretop clipped. John Pickinger. 13-6

FOR SALE—Twenty head (extra good) Pedigree Hereford Cattle, also good dairy farm on town section. Box 42, Shoal Lake, Manitoba. 27-6

TWENTY-FIVE thousand acres in famous Moose Mountain District. Prices ranging from ten to twenty dollars. Apply W. A. Rose, Forget, Assa.

FOR SALE—Fence posts, Tamarac at 5 cents each in car lots, f.o.b. Address Howard Corrigan, Whitemouth, Man. 13-6

HAY RANCH—Good range. Two hundred breeding cattle, eighty range horses. Will sell all together, or separate. A. O. Endersby, Twin Butte, Alberta. 27-6

FOR SALE—One hundred acres in beautiful Niagara Peninsula; good soil and buildings; 4 acres fruit, 4 bush; well watered. Price \$5,000. Box 132, Niagara Falls South. 13-6

FOR SALE—Large English Berkshire pigs, 3 months old, boars ready for service. Sows ready to breed, pedigrees registered, T. E. Bowman, High River, Alta. 27-6

IRISH AND SCOTCH—Terriers. The leading kennel of scotch terriers in Canada. Prize winning stock and puppies for sale. Enclose stamps for circular. Bradley-Dyke, Sidney, British Columbia. 4-7

HERE IS A SNAP—Northeast quarter section, thirty, Township five, Range two, near Alameda, eighty acres broken. Rented for \$160 per year. Price \$11.50 per acre. Apply to James Eadie, 500 Pender St., Vancouver, B. C. 20-6

FOR SALE—The Management of Dr. Barnardo's Farm, near Russell, have for sale a car load of beautiful grade Shorthorn heifers,—all in calf to excellent bull. For prices on cars, Russell, apply to E. A. Struthers, Barnardo P. O., Manitoba.

FOR SALE—Seventy-eight acre Fruit Ranch. Ten acres, all planted, in apple and peach trees. Eighteen acres in crops, potatoes, oats, etc. Good buildings. Farm all fenced. Good water supply. Price \$4,500, with liabilities. Apply, Mackray & Bowden, Kelowna, B. C. 28-6

MONEY FOR YOUR FARM—Do you wish to sell your land to men who can pay for it. We have clients in the United States and Eastern Canada who want to purchase improved and unimproved farms in Manitoba, Saskatchewan, and Alberta. Practical farmers with money. Write for blank forms. Thordarson & Co., Real Estate Brokers, 614 Ashdown Blk., Winnipeg.

POULTRY & EGGS

Condensed advertisements will be inserted under this heading at one cent per word each insertion. Each initial counts for one word, and figures for two words. Names and addresses are counted. Cash must always accompany the order for any advertisement under this heading. Parties having good pure-bred poultry and eggs for sale will find plenty of customers by using our advertising columns.

TELL THE ADVERTISER you saw his announcement in our columns.

C. W. TAYLOR, Dominion City.—Barred Plymouth Rocks, Buff Cochins, Black-breasted Red Game, White Cochins.

UTILITY BREEDS—Turkeys, Geese, Ducks, Chickens, Poultry supplies, 16 page Catalogue mailed free. Maws Poultry Farm, Winnipeg.

FOR SALE—Eggs from Choice White and Barred Plymouth Rock, \$1 per setting, two settings \$1.50, \$5 per hundred. Also Poland China Pigs. Thos. Common, Hazelcliff, Sask. 20-6

FOR SALE—Eggs from Barred P. Rocks, utility, pen headed by cockerels from non-sitting strain; private stock, \$1.00 per fifteen. J. Z. Raymond, Mille Roches, Ont. 13-6

EXHIBITION BUFF ORPHINGTONS—Winings at Eastern Ontario, March 1906, every prize except 3rd cock. Eggs \$5 for 15. A. W. E. Hellyer, Ottawa South, Ont. 6-9

EGGS FOR HATCHING—From Indian Game, Golden Wyandotte, Barred Rock and Buff Orpingtons, \$9 for 15. A few choice birds for sale. S. Ling, 128 River Avenue, Winnipeg.

POULTRY will yield a very large dividend on the small investment required, if you keep and feed your hens properly. The Canadian Poultry Review tells you exactly how to do it. Fifty cents a year, or send us One Dollar and the names of two yearly subscribers and we will send the Review to you for one year free. **CANADIAN POULTRY REVIEW**, Toronto, Ont. 22-8

Lost, Strayed or Impounded

Below is to be found a list of impounded, lost and stray stock in Western Canada. In addition to notices otherwise received, it includes the official list of such animals reported to the Manitoba, Saskatchewan and Alberta Governments. This department is for the benefit of paid-up subscribers to the "Farmer's Advocate," each of whom is entitled to one free insertion of a notice not exceeding five lines. Notices exceeding five lines will be charged two cents per word for each additional word, payable in advance.

Did you read the proof we gave you last week, that ads. on this page pay?

Eighty inquiries came through this paper in one week from a small ad. of a farm for sale in Saskatchewan.

REMEMBER—the price is only one cent a word per insertion.

MANITOBA.

ESTRAY.

FINDLAY—Strayed to the farm of J. W. Hay one red cow, branded J B on the right hip, also one black steer two years old with horns. No brand visible. J. W. Hay, 14, T. 7, R. 25.

CLEARWATER—From Township 25, Range 28, near Roblin, a grey Broncho horse, branded, 4 years old, a bay mare seven years old and a sorrel mare twelve years old. Last seen at Assessippi. If seen please advise Matt. Tamm, the owner, Roblin P. O.

LOST.

SNOWFLAKE—Since May 15, from Sec. 16, T. 1, R. 9, one red heifer, dehorned, V out of left ear, due to calf May 20. Finder will be rewarded. R. Barber.

ALBERTA.

LOST.

NANTON—Strayed from section 2, T. 15, R. 27, W. 4, one black work-horse, weight about 1,300, branded S on left hip. Anyone giving information leading to his recovery will be suitably rewarded. Geo. B. Thomson.

ESTRAY.

RED WILLOW—Brown mare, branded on jaw, four white feet, white stripe on face. Estray March 29, 1906. T. Turner, Sec. 34—38—10, care of Brownfields P. O.

GHOST PINE CREEK—Strayed away from 20—22—31, spring 1905, 2 geldings, brown, five and six years, one with white forehead brand E. on left shoulder, \$50 reward for delivery—Geoffrey Swanwick.

Breeders' Directory

Breeders name, post-office address, class of stock kept, will be inserted under this heading at \$4.00 per line per year. Terms, Cash strictly in advance. No card to be less than two lines or more than three lines.

P. F. HUNTLEY, Registered Hereford cattle—Lacombe, Alta.

REMEMBER—It will pay you to say you saw the ad. in this paper.

JAMES DUTHIE, Melgund Stock Farm, Hartney, Man.—Shorthorns and Berkshires.

J. COFFEY, Dalesboro, Sask. Shorthorns, Yorkshire swine of all ages and both sexes.

ADAMSON BROS., Gladstone, Man. Young Scotch-topped Shorthorn bull for sale.

W. N. CROWELL, Napinka, Man. Breeder of Shorthorns and Berkshires. Stock for sale.

A & J MORRISON, Glen Ross Farm, Home-wood, Man. Shorthorns and Clydesdales.

SHORTHORNS and Clydesdales. Wm. Chalmers, Smithfield Stock Farm, Brandon. Phone at residence.

C. BALDWIN, Emerson, Man.—Yorkshire swine, both sexes. Herd boar purchased from Camfield, Minn.

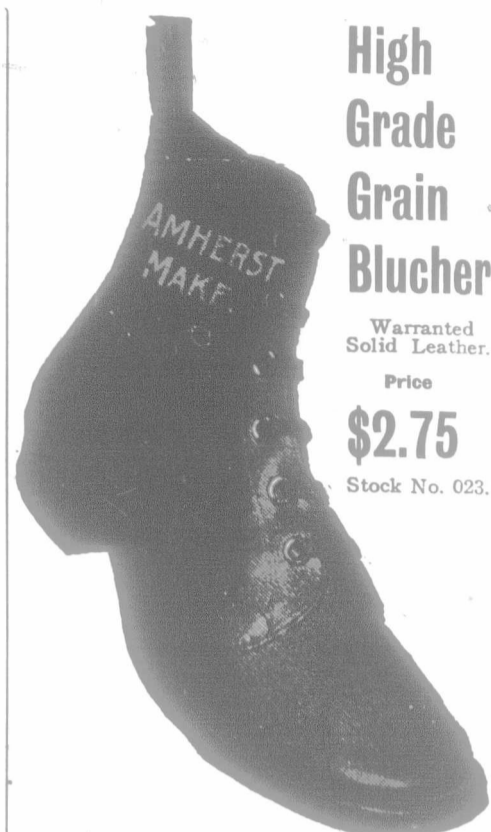
BROWNE BROS., Ellisboro, Assa., breeders of Polled Angus cattle and Berkshire swine. Stock of both for sale.

H. V. CLENDENING, Harding, Man.—Breeder and importer of Red Polled cattle, the dual-purpose breed. H. V. Clendenning.

JOHN WISHART, Portage la Prairie, Man.—Breeder of Clydesdales and Hackney horses. Young and breeding stock of both sexes for sale.

T. W. ROBSON, Manitou, Man. Breeder of pure-bred Shorthorns. Large herd from which to select. Young bulls and females of all ages for sale.

JOHN GARDHOUSE & SONS, Highfield P. O., Ont. Breeders of Scotch and Scotch-topped Shorthorns, Lincoln and Leicester sheep and Shire horses.



High Grade Grain Blucher

Warranted Solid Leather.

Price

\$2.75

Stock No. 023.

Save Your Repairing Bill. Buy the Best. If Amherst make is not sold in your town write

E. J. BLAQUIER, Box 683, Brandon, Man. If sent by parcel post 25c. extra.

An Irish woman had twins so much alike that no one could tell the difference. There was only one distinction one of them had a trick of biting. "When I want to know then one from the other," said the mother "I put my finger in Mike's mouth, and, if he bites, I know it's Patrick!"

CREAM GATHERING CREAMERIES.

