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SPECIMENS OF SOUTHDOWN SHEEP, THE PROPERTY OF JOHN JACKSON & SONS, ABINGDON, ONTARIO.

### **EDITORIAL**

#### Mr. John Jackson's Southdowns.

Our front page illustration of Southdowns is a fair representation of one of the finest flocks of this breed of sheep on the continent, owned by John Jackson & Sons, Woodside Farm, Abingdon, Lincoln County, Ont. This is one of the oldest flocks in the Dominion, established over thirty years, although it has been entirely renewed during the last thirteen years by importations of the best to be found in England. The Messrs. Jackson have been particular in securing the very best stock rams, both for pedigree and individual merit, regardless of cost. The same practice has been followed in the selection of the ewes. The following is a list of Royal winners added to the flock during the last ten years: 1st and 2nd prize ewes at York in 1883; 1st prize ewes at Shrewsbury in 1884; 1st prize ewes at Newcastle in 1887; 2nd prize ewes at Nottingham, 1888; 1st prize ewes at Windsor, 1889; 1st prize ewes at Plymouth, 1890; reserve number at Warwick, 1892.

The stock rams used in the flock in 1892 were as follows: Imported Norwich Beau -2919-, bred by J. J. Colman; this ram has been shown twentyfive times and has won as many first prizes, having never taken a lower place. Imported Royal Warwick -5609-, bred by E. Ellis; this ram was second prize at the Bath & West, also second at the Oxford Show, and reserve number at the Royal at Warwick, and first at Toronto and London in 1892. Imported Lodore [44], bred by Geo. Jonas; this ram was second prize at Toronto and London in 1892. Imported Bill -5614-, bred by E. Ellis-a lineal descendant of Royal Newcastle; this sheep was second at Londor and first at four other shows as a lamb in Imported Warnham (410), Vol. 2, E. F. B., bred by C. T. Lucas; this sheep was second prize as a lamb at Toronto, 1892. Imported Ben -5613bred by E. Ellis, was first prize as a lamb at London, 1892. The lambs of this year, although by so many different sires, are a very even lot.

The Woodside flock has been shown with great success at the largest shows in Canada and the United States, and during the last ten years have been awarded over one thousand prizes, including ten gold and silver medals, making a clean sweep of the Detroit International Show for two years in

The Messrs. Jackson always take pleasure in showing their flock to all interested in this breed of sheep. The lot selected for the World's Fair at Chicago is an exceedingly fine lot all round. Customers can be supplied with rams and ewes not akin, and when the quality of the sheep are considered the prices are as low as the lowest.

The ewe lamb in the front of our illustration, Duchess Northumberland -5615- was bred by His Grace the Duke of Northumberland, Albury Park, Guildford, England. She has for her sire Ellis "117" (399), that won the champion prize for best at the Oxford shows in 1891. This lamb took first prize at Toronto and London, also at the Fat Stock Show at Guelph in 1892. The two shearling ewes on the right and left are twin sisters, bred at Woodside; sired by Norwich Beau -2919-, their dam being Royal Windsor "5" -4318-, one of the pen of ewes awarded first prize at the Royal Show at Windsor, 1889. These two ewes were first prize as lambs at Toronto, Detroit, Montreal and Ottawa in 1891; and when shown singly in the shearling class were first and second, and were in the flock that won first, the get of one ram, at the Fat Stock Show at Guelph, 1892, where they were photo graphed for this sketch.

The Western Division of the Travelling Dairy, under the management of F. B. Linfield, has begun its work down on the River St. Clair, in the County of Lambton.

The death of Joseph Harris, at "Moreton Farm," in New York State, has removed one of the bestknown American agricultural writers of the past quarter century. He did much to promote the application of scientific methods to farming. Among his most widely read works were "Talks on Manures," "Walks and Talks on the Farm," and "Harris on the Pig."

Nothing gives a farm such an unsightly appearance as dilapidated fences and gates. Between planting and having is a good time to complete any repairs that were not finished before seeding. Be careful that no barrier is so low or shaky as to tempt stock into the growing crop. In one night | if in quality as well as quantity any of them do they may acquire a bad habit that will worry their not prove themselves good milkers, they should be owner for the whole season.

Farmers who only send their milk once a day should be very careful to thoroughly stir and aerate the evening milk, for if this is not done the cream will be in flakes, which will not readily enter the pipette, and the patron will not be paid for all the butterfat his milk really contains. Do not blame the factory manager for fraud, or at least carelessness, unless you give him a proper sample to work with. Milk will also make more cheese and better cheese when thoroughly aerated.

We hear that sharpers are now practising a new fraud upon unsuspecting farmers, so it will be well for them to be on their guard. A man drives up to a farmer's house in great haste and gives him a telegram announcing the serious illness of some relative. On the face of the envelope the charges are \$3 or \$5. He pays the charges and takes the first train for the home of the relative, only to find on arriving there that he has been duped. The stranger is miles away swindling some other honest tiller of the soil.

Though it is a recognized fact that both the dock ing and castrating of lambs should be done while they are quite young, still many farmers neglect it until the warm weather arrives-when not only is the suffering and loss of blood greater and the recovery more doubtful, but the flies will be trouble some, and unless the lambs are closely watched death may result. If the above operations have not already been performed, lose no time about it now, while the weather is cool and before the flies make their appearance. A wether lamb will fatten easier, will not worry the ewes, can be fed later in the season, and lastly is worth more per pound.

An enquirer in the Country Gentleman writes "I have used ashes from Canada, but the transportation to my farm on the top of the Catskills is so high that it does not pay me to buy them," and he then asks for a substitute. The editor of that paper suggests a mixture which will be lighter in weight than ashes, and will cost \$11.15 per ton, or, as the paper says, "a little less than Canada ashes cost on the average." In view of the number of articles on this subject in the Advocate, it surely is not necessary for us to make any comment on the above, nor to call attention again to the folly of selling and shipping ashes from Canadian farms.

Are your trees troubled with the oyster shell bark louse? If so, now is the time to spray with kerosene emulsion to kill the young larvæ. They leave the parent scale towards the end of May and make their way to the small twigs, where they insert their tiny beaks and never move from the spot again. In a few days threads grow out from their bodies, and in a very short time they are covered with a perfect shield, when nothing but the scraping of the tree will dislodge them. Spray while in the unprotected state with kerosene emulsion, made as follows:-Dissolve half pound of common soap in one gallon of boiling water; pour into two gallons ram any age or breed at the Bath and West, and of coal oil; churn with a force pump; when cold dilute with nine parts of water.

> Have the Paris green ready for the potato beetles as soon as they make their appearance. Each female killed at this time may be said to represent five or ten hundred of the succeeding generation, for if not prevented she will lay that number of eggs. The handiest way to apply Paris Green at this stage is in the dry form; take old cans, punch holes in the bottom, and dust it on the plants where the beetles are at work, in the proportion of one part to forty of plaster, ashes or flour. Later on, when you have to apply to the whole crop, mix with water, and use the force pump, and apply in proportion of one pound to two hundred or two hundred and fifty gallons of water. The combined mixture (Bordeaux and Paris green) gives good results. See last issue, page 183.

Some farmers seem afraid that the introduction of the Babcock test for the division of proceeds in creameries and cheese factories will place an undue power in the hands of an inexperienced or unscrupulous person who may be in charge of the factory. Inmarketinggrain, the seller either watches the scales, or what is better, has weighed the load privately. Many farmers occasionally check the weight of milk credited to them by the use of their own scales. Every farmer who sends milk may have a small Babcock, and know the percent, of fat which his milk contains. Then if any variation is disclosed by the report received from the factory, he can soon find out the reason why. Besides this, he can test his cows individually, and discarded.

A cheap insecticide has been prepared by B. W. Kilgore, assistant chemist of the North Carolina Experiment Station, as follows: -A mixture of one pound of the commercial white arsenic and two pounds of lime, boiled together for half an hour in from two to five gallons of water, and then diluted o about one hundred gallons of water.

Do not neglect your current bushes at this busy season of the year. During the press of spring work they are apt to be forgotten until the worms have stolen a march on the farmer and left the bushes nearly bare of leaves. Paris green may be used to destroy the first brood, but is too dangerous for use later on. Powdered Hellebore is the best remedy, either dusting it on pure or mixing with proportions of two pounds to forty gallons of water, or one part to ten of dust, ashes, or flour.

The different brands of Paris green and the other chemicals used will often vary so much in strength and purity that it is a good practice to spray a couple of trees, noting the result, and if any of the leaves turn brown use a less quantity next time. As the Paris green does not dissolve, merely being held in suspension in the water, great care is necessary to keep the mixture properly stirred, for if this is not done the Paris green will settle to the bottom, and the last of the barrel will be so strong that the leaves will be found to be severely

Get your spraying apparatus ready, so that when it is wanted for use you will not have to drive ten or twelve miles for a new pump, repairs to the old one, or for a supply of chemicals. A delay of two or three days at the proper season of the year will be just enough time to allow the grubs to get beyond the reach of Paris green, and the spraying will be comparatively useless. Never spray while the trees are in full bloom, for no good will be done and bees may be poisoned, but just as soon as the petals fall make the first application.

The practical use of the Bordeaux mixture has shown that it is of great value in combating the scab of apples, and also that its use increases the keeping qualities of fruit, and to a certain extent prevents the appearance of rot. A good combination fungicide and insecticide is made by combining the Bordeaux mixture and Paris green as follows:-Copper sulphate, four pounds; fresh lime, four pounds; Paris green, four ounces; water, fifty gallons. This will cost about 45c. or 50c., or \$2.00 per acre. (See page 128). The combined fungicides and insecticides effect a great saving of time and are less liable to injure the foliage.

The larvæ of the codling moth should be given their first dose of Paris green as soon as they hatch and before they have had time to eat their way into the apple, where no treatment can affect them until they choose to come out. Spray the second time in about a week or ten days. If the trees are sprayed at the proper time there will be very few wormy apples, as is proven by the perfect fruit in orchards where spraying has been practiced for several vears.

For the curculio the treatment is the same, but the result is hardly so satisfactory, though sufficiently so to pay for the trouble of spraying many times over. Here the object is different; instead of the young insect it is the mature one which you wish to poison while it feeds upon the leaves or is gouging the crescent-shaped mark on the plum to lay its egg. The egg is laid in the plum, and the larva is well out of harm's way. One reason of the only partial success of the treatment is, that many eggs may be laid before the female is poisoned. Spray at the same time as for codlingmoth, and give two or three applications, at intervals of a week or ten days, or oftener, if rain has fallen. Use one pound of Paris Green to two hundred gallons of water for apple trees, and a little for apple trees. little less for plum and cherry trees.

The black knot scourge is spreading through the country, and if the plum and cherry trees are to be saved then united action must be taken by all farmers and gardeners. The appointment of an inspector for each township is giving good results in some places. The best remedy is to cut out all knots and burn them, and dig out all worthless trees by the roots. Very often when spoken to about the knot a farmer will say, "Oh, those trees are of no use, so I did not bother cutting away the knots." This is just where most of the harm comes from. Kerosene is said to kill the growth, but we could not recommend it except when the knot is on a large limb of a very valuable tree, and then it might be tried. Nothing gives such good results as the knife and fire. In using kerosene care must be exercised so that it will not touch any other portion of the tree except the knot.

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#### Economical Farm Fencing.

How to fence has for many years been one of the most difficult problems to solve in connection with the management of the farm. While timber for fencing was in abundance, all that was required was to supply the labor between the standing tree and the snake fence, and although this fence was considered a vast improvement upon the first barrier that pioneers were wont to form in the woods to keep their stock in bounds, and whose appearance has been well indicated by the old saying, "Homely as a brush fence," yet it requires a strong stretch of imagination to see anything in the crooked rail fence beyond a temporary barrier, and a very unsightly one at that.

We still have those who advocate the crooked rail fence, contending that if properly built, staked and ridered, it will last as long as any other variety of wooden fence; but the land it occupies, which is worse than wasted, together with the utter impracticability of obtaining the material for building in most localities, puts it entire y out of the question. Most old "snake" fences will yield enough sound rails to construct a straight fence four or five rails high, if posts are used and wire loops and staples for fastening. Some of these patent reconstructed rail fences, however, are entirely worthless. Too many farmers are apparently striving to excel their neighbors in expending work building useless fences, so that it is not surprising that the work on the farm gets behind, for nothing contributes to economical labor like laying out work so that when performed it is finished and lasting. In this way numbers of fences are put up only to be blown down with the first heavy gale, and they are again raised to their tottering height only to undergo the same experience, and thus keep their proprietors in a perpetual turmoil.

If there is anything annoying it is bad fences; they not only teach the stock on the farm to be breachy and troublesome, but contribute more to illwill between neighbors than any other cause. It is an open question which would first become reconciled after being ensconced behind their more secure surroundings-the breachy stock or the cantankerous neighbors.

It requires very little reflection and less calculation to become conversant with the fact that fencing is the most costly department in the farm expense account; much of this is due to the temporary character of the fences most commonly built. For example, to lay out a one-hundred-acre farm in convenient form and in ten acre fields it will take over 1,000 rods of fence, and if this be built with boards it will cost fully \$1.00 per rod, or in other words \$1,000. Supposing this fence to last twenty years, with simple interest at six per cent. per annum, divide the principle in twenty equal parts, the combined interest and principle will just amount to \$110 per year. A pretty serious item in the farm expenditure any farmer will say, yet there it is in black and white, and no way to get out of it.

Side by side with every conceivable sort of rail, board and picket fence, we have wire fences in pretty nearly the same multiformity. Some of these have undoubted features of excellence. Very strong claims, for example, are made on behalf of the Page Woven Wire Fence as a complete barrier to all kinds of stock, it being distinguished by strength and elasticity owing to its coiled springs. Even with only three posts to the hundred feet, it is said that it will not sag nor draw together be-tween, but we would be disposed to recommend more in order to greater security. After a thorough test on a small scale the Lake Erie & Detroit Railway last year used seventy-five miles of this fence. Some forty rods having been in use for years on the Michigan Agricultural College Farm, the Executive Committee unanimously ordered more of it. This

style of fence is sold ready to stretch on the posts.

Then we have the different kinds of hedge fences, doubtless instituted with a view of providing winter pasture for field mice, if we may judge of the way these rodents have gone for rods of hedge plants during last winter. They have appreciated the efforts of the companies who have provided the plants, but just who is to fa her the loss the farmer will tell later on, and probably when settling-time comes round pleasantries will be at a premium. We have no way of estimating just how many thousand miles of these hedge fences have been set out, nor do we know how competent to fulfill expectations the company will be that has had its persuasive agents abroad. This we can say, that we have seen miles and miles in more than one county of these prospective hedges, the owners of which state that the allotted time when the finished fence should be handed over is drawing near, yet the completion seems to be as far off as when the plants were first set out.

That they will make an impassable barrier if sufficient posts and wires are placed among the

hedge plant itself is to play, further than ornament, we will leave some one else to answer. With regard to the obligations that farmers have placed on themselves in giving orders for these fences we cannot say, but we would feel tempted to try how far the courts would support the company before we would be inclined to pay the last instalment on the contracts.

That wire fences of some variety are to be the future field barriers people seem pretty well agreed. What sort is best suited to the requirements of the farm is the question to be decided, and it is the weak and strong points of each that we wish to discuss. Those who have had valuable horses or other animals ruined by the cruel barbed wire realize that it should have no place where valuable stock is kept. Again, this fence does not answer the purpose of a barrier, unless uncommonly well built, as the wires are readily sprung apart, and by this means unruly cattle often get through to feed upon the crops in the adjoining field. The same difficulty is found with many of the smooth wire fences where no netting or cross stays are placed to hold the wires together.

Now, what are the requisites of cheap fencing? The answer is, A fence that requires the least number of posts, with wire at the cheapest rate per pound, with the other necessary attributes of a perfect, lasting structure that is not injurious to the stock it confines. This latter danger is avoided where strong smooth wire is used, and permanent durability is gained by utilizing stays and clamps, such as the Locked Wire Fence Co. have succeeded in applying, either in the case of old or new fences. In building this sort, seven horizontal wires are used, although in some localities this is not considered sufficient. However, the wire is smooth and cheap; it can be purchased at three and a-quarter cents per pound, but it is in the stay and lock that forms the strength, as the lock effectually ties all the wires together, forming a truss that no animal can possibly get through or break down. Other good points in this fence are: The ease with which it can be joined if the wires have been cut to form a gap, or under any emergency; the fence readily adjusts itself to excessive heat or cold; if weighed down with ice or snow, when freed it springs back and assumes its former position without assistance. It is strong and durable. Gates can be very cheaply made on the same principle. This fence is also suitable for lawns and gardens.