The cream-gathering creamery system has many features to recommend it, and is, alike, popular with patrons and factory proprietors. It leaves the skim-milk in ideal condition for feeding purposes where a hand separator is used for creaming the milk, the cost per pound of butter for delivery to the factory is very materially reduced, and as the territory that a creamery can serve is greatly enlarged under this system, and the make proportionately increased, the cost of manufacture is correspondingly reduced. Furthermore, it is especially suited to the conditions of sparsely populated districts. These features all commend themselves so strongly to the farmer that we believe that the cream-gathering creamery system has gained a strong and lasting hold upon the affections of those to whom our dairy industry really belongs. The weakness of the system of course is the fact that so much is dependent upon the work of so many, and the hands of the skilled butter-maker are largely tied. But good, earnest, intelligent patrons working under favorable conditions can supply to a creamery a quality of cream that will make a fine quality of butter. At the same time we would say this, and say it most emphatically, that unless we are up and doing the advantages of this system will prove wholly or largely illusory; for the gain made at the manufacturing end will be more than swallowed up at the selling end through the manufacturing of butter of an inferior quality that must be sold at a reduced price.

CARE OF CREAM.

The herculean task before us in connection with our cream-gathering creameries is the education of the patrons to properly care for their cream. When the cream leaves the farm it should be both clean in flavor and sweet. This means care and cleanliness throughout, and the providing of facilities for cooling the cream. The utensils used should be of the best quality and properly cleaned, so that there will be no danger of contamination from this source. In this connection, we would most strongly condemn the practice of not cleaning a separator every time it is used. In some sections of the country this most faulty practice is on the increase and cannot be too strongly condemned. Some separator agents who have advised this practice should be severely reprimanded by their employers

(Continued on page 920.)

One Reason Why
 Rex Flintkote Roofing is being chosen for all kinds of buildings in preference to all other roofings is the ease with which it is laid. No matter how irregular the roof space, or how many turns and angles it presents (see buildings below), any one can lay Rex Flintkote perfectly. Positively proof against leaks from rain or snow, unaffected by heat, cold or chemical action, and an efficient protection against fires from falling sparks. This trade mark is found on every roll of

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Refuse to buy any roofing if the dealer cannot show you this guarantee of quality. Send for the name of our agent. Send for Free Samples. With them you will also get a book showing all kinds of buildings from poultry houses to railroad terminals and public buildings in all parts of the country, which are to-day proving the superiority of Rex Flintkote Roofing. Please write for them at once.

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General Change of Time Tables, June 3, 1906

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Connecting at Port Arthur with Northern Navigation Co.'s Steamers, Canadian Pacific S. S. Line and Canadian Pacific Railway.

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First-Class Sleepers and Dining Cars (Meals a la carte) between Edmonton, Winnipeg and Port Arthur.

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Tri-weekly through trains between Winnipeg and Prince Albert, via Carberry and Neepawa. Through first-class Sleepers.

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SUMMER TOURS TO ST. PAUL, MINNEAPOLIS, DULUTH, ISLE ROYALE AND EASTERN POINTS.



For Sleeping Car and Steamer Reservations and Fullest Particulars—

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In a few words, you gain this by using a Tubular: (1). One-quarter to one-half more cream, because Tubulars skim by centrifugal force, which is thousands of times stronger than the force of gravity that makes cream rise in pans. (2). One-half to twice as much for butter, because Tubulars remove dirt and bacteria, thus making gilt-edge butter possible. (3). Half the work saved, because you finish skimming five minutes after milking, feed warm skimmed milk at barn, and have only the can of cream to care for. Write today for catalog W-186. It tells all plainly.

THE SHARPLES SEPARATOR CO.
TORONTO, CAN. WEST CHESTER, PA. CHICAGO, ILL.



GOSSIP

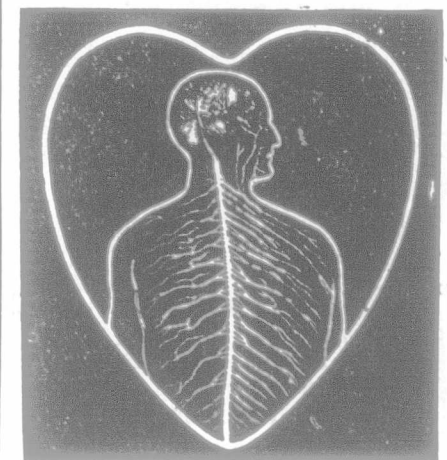
TEAMING AND CONVERSATION.

Every once and again the matter of whether it is better for the manager of a horse to talk to the animal comes up for discussion, and some able writer is sure to point out that most very successful riders and drivers are extremely silent men, rarely speaking or making a move in the most exciting situations, yet seeming to communicate with the horse in a perfectly understandable way. An explanation offered for this is that the horse has a limited apprehension of the meaning of words, but is endowed with a wonderfully retentive memory for the things he once learns, therefore it is best to teach him a few necessary things and teach those thoroughly. This is no doubt true, but it is equally true that many horses require soothing by the voice of some human that they know, and have confidence in. In the cases of those that are handled by the phenomenally taciturn driver it will generally be found that another driver may have to encourage with the voice in order to avert panic under some circumstances, and on the other hand the horseman who rarely speaks may have no difficulty in handling the horse that is used to being talked to almost continuously. The silent man frequently has some sort of magnetic influence that is given to few mortals. But there are examples of the very antithesis of this. On the tracks of the Western Jockey Club a few years ago there operated an elderly man who made a specialty of redeeming "rogues." How he did it no man could tell. He used no medicines, nor any paraphernalia, but he never failed with a horse. His method was a loquacious one, too. He would get close to the horse and begin talking in a smooth monotonous voice. Pretty soon he would have that nag's confidence, and would be exchanging caresses with him. In two days' time, if not interfered with, he could reduce a man-eater to a state where a child might play under his feet. Sometimes the patient would relapse into his evil ways, but the "Professor" would reform him again in a few hours. Gleason, the greatest of horse trainers in this country, worked on entirely different lines. His method was to make the horse understand that bad acting brought its own punishment. With the assistance of ingeniously devised apparatus he could render any horse powerless without harming the animal. He convinced the horse that the driver was the stronger, and then the rest was easy. Gleason was sometimes silent and sometimes talkative. It made no difference to him whether the horse liked him or not, it was sure to respect him. But he was never unkind except when the horse forced punishment on himself.

The best hostlers believe in keeping the car of a horse busy. Go into any stable where experts are employed and watch the horses being groomed. A constant hissing sound is kept up. With every stroke of the comb or brush that sibilant "s-s-s-z-z" will be heard. The "swipes" say that a horse will never kick his groom as long as that sound is heard. This reasoning is analogous to the theory and practice of cow-punchers that the only way to calm a herd of cattle that is about to stampede is to sing. The human voice appears to have a soothing effect on all animals that know man even remotely, that is if it is properly exercised, by which is meant that there should be no crescendo passages, but a steady sort of monotone with a hint of rhythm in it.

My advice to amateur drivers is to talk as little as possible to the horse, and never use a word that is intended as a command except when it is meant to be obeyed. For instance never shout "Whoa" at a horse unless you intend that he shall come to stand still. If he lacks courage it may be wise to say "steady," or some other word that does not have the same sound as "whoa", and cannot be mistaken for it. The principal thing is to divert the attention of the animal from what he imagines is a danger, and inspire him with the idea that so long as you are in command he cannot be hurt except by you, and that you won't hurt him unless he does the thing he has been taught is wrong.

MILBURN'S Heart and Nerve Pills.



Are a specific for all diseases and disorders arising from a run-down condition of the heart or nerve system, such as Palpitation of the Heart, Nervous Prostration, Nervousness, Sleeplessness, Faint and Dizzy Spells, Brain Fag, etc. They are especially beneficial to women troubled with irregular menstruation.

Price 50 cents per box, or 3 for \$1.25. All dealers, or THE T. MILBURN CO., LIMITED, Toronto, Ont.

After all, however, there are nearly as many temperamental varieties among horses as there are among humans and a general rule is hard to apply. Probably the only safe one is to know just a little in advance what the horse intends to do and keep him from it if it is harmful.—Horse Show Monthly.

In changing his advertisement H. M. Bing the Hereford breeder of Glenella, Man., says the sale at Winnipeg at which he had two bulls one of which he sold for seventy two dollars, was far from being a satisfactory close of a season of fairly active demand; whether it was because farmers do not expect to get good values at these sales or because Winnipeg is too far removed from the source of demand one cannot say, although the former seems to be the most likely explanation for the lack of demand. However Mr. Bing will not be found forsaking the "white faces." This summer he will show a few head including his herd bull, two cows, a two-year-old and a few young things. In the meantime he can supply young breeding stock of the very best quality and of the most approved breeding.

Humorous.

When Frank Stockton started out with his Rudder Grange experiences he undertook to keep chickens. One old motherly Plymouth Rock brought out a brood late in the fall, and Stockton gave her a great deal of his attention. He named each of the chicks after some literary friend, among the rest Mary Mapes Dodge. Mrs. Dodge was visiting the farm some time later, and happening to think of her namesake, she said:

"By the way, Frank, how does little Mary Mapes Dodge get along?"
"The funny thing about little Mary Mapes Dodge," said he, "is, she turns out to be Thomas Bailey Aldrich."

A city gentleman was recently invited down to the country for "a day with the birds." His aim was not remarkable for its accuracy, to the great disgust of the man in attendance, whose tip was generally regulated by the size of the bag.

"Dear me!" at last exclaimed the sportsman, "but the birds seem exceptionally strong on the wing this year."
"Not all of 'em, sir," was the answer. "You've shot at the same bird about a dozen times. 'E's a follerin' you about, sir."

"Following me about? Nonsense! Why should a bird do that?"

"Well, sir," came the reply. "I dunno, I'm sure, unless 'e's argin' round you for safety."

U S U S U S

World's Champion Cow

The Guernsey cow here illustrated has proven herself the biggest butter producer in the world. This letter tells the story.



"Milwaukee, Wis., Feb. 12, 1906. My Guernsey cow, Yeksa Sunbeam, No. 15439, holds the World's record for a yearly butter-fat production, having made in a year 857.15 pounds of butter-fat. She also made 14920.8 pounds of milk testing 5.75 per cent. fat; this is the largest amount of milk produced in a year by any Guernsey cow.

The butter exhibited from my farm was awarded **FIRST PRIZE** over all at the State Dairyman's Convention at Waukesha, Wis., scoring 97½ points.

I use the United States Cream Separator, of which I have three on as many farms.

FRED RIETBROCK."

Don't miss the point of this story: **GOOD COWS** and the

U. S. CREAM SEPARATOR

is a combination that means biggest profit to dairymen. You feed your cows to produce rich milk, and to get the most butter-fat from that milk you need a U. S. Cream Separator because it **Holds the WORLD'S RECORD for CLEAN SKIMMING.**


Our new, handsome 1906 catalogue tells all about the U. S. Read it before you put any money into a cream separator. Just write us, "Send catalogue number 110". You'll get one by return mail. Better lay this paper down and write us now while you think of it.

VERMONT FARM MACHINE CO.

Bellows Falls, Vermont.

Eighteen centrally located distributing warehouses throughout the United States and Canada. Prompt delivery. 436

U S U S U S



Sunshine Furnace


You can shake down a "Sunshine" furnace without getting covered with ashes and dust—has a dust flue through which all the dust and ashes escape when you shake down the fire.

This heater is so easily regulated and operated, and so clean, that it makes the entire household bright and genial.

Sold by all enterprising dealers. Booklet free.

McClary's

LONDON, TORONTO, MONTREAL, WINNIPEG, VANCOUVER, ST. JOHN. HAMILTON.



George Ade, the well known novelist and playwright of Brooks, Ind., and well known to the Chicago trade as a feeder, had in three cars of cattle to-day, being some of his own feeding. His brother, Jos. Ade, also well known as a prominent feeder, accompanied this shipment. He said his brother George had just arrived home Saturday from his Egyptian trip, and on meeting his brother, he told him that they had just a little rain that day, for which they were very thankful, as it had been very dry in their part of Indiana, to which his brother George replied: "It has also been very dry where I came from, along the Nile. They had a little rain there a week or so ago, the first rainfall in five years, and it created quite a little talk about the town."—*Live Stock World.*

THE SELECTION OF SHOW SHEEP.

This is a matter of the greatest importance, which cannot be hurriedly done. It requires many careful inspections, and ought to be done by gradually reducing the first selection by careful drafting down to the required number. So far as regards the old ram or two-shear sheep the selection is naturally limited, but at no age can any breed be better or more typically represented. In these classes the majority of champion animals are found, and further, at no other showyard age can the visitor or export buyer secure a better or more complete idea of what a ram of the breed should be than when such exhibits are mature sheep.

Then selection of yearling sheep, both male and female, requires more care and time, because in most flocks the number from which selection can be made is larger, and maturity and full development have not been reached. The first object to be aimed at is to select only sheep well made, symmetrical, and properly formed. Then come breed type and character—masculinity in the male, and sweetness in the female. Wool, too, is a most important point, and no animal should be selected that has not a fleece of even and uniform character. No animal, male or female, should be taken for the show yard lot that cannot walk well and is not able to carry itself in proper form.

In the case of ewes, which are almost invariably exhibited in pens of three, it is essential that the selected lot should be uniform in color, etc., that will enable thoroughly and well matured pens to be finally selected for exhibition. With the selection of lambs, of both sexes, the shepherd finds a task of very great difficulty. This arises very much from the fact that with the very rapid growth of the lambs it is almost impossible to ascertain with any degree of certainty how the individual lamb or lambs, will grow and develop. For this reason it is necessary to have a considerable larger number in what is generally termed the showyard lot. It is often drawn upon to a greater extent than many anticipate, on account of the number of lambs that fail to keep up the touch and handle under the great stress of showyard work and constant and continuous pushing forward.

In general terms it may be said that the ruling conditions here are the same as in the selection of the yearling sheep, except that in this age greater notice should be given to the pedigree, because if the individual characteristics of the parents are known this is a good indication in most instances of what the lamb may be expected to develop into. One of the truest tests of any flock is uniformity of types, character, flock likeness and true breed characteristics running all through the entire exhibit from the flock. A competitor should always make his selection so that the whole of his entries, no matter the age or sex, that they could with hope of success compete for a prize for the best collection of the breed, were such a prize offered. Nothing is so detrimental to the reputation of any flock from the stud point of view as to find it represented by different types of the same breed.

PREPARATION.

Many times have I been asked, When should we begin to prepare our sheep for show? Almost as soon as the lamb is born. Showyard preparation is unfortunately blamed for many losses it should be innocent of, and the reason is that in many cases the commencement of this work is put off until the last minute, with the result that the only way in which the proper condition, according to the prevailing idea, for the showyard can be secured, is by inordinate forcing. If therefore it is intended for exhibit, let the preparation be commenced as early as possible, and then the necessary condition can be gradually obtained, with the result that little, if any, loss will be experienced.

For lambs there is but little time, and hence the risk in their preparation is much greater than among older sheep. With an early selection, gradually reduced as time goes on, and the whole lot kept going ahead, those not required for the showyard will make full value in the market. Exercise is a very important point in successful preparation. Ne-

MILBURN'S

LAXA LIVER PILLS

Are a combination of the active principles of the most valuable vegetable remedies for diseases and disorders of the Liver, Stomach and Bowels.

CURE CONSTIPATION

Stoic Headache, Jaundice, Heartburn, Catarrh of the Stomach, Dizziness, Blotches and Pimples.

CURE BILIOUSNESS

Dyspepsia, Sour Stomach, Water Brash, Liver Complaint, Sallow or Muddy Complexion.

CLEAN COATED TONGUE

Sweeten the breath and clear away all waste and poisonous matter from the system. Price 25c. a bottle or 5 for \$1.00. All dealers or THE T. MILBURN CO., Limited, Toronto, Ont.

GREAT ENGLISH REMEDY.

BLAIR'S GOUT AND RHEUMATIC PILLS

The best and surest cure for GOUT and RHEUMATISM. Thousands have testified to it. All stores and the BOLE DRUG CO., Ltd., Winnipeg, and LYMAN, SONS & CO., Montreal and Toronto.

glect of this has been the reason for many gleet of this has been the reason for many heavy losses, most of which were quite preventable. The successful exhibitor of horses or bulls, or the successful exhibitor of thoroughbred stock, all know this, but not so, unfortunately, with many a sheep exhibitor. Why this is so is inconceivable, for time and again so many prizes have been lost through neglect of this point, that it might be expected that even the novice would not fail to note it.

One of the most successful shepherds some twenty years ago, has time after time said, "Eh, sir, 'tis not always the best sheep that wins, but in ninety nine cases out of a hundred it goes to the sheep that is best trained and exhibited."

Let all who aspire to showyard honors in our sheep classes bear this in mind. The training a ram, ewe, or lamb to walk properly, either in the halter or without it, takes time, but it is time well spent, because it adds largely to the chances of success in the show-ring. In its natural state the sheep does not stay in one spot, but moves continuously whilst getting its food, and hence the nearer one can keep the animal to its natural condition the greater are the chances of success.

Coloring is, fortunately, a practice on the decline, and the sooner it dies out the better. It adds somewhat to the appearance if applied in moderation, but when applied as it still is amongst the Down sheep wools or the Lincolns in instances it is thoroughly objectionable, and at the same time most detrimental to the best interests of the breed, preventing visitors from examining either the sheep or its fleece.

SHEEPMAN.

A judge's little daughter, although she had talked several times through the telephone to her father, had never gone through the formalities necessary in calling him up. The first time she tried it she took up the receiver as she had seen others do. "Hallo! I want to talk to papa," she said, when she had placed her lips to the transmitter. "Number, please?" said the young lady at the exchange. "Singular!" she answered, surprised at the question, but proud that she knew something of the rudiments of grammar.

Fistula and Poll Evil



Any person, however inexperienced, can readily cure either disease with Fleming's


Fleming's Fistula and Poll Evil Cure

—even bad old cases that skilled doctors have abandoned. Easy and simple; no cutting; just a little attention every fifth day—and your money refunded if it ever fails. Cures most cases within thirty days leaving the horse sound and smooth. All particulars given in Fleming's Vest-Pocket Veterinary Adviser. Write us for a free copy. Ninety-six pages, covering more than a hundred veterinary subjects. Durably bound, indexed and illustrated.

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THE Hoover Digger

Clean, fast work. It stands the wear and tear.



Favorite in every great potato growing district. Get free catalog.

The Hoover-Prout Co., Lock Box 32, Avery, O.

Are You DEAF?

I was deaf myself for 25 years. I perfected and patented a small invisible ear drum in order to help my own hearing. It is called "The Way Ear Drum," and by the use of these drums I can NOW HEAR WHISPERS. I want all deaf people to write me. I do not claim to "cure" all cases of deafness, neither can I benefit those who were born deaf. But I CAN HELP 90 per cent of those whose hearing is defective.

Won't you take the trouble to write and find out all about me and my invention. Tell me the cause of your deafness. Geo. P. Way, 616 Majestic Bldg., Detroit, Mich.

Advertise in the Advocate.

Questions and Answers

WILD PEA—HOMESTEADING.

1. I enclose a flower of wild pea which grows here in the spring; is it poisonous for cattle?
 2. I file for my homestead on April 1, 1905, and commence actual settlement on same on September 30; does the time count from April or September? Could I get my patent before September, 1908?
 3. If I commence actual settlement on my place on December 1, 1905, and stay on until December, 1906, does that count for two years settlement?
- Alta. J. L. W.

Ans.—1. We have never known the wild pea to poison stock.
2. The law is that the homesteader shall reside on his homestead for six months in each three consecutive years from time of filing his claim. You therefore should get your patent about July if you give notice of application early in the year.
3. No.

TAXES ON LOT.

A. B. and C. own town lot with building and are assessed as joint owners. C. occupying, A. and B. never lived in town. Taxes levied are \$1.00 per lot and \$1.00 poll tax.

1. Can a poll tax be levied on A. and B.?
2. Can a poll tax be levied on C. (joint owner)?
3. Can the one lot be assessed to each one, thereby making taxes \$3.00 on lot? Sask. A. J. W. L.

Ans.—1. A. B. and C. may be assessed as joint owners and C. as occupier of the property.
2. If A. and B. do not reside in town the poll tax cannot be levied on them. A poll tax cannot be levied on C. as he should be assessed as occupier.
3. The lot should not be assessed to each, if this is a joint ownership.

"HORSE SENSE"

Only the tenderfoot buys a horse, simply because his color and markings are attractive, and his coat sleek and shiny. To the genuine horseman this fellow is appropriately known as a "sucker".



Apply ordinary "horse sense" to the purchase of a cream separator, and you won't buy one, which has little more than paint to recommend it, nor be deceived by the misleading claim of "cheap". The cheapness is invariably at the manufacturing end.