#### Millet.

There are several distinct varieties of this grass, of which the Hungarian grass and common millet are the kinds most frequently sown, although German millet, which matures a little later in the season, is grown to some extent with good results. Our experimental stations are taking up this plant with the view of providing a good substitute for hay in the short years, and they have a number of new varieties which they report as being much superior to the common varieties now grown.

In this country it is grown altogether as a fodder crop, either to be fed green or cured as hay. Millet is especially valuable to supplement the hay crop in bad years, for a farmer can wait until he can de termine the yield of his hay or ensilage crops before sowing, consequently he can calculate the amount of millet which will be necessary to insure the usual amount of winter feed for his stock; while nearly all other crops require an earlier sowing as well as a longer season of growth, millet can be put in quite late in the season and still give a heavy crop

A dry rich soil is desirable, but though it will grow on thin soils it pays best on fertile land. It will grow well on any soil of sufficient richness to give a good crop of corn or potatoes. The soil should be well pulverized and harrowed, and made smooth and level, so that the small seeds may not be buried too deeply. From three pecks to thirty quarts are enough, when sown broadcast; if drilled, less will be needed. After sowing the seed roll the surface. Sow after corn planting is finished, when the weather has become settled and the nights are warm, which will doubtless, in most parts of Canada, be about the first of June.

It should be cut as soon as the heads are well formed and before the seed ripens. Millet ripens very irregularly; some heads will be ripe when others are just shooting out, so it should be cut on the early side to get the best quality of feed. Cut with a mower and cure the same as common hay. One objection to the general growth of this crop is the fact that it is an annual and thus requires the ground to be prepared and the seed sown each season. Millet makes very rich feed and all kinds of stock eat it greedily, so that most growers prefer to mix it with common hay or other coarse fodder. If any of the crop has been allowed to go to seed it should be fed with great care and only in small quantities, as there is a certain amount of danger in feeding at this stage. Great care must be exercised when buying millet and Hungarian grass seed, that it is pure and free from foul weed seeds. A great deal of mustard and similar seeds have been introduced into the Northwest and Manitoba in this way; in some sections every farmer who was growing millet could be pointed out at a distance by plants we have no doubt, but just what part the means of the yellow mustard blessoms in the crop.

#### Live Stock Portraiture.

There is a peculiar satisfaction in work well done that comes to the publisher in no other way. Though aiming at constant improvement in all departments, we are reminded by many congratulations that in live stock portraiture the front page illustrations of the FARMER'S ADVOCATE exhibit a distinct advance in this feature of agricultural journalism. Recognizing the existing need in past years for improvement, we are pleased to be able to place within reach of Canadian breeders a class of work that will do life-like justice to stock, the excellence of which has gained world-wide repute. The portrait of Messrs. Jackson's Southdowns, occupying the place of honor in this issue, has probably never been excelled, it indeed equalled in periodical work. It's fidelity to life is remarkable. Among others with which we hope to favor our readers shortly will be a group of Mr. John Bell's celebrated Tamworth swine, Messrs. Gibson & Walker's Lincoln sheep, and the noted Ayrshire sire at the head of Mr. Thos. Guy's herd.

#### The Hawks and Owls of North America and Their Relation to Agriculture.

Bulletin No. 3 of the United States Department of Ornithology and Mammalogy describes the above birds and their value to the farmer. The statements made in this book regarding the foods consumed are based upon a critical examination of about 2,700 stomachs, thus showing the enormous amount of labor expended in compiling the The results prove beyond a doubt that a class of birds commonly looked upon as enemies of the farmer and destroyed whenever occasion offers, really ranks among his best friends, and, with a few exceptions, should be preserved and encouraged to take up their abode near his home. Only six of the seventy-three species of hawks and owls are injurious, and of these three are so rare that hey need not be considered, and another, the Fish Hawk, is only indirectly injurious, leaving only two, the Sharp-shinned Hawk and Cooper's, or the true Chicken Hawk, that really need to be taken into account as enemies of agriculture. Omitting the species which feed largely upon poultry and game, 2212 stomachs were examined, of which 56 per cent. contained mice and other small mammals, 27 per cent. insects, and only  $3\frac{1}{2}$  per cent. poultry or game birds. In view of this the folly of offering bounties for the destruction of hawks and owls, as has been done by several states, becomes apparent. When certain birds are known to be harmful, the farmer has a right to demand that the protection of the law be withdrawn.

At first sight it would seem an easy matter to divide birds into the two great classes of injurious and beneficial, but in fact there is no more difficult task, because their habits vary with the different locations and the different seasons of the year. For instance, the bobolink is one of the most highly prized visitors of the Northern States and Canada, out in the Southern States this same bobolink, there called the rice bird, annually damages the rice crop to the extent of a million dollars. The crow is considered one of the worst enemies of the corn field, but when the corn is past danger the crow changes from an obnoxious to an exemplary member of bird society, and wages war against the cut-worm and other insects.

In spite of the general opinion that these birds are injurious, the investigations go to show that owls are among the most beneficial of all birds, inflicting very little damage upon the poulterer, and conferring vast benefits upon the farmer; also that all hawks, with possibly one or two exceptions, are to some extent beneficial to the farmer.

This work divides hawks and owls into four classes; the first contains six wholly beneficial or harmless birds, of which the Rough Legged Hawk, or wrongly named Hen Hawk, is the best known. This hawk lives principally upon mice and other small rodents. The second class includes those which are mainly beneficial, and contains thirty-four varieties, of which the Sparrow Hawk, Barn Owl, Screech Owl, Hawk Owl and Snowy Owl. The third class includes those in which the good and evil balance each other. This class contains seven birds, of which the Golden Eagle, Bald Eagle, Pigeon Hawk and Great Horned Owl are well known. The fourth or injurious class has already been mentioned; Cooper's Hawk is a common species throughout the United States and Canada. Much of the ill-favor with which birds of prey are looked upon is due to the depredations of this true Chicken Hawk, together with its smaller congener, the Sharp-shinned Hawk. Unquestionably both species should be destroyed whenever and wherever possible.

It will be seen from this bulletin that of our birds of prey there are but two which deserves to be put upon the black list and persued without mercy. The greater number pass their whole lives in the constant performance of acts of great benefit to man, or else make good any injury they may do poultry or insectivorous birds by destroying a greater number of animals known to be hostile to the farmer. This bulletin, which contains a description of nearly sixty varieties, with handsome colored plates of about twenty-five of them, was prepared under the direction of Dr. C. Hart Merrian, Chief of the Department, by A. K. Fisher, M. D., Assistant Ornithologist.

#### STOCK.

#### Studs, Herds and Flocks.

HOLSTEIN-FRIESIANS AT MAPLE GROVE. It is nearly three years since we last inspected the herd owned by Messrs. Bollert Bros., Cassel, Ont. Since then the brothers have dissolved. The herd is now owned and managed by Mr. Herman Bollert, and is fully up to its former excellence. The stalls are filled with a fine collection of black

and white beauties which have large deep frames and well-developed udders, proclaiming performances at the pail that leave no doubt as to their true value in this line. Nor is milk production the only object kept in view. A very fine lot of young calves in another part of the stable show that breeding and rearing animals of excellence holds an important place on this farm. The nicely-marked, promising calves proclaim the prepotence of Colanthus Abbekirk, the bull that Mr. Bollert placed at the head of his bond two years are. His calves the head of his herd two years ago. His calves appear to be remarkably smooth and very uniform in type. This bull is very richly bred; some of the most noted butter producers are among his immediate ancestors.

At the time of our visit, early in April, Mr. Bollert still had several young bulls on hand, some of which had been sold, but not yet delivered. Of these, we noticed Maple Grove Prince, who has been purchased by Mr. James Elliott, of Bluevale, but as Mr. Bollert thought very highly of his breeding, together with his individual merit, he retained him for a short time to breed to severe the state of the severe retained him for a short time to breed to severe the severe retained him for a short time to breed to severe the severe retained him for a short time to breed to severe the severe retained him for a short time to breed to severe the severe retained him for a short time to breed to severe the severe retained him for a short time to breed to severe the severe retained him for a short time to breed to severe retained him for a short time to breed to severe retained to sever retained him for a short time to breed to some heifers in his herd. This bull's dam is (imp.) Trijntje, a remarkably large cow which won a

sweepstakes before leaving her native country.

Mr. Bollert has recently purchased a yearling heifer in the Brookside herd of Mr. Henry Stevens, Lacona, New York, which has been left to be bred to Dekol 2nd Netherland, one of the richest bred bulls in the world. He intends to exhibit her at the World's Fair.

We were shown a three-year-old heifer lately purchased, that gave eleven pounds three-quarters of butter in seven days, in her two-year-old form, five months after calving. This heifer's dam, Aaltje Posch, has the second richest test at the New York Experimental station, his grand cow Heimke standing highest. The above heifer was imported as a calf by Mr. Bollert. He then sold her, but has recently repurchased here. her, but has recently repurchased her. She is now in calf to Colanthus Abbekirk, and the result of this cross will be watched with the greatest interest. Mr. Bollert's aim is to produce the richest quality of milk with the greatest quantity, and on the line of breeding which he follows we doubt not but that he will succeed.

SPRINGBROOK HOLSTEIN-FRIESIANS.

A nicely-kept herd, with comfortable surround ings, is the verdict given by all visitors to the home of Messrs. Hallman & Co., New Dundee, Ont. Whenever we find a stockman who delights in having his cattle in good condition, there we just as surely find a proper selection, not only in the individuals present, but also in breeding. This herd is no exception. Each year appears to bring with it an improvement that is quite apparent to the least interested observer.

Two exceedingly good bulls are now used in the herd. These are Royal Canadian Netherland, a winner nerd. These are Royal Canadian Netherland, a winner everywhere shown except once, and that was when beaten by the bull described below. Royal Canadian Netherland is a wonderfully smooth bull, with the corn-fed Colorado steers, 1532 lbs., \$5.25. Distilleryabundance of character, and just the type one would expect to see when shown a successful dairy sire. The other bull is Netherland Statesman's Cornelius, which had the distinguished honor of winning the silver medal at the Toronto Industrial for the best bull of any age two years in succession, viz., in 1891 and again in 1892, in addition to which he also won silver medal as bull and four of his get in both these years. With two such admirable bulls to breed from, it would be strange indeed if good results were not obtained, especially as their breeding fully equals their appearance. An inspec tion of the young stock very quickly dispels any doubt on this subject. There was a long line of young heifers; one could hardly go astray in making a choice from among them. All were smoothly formed, with beautiful touch and nicely marked.

Among the youngsters two very choice bull calves were pointed out. These Mr. Hallman expects to win future honors. The younger of the two is by Royal Canadian, the first mentioned stock bull, while the other is by the silver medal bull, and has for his dam Princess Margaret, with a butter record of twenty pounds one-half ounce of butter per week. This should be a most desirable bull to head some crack herd.

Space forbids anything like individual mention. At the same time we cannot pass by such cows as Princess Margaret, whose performances we have just mentioned. She is as near what we consider the type of a dairy cow should be as anything we recollect seeing. She has that wide, wedge-shaped frame, with immense chest, wide hind quarters, leaving any amount of room for a large and well-developed udder, a beautiful silky coat and soft, pliable skin. Her stall companion, Gem 2nd, is very little behind her in any particular; instact, it requires close scrutiny to know which should be

their bulls, as of these only a few remained unsold, and heifers.

Although breeding and rearing young stock for sale is made the first importance, still considerable butter is sold, and the skimmed milk (one of the best feeds for rearing dairy heifers) utilized on the

Hallman & Co. have lately added Tamworth pigs to their other breeding stock, and, as in the case of their cattle, aim at a high standard of ex-

HOLSTEIN-FRIESIANS AT MAPLE HILL.

Mr. Geo. W. Clemons, of St. George, Ont., who as recently appointed secretary of the Canadian Holstein-Friesian Association, has for several years been a strong believer in the blacks and whites, and in order to breed milk and butter producers he and in order to breed milk and butter producers he has started on the right line by purchasing cattle of the most popular strains of blood, as well as individuals that belong to the best perfecting families.

The bull Artis Aaggie Prince, as purchased from Messrs. A. C. Hallman & Co., New Dundee.

He was sired by Prairie Aaggie Prince, dam Artis Kassie, and is own brother to Mr. Hallman's silver medal heifer.

Among the cows is Mercena, imported by B. B. Lord. She was sired by Pieter, the sire of Careme

with a record of 35.09 lbs. of butter in a week, and has all the characteristics of an excellent dairy cow herself. She has a capital udder and well-developed milk veins.

Kaatje De Boer is another imported cow. Her sire was Jacob Wit, the sire of Tirania, who has a milk record of ninety-one pounds per day, and a butter record of thirty-six pounds eleven ounces per week, and Kaatje De Boer has every appearance of being a performer herself.

In the next stall adjoining to Kaatje De Boer are two light-colored, three-year-old heifers. One of these is by African Prince, and the other by Prairie Aaggie Prince. Both are promising as performers, and are most useful looking heifers. There were also several beautiful young heifers that will doubtless give a favorable account of themselves later on. One which we took particular notice of is Netherland Blanche, a heifer of Mr. Hallman's breeding, and by his celebrated bull Royal Canadian Netherland. She was calved last September and has lost no time since, being well developed. There are also a number of promising, nicely marked calves. A very likely young bull calf is Netherland Consul. He was dropped last September. He was bred by Mr. Hallman, and sired by his bull Netherland Statesman's Cornelius. and his dam, Polyanthus, has a milk record of 13,160 pounds two ounces per year, as a two-year-old. She was imported by Smith, Powell & Lamb, in whose hands she obtained this record.

Netherland Venture is a nicely marked yearling bull. He was sired by Royal Canadian Netherland, his dam being Baillie 2nd. A number of young bulls of more than ordinary merit are now on hand. The herd contains some fourteen head of pure-bred cattle. Mr. Clemons displayed much enterprise in selecting the best blood, and, what is of much consequence, knows how to take care of them after obtaining them.

#### Chatty Letter from the States.

(FROM OUR CHICAGO CORRESPONDENT.)

Following were among some of the noteworthy transactions on the Chicago market:-Choice 1533fed steers, 1000 to 1400 lbs,, \$4.75@\$5.40, the latter the top price of the year. Fancy 870-lb. heifers, \$4,600 \$1.80. Choice 1122-lb. steers, \$5.10, with plain fat 1400b. steers at \$4.50@ 5.00. Export cattle, \$4.50@ \$5.35. Fat bulls, \$3.00@ 3.90. Thin old cows, \$1.00@ \$2.00. Eancy heavy hogs, \$7.75@ \$7.90. Light hogs,

\$7.25@7.70. Pigs, 100 to 130 lbs., \$4.25@7.25. Shorn western lambs, 79 lbs., \$6.30. Shorn 120-lb. earling sheep, \$5.65. Wooled Texas lambs, 79 lbs. \$6.00 per 100 lbs

Chicago receipts of live stock for the year to date, show a decrease of 104,000 cattle, 1,126,000 hogs and an increase of 270,000 sheep. On the whole, it will be seen the loss is quite large, and that accounts for high prices. The loss of pigs by the cold, wet spring will tend to keep hog prices up longer than many expect. The horse market is over-stocked with common kinds, but good, wellbred horses bring fair prices.

Prospects are, that there will be fewer range cattle marketed this year than last. There is un doubtedly a shortage in native corn-fed cattle.

The stringency of the money market has lately had quite a depressing influence upon the live-stock trade. Prices were sharply lowered by the late Wall street scare, but the character of the consumptive demand was shown to be quite good, from the fact that values quickly rallied in response to a decrease in receipts. There is no foundation for a money scare, but the uneasiness may not be readily disposed of.

Geo. Geary, Goodwin Judy, and J. P. Hine recently offered 31 Angus cattle for sale at Dexter Park, but after 10 head had been sold at \$35% \$75 for bulls, and \$30% \$100 for cows, the sale was stopped. The J. J. Hill Aberdeen-Angus cattle The J. J. Hill Aberdeen-Angus cattle, lately bought by Shirley and Miller, were sold at placed first.

The herd now numbers some sixty head, and the proprietors appear to have unlimited demand for sold at \$30@\$130 for bulls, and \$35@\$150 for cows

Holstein Grades as Beef and Veal Producers. [Paper read by A. C. Hallman, at meeting of the Canadian H.-F. Association.]