De Laval Separators are sold on the guarantee of unqualified superiority in every feature of separator utility, regardless of the most extravagant claims made for imitating machines, and if after a careful examination there remains any doubt of De Laval pre-eminence, you may, free of charge, try one for a week in your own home. You owe it to yourself to investigate the De Laval, since its merit has been amply sufficient to win Every Exclusive Highest Award ever offered for cream separators in competition open to the world.

We would like to mail you a catalog—ask for it.

The De Laval Separator Co., 14-16 Princess St., Winnipeg

Montreal Toronto Vancouver New York Philadelphia Chicago San Francisco Portland Seattle

HUMOROUS

The large woman who was acting as chairman, being in some doubt as to what the sixteen ladies who had been talking in chorus for ten minutes were in favor of, rapped sharply upon the table and asked: "What is the sense of this meeting?" "There ain't any," said a little man, who had slipped into the hall unobserved. Then, the door being open, he fled with a demonic howl of triumph—Chicago Record Herald.

In a car speeding over a western prairie, one man remarked to another: "This is the first time I ever travelled over this line without a newly married pair on board. I have been studying the passengers and there is not a bridal couple among them." Just then the train stopped, and a man who had been seated with a lady and a little girl across the aisle walked to the end of the car. The child leaned forward and in a shrill, penetrating treble asked: "Mamma, which papa do you like best, this new papa or my other papa?"

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The farmer's home without an Agricultural Library is lacking in one of the chief aids to pleasure and success. We have gone over first-class works on agricultural subjects, and selected the best.

See below for prices and how to obtain them.

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The musicians ideal is realized in the

QUARTER GRAND

Every musician with any ambition at all is anxious to have a grand piano, as the enthusiastic automobilist is to have a forty-horse-power machine.

There is that tonal beauty in the Quarter Grand usually obtained only in larger grand pianos, yet it requires so little more space than an upright that any moderate-sized music-room will accommodate one.

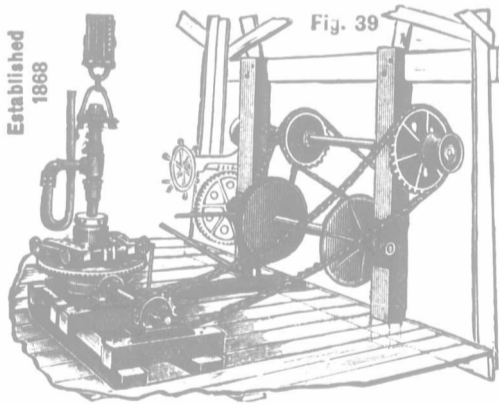
Truly, the ideal piano for the true artist where space does not admit of the usual grand piano is the

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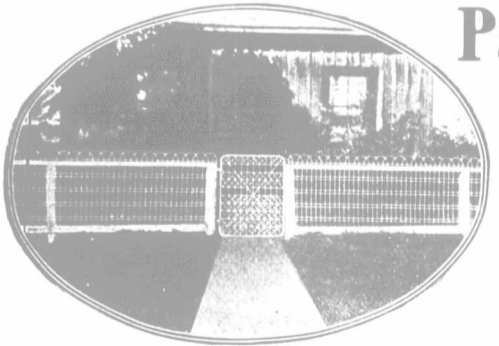
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NOTES FROM IRELAND

THE NATIONAL CATTLE SHOW.

This letter must principally deal with the great annual spring show of the Royal Dublin Society, which took place at Ballsbridge, in the Irish capital, about the middle of April. Of late years this event has been assuming increased importance in stock-breeding circles, not only in Ireland, but also in the whole of the United Kingdom. This year it aroused, as usual, keen interest all over the country, and its offcoming appeared to possess more than customary attractiveness for our cross-channel neighbors in England and Scotland, who were strongly represented, not merely as spectators, but, to a larger extent than ever before, as exhibitors in the different sections. Not so very many years ago discussion was rife regarding the advisability of allowing English and Scotch breeders to exhibit in open competition at this show, for the simple reason—let it be confessed—that, as an invariable rule, the visitors had the better of the argument, and took home with them the most coveted trophies and honors of the ring. It then appeared that it was a forlorn hope to expect Irish breeders to compete successfully with the old-established British herds; the best that the Emerald Isle contained were no match for the tip-top specimens of the different breeds brought across the water to put in array against them. It is, however, strikingly significant of the change that has come over Irish stock-breeding during the past few seasons, that this year, at any rate, so far as the Shorthorn is concerned—and this breed is practically the backbone of our cattle industry—our cross-channel rivals have been kept in their place. In all, close on 30 English specimens of the red, white and roan were present, and of these only three succeeded in winning first prizes, although they made claim in every class; while all the championships and special prizes for the breed were secured by Irish exhibitors. However, as I may not occupy unlimited space, I must be more specific in my remarks and come directly to the salient characteristics of the show. The fixture, which, as indicated already, was very largely attended, was twice visited by His Excellency Lord Aberdeen, who evinced very keen interest in the proceedings. In all respects the show may be said to have reflected an all-round improvement in the cattle kept in the country; indeed, on no previous occasion has a better collection of breeding stock been seen in any Irish show-yard—this applying not only to the quality, but also to the numerical strength of the exhibits. The services of several prominent English and Scotch breed experts were requisitioned for the judging.

Speaking generally, it was for its magnificent display of Shorthorns that the show was particularly noted. In nine classes this breed was represented by no less than 553 specimens, some of the individual classes containing exceptionally large entries; thus the two provided for "young" and "old" yearling bulls attracted 140 and 130 entries, respectively—the others also being well furnished. The all-round standard of merit attained by the exhibits was gratifyingly high, and, needless to say, competition for places proved exceedingly keen. One of the healthiest signs apparent in the section was the increase in the number of "tenant-farmer-breeders" among the exhibitors, especially from the north, where the breeding of Shorthorns is rapidly becoming a favorite business. Some of these men have already made a great success of the work, and not a few animals have been brought out by them that have sold in public auction at prices running well over 100 gs. But this is digressing, and we have not yet finished with the show. The section set apart for aged bulls is always a notable one at Ballsbridge, inasmuch as it succeeds in attracting some of the best "sire stock" in the country. This year the class contained

fully 50 splendid bulls, which formed quite a strong feature. After a considerable amount of inspection the leading position, and together with it, as subsequently happened, the rare honor of championship of the show, was bestowed upon a wonderfully symmetrical roan, named Linksfield Champion, owned and exhibited by a prominent lady admirer of the breed, Miss Staples, of Durrow, Queen's Co. This bull last year made what is called in theatrical language, "a tour of the Provinces," and at every show exhibited he met and defeated all comers. He was bred in Scotland by Col. Johnston, of Elgin, and brought over to Ireland a couple of years ago at the not too extravagant price of 50 gs. When exhibited at Dublin he aroused a great amount of attention, and his grand, evenly-fleshed frame, his rare substance and excellent quality, pleased the critics immensely. Ere the show had been many hours in progress he passed into the possession of Mr. F. Miller, of Birkenhead, at the very handsome figure of 500 gs.—ten times his original cost! Reserve for the championship fell to another richly-fleshed roan, in Diamond Link, also bred in Scotland, but now owned by Mr. H. J. C. Toler Aylward, of Cokelenny. This bull won the first prize as the best two-year-old in the show. In the big class of 140 "young" yearling bulls, the place of honor was filled by an exceedingly promising youngster, Extra Stamp by name, bred and exhibited by Sir H. H. Smiley, Bart., of Lorne Co., Antrim. Other successful Shorthorn exhibitors included: Mr. Geo. Harrison, of Gairford Hall, Darlington; Mr. H. S. Leon, Bletchley, Bucks; Mr. R. G. Nash, Lucan; Mr. A. Smith, Ballacolla; Mrs. E. Walsh, Cootehill, and the Earl of Bessborough.

Never before has such a fine display been made by the Herefords. All told 104 of the picturesque white-faces appeared, and special interest and tone were imparted to the section, by reason of the fact that His Majesty the King sent over from his choice herd at Windsor five grand specimens, which did a good deal of winning. Sir J. R. Cotterell, Bart.; Mr. Peter Coates and Mr. A. E. Hughes, three other well-known and successful English breeders, were also strongly represented; but still the visitors had by no means a monopoly of the honors, as Col. Everard (of tobacco-culture fame), Major Hillas and Major Hamilton creditably upheld the honor of the home country. For use on the great grazing tracts of the midlands, Herefords have much to commend them, and no doubt the excellent turnout of the breed at this show will give them increased favor in the eyes of Irish farmers. An out-standing animal was the King's great champion bull, Fire-king which is a typical specimen of the breed as has been seen for a long time. He carried all before him in English shows, nor were his colors lowered at our Irish fixture.

The comely black Aberdeen-Angus mustered to the extent of 153, and this section contained a notable group of well-bred and symmetrical females from a prominent Scotch herd—that belonged to Mr. Kerr, of Harviestoun Castle. The display, all in all, was a most creditable one, and a very good standard was attained, even in the comparative absence of cross-channel exhibits to strengthen it. Among our Irish exhibitors the most successful were: Mr. E. H. Woods, of Skerries; Mr. E. J. Beaumont Nesbitt, of Edenderry; Mr. A. J. Owen, of Shanvaghey; Mr. E. Coey, of Lorne, and Mr. Hum Bland, of Greystones.

These are the breeds that will doubtless appeal most to Canadian readers, and for the remainder it will suffice to merely mention that some excellent specimens of the following breeds were also exhibited: Norfolk and Suffolk Red Polled, Kerries, Dexters, Jerseys and Ayrshires.

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NOTICE TO STOCK OWNERS.

Notice is hereby given that on and after the First day of July, 1906, the joint office of the Recorders of Brands for the Provinces of Alberta and Saskatchewan will be situated at Medicine Hat, Alberta. All communications in connection with brands should after that date be addressed to THE RECORDER OF BRANDS, MEDICINE HAT, ALBERTA.

Money sent in payment of fees should be remitted by postal note, money order, or express order made payable to The Recorder of Brands, Medicine Hat. If cheques are sent, they must be certified by the bank on which they are drawn, and the necessary exchange must be included.

RECORDING OF BRANDS IN BOTH PROVINCES.

Persons ranging cattle in the vicinity of the inter-provincial boundary (the Fourth Meridian) when applying for brands should, in order to protect themselves, also apply for a record of the same in the Province of Alberta, which may be effected on payment of an additional fee of \$1.00.