Steadily but surely the Holstein-Friesians are pressing forward, establishing their merits as they pass along, and gaining new admirers. Progress is stamped on their banner. Missiles have been hurled from all directions, but without effect, only strengthening their cause. The fight has been fierce and strong. Many an enemy has been laid flat in the struggle. They were destined for a great future, and they have reached the goal, and today, stand pre-eminent among the breeds of cattle. Possessing a wonderfully strong constitution gives them great power of transmitting their characteristics to their offspring. Since everybody cannot have pure-breds, a great improvement is made by crossing a thoroughbred bull on common cows. The young almost invariably take strongly after the sire. The outcome of such a cross is very desirable and profitable. A second or third cross is always desirable; it increases the milking qualities, which means more nourishment for the calf. The young calf, possessed with a vigorous constitution and digestive organs, takes to its milk and feed readily and regularly. It at once gets started, grows very rapidly, makes the best use of its feed, and at four weeks old generally outweighs his rival brother by a good many pounds. It is no unusual thing for grade calves at birth to weigh from 80 to 100 fbs., and put on 100 lbs. a month after. Flesh thus rapidly formed must be tender, juicy, and of the finest quality and flavor. Veal thus early produced brings always the highest price in the market, and there is an unlimited demand for it. If we want to raise a good animal of any kind, we must have something good to start with. Calves of such a conformation, if attended with care, the proper kind of food supplied and plenty of it, will not only make the best use of it, but will make rapid progress from start to finish. If intended for the shambles, you cannot with any other breed of cattle show more daily gain, more weight for age with the same amount of food consumed, than with a Holstein-Friesian grade. Nor can they show a better quality of beef or a larger per cent. of dressed meat to the 100 lbs. than with this noble breed of cattle, which we are prepared to prove. I am personally acquainted with men who a few years ago, through prejudice, would not have a "black and white" in the stable for feeding, but are now as eager to get them as any other. Gentlemen, we must be united. We must let no opportunity pass where we can establish and prove these facts. We have the breed of cattle that have the merits, and we need fear no competition. We have suffered perse-cution long enough, and we must stand boldly and we will be sure of success. To substantiate my claims, I will show a few

facts (out of many) which speak for themselves: At the Michigan Experiment Station, two each of Galloways, Shorthorns, Holsteins, Jerseys, and one of Herefords and Devons, were selected, and an accurate account kept for seven months of food consumed, daily rations, monthly weights and gains; it was found the two Holsteins had the largest gains per day since birth. It required 7 hs. and a fraction of a mixture of food to make an increase of a pound of weight of Holsteins, where it required ten its, of the same mixture to produce the same increase in the Shorthorn, the Holsteins same increase in the Shorthorn, the Holsteins showing themselves the most economical feeders in the test. I have other equal facts, but seeing my paper is getting too lengthy I must hasten on. In our own experience, the seven-eighths-bred Holstein steer that took second prize at Toronto in 1892, in the 2-year-old class, competing against all breeds, we have a fine sample. The steer was never intended for exhibition. He was raised as a calf on skim milk; then took his chances as a stocker. Picked up from pasture in November, 1891, fed during the winter with no intention of being a show animal. The cattle being dull in the spring, he was carried over summer (in the stable) till the Toronto Industrial, and exhibited with results above stated. We kept him on, sold him to Tyson Bros., butchers, Berlin, for Christmas beef, at the highest market price, and they speak of him in the following

price, and they speak of him in the following terms:

Berlin, Feb, 9th, 1893.

To Whom it may Concern,—We, the undersigned, do hereby certify that on the 21st December, 1892, we killed a Holstein grade steer, which we purchased from Mr. A. C. Hallman, of New Dundee, and that in point of excellence of meat never killed a finer one. He was nicely mixed, and the grain of the meat was A No. 1. Can procure testimonials from parties in Berlin, who bought roasts, steaks, etc., that it was the finest piece of beef they ever ate.

The steer dressed about 67 lbs. to the hundred, which speaks for itself to anyone who knows or is acquainted with the killing properties of beef.

Hoping that the above is satisfactory to parties interested in Holsteins, ortoany parties who wish toknow in regard to killing properties of Holsteins will be most happy to give desired information,

We remain, yours, etc.,

Tyson Bros., Butchers.

The above was no more than an average steer:

The above was no more than an average steer; we have had them better. Had we given him the same opportunity his competitors had, he would have surpassed everything on exhibition. For yeal Tyson Bros., Berlin, report calves, 3½ weeks old, dressed, 120 fbs.; 4½ weeks old, 140 fbs., veal of best quality. R. Marshall, Edmonton, Ont., reports a calf, 5 months old, 530 fbs. William Lony, butcher, Sundridge, Ont., killed a calf, 7 months old, fed in common way, dressed 350 fbs. Jas. Coulson, Newcastle, reports a calf, 4 weeks, weight, alive, 197 tb... which killed good in every particular, and never killed anything like it, only of the same breed. With these few remarks I must conclude, still having the fullest confidence in the future of the breed

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## THE FARMER'S ADVOCATE & HOME MAGAZINE

THE LEADING AGRICULTURAL JOURNAL IN THE DOMINION.

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must be made as required by law.

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THE FARMER'S ADVOCATE, or THE WILLIAM WELD CO., LONDON, ONTARIO, CANADA

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#### Our Monthly Prize Essays.

CONDITIONS OF COMPETITION.

 $1.-\mathrm{No}$  award will be made unless one  $\,\mathrm{ess}_{ay}$  at least comes up to the standard for publication.

2.—The essays will be judged by the ideas, arguments, conciseness and conformity with the subject, and not by the grammar, punctuation or spelling.

3.—Should any of the other essays contain valuable matter, not fully covered by the one awarded the first prize, or should any present different views of the same topic, and we consider such views meritorious, we will publish such essays in full, or extracts from them as we may deem best, and allow the writer ten cents per inch (one dollar per column) printed matter for as much of such articles as we publish. By this rule each writer who sends us valuable matter will receive remuneration for his labor, whether he be the winner of the first prize or not.

See section 6 and four following in publisher's announcement above.

We extend an invitation to dairy farmers, in all Should any of the other essays contain valuable matter

We extend an invitation to dairy farmers in all parts of Canada to send us concise, practical letters,

giving the results of their past year's experience in feeding dairy cows. lst.—In winter feeding, what have you found

the best foods, quantity and quality of milk and ecomony of production considered? 2nd.—With what do you supplement pasture in

summer and fall feeding? 3rd.—In winter, do you feed twice or oftener per day, and why? Give particulars of your

A prize of \$5 will be given for the best article embracing answers to the above questions. Essays to reach this office not later than July 1st. A prize of \$5 will be given for the best essay on farm drainage with special reference to methods of

#### Our Scottish Letter.

The month of April has in many respects been an eventful one in Scotland. Several very important shows have been held; there has been a good deal of activity in the Clydesdale world. The exhibitions Ayrshire cattle have been largely patronized One or two auction sales have been failures, and several animals of choice breeding have seen the light. The first notable event in the month was the Hackney sale at Gowanbank. Strictly speaking it took place in March, but was not reported until April. Some sensational prices were realized, and altogether the sale was regarded as an unqualified success. The aged Fireaway mare Crompton's twenty-three yearsold, drew 80 guineas and was champion at Ayr in the end of the month, actually beat ing the Kilmarnock champion, the fine mare Florence, owned by Mr. Morton, The twelve-year-old mare, Lady Margaret, 15 hands high, drew 130 guineas, and a beauty named Ellengowan, 170 guineas. Yearling colts made 62 guineas, 80 guineas, 70 guineas, and 31 guineas a piece. Amongst the three-year-old fillies, Sweet Mary, a chestnut, the three-year-old filles, Sweet Mary, a chestinut, drew 320 guineas, Orange Lily 125 guineas, Sweet Lullaby 65 guineas, Annie Laurie 78 guineas, Gowanlea 90 guineas, The Orphan 81 guineas, and Bonnie Doon 500 guineas. A two-year-old filly drew 285 guineas, and some idea of the general run of project way, he informed from the averages: 10 prices may be inferred from the averages:-10 ponies, £40 8s. 6d. a piece: 14 Hackney brood mares, £58 4s,; 6 Hackney stallions, £121 19s.; 4 yearling colts, £63 15s.; 7 three-year-old fillies, £188 17s.; 7 two-year-old fillies, £917s., and ninelyearling fillies, £39 ils. These prices will take rank as amongst the best ever realized at a Hackney sale, and Mr. Morton's success will be welcomed as thoroughly well-deserved.

In the following week, on April 6th, the annual Clydesdale and Shetland pony sale took place at Seaham Harbour, and good prices were obtained in both sections, Bidding for the Shetland ponies was brisk, and a good sale was the result. For some of the Clydesdales there was a good demand, the threeyear-old horse, Sir David 9409, drawing 515 guineas, a splendid figure. The average price of 17 ponies was £22 12s. 2d.; 22 Clydesdale mares and fillies made £80 7s. 11d., and 9 stallions ran up to the respectable average of £106 12s. 8d.

Castle Douglas Show is rapidly growing in popular favor, and the meeting this year marked a distinct advance on the last. Galloways here naturally took the place of honour, and the famous Tarbreoch herd was well to the front in the premium lists. The class of aged bulls was a grand one, and the first prize one, Henry of Tarbreoch, owned by Messrs Clark & Culmain, has few equals. Messrs Biggar & Son's second bull, The Viking, is a level beast with fine top. In the class of aged cows Mr. Cunningnam fairly took the cream of the prizes with three noble cows, Scottish Queen, Madonna, and Mary Graham. Mr. Pilkington, in the class for younger cows, was an easy first with the beautiful little cow, Tidy V. of Drumlaing. Ayrshires were a great display, and the herds of Mr. Andrew Mit-chell, Barcheskie, Mr. Abram Kerr, Castlehill, Mr. Wardrop, Garlaff, Sir Mark J. Stewart, M. P., and others, sent forward animals that more than sustained the fair name of the breed. Clydesdales were prominent, as they could not well miss, being in the very centre of the Macgregor county and at a town like Castle Douglass. The champions in this class were both got by the famous Prince of Albion and bred by his owner, Mr. Gilmour, at Montrave. The champion stallion was Montrave Dudley, owned by Mr. William Montgomery, and the champion mare the 1000 guineas filly Queen of the Roses, owned by Mr. Pilkington. Mr. Andrew Montgomery's first brood mare, Daisy Dear, is by Prince Lawrence; Mr. Pilkington's first yeld mare, The Queen, is by Queen's Own; the first three-year-old mare was Queen of the Roses; the first two-year-old filly was owned by her breeder, Mr. David A. Hood, and was got by Balgreddan Prince, out of the dam of the celebrated Oliver Twist; and the first yearling filly was a beauty got by Patrician and owned by Mr. William Montgomery. The first yearling colt was owned

by the same gentleman, and got by Macgregor.

Kilmarnock Show, one of the great events of the
year, was held ten days later. This is the centennial year of the existence of the local Farmers' Society, and the executive resolved to distinguish the meet ing by extending the show over two days. Certainly they ought to be satisfied with the result, for a grander display of stock of every kind could not have been looked for. The classes were all wellfilled, and the attendance of the public on two days in which lovely weather prevailed could not be surpassed. Hackneys mustered in large numbers, and Mr. Alex. Morton's Gowanbank stud was very successful in taking away a large share of the prize The best driving Hackney in Scotland is undoubtedly, however, Mr. Andrew Hunter's Lady Lofty, a superb animal in harness, with action that fairly eclipses that of almost any otherliving Hackney. Her hock action is perfect, and she gets over the ground in great style. Messrs. P. & W. Crawford, Eastfield House, Dumfries, showed a grand black stallion, Dash It All, a very fine specimen with many friends and admirers. Ayrshires were even more numerous than at Castle Douglas, and the quality was unmistakably high. The champion cow was a brown animal owned by Mr. James Lawrie, Newton, Strathaven — unquestionably farm drainage with special reference to methods of doing the work, the materials and implements used. Essays to reach this office not later than July 20th.

Craighead, Mauchline. He was also pion at Ayr. The show of Clydesdales has always been an unique feature of Kilmarnock Show, and this season proved no exception to the rule, Mr. David Mitchell, of Millfield, Polmont, fairly eclipsed all previous records by taking home both championships. His brood mare Princess Adino, a splendid big animal, won in the female section, and his renowned stallion, Prince of Millfield, amongst the stallions. Brenda of Kippendavie, a favorite prize winner, and looking vastly better than we have ever before known, was first in the yeld mare class. Queen of the Roses was first three-year-old filly, being followed by two daughters of Flashwood, and the first two-year-old filly was Maggie Macaulay, owned by Mr. Howie, Hillhouse, Kilmarnock, and got by that famous horse The Macaulay. The first yearling filly was a beautiful beast owned by Mr. Kean, and got by Prince of Carbury. It now

has joined the Barcheskie stud. The principal events in the third week of April were the East of Fife show at Coluisburgh and the spring show of the Royal Dublin Society. Fifeshire is a county in which the modes of farming differ somewhat from those that are popular in the West of Scotland. The features are the Clydesdales, for which, however, all the credit is due to gentle-men like Mr. Gilmour, of Montrave, Mr. Balfour, of Balbirnie, and tenant farmers like Mr. Anderson, Newbigging, Ceres, and Messrs. Meiklem, Begg Farm, Kirkcaldy. Several magnificent Shorthorns may almost always be counted on at Coluisburgh, and fat stock are generally well worth studying, the district being largely a feeding one and pretty sharply divided on that account re the vexed question of Canadian stores. Hunting horses, however, alwaysmake the grandest display at this show, and this season was no exception to the rule. Mr. Gilmour exhibited some of his famous Clydesdales, and they alone were well worth looking after. By far the best, however, was the pair of mares, Montrave Gay Lass and Tinwald Forest Flower. The two three-year-old mares, Rance II. and Lady Muriel, were great pair, and the younger ones were also good.

The Dublin Show is a notable gathering, but it does not at all approach the autumn show there as a fashionable function. It is, however, well patronized by the farming community, and the display of all classes of stock indicates an advance.

The last week of the month has been a very notable one. The Messrs. A. & W. Montgomery have purchased the celebrated Flashwood, without much doubt the best living Clydesdale stallion. He is now ten years old, and has changed hands at an unprecedented figure for a horse of his age. Ayr show has been held under most favorable auspices and has proved a great success, and the Maryhill show in the vicinity of Glasgow has followed suit. The champion Ayrshire cow was Sloth II., owned by Mr. Steel, Burnhead, Darvel, and the Clydesdales were a splendid exhibit. The first three-yearold at Kilmarnock was the Banks horse, Belvidere, and the first at Ayr was also Mr. William Mont-gomery's fine thick horse, the Macmeekin. At Maryhill and Ayr, Mr. Mitchell's mares carried almost all the principal prizes, Princess Adino being champion at the latter show, while the champion horse was the great son of Sir Everard, named SCOTLAND YET. The Summit.

#### Notes on Sheep Feeding and Breeding.

Editor of the FARMER'S ADVOCATE:
Your valuable journal recently contained letter on sheep breeding by "Practical," of Virden. Man. He says he thinks the ADVOCATE should be in the hands of every farmer; in that I quite agree with him, but with some of his remarks I do not concur. In the first place he says half-threshed pea straw is the best feed for sheep. I consider there would be a great waste of peas in the straw, and do not think it necessary to afford as much grain as that. For instance, ten acres of good pea straw (hand threshed), with a few roots and a very small quantity of grain, should feed twenty sheep for five months, and yield two hundred and fifty bushels of peas. This half-threshed, with the ground grain he speaks of, would be too expensive feeding for profit. In another place he says he selected the largest ewe lambs for breeding. In that he was right as far as he went, but he should take shape into consideration, for a large sheep if not well formed will not take the eye of the judges, and should not be bred from. Now, with regard to the twin lambs, the condition of the ewes when served will have more to do with the twins than either the ram or the ewes being twins. He says he expects to get three or four lambs from each ewe every year. I think after he has had the three or four lambs with each ewe a few times he will be satisfied with two-at least I am—or even one, rather than three or four. R. HONEY, Warkworth, Ont.

#### A Home-Made Chemical Dehorner.

Dr. Salmon, the head of the U.S. government bureau of animal industry, gives this as the "chemical dehorner" used in his experiments: A mixture is prepared by taking fifty parts of caustic soda, twenty-five parts of kerosene oil, and twenty-five parts of water. An emulsion is made of the kerosene oil and soda by heating and vigorously stirring, and this is then dissolved in water. The mixture is then placed in a bottle with a solid rubber cork. This cork is to rub the mixture in when a few drops are applied to the end of the coming horn of the calf, which should not be more than three weeks old. It is strong stuff and should be carefully con-

#### Chester Whites as Bacon Hogs.

BY R. H. HARDING, THORNDALE, ONTARIO. Many readers of the agricultural journals of Canada are perhaps not very well posted on the different breeds of swine, and having read the able articles written by parties interested in Yorkshires, Tamworths, etc., would naturally suppose that the above-mentioned breeds were the only suitable sorts to fill the present demand as bacon hogs. Let me say, in my opinion there are breeds just as suitable for this purpose that will return fully as large if not larger profits to the producer. One of these breeds is the Improved Chester Whites. I admit there are poor specimens of this breed, as among other kinds, but I do say the worst specimen of a hog I ever saw was at the last Industrial, and he was not a Chester White. The pig that will produce the largest amount of meat and lard of the best quality at the least cost, at from six to eight months old, is the most profitable pig, regardless of breed. Although I did not hear the following direct, I have it from a party not interested in any breed, that the foreman in a well-known packing house said a few months ago that the best bacon hog they could get was the Chester-Berkshire grade. He said they had plenty of side and better hams than grades of other breeds. The ideal hog must of necessity have a strong constitution and a vigorous appetite. If he will not feed he is of no use. The more a pig will eat and digest in proportion to its size, the more profitable it will be. He must also be of a quiet disposition; the more discontent and unnecessary motion the greater the demand on the stomach, consequently more food will be required merely to sustain the body. The best specimens may be described as long and deep in the carcass, straight on the back, short in the legs, full in the ham, light in the shoulder, head small in proportion to the body, nose not too long, face slightly dished broad between the eyes, and especially a heavy coat of fine silky hair to protect him from cold in winter and the scorching sun in summer. The latter will blister a thin-haired pig, and in consequence it will not thrive so well. Add to the above quiet habits and an easy taking on of flesh, so as to admit of being slaughtered at almost any age, and we have what is considered a typical Chester White. I might also say that this sort seldom call their feeders before a reasonable time in the morning, as some other breeds were in the habit of doing at the time of the last Industrial Exhibition. While

it is necessary for a pig to have a good appetite in order to thrive well, yet it is not necessary that they squeal themselves hungry.

Mr. Caswell, Manager of the Canadian Packing Company, when addressing the Western Dairy men's Convention at London. Ont., when asked by some gentleman if the Chesters were not a suitable hog, said they were too fat when fully matured, and consequently were only fit for mess pork. I would liked to have asked him (but time would not permit any discussion) if he considers the breeds he was recommending as suitable for singed bacon fully matured at from 180 to 220 pounds, the weights most in demand. If so, they should certainly be classed as small breeds instead of large, but it is well-known this is not the case. I believe it is a mistake to crack up any special breed as the only suitable breed for A 1 bacon. The race we are all competing in is, "Who can produce the ideal bacon hog at the greatest profit?" A little swine feeding goes a long way if there are no profits in connection therewith. A better way would be to pay extra prices for the hog most suitable, or reject the ones that are not suitable, and let the producer decide what breed or breeds crossed will make the desired hog at the greatest profit to himself. The extra price paid for the best class will be of sufficient interest to the farmer to arouse him in this matter. Now, if the Improved Chester or Chester grades will produce, as they undoubtedly will, a hog at from six to eight months old, weighing from 180 to 240 pounds, with long, deep sides and especially good hams, well mixed with lean of a fine quality, what more does the packer want? or, is it a fact that some of the packers are also importers and breeders of other breeds? If so, they certainly have a twofold object in view -first, to keep their own breeds to the front, so as to sell their stock at good prices; and second, to manufacture the offspring into bacon, thereby making double profit instead of single, also giving all the credit to the Yorkshire, because the grades are mostly white, never considering that they are largely produced by Chesters. While it is necessary that we cater to the packers' wants, yet the first thing necessary is the profits on food consumed. At present prices of pork, any breed can be fed at a reasonable profit, but when prices are away down the profits are of necessity very small. Then the producer will naturally ask himself the question, Can I furnish the required quality of pork any cheaper from one breed than another? answer to this, I might say the grazing hog of the most contented disposition, with light offals, all other points being equal, is in my opinion the most profitable pig to raise at the present time, and a good Chester White meets these requirements perhaps as nearly as any other breed. The sows are especially good mothers, being both careful and good sucklers and as to their prolificacy the most I have had farrowed at one litter was seventeen healthy living pigs, but I read the other day of a Chester

they are seldom mentioned, except in the advertising columns of agricultural journals. I felt it was both a duty and a privilege, as a breeder of Chesters, to say a word or two in their favor, as I know they are well deserving of a better place in public esteem than they hold in Canada. This is what prompted me to write this article.

## Duroc-Jersey Swine. BY TAPE BROS.

The origin of the Duroc-Jerseys cannot be positively traced, and was evidently unknown to the earliest historian of the hog; they have been traced back over half a century, but earlier than that little is known of them. Joseph B. Lyman has the credit of first calling them Jersey Reds. He was agricultural editor of the New York Tribune at the time and resided in New Jersey. In discussing the merits of the red hog of New Jersey, he called them "Jersey Reds." Previous to this, they had been simply called red hogs. Mr. Lippencott, of New Jersey, was the first man to advertise the hogs as Jersey Reds. Clark Petit's history of Jersey Reds states that in 1832 there was a pair of red hogs shipped to Salem, N. J., but does not state who was the exporter or importer.

Durocs was undoubtedly the name given them by Isaac Fink, a prominent farmer living near Saratoga, N. Y. He named them after a noted stallion owned by Mr. Kelsley, who had a red sow with a litter of pigs. He said he had imported the sire and dam. Mr. Fink bought a pair of the pigs, and called them Durocs.

Hon. James B. Clay is said to have imported a pair of red pigs from Spain during his residence as Minister of the United States at Lisbon in 1850. No doubt some of this stock reached Kentucky and other Southern States. Hon. Henry Clay is said to have imported four red shoats in 1837, and to have been so well pleased with them that he bred them on his farm at Ashland for a number of years. They were probably the source from whence the family of southern-bred red hogs descended.

In all descriptions of hogs of the older countries of Europe—England, France or Spain—no others were known except those claimed to be brought from the east coast of Guinea during the slave trade

Coburn tells us that the Duroc-Jerseys are of African breed and imported from the Guinea coast. He says:—"I have been unable to find any domestic red hog in any country where the slave trade did not extend, and in almost every country where the captured Guinea slaves were landed, there we find this valuable red hog, but only in the United States are we able to find positive proof that it was brought directly from Guinea. It is, therefore, a fair conclusion, from the circumstances and the evidence showing the introduction into our country, that the red hog of the several slave-trading countries had one common origin."

Duroc-Jersey sows have large litters; young ows from eight to eleven, and old sows from ten to eighteen. Twelve and fourteen strong pigs at one litter is not at all uncommon. No breed has stronger pigs at birth. No help is required when pigging, either for the sows or pigs. The pigs are always strong and active, because the parents are invigorated with strong blood and most excellent constitutions. The little pigs possess so much vigor and the sows are so quiet that the loss of pigs is very little. They are not so subject to thumps as the more inactive sorts with feeble heart action. They are docile and easily confined. As foragers they excel. A strong constitution is the foundation or a strong appetite, and a good appetite is naturally the outgrowth of a good digestion and power of assimilation. These favorable conditions are found in these pigs in a marked degree, which makes them less liable to disease. They can be made to utilize the cheaper and coarser forms of food on the farm. They do wonderfully well on pasture and make a good growth on it.

#### To Prevent Cows Sucking Themselves.

Dear Sir, Here is a good plan to stop cows self-sucking, which may be of benefit to your readers. Take two pieces of good wood one and a-half by two inches, two feet six inches long, and two pieces one and a-half by two, one foot six inches long, and bolt them together (as shown in illustration) to fit close on both sides of the neck just behind the head. Cut a half-inch gain in the upright pieces for the long pieces to fit tight into; a good way to fit the frame to the neck is to bolt

question, Can I furnish the required quality of pork any cheaper from one breed than another? In answer to, this, I might say the grazing hog of the most contented disposition, with light offals, all other points being equal, is in my opinion the most profitable pig to raise at the present time, and a good Chester White meets these requirements perhaps as nearly as any other breed. The sows are especially good mothers, being both careful and good sucklers and as to their prolificacy the most I have living pigs, but I read the other day of a Chester white meets that there are frequently able articles written in favor of other breeds, Chester Whites are still in good demand, although

#### Cross-Breeding for Mutton.

BY D. M'CRAE.

Sheep breeding for mutton has not had in Canada the attention it deserves. There has been in the past a good deal of haphazard grading and crossing, resulting in many cases in a very nondescript flock of varied quality and type. The bulk of Ontario flocks are still of the long-woolled breeds or of grades, many of which are of Leicester and Cotswold breeding, or a mixture of these. In some parts Shropshires are well represented, but none of the Down breeds have obtained such a footing as to give from our annual clip of wool any large percentage grading a Down quality. Our lambs are annually exported in large numbers to the United States for mutton, and too little attention has been given to the quality of our product. Breeders say that buyers are to blame to a large extent for this, as they will not give a specially good price for a carefully bred lot, but pay the same general average for any lot.

Sheep will pay for good, careful breeding as well as any other kind of live stock, and more attention should be paid to careful cross-breeding. If a flock of young long-woolled ewes be selected from which to breed, the best cross will probably be with one of the Down breeds. Select a pure-bred male of good individual merit and of good pedigree, the length of the pedigree not being of so much importance as the quality of the animals named in it. If a Shropshire ram be selected he should not be used more than two years, and should be followed by an animal of a different breed (say, an Oxford-Down or a Southdown). If the ewes are a good, uniform lot, the produce will be a superior lot of lambs. These should all be fed for the market. Give the ewes after lambing plenty of good, nourishing food, and if they come early plenty of roots (either turnips or mangolds). The lambs may get a small ration of oats or oats and bran, and when weaned should have a nice bit of good pasture. These cross-bred lambs are good feeders, and make a superior quality of mutton. They should all be fed for mutton-none kept for breeding. It is objected to this plan that it requires a farmer to buy in his breeding ewes every few years, but this is considered to be a much better plan than that of breeding from cross-bred animals. This latter plan may be used in some cases with success, when another cross is desired for some special purpose. Where very early lambs are wanted for the spring market, it is claimed by some that by crossing a flock of grade Down ewes with a Dorset Horn ram the ewes of the produce will, if crossed with a Leicester ram, give a quick-feeding lamb that will bring a big price early in the season. There would be no special advantage in this plan of breeding, were we able to get grade or purely bred Dorset Horn ewes at an ordinary price. At present this can not be done, and the cross is suggested as giving a lot of breeding ewes at a low cost. The advantage claimed for the Dorset Horn breed is that they will mate at any time in the year, and that therefore the lambs can be dropped at any time desired. If it be, as claimed by property is inherited by the cross-bred ewes, it is a valuable point in breeding for early spring lamb. There is a large and increasing demand for such early lamb in all the large cities, both of Canada and the United States. At present it is a scarce commodity, and will bring a much higher price per pound than anything else in the line of food pro-ducts that can be raised by the farmer. The earlier the lambs can be got ready for market the bigger price they will bring. Good, warm buildings are absolutely necessary for this trade, and careful feeding of the ewes and lambs with a variety of succulent food. These are already possessed by many farmers, while the lambs come at a season when there is plenty of time to give them early are when there is plenty of time to give them extra care and attention. In both these branches of sheep breeding there is a good prospect of remunerative returns to the breeder and feeder.

#### The Foal.

Mr. W. Brownlea, of Hemmingford, Que., gives his treatment of young foals as follows: We usually raise from two to six colts each year. If the young foal has no movement of its bowels, we give an injection of strong suds made with castile soap and soft water at blood heat, to which it is well to add a little castor oil. It is much easier to give an injection with a large syringe than a small one. Give one injection after another until successful. Do not be discouraged if you have to spend the whole day doctoring. We have never lost a colt since we began using the above treatment, with the exception of the first one, which was allowed to go too long before anything was done. We never give castor oil inwardly, because we find that it makes the colt sick, and it will not suck and soon dies. For diarrhoea we give Dr. Fowler's Extract of Wild Strawberry with good results, having saved a number in this way, giving a quarter or a third of a bottle at a dose, one to three doses generally effecting a cure, and never leaving any injurious after effects.

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#### lodide of Potassium.

Mr. E. Watson, South Hammond, N. Y., gives his experience with the iodide of potassium cure for lumpy jaw as follows:

I had seen lumpy jaw treated in England with iodide of potassium, but did not have much faith, but as my heifer was getting worse I concluded to give it a trial, so I got twelve drachms, paying fifty cents for it, and started to give it to the heifer in two-drachm doses in her feed; but that did not give me satisfaction, so I dissolved some in a little water and put it in a bottle and gave it in that way. After I had given it to her four days, I noticed her eyes started to weep, her nose began to run, and her hair was full of something like bran. Then I stopped for three days, then started again and kept it up for a week longer. By that time I came to the conclusion that I had cured the heifer, for the running lump on her face as large as a man's fist had all dried up and disappeared, leaving nothing to tell the tale of lumpy jaw but a scar, which is fast getting covered with hair of natural color. The heifer that was once poor and thin is now a fine, thrifty-looking animal. I am firmly convinced that if I had not given the heifer the iodide of potassium I would have lost her, for she was going down hill every day in spite of all I could feed her.

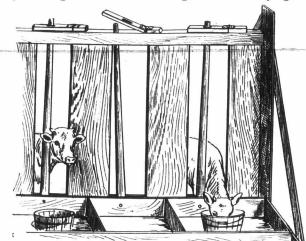
Mr. Watson also adds the testimony of another farmer as follows:

One of my neighbors had a heifer which had three large lumps on the side of her face, and they all broke and started to run. I advised him to try iodide of potassium, which he did, and I saw him a week after and he told me his heifer was doing well, for the places had all dried up and the swelling had gone down. He only used fifty cents worth of potassium.

#### Calf Feeding Pen.

BY W. M. CHAMPION, REABURN, MAN.

By the time your June number reaches your readers, many will be tussling with their young calves at feeding time, now just turned out to pasture; and to save many knocks both to feeder and calves, I advise them to make a calf stanchion and build it into the fence. To make it, it requires two upright ends morticed into two blocks for feet; let these be four feet long, with the upright placed in centre. Now saw gains in uprights six inches from each end, leave one inch full of upright, now take either nicely smoothed poles, or better, strips of picketing, and nail in the gains cut in uprights.



Now you have your two end pieces standing on their own feet, and the strips, two top and bottom, nailed securely, or perhaps a half-inch bolt run through. Now any pieces of board will do for filling. The dimensions of my calf feeder are as follows, and I find it about right:-height of posts over all, four feet; between the long strips, three feet; a convenient length of feeder, twelve feet. Now this part of our machine be careful about; begin at one end, and next post put into the stanchion a strip four inches wide; now leave nine inches; now fill fifteen inches, then leave nine inches, and go on until you come to the end, always nailing filling; now take four-inch strips for your stanchion, and you have, as it were, a mortice at top and bottom, put this into the nine-inch vacancy and leave only four inches for the calf's neck; taper at the top your stanchion, so it will give your calf room to get his head in, and fasten bottom of stanchion by putting in either a bolt or oak pin. When feeding time comes all the calves that can get their heads in will be ready to fasten in, and when they are fed shove out their heads, and there will soon be another ready to shut in; to hold the pails for feeding, run a pole from one foot to the other, and between each stanchion brace to the bottom of feeder by nailing short pieces, and each calf has its own bucket, and no wasted feed or

#### QUESTIONS AND ANSWERS.

[In order to make this department as useful as possible, parties enclosing stamped envelopes will receive answers by mail, in cases where early replies appear to us advisable; all enquiries, when of general interest, will be published in next succeeding issue, if received at this office in sufficient time. Enquirers must in all cases attach their name and address in full, though not necessarily for publication.]

#### . Veterinary.

ANSWERED BY DR. W. MOLE, M. R. C. V. S., TORONTO. BARRENNESS.

ALEX. McLEAN, Turtle Lake, Ont .: "I have a heavy mare nine years old, and have raised two colts from her, and now I cannot get her in foal. She has been covered two years in succession without success. Can you advise any treatment likely to succeed? What can I do for her?

We are afraid that the attempt to breed from your mare will prove unsuccessful. The neck of the womb is injured from her last parturition, and become too rigid and the opening too small to allow of impregnation. However, if you are very desirous of breeding her, pass the hand into vagina, and with the finger closed proceed to dilate the mouth of the womb, or procure one of Lyman's Impregnators and insert previous to the mare being put to the horse.

#### DISORDERED TEETH.

A. S. J., Willowdale, Ont. :-"I bought a cow a few weeks ago, and found she would not eat as though she cared for her food, and the saliva is continually running out of her mouth. I find about a gallon in her feed box in the morning. Her coat is rough and skin seems rather too tight. Will you please tell me what is the matter, and what I can do for her?