J. R. C. HONEYMAN,

Deputy Commissioner of Agriculture,
 Department of Agriculture,
 Provincial Government Offices,
 Regina, Sask. June 1st, 1906.

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TWO VENEREAL DISEASES OF HORSES.

The following lucid descriptions of two venereal diseases of horses, one malignant and incurable, the other curable, from the pen of Dr. J. G. Rutherford Veterinary Director General for Canada will be read with interest by all horse-men.

MALADIE DU COIT (MALIGNANT AND INCURABLE.)

This disease which has long been known in the old world was introduced to this continent in 1882 by a Percheron stallion imported from France, and used for service in Illinois. Unfortunately the nature of the affection was not discovered until several years had elapsed, during which period a considerable number of stallions and mares had become infected. Some of these infected animals were removed from the district before quarantine was imposed, with the result that a number of disease centres have been established in various parts of the United States. The large influx of American horses is undoubtedly responsible for the introduction of this loathsome malady to western Canada, where its existence was first reported from Lethbridge district in March, 1904.

Since that time active measures have been adopted for its repression, but owing to the nature of the malady and the loose conditions under which the horses are handled in the range country, it is a matter of great difficulty to deal with it effectually. A copy of the regulations now in force is printed herewith, and the hearty co-operation of the horse-owners in enforcing the same is earnestly solicited. Compensation on a most liberal scale, when the intrinsic value of a diseased animal is considered, is paid for all animals slaughtered by order of an authorized inspector, except when the owner has been guilty of an infraction of the Animal Contagious Diseases Act, or of the regulations passed under the authority of the said Act.

Maladie du Coit, wherever it exists, paralyzes horse-breeding operations and ruins those engaged in the horse-breeding industry. It is, therefore, the plain duty of all interested in horses or horse-breeding to second in every possible way the efforts of the inspectors of this department to stamp it out wherever found. As its eradication is a matter of public and not private interest, every breeder is urged to report immediately any suspicious case of the existence of which he may become aware, whether among his own animals or those of others.

Maladie du Coit (Dourine) is a malignant, insidious, incurable disease peculiar to the horse, supposed to be due to the entrance into the system of a micro-organism, known as the *Trypanosoma Equiperdum*.

This disease as its name implies, is essentially one of coition, being transmitted during the act of service, from stallion to mare, and vice versa. Some authorities report, however, that they have succeeded in inducing it, by experimental inoculation, in the horse and in several other animals of different species.

The symptoms, as in other contagious diseases, differ considerably according to the susceptibility of the animal, the nature of its surroundings, and the vitality of the virus. Some cases, therefore, are acute, the various stages of the disease following each other rapidly, and these generally reach a fatal termination within a very short time. Unfortunately, however, this is rarely the case, the disease generally following a chronic, insidious and semi-latent course, making it, in view of the constant danger of infection, a most serious menace to the horse-breeding industry.

In reading the following description of the symptoms as presented in the three stages of the malady, it will be well to bear in mind the great liability to variation, such as the appearance of characteristic symptoms in one animal, and their total, or partial, absence in another. The stages are not ushered in uniformly, neither are they of regular duration, as in many cases almost all evidence of disease will occasionally disappear for a time, only to recur later and with renewed virulence. The duration of the disease varies,

and may extend from a month to several years, the average time, however, being about eighteen months. After copulation with an infected animal the germ, having been transmitted during this act, commences to multiply rapidly or tardily, according to its vitality, the susceptibility of the infected individual and the favorable or unfavorable condition of its surroundings in the generative organs. This constitutes the incubative period, which may last from one to two weeks or much longer.

THE PRIMARY STAGE

is ushered in after the germs have developed sufficient activity to produce irritation in adjacent tissues, whether observable or not. In the stallion the mucous membrane of the urethral canal (passage through which urine is voided) exhibits the first sign of irritation; its external opening at the end of the penis (*Meatus Urinarius*) assumes a bright red color, accompanied by swelling, which may cause it to bulge out prominently, followed by a discharge, at first almost imperceptible, but increasing in quantity as the disease progresses.

The above mentioned symptoms are often very meagre, and frequently overlooked, especially so with the unsuspicious. During this period, however, the stallion is a positive infective agent, his desire for serving mares being greatly increased and his ability to perform this function not seriously impaired.

The possibility of widespread infection, if such a case is not detected and immediately placed under restraint, can be readily appreciated.

As the disease advances the irritation of the generative organs increases frequent erections of the penis follow, this organ often attaining unusual proportions, and occasionally swelling to such an extent as to prevent its complete return to the sheath. Urination is performed often and incompletely, the urine being mixed with a mucous discharge varying in quantity, and the act is often accompanied by switching of the tail or stamping of the feet, due to the irritable condition of the parts.

Red spots may appear on the penis and adjacent parts; these may disappear rapidly with a tendency to return, or they may increase in virulence, forming discharging sores.

White spots, due to loss of pigment (coloring matter of the skin), may indicate previous eruptions on the penis, sheath and surrounding tissues. This condition is often well marked, in some cases the spots forming large patches, which may involve the major portion of the penis, changing it to a dirty yellowish white, rough and unhealthy looking organ, while in others, they are only slightly perceptible or altogether absent.

A gradual swelling of the sheath becomes noticeable, and is frequently the first symptom observed; this swelling often involves the scrotum and testicles, and may extend to the abdomen and limbs. The character of the swelling is generally cold, doughy and passive, and it may obstinately persist, disappear rapidly, remain absent, or return frequently. Occasionally it is hot tender and painful and shows a tendency to the formation of vesicles and erosions of the tissues, accompanied by a purulent discharge.

The penis, in many cases, becomes protruded from the sheath continually, the animal being unable to retract it, owing to the loss of such power, or to the excessive amount of swelling present. The appetite still remains unimpaired, and no serious constitutional disturbances are yet observable.

In the mare the symptoms are somewhat similar, differing only in accordance with the anatomical and physiological structures of the generative organs. The same variable incubative period follows infection as in the male. The preliminary symptoms are also of a very imperfect type, and difficult to detect, unless suspicions have been previously aroused. They are most frequently insidious, and consequently very dangerous, necessitating, as in the stallion, every precaution, where the slightest cause for suspicion exists.

On close observation however, a discharge may be noticed from the vulva (external opening), the mucous membrane lining it and the vagina

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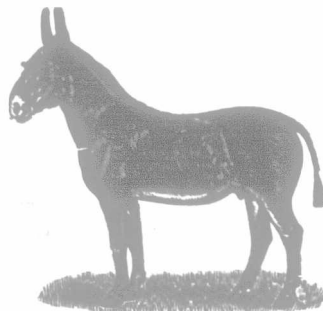
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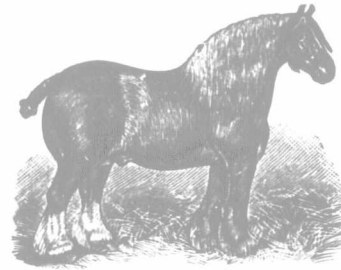
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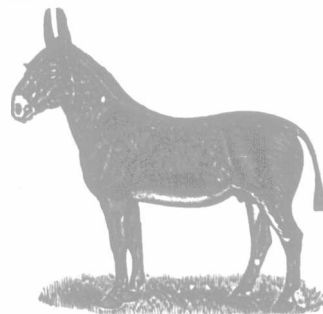
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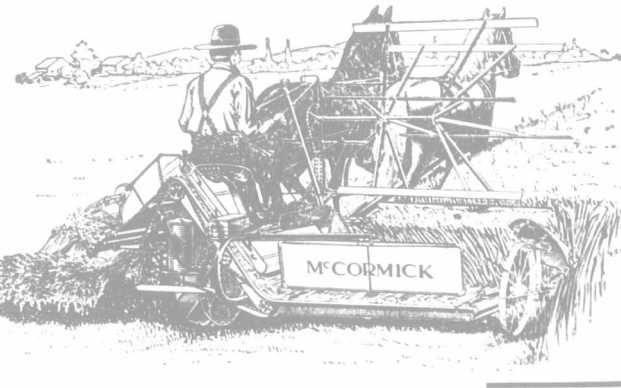
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(canal from external opening to the womb) gradually assumes a discolored, thickened and rough appearance giving evidence of increasing irritation and consequent inflammatory results. Red spots may make their appearance on the vaginal membrane, and when present, are especially noticeable in the region of the already thickened and erect clitoris (the part commonly exposed by mares in season), a condition of this organ which, to a greater or less extent, is persistently present throughout the course of the disease.

An abnormal sexual desire is intermittently present, the mare, at intervals continually exposing the clitoris. Urine, mixed with mucus, is frequently voided in jets. This causes increased irritation, followed by stretching, stamping the feet, and switching the tail. An extremely irritable condition has been observed accompanying these symptoms, the animal rubbing itself violently against any object.

The discharge from the vulva becomes sticky and irritating, adhering to adjacent parts and scalding the contact tissues. The discharge may increase or decrease in quantity, and become more purulent as the disease advances. Local swellings appear, as in the stallion, at any stage of the disease, and may also, in the mare, be the first noticeable symptom; these frequently affecting one side of the vulva and may extend to the other, or spreading rapidly, involve the mammary glands, abdomen and limbs, or they may confine themselves persistently to more limited areas, often giving the vulva a puckered and deformed appearance.

As in the stallion, these swellings may persist, disappear suddenly, remain absent, or recur frequently. They are generally of a doughy consistency, cold and painless, but occasionally appear in an acute form, with heat and pain present, accompanied by a tendency to the formation of vesicles, followed by erosion and discharge.

As the disease advances, the lining membranes of the vulva and vagina assume a yellowish color, the clitoris distinctly presenting a white or yellowish, and slightly corrugated appearance. White spots appear in the locations of previous vesicles, which vary considerably from small indefinite ones to most decided and marked patches. Constitutional symptoms may not appear for weeks, and often months, and in some cases not until the local symptoms have been absent for some time, the animal still maintaining a good appetite.

THE SECONDARY STAGE

is the result of the migration of the micro organisms with their accompanying toxins, into the general system, which may occur from one to three months after infection, but differs largely in individuals. The disease now commences to mark its progress in no uncertain manner, and it is at this stage that the inexperienced realize that there is something seriously wrong. One or more, or all symptoms become aggravated, constitutional symptoms supervene, the condition of the skin and hair becomes dry and harsh, the rounded form disappears and the outlines of the ribs, haunches and spine gradually gain prominence, the eye takes on a dull, expressionless stare, the ears lop over, the lips often hang pendulous, the eyelids droop, owing to partial paralysis of the nerves supplying the parts, and a general marked unthrifty appearance presents itself.