You do not say how old the animal is. If she is from eighteen months to two years old, examine her mouth, and I think that you will find that the temporary molars have not been cast off, and will thus account for all the symptoms you describe. Anything wrong with the mouth or teeth of cattle will cause an increased flow of saliva. Remove the crown, and give a dose of laxative medicine.

MAMMITIS (INFLAMMATION OF THE UDDER).

JOSEPH IRWIN, Salisbury, Ont. :- "I have a valuable cow, and every few weeks in the summer her bag is caked. When I milk her the swelling is down, but it is not good milk. If you will kindly tell me, through your valuable paper, a cure for it I should be much obliged?

This disease is known among farmers, cowkeepers and stock-keepers, as garget, long slough, caked bag, etc. It consists of inflammation of the udder, and is often of a very intractable character, especially when it takes on the chronic form. The symptoms are increased heat in the udder, attended with redness of the skin, and it becomes increased in size and hard, very tender and painful to the touch, and when manipulating look out for kicks. Upon drawing the bag, instead of milk a thin, yellowish fluid will be obtained, mixed with small curds and strings of fibrin. For treatment—foment with warm water, by the application of a blanket across the loins, suspend the udder, which must be kept free from milk, and then apply some stimulating liniment: Water of ammonia, one part; olive oil, four parts; or the ordinary soap liniment from stores. Sometimes this disease assumes a chronic form, and instead of the active inflammation forming an abscess, a hard, nodular state of the udder ensues permanently. In this stage of the disease apply an ointment of iodide of potassium, one part, to eight of lard. These measures must be perseveringly employed for a length of time with discretion, and are usually attended with success.

#### PARASITES IN SHEEP.

THOS. E. BARTLETT, Hybla, Ont.:-"I am in trouble about my sheep, as they are dying off rapidly. Last fall I had about one hundred and fifty lambs; about New Year's Day, one took sick after another, and all I could do to save them proved of no avail. They are not able to hold up their heads, nor have they strength to stand. Most of them froth at the mouth at first, then become purged and nothing would stop it. I find they have lumps under the jaw, with a bad smell just before they die. I tapped six of them with lumps, and find the swelling filled with water. I do not think I will have a lamb of last year left. This spring I have had so far about seventy lambs, and only fourteen living. Some come and never move; some linger a day or two and even a week some are strong, run and jump around, still they die. Many of the ewes, even good mothers, drop their lambs and then leave them to die. I do not skin them, they smell so bad, and I am at a loss to know what

I must confess this alarming state of affairs ouzzles me, and without an inspection it will be difficult to locate the cause. My opinion, from the symptoms detailed of the odema or "watery condition of the skin", points to parasites or worms in the intestines. A qualified veterinary surgeon should be at once consulted to make a post mortem of those dead or dying, and suggest remedies for further, prevention. If there are any dogs around, or if the sheep have access to stagnant water, swamp or marsh land under trees, it will be most likely due to the parasites named Esophagotoma Columbian;

this will cause obstruction to the circulation of the blood and account for the dropsy. The post mortem would reveal the nodular lumps or concretions in the bowels. If this should prove to be the case, see that your dogs are treated to a dose of worm medicine occasionally, and remove the sheep from the infected area.

#### Miscellaneous.

BUCKWHEAT FOR FEEDING. ALEX. McLEAN, Turtle Lake, Ont .: - "Is buck-

wheat a good grain for fattening beef cattle? Buckwheat is seldom used as a feeding stuff, though it makes a good feed for poultry, and when mixed with corn is much used for fattening swine in some places. It is also fed to other kinds of stock with good results, but except in some special cases ts use in this way would not be profitable, because the selling price is usually above that of other grain, while the feeding value is considerably below. For comparison, taking oats as an example, the

digestible nutrients are as follows: Of Buckwheat— Albuminoids, 6.8; carbo-hydrates, 47.0; fat, 1.2; nutritive ratio, 7.4; value per hundred pounds, 77c. Oats—Albuminoids, 9.0; carbo-hydrates, 43.3; fat, 4.7; nutritive ratio, 6.1; value per hundred pounds,

#### Answers re Tread-Power Threshers.

To the Editor FARMER'S ADVOCATE.

In reply to "Manitoba Farmer," I would say that I am an Assiniboia farmer, and have used one of John Larmonth & Co.'s (Montreal) tread-power threshing outfits for five years, and never invested my money better than in that machine. If your friends will write to me I will tell them all they wish for, or they can call and see the machine at Yours truly,

A. L. GRUGGEN, Moosomin, N. W. T.

To the Editor FARMER'S ADVOCATE.

In reply to your correspondent, "A Manitoba Farmer," I will give my own experience with a tread-power threshing machine. His objections to getting the threshing done by hired machines are correct and not overstated, and it was these objections that induced me to buy a two-horse tread-power machine in the year 1888, and which I have used with increased satisfaction ever since. The chief points in its favor are: 1. Being able to do your threshing just when you are ready. 2. To take your own time and clean the grain thoroughly out of the straw, and not "throw over." 3. When finishing a stack, to leave no waste on the ground. 4. To keep the 4c., 5c. or 6c. per bushel in your own pocket.

My machine (John Abell's, of Toronto,) threshes in wheat about 30 to 35 bushels per hour; oats, about 50 bushels per hour. Threshing from the stack, four men are all that are required, and threshing from the stook five men. I find threshing from the stook is by far the best, and my method is as follows:—As soon as my grain is all in stook, I begin to thresh the first that was cut, setting the machine so as to get about 600 bushels at a setting, and for a crop of about 200 acres use 6 horses—2 horses on the power, and using two wagons for drawing to the machine, changing horses at intervals. One man with each wagon can put on his own load and keep the machine supplied with sheaves; one man feeding and cutting bands; a fourth attends bushels and, if necessary, ties bags; while a boy with a horse or an ox draws away the straw. At noon and night we just take the sides off the racks, pile on the bags, and take our grain home with us. In this way I can, with only the same hands required for stacking, have my grain threshed and safely housed in almost the same time that we should take to stack it. By this you will see that there is positively no outlay whatever for the threshing, except the first cost of the machine, and I consider that in two seasons I fully save the price of that. I think greater care is required in the selection of a machine of this kind than in the larger ones, as, in this case, you verily want Multum in Parvo, and I have seen several treadpowers in operation that I would not give yard room. The machine that I use has always given the greatest satisfaction; the power is a level tread, that is, the horses feet are level, although they are walking up hill, and, although prejudice is to the contrary, my horses come off the power as fresh and sound as when they went on, and two that have been going on the power for five or six years, and have, in fact, done the most of the threshing, are as sound in their legs to-day as when they first went on.

Every farmer with 100 acres or more should have a machine of this description; with 200 acres or over I think a 3-horse tread-power would be advisable.

My idea of farming in Manitoba, and I speak from 11 years' experience, is, wherever practicable, to go into mixed farming, (I myself raise, besides grain, horses, cattle, sheep, etc.), and do all the work with your own machines, thus keeping everything on the farm; with this object in view, I use all the newest implements and machines, including a hand centrifugal cream separator, and last though not least, I have erected an all-steel Geared Aermotor Windmill for grinding grain and cutting hay and straw, etc., on one of my barns, which I consider one of my best investments.

Yours truly, J. E. MARPLES. Poplar Grove Farm; Hartney, Man.

#### FARM.

#### Farm Architecture.

We take great pleasure in introducing this new and interesting feature to our many readers. Many a farm house is built with little thought of having it attractive in external experience, or of making the interior arrangements convenient and at the same time economizing space; whereas by forethought and planning, with little or no increase in the cost, a house could be made much more convenient, more easily heated, better lighted, more labor-saving and more attractive both inside and out.

Farmers know how to appreciate a conveniently planned stable, but are apt to take little interest in the arrangements of the house. A nice looking house not only adds to the value of the farm from a commercial standpoint, but adds much to the love all members of the family have for their home, and thus is a great factor in keeping the young folks on the farm. In having this plan prepared we have aimed at nothing elaborate, but a simple, convenient, and not overly expensive house.

#### A Farm House.

BY E. LOWERY & SON, ARCHITECTS, WINNIPEG, MAN. The accompanying cut gives the elevations and floor plans of a farm or country house, costing from \$1,800 to \$2,000, according to locality.

Size of Structure-Main part, 30x30 feet; rear wing, 14x16 feet. Size of Rooms-See plans.

Height of Stories—Cellar, 6 feet 6 inches; first story in main part, 9 feet; in wing, 8 feet 6 inches; second story, main part, 8 feet 6 inches; in wing, 8 feet.

Materials-Foundation, posts; first and second story, frame, covered with shiplap, tar-paper and "drop" siding; gables and roof shingled, over shiplap and tarpaper. First floor of main house is a double one of shiplap, tar-paper and "T. & G." flooring. Second floor, single, of white pine "T. & G." flooring. Flooring of diningroom, vestibule, pantry and kitchen to be of Douglas fir; all other flooring, white pine. Shingles used on building to be all of B. C. cedar.

Plastering—Two coats, with usual Plaster of Paris hard finish.

-Painting—Two

work throughout, and "picked out" in two colors. Special Feature—Alarge comfortable and good looking farm house for a comparatively small sum of money; an isolated bed-room for the working-men; an earth-closet off laundry or woodshed for winter use. This closet is fitted with earth-drawer, which may be removed or inserted from the outside of house. This closet is much more convenient and comfortable for winter use

than the ordinary privy at a distance from the house. Dining-room and kitchen are wainscoted with pine ceiling to a height of three feet.

side gables may be "clipped-tops" as shown on front elevation, or may be carried up in the ordinary way, as shown on side elevation. Dotted lines on second floor plan represent the roof lines.

Sirs, - I have no hesitation in saying that I consider the FARMER'S ADVOcade a good, reliable and very cheap agricultural paper. It certainly furnishes its readers from month to month agreat variety of common agreat variety. iety of correspondence and vigorously written ed-

JAMES MILLS,

#### Fifty Years Ago.

BY T. B. WHITE, CLARKSBURG, ONT.

In my last I stated that clearing and draining and changed the effects of the climate favorably to health and agriculture, and on no point more, I think, than in moderating the effects of summer frosts. M. Fantiat says:—"It is pretty evident that



FRONT VIEW.

townships south of here, when first settled, and the the settlers were isolated in small clearances, their grain crops seldom matured, on account of summer frosts. I have seen the Osprey farmer, in the town of Collingwood, with his load of frozen wheat in the straw trying to sell it, or trade it off for something to take home to eat. The sun rises on a different Osprey now. What summer frosts I have noticed in townships nearer to Georgian Bay, the effects have been decidedly worse in sheltered places; and my experience has been, for over fifty years, that for good farming we want as little interruption to wind-currents as possible. I am not speaking against shelter for special purposes. In England, where I lived in Lincolnshire, Middle Marsh, before the land was drained and they could only raise but little crop, and had to live too much on barley bread and flukey mutton,

and be shaking with the ague about half the time, high and thick hedges for wind-breaks were looked upon as a necessity; but when, through under-draining and feeding the land, they had something to sell and to keep, hedges had to be plashed and kept down by trimming as low as possible so as to answer for a fence, and let the wind and sun on to the land and the roads. My father saw these two extremes, and lived to plash many a hedge. So I need hardly say I was amused when I read on page 34, forestry report for 1887–8, "That all over England the fields are separated by hedges, often tall and thick, often raised on banks, and that the fields are generally small, &c." But with a great many it is

wood twenty miles from London afforded skating

for ninety consecutive days in the winter of 1885-6,

while during a greater part of the time the lakes in the London parks were free from ice." In some

different, and they reasonably suppose that such statements made under such authority are correct. On the 18th of February, 1886, about a year before the above quotation was printed, the following incident occurred before a bench of magistrates, at Boston, England: - "Thos. Morley, farmer, Bicker, was charged with being the owner of land on whicha certain hedge is growing adjoining to a carriageway, and neglecting to cut a plash in said hedge, so that sun and wind are excluded from the said carriageway.

The defendant said he had commenced to cut the hedge. An order was made for the cutting to be completed, defendant to pay costs."

With respect to hedges being raise on banks, the custom was to dig a dyke along the supposed hedgeway, and put the soil on the side the quick was intended to be planted, as quick grew best on a dry, good soil, which is all the banks I ever saw, and to have it appear in this country that the hedges were raised up for the

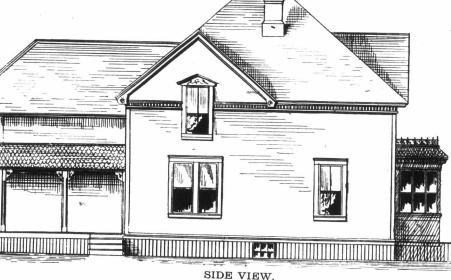
purpose of making better wind-breaks is more than amusing to one who has worked at the business; and for a common-sense view of the question, I prefer what the Yorkshire-

man hedger says:"If theease
warn't lopped an'tr hedges an' ivery noo an' then chopp'd doon an' braced in, they wad gan sprawling ower t' rooad o' yah side an' ower t' clooases on t' uther, an' grow thick i' yah. spot an' thin iv' anuther, an' grow up two or three an' grow up two or three yards high into t' bargain. A rood o' good land wad be weeasted, 't sheep wad gan throo t' gaps, an' t' sun wad be kept off t' corn, or 't tonnops, or t' rape, or whativer else was growing, an' they wad deeu a parlos lot o' mischief."

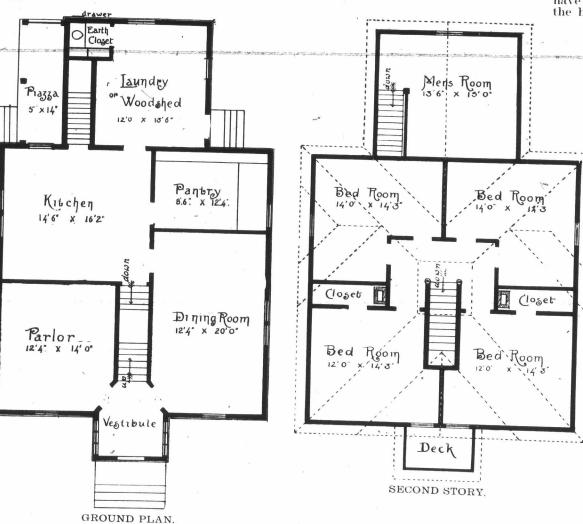
fo co jo ar m

On page forty, forestry report for 1891, we read: "That forests tend to diminish the degree of sudden changes, and to avert thunderstorms, etc." Well, we know that the temperature is more equal in the woods both day and night, but that is just where the farmer can not be. He has got to clear himself a place to live on, and he has got to work that place and keep out of the woods for farming purposes, and as long as he is isolated in a small clearance sur-

intercepting it, so as to have it tarry among them, through rusts, frosts and insects. In 1848 spring has long been known. A dry garden on gravel in Surrey, England, of three acres in extent, surrounded by trees, is generally 3 to 6 colder than the open council resolved that the Reeve be authorized to surface the surrounded by trees, is generally 3 to 6 colder than the open council resolved that the Reeve be authorized to surface the surface to the surface to surface the surface that the surface the surface that the surface the surface that the surface that the surface the surface that t Agricultyral College, Guelph. over the trees, and a large pond in a pine notify the Warden that it is the desire of this



SIDE VIEW.



vigorously written editorial matter on general agriculture, dairying, stock raising, fruit growing, and other things in which the farmers of this country are deeply interintercepting it, so as to have it tarry among them, have been all to fine would be a solution of the same time more subject to failure of crops through rusts, frosts and insects. In 1848 spring wheat in these temperature may be subjected to extremes of the same time more subject to failure of crops through rusts, frosts and insects. In 1848 spring wheat in these temperature may be subjected to extremes of the same time more subject to failure of crops through rusts, frosts and insects. In 1848 spring wheat in the same time more subject to failure and through rusts, frosts and insects.

council that he would call a special meeting of the county council for the purpose of procuring seed, and that the Reeve be authorized to apply for the sum of \$1,000 to procure seed for this township (Colingwood). Yet the young farmers of Ontario, by reading forestry reports, cannot but be impressed with the idea that the first settlers had nothing to do but just tickle the land and have plenty.

Then as regards clearing land averting thunderstorms; at a raising in the woods I was at in the spring of 1848 it came on a wind and thunderstorm which frightened us all away to a small clearing near by, and of the great storm in Oxford last summer we read that Capt. Williamson informed the people that when the county was first settled, upwards of sixty-five years ago, he witnessed one as bad if not worse. Rev. E. R. Young writes at Norway House: "When we were at family prayers the first evening after our arrival there came up one of the worst thunderstorms we ever experienced. The heavy mission house, although built of logs and well mudded and clapboarded, shook so much while we were on our knees that several large pictures fell from the wall, one of which tumbling on Brother Stringfellow's head put a sudden termination to his evenings devotions.

#### Agriculture in the Public Schools.

A paper read at the Teachers' Convention, at Virden, by Jas. Elder, "Hensall Farm," Virden.

A common question frequently asked is, "Why do our boys leave the farm?" and many are the answers given, all more or less correct. There is one answer, however, which is perhaps as much to the point as any, but which I have never heard given, viz.: Our boys are not taught the science of farming, and consequently they grow up with the idea that farming is a sort of low class occupation, from which, by dint of hard, dirty labor, an ignorant, stupid, simple set of men are able to just keep body and soul together, the only spice of whose life is an occasional visit of the bailiff, whilst the city and town occupations require intellect, education and sharpness, which, when applied, secure for those employed in them competence, dignity and respectability.

No doubt among those engaged in farming there are many well educated men. Educated in certain branches, but not in the branches applicable to their occupation; consequently, whilst they can talk intelligently about politics, history, geology or astronomy, they know nothing about the science of agriculture. Some of these are excellent painters or musicians, but in the business from which they expect a livelihood they are simply plodding along in the dark. They do a thing because they see some one else whom they consider a good farmer doing it, failing altogether to notice that the circumstances in his case are entirely different from

those in theirs.

But perhaps some one will ask: "Is there any science in agriculture?" I answer, just as much as in any other occupation. Nay, I question if in any business there is more need for knowledge, skill, judgment and perspicuity than in agriculture, and therefore I am disposed to dispute the claim to the name "profession" with some of those occupations which now assume it. True, in the past it was generally thought that principal requirements in a farmer were plenty of physical strength and mental energy. But in these days of keen competition and improved methods, a man requires to exercise his mental even more than his physical powers; if he is to be successful in agriculture he must know the whys and wherefores, he must know the principles as well as the practice.

Yes; not only is agriculture a science, but it is the grandest science on earth. 1st. Because it is the fountain of the world's life. 2nd. Because it was the only science practised by man in his unfallen state. The sciences of law, medicine, etc., are only the results of sin. 3rd. It is the most independent mode of existence offered to man. "Happy and free as a king is he who bows but to God alone." Therefore, we believe that the time has come for agriculture to be taught in our publics chools.

As to the subjects to be taught, these are many and varied. Whilst technical chemistry is all very well in its place, at the same time I believe that, for the present, the very best text-book possible could be compiled of extracts from our agricultural journals. These are not only suitable to our times and conditions, but their practical character would make them interesting to our young people, and would impress them upon their minds in a manner impossible to the more technically written articles. A thoroughly practical, intelligent farmer should be chosen to make the selections. He would be in a position to make a much more judicious selection than a regular educationist.

A text-book of this kind could be made very interesting and instructive, and we have no doubt would in many cases be read with profit by the parents. It should embrace a wide variety of subjects, such as the constituents of soils, the constituents of plants and grains, the systems of cultivation for different soils and different plants. (I remember well, in my boyhood days, reading a series of articles in the old Canada Farmer, entitled "Familiar Talks on Agricultural Subjects," from which some excellent articles could be culled.)

Then there is the stock department.—the characteristics of the different breeds of horses, cattle, sheep, pigs and poultry, also methods of feeding to best advantage, including results of experiments made at the Experimental Farm; also an article on pedigrees of stock.

Then there is gardening in all its branches, a subject so important in contributing to the variety on the farmer's table, or to cultivating a taste for the beautiful; also tree planting, the knowledge of which seems to be very limited, and the practice of which would contribute as much as anything else to make country life pleasant, enjoyable and elevating.

And last, but not least, I would include in such a text-book articles for the girls on housekeeping, cooking, dairying, etc. I am afraid that too much pains are taken sometimes to teach the girls to ape the lady under a sad misapprehension of the true meaning of that term, and not enough to teach them those things which are essential to their future usefulness, happiness and well-being; for, after all, "Life is real, life is earnest." Fancy clothing, stylish gait and simpering manners may be very fascinating to the love-sick swain, but they add but little to the prosperity, contentment and happiness of after-life. 'A well-cooked meal, clean, cheery house, well-repaired pants, and a thrifty, intelligent wife, who can talk intelligently about mutual interests, will contribute to a husband's contentment and good humor, and to the happiness of the home long after the simpering manners have lost their

Let such a book be compiled, and I believe it would be the most interesting as well as the most instructive book in our schools.

Some will say that agriculture must be learned by practical observation. True, and do not our country boys have the practical partright before them? What they need is to be taught correct theories, and by comparing these theories with the practice they see at home, whether that practice is right or wrong, they will enjoy the very best facilities for learning the science of agriculture.

Now, as to the objects to be attained. These are both important and far-reaching 1st. I would say that the ideas caught by the children at school, and by them suggested at home, would have an immediate effect in improving the methods practised by the parents. 2nd. It would cause the children to be more observant of farm operations, marking wherein the home practice agreed with the school theory, and vice versa 3rd. The above two points gained, I believe that an immediate effect would be seen in better managed and more productive farms; better and better kept stock, and, consequently, better financial results; and again, consequently, more happy homes, because the old Scotch rhyme is true:

"There's little cant and little cheer can come, Wi'duddy duplits and a pantry toume.

4th. Our young people will learn that there is something more than plod in farm life; that there is a wide field for the exercise of their intellectual being, and that the farmer's or farmer's wife's life can be as respectable as that of any other man or woman who breathes the air of heaven. 5. Some of the future results will be: Fewer of our boys leaving the farm; fewer of our girls preferring the stylish dude to the substantial, noble-minded agriculturist; agriculture placed where it ought to be, as the most independent and honorable calling open to men and women, which God speed the day.

#### POULTRY.

How to Start and Stock a Hennery.

Written for the Advocate by J. C. Harrison, "Brandon Poultry Yards," Brandon, Man.]

The subject of poultry keeping is just now receiving much attention from beginners who have no practical experience, and they ask for information on this important subject, to answer which privately would require too much time, so that I through the columns of the Advocate desire to discuss the general principles of this subject in a public way. Poultry is kept principally for two purposes,—that of furnishing table fowls, and supplying eggs. Some varieties are best for one purpose, and some for the other. Some varieties are what might be termed general purpose fowls, combining both qualities. It will be well, then, for a beginner to first decide what he wishes to produce, and select breeds best adapted for his requirements.

Since fashion in poultry raising and poultry journalism has run so high, breeders of particular varieties have become so enthusiastic as to claim every good quality imaginable for their particular favorites. Every sensible person, however, should know that no one breed can excel in all character istics. Some of the best layers are non-setters, and some of the heaviest table fowls are indifferent layers. and so on. In my many years' experience with the different varieties, I might affirm that they will all pay handsome profits, if furnished suitable quarters for their varying conditions and receive proper care. In order to assist the inexperienced in selecting the breeds most suitable to his purpose, I would advise the selection of Light Brahmas, Plymouth Rocks, Wyandottes and Leghorns as being the best for all practical purposes. The Brahma is a superior winter layer, the best of the Asiatics. The Plymouth Rock is a good average layer, will aver-The Brahma is a superior age about ten dozen eggs each per year; they are also excellent broilers, are also good setters and mothers; and I think that all the setting varieties will lay fewer eggs if deprived of the privilege of bringing out at least one brood of chickens. long as the breeders of Plymouth Rocks will be content to have them occupy the middle ground between large and small breeds, and endeavor by careful selection to improve their egg-producing qualities, they will hold their position of favor against all rivals.

The Wyandotte of late has come into public notice; they are very similar to the Rocks, and are their strongest competitors. They are shorter jointed, more blocky, finer boned and closer feathered, and if they become of a uniform type they will certainly deserve all the praise their breeders give them.

The Leghorn is a non-setting variety, and one of the best producers of eggs, being most prolific during the warmer months, their chickens making nice, early, though small broilers, and should only be used as such, as their skin is too tough to make good roast rs. Their chief merit is, however, in eggproduction alone. They mature early, many pullets commencing to lay at five and a-half months old.

The Langshans will lay as large an egg as the Brahma, and perhaps as many of them, also of the same desirable color, but they are not considered a first-class table fowl by the Americans on account of their white skin.

The Dominique, I would say, occupied the middle ground in company with the Plymouth Rock and Wyandotte. Of the many other varieties of poultry, I might just mention the Hamburg family, whose chief merit is egg-production, one gold-spangled hen having laid one hundred and fifty eggs in six months. Their meat is too dark to be desired for table use, their chickens are delicate and hard to raise, but when six or eight months old become quite hardy. The different varieties of this family are gold and silver-spangled, gold and silver-pencilled, and the white and black varieties, which have been introduced more recently. The black I consider the hardiest and most prolific of all.

The Black Spanish, long known as one of the best layers, is equal in every respect to the Leghorns, laying a larger egg than any other breed. The chicks are extremely delicate, but the matured fowls are reasonably hardy, the contrast of the pure white face and ear-lobes with the metallic green-black plumage making them a very handsome, showy bird, but in breeding for this particular marking much of their merit has been

The French class, comprising the Hoodans, Le-Flesche and Cravecœurs, while highly appreciated in France, have failed to give general satisfaction in America. I heard of one poultryman in the Southern States who has been very successful with Hoodans, and who claims every excellence for them as table fowls, besides being good layers. All these-varieties, however, as well as the Polish, require warm, dry quarters, as they are very liable to roup if kept in damp pens.

The LeFlesche are the most delicate to rear of the whole race, especially in this northern climate, but I believe a good hen of this breed would lay more eggs from March to October than any other, not excepting Leghorns.

#### A Correction.

A while ago I saw a collection of statistics concerning many different kinds of fowls and eggs, wherein it was said some smaller eggs fell short of a pound to the dozen, while larger kinds overran in varying degree. Writing on another subject than size of eggs, I absent-mindedly "lumped" and misquoted the above as requiring to a pound one dozen large eggs of the hen. How I could have done so, I cannot tell; I give it up. I knew better, for I have often wished I could sell my hen-fruit by the pound, since many specimens are too large for fitting ordinary egg-cases. Even the most accurate are human, and may err. "Homer sometimes nods," which I don't wonder at, if he had my burden and variety of spring work.

Mrs. IDA E. TILSON.

#### Secluded Nests.

It is a mistake to locate the nests of the henhouse in an open place, where the light can shine full upon them. Such nests invite scratching, pecking and the eating of eggs. The nest should be so dark inside as to hide the contents almost entirely, and it should be roomy, too, so as to prevent eggs from being crushed by the hen in getting into it. Hens like cosy nests, and plenty of them. To neglect this point in the care of the flock is very shortsighted. The more secluded the nest, the better it suits the hen. If we disinfect the nest boxes now, and every two weeks hereafter for the season, we will have no mites to worry the hens when the weather gets warm.—[Tennessee Farmer.

#### Dangers in Impure Water.

The sanitary condition of the live stock of the farm sometimes receives more attention than that of the family. This is true more often in regard to the water used than in anything else. For convenience sake, the wells for domestic use are placed near the house. Frequently they are found under the porch or kitchen floor. For the sake of safety they are generally tightly surbed, thus preventing any purification that might be brought about by a free circulation of the air. Being in such near proximity to the houses, wells often serve as cesspools for the drainage of the buildings and surroundings. It need not be argued that water from wells which are not scrupulously clean, and as well ventilated as they can possibly be, is dangerous. Disease is often found in water which appears as pure and sparkling as crystal. A close analysis of the water used for domestic purposes would often astonish those who use it. (lean and purify the wells,

#### DAIRY.

#### Fleecing the Dairy Farmer.

Practically single-handed, for a quarter of a century the FARMER'S ADVOCATE has resisted and exposed an endless number of schemes designed to fleece the farming public. When the movement in favor of improved butter dairying set in, occasion was taken to caution persons against starting creameries without a certainty of a sufficient supply of milk within a reasonably limited area, and without exercising the greatest possible care in the selection of plans and plant. It is no secret that there are probably a thousand creameries in the United States, which have actually cost double what would have yielded the conscienceless concerns supplying the outfits a reasonably large margin of profit. Not a few of them are to-day standing idle for lack of milk, and some have been "mysteriously burned down." We have in the past published plans and given estimates of the cost of plant and building under reasonable conditions, and at the experimental dairy stations established in the different Canadian provinces practical information as to every detail can be obtained. Reliable men who have been in the business in Canada for years are always ready to impart to beginners the benefit of their experience, so that when an oily-tongued agent from abroad strikes a district with his grip full of plans and golden statements of prospective profits it would be well to send him about his business and make enquiries nearer home. Usually this is not done. A little mother wit ought to tell any one that these glibtalking travellers are not philanthropists, and that when a couple of "prominent farmers" are invited at "the expense of the company" on a trip of 400 or 500 miles to see a real creamery running, and are wined and dined into the bargain, it is not for their benefit nor for the benefit of their fellowfarmers who are to become shareholders. However, they bring home a glowing report, the stock is taken up with a boom, the agent gets a \$5,000 or \$6,000 contract signed hard and fast for what ought only to cost \$3,000, or when the cow population of the community would not warrant a larger expenditure than that, and then takes his departure for pastures fresh, leaving his victims to fight it out with the collector of the company. It seems necessary to reiterate previous warnings on this subject, in view of the increased attention being given to buttermaking on the factory plan. The essential facts about this business can be got quite near at home, and it can be successfully developed. just as Canadian cheese dairying was, without the application of Chicago hot-house methods. A little common sense is a very good thing on which to lay the foundation of a creamery.

#### Private Dairying in Manitoba.

BY S. M. BARRE, WINNIPEG, PRESIDENT OF MANI-

come be made in private dairies. We should, therefore, make an effort to improve our ways in making and handling dairy butter. The following sug-

gestions will, I trust, prove useful:—

Cleaning the Milk-House.—The first thing to be done at the beginning of the dairy season is the thorough cleaning of the milk-house, and of all utensils connected with the dairy. Take everything out of the milk-house, use planty of certain thing out of the milk-house, use plenty of scalding water and lye to clean the shelving and all the wood-work. Whitewash inside and outside, to sweeten the atmosphere and absorb moisture. Use a weak solution of copperas or sulphuric acid to clean the floors. Keep nothing but milk in the milk-house. A vegetable cellar-kitchen is no place for milk and butter. If you have no milk-house partition a corner of your best room, and keep wilk in a cool clean place.

milk in a cool, clean place.

See that the cows get a full supply of succulent food, plenty of pure water and salt at all times of the year, and particularly during the milking

Sow a patch of corn, or of oats and peas, for soiling purposes during the hot, troublesome days of

Milking and Cream Separation. The best time Milking and erean reparation to milk is immediately after feeding. Milk, cleanly, regularly, quickly and completely. With less than regularly, quickly and completely. With less than eight cows use deep or shallow setting. Deep setting without ice or cold water is of no practical use in summer, it is defective in the fall, or at the end of the milking period, and under the above conditions should be superseded by shallow setting. Under proper conditions deep setting is far better than shallow pans in the average dairy farm. Skim before the milk is sour; so soon as the milk begins to turn, the cream has done rising; it is of no use whatever to let it remain any longer on the

The Hand Separator. With more than eight cows farmers will find it a great advantage to use a | in the right direction.

cream hand separator. The public was at first prejudiced against its use, because the hand separator was supposed to be hard to turn. This prejudice is now fast disappearing, and we are now in position to safely state that a hand separator can easily be turned by a good-sized boy. In fact, boys prefer turning this separator to milking; they claim it is lighter work. With thirty or forty cows it is best to use a larger machine, and run it with horse gear—a bull, an ox, or a pony could do the work. A tread-power is the best for this purpose, on account of securing more uniformity of speed, but hundreds of sweep horse powers are used for the purpose of turning separators, with good results, on the continent of Europe and elsewhere. The separator should be set in a clean, cool, suitable place (it needs no costly building), not too far from the cattle yard or shed. The separator is started about the time milking commences. Both operations are completed about the same time, and the warm, sweet skim-milk is ready for the calves to drink. There are no pans to wash, no cream to skim, no cold water to pump. The whole dairy operation is wonderfully simplified.

Preparing the Cream for the Churn.—The great secret of making sweet, fancy butter lies in churning often, say every day when possible, and at least every second day during hot weather. If the quantity of cream is too limited for churning so often, add new sweet milk to it in order to increase its bulk. The cream should be well mixed and stirred every time a fresh supply is added to the contents of the cream vessel. No new milk or sweet cream should be added to the contents of the cream vessel within ten hours of the time of churning. Keep the cream vessel in a cool, clean, dark place. Bear in mind that separator cream requires to be cooled immediately after separation to a temperature below 60° Fahr.—I like to cool it to 50°. This point should not be overlooked if you wish to avoid difficulties in churning, secure quality and yield of butter. The acidulation of the cream should not be left to chance and circumstances, but be so regulated as to have the cream ready for the churn at a given time. It might begin ten or twelve hours before churning and be accomplished with heat, a ferment, or both, so as to produce the best results. Cream in the right condition for churning should not be too thick nor too sour, the casine should be well separated from the fat (this is indicated by the fomentation of small pellets or grains in the liquid), and it should have a mild,

clean, sour taste.