In the stallion the appetite may be capricious, but is rarely impaired, languor and dullness replace his former vigor, occasional trembling may be noticed over the surface of the body, especially so when other horses are approaching. Although stupid, and apparently not interested in his surroundings, he frequently neighs persistently.

The swellings, when present, become hard and chronic, the testicles either enlarged (this condition being due to the thickening of the membranes enveloping the organs, and not the testicular substance proper) or atrophied, either hanging abnormally pendulous or being close up to the abdomen.

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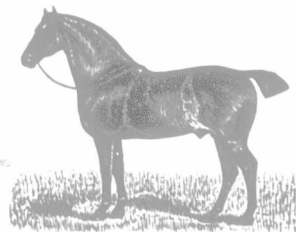


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of the glands may exist including the sub-maxillary under the lower jaw.

Rather peculiar, but characteristic elevations make their appearance at irregular intervals during this stage of the disease, and have been called, very appropriately, 'plaques.' They vary largely in dimensions and may appear rapidly, disappear as quickly, show a tendency to persist, remain absent, or break out in other localities. They are, in the majority of cases, neither hot nor painful, but occasionally may assume an irritable aspect.

Plaques may appear singly, or in groups, and are seen most frequently in the region of the croup, abdomen, chest, shoulders and neck, and are better described as flat elevations, raising up the skin, with defined edges, in some cases quite prominent, in others only perceptible by taking a position alongside, in front of, or behind the animal, and viewing the outline of the body. Marked alterations in the animal's gait soon became apparent, when standing he maintains his position imperfectly, moves his weight from one limb to another, keeping one limb in a semi-flexed position, and often raising it from the ground. When walking, knuckling over, or the dragging of a hind limb are often distinctly noticeable. Upon trotting, a stilty, jerky and swaying motion is quite apparent, the animal often falling down unexpectedly, showing a general inability to control his movements. He now prefers a lying posture and when rising, manifests difficulty, and exhibits evidence of pain in doing so.

The stallion is unable to cover, the erections of the penis being feeble and incomplete, and his inability to handle himself well marked.

In the mare, the same constitutional symptoms prominently develop. The local swellings also assume a hard and chronic form, giving the vulva a distorted appearance. They may also occur on each side of, or below the vulva, which at this stage, often remains partially open at its lower extremity, due to the chronic thickening of the clitoris. The mucous membrane of the vagina presents a dirty yellowish, rough appearance, the discharge, when present, acquiring a more purulent nature, and irritating the adjacent parts. Plaques may make their appearance in the same manner as in the stallion, and in the same irregular way.

The infection of the lymphatic system also shows the same inclination as in the male, causing enlarged glands, or suppurating sores. Marked depression and stupidity intervene, with the same inability to control movements, the lying posture being favored.

THE TERTIARY STAGE in both sexes is marked by extreme depletion of the system, the progression of the disease having produced secondary lesions of a grave nature in the more important organs of the body. The senses become more and more blunted, the discharge from ulcers and generative organs may be profuse, in some cases there is a catarrhal discharge from the nostrils, sometimes accompanied by an inflammatory condition of the eyes.

The patient, at this stage, has difficulty in maintaining a standing posture generally requiring support. When moving, it sways from side to side and stubs the toes. The knees and pasterns finally give way, the animal falls and is unable to rise again. General paralysis, pneumonia, or other results of septic infection intervene, and hasten the end.

Cases have been known in which animals have reached the tertiary stage and have then made an apparent recovery. In all such cases, however, the disease has again manifested itself in a most severe form, ending in the death of the affected animal. An apparent recovery, therefore, should be looked upon with grave suspicion.

CONGENITAL EXANTHEMA (CURABLE). Maladie du coit is frequently confounded with another, much more common but, fortunately, far less dangerous venereal disease of horses known as Coital or Congenital Exantema. This affection, which is not at all uncommon in Canada, generally makes its appearance during the breeding season, attention being directed to it by the fact of various mares served by the same horse becoming affected at once.

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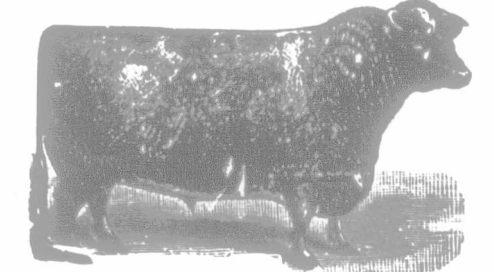
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Such mares show the presence of vaginal irritation by frequent attempts to urinate and by switching of the tail. Examination shows the vagina inflamed and studded with small vesicles which break leaving ulcers which, however, heal readily leaving temporary scars. These vesicles also appear frequently on the external surface of the vulva leaving in this situation small white spots about the size of grains of shot, which gradually become recovered with pigment. There is, during the acute stage, more or less muco-purulent discharge from the vagina, which, however, soon ceases as the irritation disappears. The disease is not of a malignant nature, although it is undoubtedly contagious. It yields readily to simple treatment and, except when complicated by co-existent strangles or other disease, generally runs its course in from two to four weeks.

In the stallion the vesicles appear on the penis and sheath and present characteristics similar to those described as occurring in the mare. Sometimes, when the horse is kept at service by an ignorant or unscrupulous groom, the ulcers become greatly irritated, with the result that prolonged rest and careful treatment are necessitated in order to restore the parts to a normal condition.

Coital Exanthema is not a serious disease, its principal ill effect being the loss due to the non-impregnation of breeding mares at the proper season. While no great alarm need, therefore, be felt on discovering its presence, it is strongly recommended, in view of the existence in Canada of the greatly more serious Maladie du Coit, that owners of mares or stallions showing any abnormal condition of the generative organs should immediately subject them to a careful examination at the hands of a qualified veterinary practitioner. After such examination if any doubt remains as to the nature of the disease the matter should be at once reported to this department and to the nearest veterinary inspector.—*Bulletin II, Health of Animals.*

DIP THE LAMBS.

When the ewes of the flock are shorn, any ticks that may be upon them will transfer themselves to the longer fleeces of the lambs, where they will find more congenial quarters and will fatten on fresh young blood. The dipping of the lambs, therefore, is a solution of one of the advertised dips, or of tobacco, a few days after shearing the ewes, should be among the certainties on no account to be neglected. And the ewes, also, will be better for a dip, or at least, of having some of the solution that is left over poured on their backs and rubbed on their sides to clean the skin and allay any itchiness that may affect them. A tank or vat made for the purpose of dipping, with a dripping board or platform at the going-out end on which to squeeze out the surplus of solution and carry it back into the tank, should be provided where the flock is of any considerable size, but in the case of small flocks the lambs may be dipped in an ordinary vinegar barrel, and stood in a washtub for the dripping and squeezing out process. The dipping solution, for best effect, should be warm, though this is not essential, and soft water should, if possible, be used. As a rule, we believe the dipping of the lambs in the spring is the only treatment Canadian flocks receive for the destruction of vermin, but we know from experience that it pays well to treat again in the late fall or early winter, by either dipping or pouring, to guard against the sheep suffering from ticks or lice towards spring, and failing in condition at a time when treatment is impracticable, and the suffering must be endured all through the warm spring months till the usual shearing time, as early shearing (unwashed) is unsafe in the case of in-lamb ewes or sheep in ordinary condition; therefore, to keep a clear conscience and ensure the comfort and thrift of the flock, make it a fixed rule to treat for ticks both in spring and fall. The cost will be doubly repaid in increased growth of wool and gain in weight and in the general health of the flock.

GOSSIP

THE CALGARY SUMMER FAIR.

The Prize List of the Inter-Western Pacific Exhibition to be held at Calgary on the 10th, 11th, and 12th of July next, has just been issued. Special excursion rates have been secured for passengers to Calgary during the week of the fair, and the freight arrangements for live stock exhibits are also very liberal.

The most attractive feature of the prize list is the Shorthorn classes where over \$800 is offered in prizes. Amongst the heaviest contributors in this class is the Dominion Shorthorn Breeders' Association, the Canadian Pacific Railway Company and the Massey-Harris Company. A piece of silver plate is offered by the Canadian Bank of Commerce for the best bull any age, and Mr. R. K. Bennett of Rushford Ranch, Calgary, is offering a silver cup for two animals, any age or sex, bred and owned by exhibitor, the progeny of one cow. In Herefords the prize list has been somewhat improved over previous years. The Canadian Hereford Breeders' Association is donating two championships for the best bull and best cow. Classes are also provided for Polled Angus and Galloways.

Messrs. John Dryden & Son, Brooklin, Ont., write: "We have had great inquiry and sale for Shorthorns the past season, and especially for young bulls ready for service. We have sold over twenty, and among them some of the best bulls that we ever raised. We are receiving inquiries for young bulls sired by 'Prince Gloster,' to be delivered next season. Among our recent sales is the young imported bull that was advertised in your paper. He is called Heather King, and belongs to the well-known Jilt family, sired by Lovat's Heir, dam by Count St. Clair. These are two especially good crosses, and are well known in the Old Country and in Canada. This young bull was sold to Mr. J. R. Harvie, Orillia, Ont., and was well grown, doing very well when he left Maple Shade, and if a combination of good breeding with good individuality counts, we do not see how Mr. Harvie can possibly be disappointed in this bull as a sire. When he has done service where he now is, he should find ready sale to head some other good Shorthorn herd. The past year and a half has seen great business done in Shropshires; the trade has not only been a good one with us, but has been general all over Canada. Realizing this fact, and knowing that the supply in Canada at the present time will not meet the demand this season, we have again decided to import about fifty head. Twenty of these will be yearling rams, and the remainder ewes of the same age. They have all been selected in person by Mr. Dryden, Sr., and he writes home that they are an exceptionally good lot, among them being some rams and ewes that will be hard to beat in any show-ring. They are bred by such breeders of prominence as Mr. Buttar, Mr. Farmer and others in England, and at most of the places the purchases made by our firm were the first choice. Mr. Dryden also adds that they are an extra well-covered lot, and have beautiful skins and fleeces. We also have, as usual, about thirty yearling rams of our own breeding and a few ewes. We should be glad to answer any inquiry from those who may wish Shropshires, either home-bred or imported."

A quiet and retiring citizen occupied a seat near the door of a crowded car when a masterful stout woman entered.

Having no newspaper behind which to hide he was fixed and subjugated by her glittering eye. He rose and offered his place to her. Seating herself—without thanking him—she exclaimed in tones that reached to the farthest end of the car:

"What do you want to stand up there for? Come here and sit on my lap."

"Madam," gasped the man, as his face became scarlet. "I beg your pardon, I—I—"

"What do you mean?" shrieked the woman. "You know very well I was speaking to my niece there behind you."

NAVAL RUPTURE (UMBILICAL RUPTURE).

This disfigurement has depreciated the selling value of many an otherwise sound colt, and no breeding season passes without such cases coming under our notice. In some districts it is much commoner than in others, and would appear to be due to climatic causes quite as much as to hereditary. An eminent French authority has stated that five per cent. of foals, both horses and mules, bred in France, suffer from this deformity. The bulging navel may be observed at birth, or develop later; it may disappear without interference, or remain during the whole of the animal's life.

The congenital form is produced during intrauterine life, when some part of the digestive and biliary apparatus is situated within the umbilical cord. The connective tissue of the foetus is in this region gelatinous, and in it are imbedded the arteries and vein alluded to in connection with a former paper, describing the causes of leakage from the navel, also the emphalo-mesenteric vessels and a portion of intestine. With the withering of the navel string after birth, this (Whartonian) gelatine undergoes condensation, ultimately forming a dense fibrous membrane, for the especial purpose of closing the umbilical opening, contracting by degrees, until the edges are brought together, and nothing remains in the adult but a lozenge-shaped scar or cicatrix. During this process in the normal subject, the portion of intestine has been withdrawn and the urachus withered to a thin ligament, and the blood vessels obliterated.

Any interruption to the processes above described may result in the enlargement we call umbilical hernia, or ruptured navel. The cicatrization, or formation of a scar of dense fibrous tissue, may have been prevented, hindered, or temporarily interrupted, so that the opening in the belly (umbilicus) remains, and through it bulges a portion of omentum, or intestine, or both, together with some portion of urachus, forming a pouch in the skin which may alone restrain it. The non-appearance of it for a few days is easily accounted for by the emptiness of the new-born, their sides being hollow, or what we commonly call "tucked up" when speaking of horses. When the young animal has distended himself with milk, and some amount of flatulence follows, the belly contents take the least line of resistance, and ruptured navel is discovered.

ACCIDENTAL OR ACQUIRED HERNIA. is not rare. It is brought about by the wild gambols of the young while yet the processes above described are incomplete. Many of our readers will have heard, and some, like the writer, will have seen, colts a few days old leap a hurdle which they will never after be capable of negotiating. They will, too, have observed that they are better at taking off than at landing, and are apt to come down a "buster" on the other side—a real literal "buster," for it is in such moments that the soft and immature substance covering the umbilical opening gives way. The excitement of a foal when the dam is first taken away has resulted in this form of hernia. It has also followed upon the straining of constipation, the relaxation of tissues caused by diarrhoea, and the spasms of colic.

There is a predisposition in underbred animals to this trouble on account of the unwillingness of the gelatine to undergo the metamorphosis we have attempted to describe, while in the thoroughbreds there is an activity or disposition to the organization of higher (denser) tissues. It follows also that in poor, ill-used, anemic mothers, a tissue debility will be frequently imparted to offspring, and this soft material refuses to be converted. It has been observed that wet years are followed by more cases of umbilical hernia, and that they are more frequent in low marshy lands than on higher and drier soils. On the former the greater volume of moist food will, of course, involve a greater abdominal distention,

which favors rupture. Heredity is an undoubted factor, mares which had been ruptured as foals have been observed to reproduce the trouble in their progeny.

CONTENTS OF THE ENLARGEMENT OR TUMOR.

We have said that in some cases there is nothing but the skin to restrain the abdominal contents from escaping at the umbilicus. This is noticeable in puppies, for in them the ordinary belly lining (peritoneum) has been broken through, and the skin so stretched that it is semi-transparent. As a rule, in the larger animals, the peritoneal lining remains unbroken. The tumor itself varies greatly as to the presence and amount of intestine, of omentum, or other structures contained, and herein is the surgeon's difficulty and the amateur's pitfall.

It so often happens that the pouch of skin contains nothing but omentum or abdominal fat of a particular kind, that rash operators succeed on one or more occasions, and, being ignorant, and growing careless, presently perform on a subject with intestine in the bulge. The result is fatal. Each case should be very carefully and fully examined, both in a standing and a prone attitude. A full animal on his feet, or when made to cough, will show the enlargement at its greatest. A comparatively empty youngster in a recumbent posture may scarcely show it at all; but these ruptures vary in size from a walnut to a child's head. As a rule the tumor can be pushed back into the abdomen, through its ring, and there retained by a finger or two until the patient coughs or fixes his diaphragm in efforts to escape the unwelcome examination. So far its permanent return is shown to be possible. Next it should be gently pulled upon, as one draws a cow's teat, and while the animal is standing. Such manipulation will give to sensitive fingers and trained observers a sensation conveying a fair notion of what is inside. If it is all fat and fibrous tissue it will impart a more or less doughy feel to the fingers, and even leave a momentary depression like certain forms of swelled legs in horses. If gut is in it, and that not full of alimentary material, the sensation of compressing a partly filled bladder will be imparted to the finger; it is also possible to feel the ordinary creepy (vermicular) movements of the bowel, which is always going on. The animal should be examined twice, the first time without preparation, the second time after a considerable fast. The latter condition makes palpation a better guide to diagnosis, the empty bowel being more compressible and elastic, returning quickly after compression, and not remaining doughy or receiving a temporary finger mark. The reader will appreciate the importance of these distinctions since a correct estimate of the contents of the sac will almost insure a safe and successful treatment, while a mistake is likely to prove fatal. If there is doubt as to the contents of the sac, and the animal is only a few weeks old, it will be advisable to wait and watch if the rupture seems to remain the same size, increase or diminish. If it remains about the same, more time may be given. If decidedly decreasing, let well alone; but if visibly enlarging operation must be resorted to.

SPONTANEOUS RECOVERY is due to the fact that during the sucking period the small intestine is not only the most developed portion, but it occupies the floor of the abdomen immediately over the weak umbilical ring. As the diet changes from milk to solid food the small intestine is withdrawn into the left flank, and its place upon the floor of the belly is occupied by the caeco-colic mass of bowel, which does not readily lend itself to extrusion through a small orifice or weak place. By this gradual withdrawal closure is invited and usually takes place, although there always remains on close examination a slight bulge in the contour of the abdomen.

Unless some special reason exists for early interference, such as an approaching show, the matter should be deferred until the fall, when the animal is stronger and better able to bear surgical operation. Mr. Armatage and others have secured considerable success with a trust which bears his name, but I have not found it free from objection or so useful as other means, where no sort of

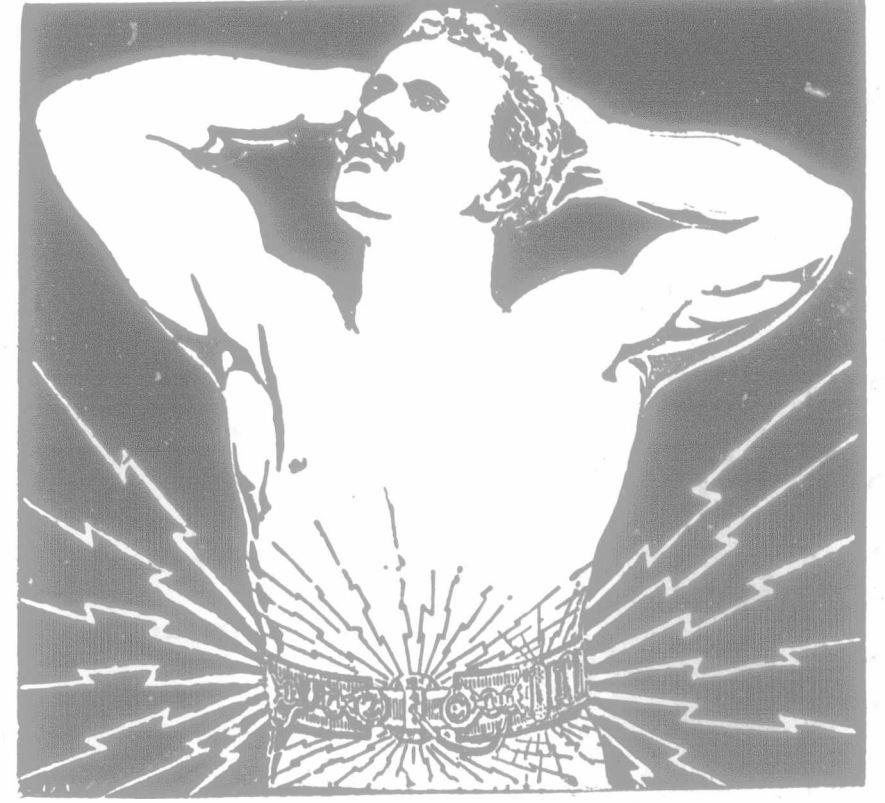


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That's trusting you a good deal and it is showing a good deal of confidence in my Belt. But I know that most men are honest, especially when they have been cured of a serious ailment, and very few will impose on me.

As to what my Belt will do, I know that it will cure wherever there is a possible chance, and there is a good chance in nine cases out of ten.

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But some men don't believe anything until they see it. That's why I make this offer. I want to let you see it, and feel it, and know it by your own experience, before I get a cent.

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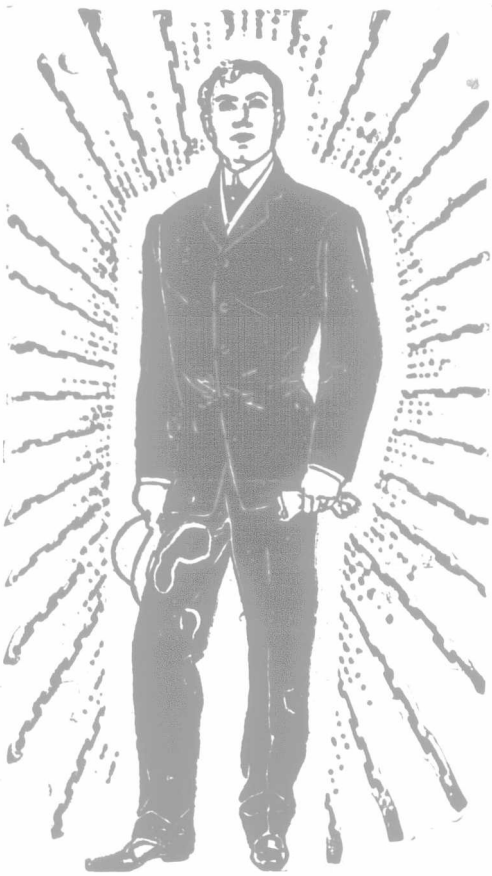
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shifting harness is required, and the movements of the animal are not so likely to interfere with their operation. Simple pressure, continuously applied, that would keep the extruded parts within the abdominal walls as effectually as we can with our fingers do it temporarily, would be all that is needed. This discovery leads to bandaging; the medical man with infants to deal with, who can be so frequently "trussed" and generally controlled, at once supposes that a bandage is all that is needed. There are thousands of people who would thank him to show us how to keep it in its place. Armatage's truss has not yet been improved upon for the purpose.