Churning, Washing and Packing Butter.—
Churn the cream in any kind of revolving or rocking churn at a temperature never above 58 Fahr. in summer, if you wish to obtain quality and quantity summer, if you wish to obtain quality and quantity of butter. Color when necessary, and always use a thermometer before churning. When butter shows signs of breaking, add a little brine to the contents of the churn to assist separation. When the butter grains are of the size of small shots, before taking out the butter-milk, add water at about 50° during compare in quantity equal to about one-third of summer in quantity equal to about one-third of the contents of the churn, agitate a little, draw off the contents of the churn, agreed a fittle, unaw on the diluted liquid, and repeat washing with water at 55° until the water comes clear. Well water is generally the best for washing butter. Let the butter drain a while. Salt at the rate of seven-TOBA DAIRY ASSOCIATION.

Dairying is taking a larger hold than ever in Manitoba and the Territories. But on account of the sparsely settled condition of the western country the greater part of the products must for years to the sparsely settled dairies. We should the sparsely settled an ounce of safe per pound of outler, and work just enough to incorporate the salt with the butter. Let it then stand a few hours in a cool, clean, dark place, and when hard enough rework slightly to make it uniform in color. Beware of over-working; nine-tenths of dairy butter is over-working; and work just enough to incorporate the salt with the butter. Let it then stand a few hours in a cool, clean, dark place, and when hard enough rework slightly to make it uniform in color. Beware of over-working; nine-tenths of dairy butter is over-working; nine-tenths of dairy butter is over-working. eights to an ounce of salt per pound of butter, and worked. Always use regular butter salt.

Three-quarters of our dairy butter is spoiled by being packed in poor tubs, and people use them because they are cheap. This is a very near-sighted policy. Pack butter solidly in neat mountain spruce tubs, which hold the pickle. Keep the butter submerged in brine so as to exclude the air from it. This can be done by keeping a weight over the butter until the tub is full. Fill the tub up to within three-quarters of an inch of the top, place two layers of butter cloth over it, and fill the remaining space with a thick coat of salt paste. This is done by mixing fine salt with water. Soak the tubs in brine five or six days before using.

How to Tare Butter Tubs. -1st. Weigh the empty tub. 2nd. Weigh again when full. 3rd. Put in the salt cloth, cover and tins, allow an extra half pound of butter for soakage, and then tare. Then your weight will hold out if the butter is not kept too long. Keep butter in a clean, cool, dark

We cannot condemn too strongly the evil practice of packing butter, and holding it from summer until fall and winter in foul cellars, or other places unfit for storing butter. Butter is a perishable article anyway, and will not keep long even in a cold storage. I am fully convinced that unless dairy butter is shipped weekly from the farm to I am fully convinced that unless some reliable dealer, who could at once place it immediately, all efforts to improve private dariving will prove useless.

Let us, therefore, organize cold storage trans portation on our lines of railways; the railway companies are desirous of providing such transportation. Let the farmers and country merchants ship the butter every week. Let this butter be honestly and properly classified, and paid for according to quality. Let it be at once sold and brought into consumption to make room for fresh supplies, and a great step will then have been made

#### The Future Cheese and Buttermaker.

Read before the last meeting of the Western Ontario Dairy men's Association, by J. S. Pearce, London, Ont.]

The success or failure of not only the cheese and butter factories, but also the whole dairy industry, depends largely upon the skill and ability of the cheese and buttermakers. A large number of our cheese factories will soon require not only a cheesemaker but also a buttermaker, and the proprietors of such will not employ two separate individuals when one should be fully competent to do the work. It will, therefore, behoove all progressive and intelligent cheesemakers to post themselves thoroughly on both lines of dairy work. To become a competent buttermaker is not nearly so difficult, nor does it require the experience that it does to be an Al cheesemaker. I want to sound a note of warning both to cheesemakers and those who employ them regarding the proficiency of those who under-take to manage and run a factory. Many of these young men, and sometimes old men, are sadly defi-cient in knowledge of their business, and this deficiency is encouraged and winked at by those who employ them, because they work for less money than a fully competent man will. These persons will take the risk, for they have nothing to lose. Those who employ this class of makers lose sight of the fact that by so doing they are putting their factory on a par with the medium and second class factories. Cheesemakers and buttermakers may be divided into three classes, viz.: First, those who are striving by every means in their power to make the finest goods, and who are incessantly trying to improve. Men of this class are never content with present attainments, but are anxious and willing to learn from every one. Any intelligent maker will tell you that the more he knows about his work the more he wants to know, and the more he learns about his business the more ignorant he becomes in his own eyes. Second, there is another class of makers who are now making a fairly good article, and seem to think they have reached the top of the ladder, and imagine that if they only make a cheese ladder, and imagine that if they only make a cneese that will, by hook or crook, pass the inspection of the buyer, they have done their duty. These cheesemakers will wake up some day and find they are being left behind in the race, and will wonder how it is and blame every one but themselves. If you criticise their cheese and try to bring the fact home to them that the trouble is with themselves they to them that the trouble is with themselves, they will tell you that their cheese sells for market price, which is sufficient in their eyes. But they forget that if their cheese was up to the best fancy article, that it there theese was up to the best laney at their, the price they would then get would be correspondingly higher. They seem blind to the fact that there is a wide range of both quality and price, from the finest or fancy down to the point where the culling commences. There is one more class of maker, and but few words will be needed to describe his class. It is he who is so utterly lazy and shiftless that he does not seem to care what the result of his labor is. You can tell him by his work and surroundings often before you see him. His days as a cheesemaker are numbered, and I am happy to say that these men are becoming few and far between.

A man or woman in order to be an A1 cheesemaker must possess no ordinary ability and intelligence, and those who reach this point may well feel proud of their position. You may rest assured that there are many makers who never can or will reach this goal. They have not sufficient ability to enable them to get there. But there are scores of others who, if they would only wake up to their pportunities and keep alive and abreast of the times, would soon make great progress. The dairy industry has made some very rapid strides in advance the past two or three years, and we shall soon see other very important changes. Are the makers alive and awake, and watching and preparing for these changes? I often am amazed at the indifference of many makers to what is their own

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as well as their factory's interests. And what about the future cheese and buttermakers? Skill is and must become more and more the watchword of the educational movement in all lines of business. There is just as much need of it in the dairy business as in any mechanical or manufacturing work. Skill and brains will be very important requisites in the future cheese and buttermaker, who will have to be an A1 man in more ways than one. He will have to know more than the mere routine of making cheese or butter or even both. These will not be the only requisite that the proprietors of cheese and butter factories will demand. The day is not far distant when a maker, to hold his position, must understand the principles that underlie his practice. He should understand the dairy cow, what she should be fed, how she should be fed, and how she should be cared for, how the milk should be handled before he gets it, as well as how to handle it himself. He should also be able to impart this knowledge to his patrons, and by so doing get them upon a higher plane of intelligence. He should also know and be able to tell all about the milk he is taking in, and know its composition. He should be able to handle the Babcock tester and Quenne Lactometer, and all other dairy appliances. There is a grand field of labor and usefulness in store for those who prepare themselves for work along these lines. How many of our cheese and buttermakers have given this matter any thought, or begun to prepare themselves for this work? For instance, how many of our makers have the tact and judgment to keep on pleasant relations with their patrons, and yet take from them only perfect milk? It is one thing to tell a patron that

his milk is "off the hooks" as to quality, but another thing to make him believe, and a still harder thing to make him reform his ways and bring in better milk. Some patrons will argue that their milk is all right when they know better, and this is enough to raise the ire of any cheesemaker. But you have a duty to perform, not only to the consumers of your product, and to those of your patrons who are not slothful, but also to yourself, for your own reputation is at stake, and if you perform this duty by drawing a sharp line between the bad milk and good, always keeping on the good milk side, your future reputation will be assured. No maker can afford to disregard these principles.

Among the qualifications of the future cheese and buttermaker are the following:—He must be active, smart and intelligent, with good address. He must be a man with years of experience both in cheese and butter. He will need a fair education and a thorough knowledge of business, and be a man of character and decision in whom all sensible and right-minded men will have confidence. He should understand human nature, in order to be able to teach the ignorant, and know how to avoid giving offence to a conceited patron, and at the same time take the conceit out of him. This, with a certain amount of diplomacy, firmness and decision, will bring him the respect of all. must be a man of natural ability, and be always studying how to make improvements. His thirst for knowledge should never cease.

As a "starter" for all these accomplishments he must have a comprehensive dairy education, such as can be acquired at a dairy school, and from reading and meeting with men who thoroughly comprehend the dairy business.

I am aware that with hundreds of young men progress stops just as soon as they succeed in getting charge of a factory. It is to them I wish to speak particularly, and urge upon them the necessity of a higher education if they would not be left behind. The education of the man who in the future will command the highest wages must extend from the feed on the farm to the division of the proceeds among his patrons. He should be thoroughly informed of the value of the different foods for the production of rich milk, should thor oughly understand the characteristics and care of the various breeds of dairy cattle, should also understand the composition of milk, and the many conditions which combine to make it of the highest quality. He should also understand a few of the simple truths of chemistry, and be able to demonstrate the same.

I have mentioned a long series of actual require ments for the buttermakers of the near future, to which, if he would avail himself of constant employment and the highest wages, he must give them careful heed. I have many times been asked if the different dairy schools would not turn out so many buttermakers that it would be almost impossible to secure imployment, but I do not think so, for the reason that among the many compara-tively few will be fit to put in charge of a public factory. There are many "lessons never learned at school," and among them is that practical factory experience so necessary to successful management. These students have one great advantage, which is that a year's practical work reinforced by the knowledge obtained at the school will make them successful competitors for the best places.

I would be glad to see every cheese and buttermaker employed at a good salary, but the conditions are the same as in every other trade or craftonly the best can succeed. The day of concentration in dairy and creamery work is close at hand. The price of the manufactured product is regulated by the buyer, but the producer can regulate the cost to a certain extent, and this is the problem that will receive its perfect solution only through the trained hand and brain of the man who seeks to advance himself. The next five years will witness great changes in dairy work, methods and apparatus.

Only the best men will have good places, and the average man who has no desire to better himself in his occupation will have dropped out and have become lost to the business.

How to Keep "Separator" Skim Milk Sweet. Editor of the FARMER'S ADVOCATE:

The cheese factory of which I am a patron has been fitted up as a creamery for winter butter making, and should the latter prove more profitable, may be continued the greater part of the year. am well satisfied with the results, except that the skim milk is not returned to me in good condition. True, it is not as bad as the vile whey that comes out of so many filthy, poisonous cheese factory tanks, which makers or factorymen do not have cleaned from one year's end to the other, but it sours in a few hours after coming to my place, and the calves turn up their noses at it, and do not thrive as they did on old-fashioned skim milk. Thus far, our factory in winter has only made butter three days per week, which you see aggravates this sour milk nuisance. (annot the FARMER'S ADVOCATE, on behalf of a host of patrons who are in this box, furnish some information that will help to remedy this serious trouble? R. T. G.

ANSWER. The difficulty arises from the heating up of the milk before being run through the cream separator, after which it sours very rapidly. The best remedy thus far tried is to heat the milk after separation, so as to sterilize it practically. At the last meeting of the Wisconsin Dairymen's Association this very point was discussed as follows:-

The Chairman—One point in particular I want to question the speaker upon, and that is, how the arrangement is made for heating the skim milk of the patron, sterilizing it as it leaves the creamery, so that its feeding value is maintained for twenty-four hours in hottest weather.

Mr. Dennison—In my own creameries we use live steam directly from the boiler, to scald the milk as it runs from the separators into the galvanized iron vat, and the factory is so arranged that the milk runs from the separators into the vat, and from this vat into the tank without lifting. By turning on the steam to just such an extent as is necessary when we are using one, two or three separators, the operators may become accustomed to it, so that they can heat the milk up to 150 degrees, and it remains perfectly sweet, so far as the taste can discover, until the afternoon of the next day—oftentimes 48 hours.

48 hours.

Question—After that milk is heated up, does it separate

into clots?

Mr. Dennison—Not at 150 degrees. You can separate casein from the water by heating it hotter than that. We start
it at 140 degrees, but we thought we would be on the safe side
and put it 150 degrees.

Mr. Favill—What is the cost of the necessary apparatus to

Mr. Favill—What is the cost of the necessary apparatus to do this in a factory that is taking 8,000 lbs. of milk a day!
Mr. Dennison—Why, we have simply a tank; it does not cost us 15 cents to put in the apparatus to do it. Our tank is a regular skim milk tank, and we just turn the three-quarterinch pipe directly into the tank.

A Member—Mr. Newton uses the exhaust steam and throws it into the pail, and it runs over into the vats, keeps heating the milk.

the milk.

Mr. Favill—Have you ever made any estimate of the cost of coal or steam to keep that thing running per day.

Mr. Dennison—As I estimate it, it costs us about 50 to 75 cts. a day when we are running 15,000 to 20,000 lbs. of milk. It is merely nominal; we are glad to do it for our customers. I prefer to use the exhaust steam to heat the feed water from the boiler, rather than use it directly in the skim milk. I prefer not to interfere with the speed of the engines on account of the separators. I have in one factory a forty-horse power boiler, and in the other a twenty-horse power; and we are running from 10,000 to 12,000 lbs. of milk during the hot weather.

weather.

Mr. Noyes—There is a jet pump, I believe, at present, that is so constructed that you can raise your skim milk or buttermilk to any temperature you wish, and it don't take any extra steam at all. The heat that lifts it heats it.

Prof. Henry—What is the name of this piece of apparatus that does the lifting?

Mr. Noyes—It is a steam jet pump.

Mr. Noyes—It is a steam jet pump.
Mr. Dennison—The heating of the skim milk is a very valuable thing. In separated districts, like our locality, the great obstruction to our business has been that the milk became sour and unfit to feed young calves, and this arrangement has obviated that trouble.

#### From Past to Present.

From the Red River cart, lumbering through Fort Garry, to the electric car, bowling along the streets of Winnipeg at twenty miles per hour; from the tallow dip to the brilliant electric light, or from the sickle to the self-binding reaper,—these are marvellous examples of development, nor are they any more remarkable than the growth of western mercantile enterprise from the days of the voyageur and the Hudson Bay trader, as he bartered for the Red Skin's bundle of pelts the products of British skill. Changes seem to have come with the quickness of magic lantern scenes. Old men recollect well the days when "The Company" did its business behind the palisades, from which has evolved that palace of trade now known as the Hudson Bay store. All that remains of the dim past, and its pioneering enterprise, is the name and adherence to honorable dealing, the very best of merchandise, and a constant policy of progress. Buying for forty general stores and some two hundred other selling points has certainly given the company an immense leverage, of which the purchaser secures the advantage. But the public realized this long ago. New comers in the country naturally enquire for these stores. It will, therefore, be information to mention the principal places: Baie Des Peres, Battleford, Calgary, Chapleau, Dauphin, Deloraine, Edmonton, Fort William, Kamloops, Keewatin, Langley, Lethbridge, Lower Fort Garry, Macleod, Manitou, Mattawa, Morden, Nelson, Pincher Creek, Portage la Prairie, Prince Albert, Qu'Appelle, Rat Portage, Riding Mountain, Russell, Shoal Lake, Sudbury, Touchwood Hills, Vancouver, Victoria, Vernon, Whitewood and Winnipeg.

In many instances the settler will be more interested in securing a farm, grazing or coal lands? Well, about seven millions of acres, or one-twentieth of the fertile belt of Manitoba and the great Northwest represent the landed interests of the Hudson's Bay Co. Under its agreement with the Crown, the Company are entitled to sections eight and twenty-six in every surveyed township, Each section consists of six hundred and forty acres, and will be sold either en bloc or in quarter sections of one hundred and sixty acres each, on most liberal terms. A moment's reflection will show that choice of location from among these is practically unlimited: and a lifetime of labor and isolation may be saved by purchasing a farm which does not require years of waiting for the country to grow round it before it becomes a paying investment. When you think of buying farm lands, grazing sections, coal areas, or town and city lots in the West, you can take a short cut, and get valuable information by writing to Mr. C. C. Chipman, Commissioner, Hudson's Bay Co., Winnipeg, or by calling at the offices on your arrival.

The Apiary.

BY ALLEN PRINGLE. SWARMING.