SUCCESSFUL PRACTICES OF OLD FARRIERS of using strong mineral acids can be traced back to Celsus, who wrote in the first century A.D., but whose Latin descriptions of surgical operations betray his reliance upon the much older writings of the Greeks. He was not himself a practitioner, save as an amateur, treating his own dependants.

These bold practitioners dab the base or margin of the tumor with nitric or sulphuric acid by means of a mop made of cotton wool or spun glass, and rub it in with moderate friction. A scar forms, and a lot of swelling ensues. The swelling is due to the action of the nitric acid on the subcutaneous connective tissue, which is infiltrated, and causes a uniform pressure on the hernied mass, this leads to the latter being pushed into the abdomen and kept there as if by a truss. The skin subsequently becomes dry and hard like parchment. In place of the hernia there is a newly-formed hard mass of fibrous tissue, which is gradually lessened by the absorption of the softer portions, and condensation of the remainder, just as one sees in a fresh and in an old scar on one's own hand. Like all heroic remedies it has its risks, and a too liberal use of acid may so injure a thin skin as to allow the gut to break through with a fatal result. For puppies it should never be employed, and any one but an experienced veterinary surgeon attempting this operation should begin by spots of acid around the base. An interval of three weeks should be allowed if the swelling proves that the acid has been too cautiously used before making another application. Some practitioners prefer sulphuric acid; their method is to draw lines over the tumor with a glass rod dipped in the strong acid. Others use an ordinary blister of biniodide of mercury. This is safer, and not much less reliable than the strong acids, but may need repetition in a fortnight if the navel is seen to be again disposed to bulge.

A METHOD

advocated by Bouley, will commend itself to many. It consists merely of injecting a solution of common salt into the connective tissue immediately under the skin by means of a hypodermic syringe, such as are used for injecting calves suffering from husk. This acts as an irritant, and produces the same oedematous swelling as the other remedies and with like results.

There are cases in which none of the foregoing will serve so well as constriction by ligature, clams, or suture. The skin covering the hernia may be so manipulated as to enable one to pinch it up, apart from its contents, and wind a more or less tight string around it, or place a clamp of wood or metal on it, or run a needle through and tie the thread, or wooden (or wire nails) skewers crossed and wound round with twine in a figure of 8. (The latter method has been used by ourselves, and found very satisfactory. Ed.) They all act by setting up a form of inflammation which first produces fluid, and subsequently organized tissues of a fibrous material, admirably calculated to form a stopper to the hole in the belly, and afterwards, by its gradual contraction, to bring the edges of the walls together. Too great pressure from either the above measures will endanger sloughing and the escape of the intestine. The modest fee usually charged by the veterinary surgeons for operating on navel hernia is well bestowed, but there are many of our readers not only in British Colonies but scattered all over the world, who must either undertake these jobs themselves or let them alone, as the great ranches are too wide for a veterinary surgeon to be available, and a hundred miles often separates the animal owner from the animal doctor.— *Vet. in F. & S.*

for so doing. Special care should be taken to milk in a clean place and in as clean a manner as possible; for particles of dirt which fall into the milk at milking time are laden with organisms which produce the worst flavors with which we have to contend, and while thus harmful at any time, are doubly so under the cream-gathering creamery system where the cream is held for some time before it is sent to the factory. The milk should be creamed as soon as possible after milking, and for this purpose we strongly favor the use of a hand separator over any method of setting the milk, as it provides the most efficient and thorough method of creaming the milk, it enables us to make a cream of any desired richness—we recommend making a cream testing about 30 per cent.—the quantity to be cooled is greatly reduced, and the cream if properly cooled, will be one of superior quality. Care should be taken to set the separator in a clean place and to stand it on a floor that can be kept clean and not on an earth or ground floor which is sure to get into bad condition sooner or later through milk being spilled upon and soaking into it, and thus causing bad odors. We would again admonish those who have hand separators to keep them thoroughly clean. We have met more separators than one in such a condition that they themselves would contaminate milk put through them. The separator bowl and its parts should not only look clean but should have a clean smell as well. If giving off any bad odors, examine all tubes and crevices about the bowl, for this is evidence in itself that there is dirt being harbored somewhere.

So much for cleanliness. This is in order to keep the milk and cream as free as possible from the organisms which work so much mischief. The next step is to cool the cream as soon as possible after it comes from the separator in order to prevent the development of those organisms that do gain access to it, for be as careful as we may milk and cream are never free of germ life. The warm cream should be put into a vessel by itself and thoroughly cooled before being added to the cold cream. The three most common mistakes made in handling and cooling cream are, that warm cream is mixed with the cold, the cream is frequently left too long before being cooled, and it is not cooled to and held at a low enough temperature. Cool it below 50 degrees as soon as possible after it comes from the separator and hold it well under that temperature until sent to the creamery. Send it to the creamery both sweet and clean in flavor.

STORING OF ICE.

With but rare exceptions, the storing of ice for cooling the cream is an absolute necessity, and any substitute is at best little more than a make-shift. Ice may be stored in a cheaply constructed building, and a small lean-to, with a tank for holding ice and water will provide an efficient means of cooling the cream. Some farmers who formerly stored ice for use in creaming their milk have given up doing so since purchasing hand separators. This is a serious mistake. While a good separator will cream milk more efficiently than will any method of setting, yet it exercises no hypnotic influence over the organisms that cause the souring of the cream or that bring about other undesirable changes. We must store ice for cooling the cream and holding it at a low temperature, so as to numb these organisms and prevent or check their growth.

At the present time the great majority of our creamery patrons have not the facilities for properly cooling their cream, and the cream does not arrive at the creamery sufficiently sweet and clean in flavor for making butter of the finest quality, as it is frequently over-ripe and over-fermented. Since we have decided to adopt the cream-gathering creamery system, on account of the many substantial advantages it has to offer, let our patrons pay the price demanded for these advantages and so get the full benefit of the system. The chief demand is that they provide facilities for caring for their cream, that is, that they store ice to properly cool it. The managers of our creameries have a great missionary work before them in the training of their patrons, and they must grapple with it in earnest. They

might begin by getting their best patrons to adopt the best system of caring for their cream and use these as a means of leavening the whole lump.

DELIVERY OF CREAM.

The cream should be collected and delivered sufficiently often to insure its arrival at the creamery in good condition. This should not be less than three times per week during the greater portion of the season. Frequently cream is seriously injured in delivering it to the creamery. We have even seen collectors using ordinary milk cans in summer for this purpose. Cream received from the patron in the best condition would not, under such circumstances, reach the creamery in a condition fit for making good butter. The tanks or cans should be well insulated, and where the latter, in particular, are used they should be protected from the sun by means of a good canvas cover over the wagon. One of the most disagreeable flavors imparted to cream is that due to the sun's rays striking directly upon and heating the walls of a can, and this flavor is invariably passed on to the butter. Where the cream is delivered by individual patrons the can should be covered with a blanket.

Provision should be made for properly caring for the cream at the creamery, and in this connection we would specially mention the importance of having suitable vats, vats with plenty of space at the sides and end for water and ice for quickly cooling the cream in warm weather. We should like to see our butter-makers make freer use of the acidimeter than they have been making in the past, and in ripening the cream we would advise them to err on the safe side, shat it, to under-ripen rather than over-ripen it. For a 30 per cent. cream .5 (5-10) per cent. of acid is quite sufficient.

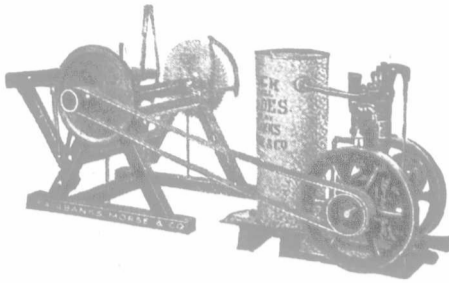
SAMPLING AND TESTING CREAM.

Too great care cannot be exercised in the sampling of cream and the testing of it. It is much more difficult to obtain a representative sample of cream than of milk, and it is equally so to prepare and test the composite samples. We do not favor the idea of sending the composite sample bottles around with the cream collector. There is danger of the bottle getting broken, the samples may become partially churned, and through frequent heating in summer weather they are likely to get into a very bad condition, a condition unfit for insuring a thoroughly reliable test. It is much better to keep the composite samples in a suitable place in the creamery and supply separate bottles for the cream-collector to bring samples of cream to the creamery in. This plan possesses the double advantage of affording the butter-maker an opportunity of examining each patron's cream and of enabling him to keep his composite samples in good condition.

Some makers meet with considerable difficulty in testing their composite samples, on account of the mould that forms on and in them. A few drops of formalin—say four or five drops—put into the composite sample bottle at the beginning of the test period will prevent this trouble. We had this tried as an experiment last summer, in a creamery where they were troubled with mould in the samples, and the trouble disappeared.

The composite samples should be kept in as cool a place as possible in order that they be in good condition for testing.

In some sparsely populated districts where they are now making dairy butter in considerable quantity, and in more thickly settled districts where the herds are small and it would take a large area to support a factory, cream-gathering creameries could be established to the decided advantage of the people of the community and of our dairy industry. Where butter is made in sufficient quantities that quite an amount of it must go onto the market, it is much better that it be made in a creamery where a large quantity of butter of uniformly good quality can be manufactured. Creamery and not home dairy butter-making is what we must depend upon to build up the butter side of our dairy industry. We are making too much dairy butter where creamery butter could be made in its stead.—J. W. MITCHELL, B. A. before Ontario Dairyman's Association



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