A reader of the Advocate writes as follows: Editor Apiarian Department:

"Dear Sir,—My bees last year swarmed so much that I think they weakened themselves, as the third swarms and the old colonies mostly died in the winter. Some of them swarmed four times, and one or two five times. The fourth and fifth swarms I took up in the fall, as I thought they hadn't enough honey to winter on. I thought the old hives that cast the swarm were all right, but they died, and I now think they left themselves so weak by swarming so often, that that was the cause. Will you please tell me through the FARMER'S ADVO-CATE how I can avoid a repetition of the loss. Can

the swarming be checked? Ans. - It is no easy matter to check the swarmng fever when it afflicts the denizens of "old box hives." Bees in movable frame hives are much more amenable to treatment. The old adage that "an ounce of prevention is better than a pound of cure" strictly applies to bees with the swarming fever. By far the better way is to "nip the disease in the bud" and prevent the development of the fever. This may be done in most cases by judicious management, that is, in the movable frame hives. It may also be done, though with a less degree of success, with the box hives. And as our correspondent uses these, and wishes to know how to make the best of them, he may proceed in this wise:—As soon as the bees begin to gather honey freely and before they exhibit any signs of swarming-before they get the fever-ventilate the hive, give them plenty of air, and shade them from the intense heat of the sun. To ventilate the colony, raise the hive up from the bottom board an inch or so in front. Put a good-sized honey "cap" on top for surplus. If there are no holes through the top for a cap bore some in and put the cap on. Blow some smoke on the bees to keep them quiet while you are working at the hive. The ventilation, and extra room for storing above, while it may not prevent swarming, will delay it and reduce the number of swarms. If, however, you do not care to bore holes, and you are determined to circumvent them, I will give you a plan which will certainly give you the "whip hand" of them, and also give you a nice big box of honey, should the season be favorable. When you see the bees beginning to "hang out" on the hive in idleness, and show signs of swarming, proceed to business before they get the start of you. Take an empty hive or box the same size as the hive with the bees in, with three or four sticks across inside, box hive fashion, and if you have no "bee smoker" get a piece of rotten elm wood, light one end of it so that it will smoke but not blaze, and then smoke the bees thoroughly through the entrances. Having provided yourself with a piece of the perforated zinc or queen excluder" large enough to completely cover the bottom of the hive when it is inverted, take the hive, after it is well smoked, and invert it, that is, turn it bottom end up, with the top of the hive (now the bottom) on the old stand or bottom board. Now, take your excluder zinc and place it over the open top (bottom) of the upturned hive and place the empty hive or box aforementioned in natural position on top of the zinc, fitting it accurately all round to match the under hive. You understand the empty hive is on top in natural position, while the hive with the bees is under it in an inverted condition, the two open ends of the hives being together, with the "queen excluder" between them. The latter can be obtained from any "supply dealors" or from some neighbor who uses it on his more er," or from some neighbor who uses it on his movable frame hives. The rationale of this rather peculiar and novel proceeding to beat the bees in the old box hive, is just this: -Inverting the hive, and standing the embryo queens on their heads, or rather, "tother end down," with lots of added room above just upgets all their exampling calculations above, just upsets all their swarming calculations, and they go to work and fill that upper hive with comb honey, sometimes in very short meter. The queen excluder serves to keep the queen down below in her place, while the workers can pass through it to store the honey above. Of course the entrance will be in the lower hive, towards the bottom. It is many years since I practised this with great success, when I used to have box hives, and before the queen excluder zinc was invented or made. I used the zinc when it came out. Having since got so far ahead of such methods I never before published this quirk to outwit the bees, nor do I know that anybody else ever practised it. I do know, however, that if our correspondent is determined to hang on to his old box hives, and gets desperate over the swarming problem, he can get even with the fever if he follows the above directions, and he will have to boot a big box or hive full of nice comb honey without any brood among it. As to what to do with the bees in the fall that are "standing on their heads," I can tell him that later

#### THE QUIET HOUR.

#### Blending Atmospheres.

(From "As it is in Heaven," by Lucy Larcom.) CONTINUED FROM PAGE 194.

It is one of the perplexing problems of our being, how to find one's right relations to the natural world. In our best moods we feel, with the good mediæval saint, that the sun and the moon and the elements are our brothers and sisters, children with us in the same household. We cannot believe ourselves unrelated to anything that God has made—and we are not. Yet matter is not spirit, nor is spirit matter, though neither can find its true life apart from the other. What if out of our purified human hearts are to be the issues of life to the lower natures which sur-

"These material coverings which we wear, writes the author of "Foregleams of Immortality," obey the law of the immortal man within them let that be purged of evil and it will transform the whole outward nature, and make our material clothings fit to us as our robe of righteousness. Matter is neither good nor evil, except as magnetized by the spirit within. when the savagery in men has been eliminated or softened down, the savagery in brute natures will be softened also, as reflecting His own nature back upon them; for there are fine, invisible nerves that pervade all the universe, and run down from man into all the lower creation, and when he is himself redeemed will draw the lower creation to-wards him, and harmonize it with him in one great atonement. For in just the measure that the lion in man's nature lies down with the lamb, just in the same measure will the peace be radiated on all things about him.

There is a sort of sympathy of all nature with all humanity. She copies out of man what is in him, that he may see himself face to face. And so her types beneficent will grow fairer to us, and sparkle with a more glorious beauty as we grow better and drink more largely the spirit of mercy; and her ugly deformities will grow more ugly if they become the looking-glass of our own mind.

\* \* \* \* \* Man's redemntion is, at the same Man's redemption is, at the same time, the redemption of all the creatures over which he has dominion, and the redemption of nature from the curse that lay upon it, for the curse is primarily in himself. Let his own heart and mind become paradisiacal and he will enter Para-

dise again, for its light will be on the fields, the rivers and the mountains.' We are awed by the sacred responsibility God thus lays upon us of being creators, with Him, of the new heavens and the new earth. His Spirit breathed through us shall make this sad, half-dead world feel within herself the stirrings of a living soul! His Spirit, Soul of our souls, Breath of our breath! Ah! Beautiful it is to live through Him, in Him,—beautiful both for worlds and for souls!

We feel Him around us, above us, within us, the pure exhibaration of immortality. The breath of the Spirit is like the air which is astir every-where-choked and smothered among the fetid growths of the marsh, free and untainted on the mountain-top. We cannot live among the miasmatic exhalations of the bog, nor can we breathe naturally upon summits clad in perpetual snow. Being human, we belong in zones where heaven and earth healthfully blend their atmospheres; though we are seldom in danger, with our low earthly clinging of ascending into ether too pure. It is from the highest heavens that earth and our souls must be continually refreshed: and there is no vigor like that we obtain from accustoming ourselves to the air of lofty spiritual altitudes.

Yet it is possible for righteousness to be too hard, and purity too cold. The flower will grow beneath the frowning rock, and even upon the fringe of the everlasting snows,-but not without the sun. It must have warmth as well as light and strength from the heavens. Love is the motherheart of the sun to the blossom. Love is the fusing element of all life—the tremulous, softly-defined horizon-line that at once separates and unites the spheres, terminating our human vision; the tryst ing-place where earth and heaven meet. Beneath its tender, atmospheric suffusions all imperfections are hidden and forgotten, as if they were not. Life is at one with itself, in its incompleteness, in its aspirations and its prophecies.

The mysterious interblending of day and night in all vast, lonely expanses, appeals to a sense of deeper vastness within ourselves. Grand as nature is, it only typifies something grander in man; unconscious heights and breadths and depths within him, waiting to embosom themselves within the life and light of God. Seeking that ineffable oneness with Him, man and nature send up together one yearning response through the holy silence: "Grant us Thy peace."

The sunset ebbs down the mountain-slopes, and village and wilderness fall asleep quietly, side by side. Twilight touches all growths with its chrismal dews. Night falls softly upon the earth, revealing to us our near and glorious companionship of stars and leaving us to float away with them through the solitudes of heaven. Home-lights twinkle up from the darkness below with a radiance indistinguishable from the light of stars. Lifted into the over-brooding stillness, we feel only the throbbing of One Infinite Heart. All things all souls of things

are indissolubly one in the Eternal Love. Through all the universe there is no longer any sigh

"So when for us life's evening hour Soft falling shall descend, May glory born of earth and heaven The earth and heavens blend.

"Flooded with peace the spirit float, With silent rapture glow,
Till where earth ends and heaven begins,
The soul shall scarcely know!"

#### FAMILY CIRCLE.

#### THE STORY.

#### Betsey Somerset. BY MARY E. WILKINS.

Bet sey also took out of a little box a small mosaic brooch which Hester had given her, which she had always gloated over with the inmost joy of possession, but wore few times. There was, too, a yellow letter which Hester had written her in her girlhood, when she was away on a visit; it was the only letter which Betsey had ever received. There was a scrap of blue and orange changeable silk from Letitia's first silk grown, a little pin-cushion of painted velvet stuck between two scallop shells which she had given her, and a little red rose from a beautiful old bonnet of Hester's. There were other little treasures of which nobody but the old woman herself knew the value, and which indeed had no value except in her own heart, which had stamped them, like coins, with the royal mark, to her eyes alone.

own heart, which had stamped them, like coins, with the royal mark, to her eyes alone.

She gathered up her dark cotton apron into a bag; she heaped therein all her dearly beloved little treasures which were in any way connected with Hester and Letitia; she carried them out in the kitchen, and lifted a cover from the stove. The flames from the wood fire leaped up toward her face; she dropped the treasures in, one after another, and put the cover on again. Then she drew a chair close to the stove, and sat down huddled over it, bent almost double.

All the afternoon the snow-water ran along the caves, and gushed noisily from the spout at the corner of the house. The sunlight, full of watery reflections, lay upon the kitchen floor, and the old woman's dark curved back never stirred.

It was twilight when she heard the front door open, and almost at the same instant a wailing cry. She never moved. She heard the sisters' voices, full of strange cadences which she had never heard in them before, but the wail was persistent.

ent.

The kitchen door was opened, and Letitia spoke. When that soft curl, now ashes, had hung from her childish head, she could not have spoken more timidly, with a more anxious and deprecating appeal. "You there, Betsey?" she said, peering

could not have spoken more timidity, with a more anxious and deprecating appeal. "You there, Betsey?" she said, peering out into the dusky room.

Betsey never moved.
"Betsey"-Letitia came forward and touched Betsey's shoulder, which seemed to resist her likewise—"Betsey, you are not sick, are you?"she cried out, quickly.

Retsey granted.

shoulder, which seemed to resist her likewise—"Betsey, you are not sick, are you?"she cried out, quickly.

Betsey grunted.

The wail from the sitting-room was more peremptory. "Ask her to please be quick!" Hester's voice called from the distance. "Betsey—"Letitia began again. Then she stopped, and fled back to her sister.

Betsey sat still. She did not stir when she heard Hester's voice close at her side. It rang more decidedly than Letitia's; there was a faint touch of temper in it. That pitcous wailing had almost overcome the absolute power of her old servant. She and her sister had started off with an actual sense of guilt and shame; they had quaked at the thought of discovering their undertaking to Betsey; but now shefelt suddenly courageous. She stood over Betsey, and made a little speech which she and Letitia had planned with grave dignity.

"Betsey," said Hester, "we have thought it wise and best for us to adopt a child, a little boy, whose father and mother died a little while ago over in the North village. We have brought him home to-night. We trust that you will beas fond all in as we shall, and that he will grow to be a comfort to us of him our old age."

There was not a sound from Betsey Somerset.

Hester's voice, which had grown tender and tremulous on the last words sharpened syddenly.

Hester's voice, which had grown tender and tremulous on the last words, sharpened suddenly. It might almost have been Dr. John Lyman who spoke. "Betsey," said she, "please start up the fire, and make some hot porridge for the baby. He is cold and hungry.

The old woman did not move.

"Immediately" said Hester, but she quavered a little.

The old woman did not move.

"Immediately," said Hester, but she quavered a little.
She stood waiting. Letitia appeared in the doorway with
he weeping baby. His little red convulsed face showed over
her shoulder, his little legs kicked wildly under her arm.
"Betsey," she said, softly, "just look at him!" and she might,
from her tone, have held a glorified cherub instead of a little

mad mortal baby

mad mortal baby.

She laid her thin long old maiden hand on the little downy head which bumped her shoulder. "Betsey, just look at him," she said. "See how pretty he is. See how smart he is for only six months old. And he's hungry, poor little thing. Won't you make his porridge for him right away, Betsey!"

Suddenly Betsey arose, stalked into her bedroom, and shut the door. The sisters looked at each other; Letitia's own eyes filled with tears as she patted the baby's little heaving back.

"We ought to have told her," she whispered.

"It wouldn't have made any difference," returned Hester, moodily. "She would never have approved of it. I thought this was the best way."

moodily. "She would never have approved of it. I thought this was the best way."

"I thought, when she saw him, she couldn't make any objections," said Lettita. "But she never looked at him."

Hester took off the stove cover. "I am going to start up the fire and make the porridge, or the child will starve," said she, desperately. "You take him back into the sitting-room and see if you can't stop his crying. I'm afraid he'll hurt himself. Perhaps you can trot him."

"I did, but he didn't seem to like being trotted," responded Lettita, pitcously. "Some children don't; I heard mother say I never did."

Letitia, piteously. "Some children don't; I heard mother say I never did."

She went away into the sitting-room with the poor baby, and employed all the cajoleries which she knew by instinct or tradition. She trotted him on her thin black-draped knees, she strove to make it cuddle down into the great feather cushions of the chintz-covered rocking-chair, holding it with one hand and rocking with the other. She laid it on the hair-cloth sofa, and pushed her thin forefinger at its unhappy little face, and chuckled in a vain attempt to coax a responsive smile.

The baby wept and wailed until Hester came with his supper. That was what he had wanted, and insisted upon having in his blind, innocent wrath and the passion for life with which he was born. Hester held him in her lap and fed him his porridge with one of the old Lyman teaspoons out of an old pink china bowl, which had used to delight her own childish eyes. The baby swallowed greedily, his head tipped back in the hollow of Hester's shoulder, his eyes upturned with comfort. The porridge was spluttered all over his little weary face. He doubled up his two little fists. Letitia stood over her sister and the baby. "Just see him cat," she sighed out. She watched as exultingly as if he had been her own baby, and her elder sister's face bending over him took on all the maternal light of which nature had made it capable.

They almost forgot the old maidservant sitting alone in her dark bedroom nursing her jealousy and injured love. They forgot that they had not had their own supper. After the baby had finished his, they laid him carefully in the rocking-chair, drawn up close to the wall, and the rockers braced with a book a copy of Burton's Austomy; then, between them, they brought the old cradle down-stairs. It had been fitted up with new pillows and coverlids, and hidden in Hester's closet, but Betsey had seen it there.

That night the sisters slept in a bedroom off the sitting room, which their parents had used to occupy. They kept the lamp burning all night, and the cradle stood in full view from their bed. The baby slept quietly, he awoke only once, and Hester heated his porridge on the air-tight stove and fed him; then he fell asleep again. The sisters did not sleep much; one or the other tiptoed softly to the baby's side many a time. Once Letitia thought he did not breathe properly, and called her sister to see.

her sister to see.

Hester listened awhile, then she put on her slippers, wrapped a shawl over her night-gown, and stole through the icy house to the old study, where her father had kept his books and medicine bottles. She came back with a bottle of croup mixture, but they did not give it to the baby, for they thought he breathed better. Still, after that, both of them slept with their ears all ready to catch the first sound of that terrible croupy cough of which they had heard, and the spoon lay handy to the medicine bottle.

cough of which they had heard, and the spoon lay handy to the medicine bottle.

Betsey Somerset, lying in her bedroom off the kitchen, knew all about it. She heard them come down stairs with the cradle. She knew they slept in the sitting-room bedroom to take care of the baby. Her room was in the L, and she saw the light flash from the study windows, and Hester's figure pass before them, and knew that she was after medicine for the baby. In Betsey's veins flowed still a certain proportion of the blood of an old race that slew where it hated. It was crossed and purified by that of a race of finer principles and nobler practices; but that night the old savage blood seemed to surge over the other. Betsey opened her door a little way and listened for the croupy cough of the child.

She had not had any supper that night; she had not got any for the sisters. She knew that Hester had made a cup of tea for them. The next morning she got up as usual and prepared breakfast. She made the hot biscuits that the sisters loved, and cooked a slice of ham.

Hester came out to the kitchen looking worn but radiant. She greeted Betsey with joyful readiness, but the old woman turned the splutteringh am and made no response. She saw Hester make more porridge for the baby, and carry it to the sitting-room with some hot water. She set the ham and the hot biscuits and the silver teapot on the table in the dinning-room, and went to the sitting-room door.

"Breakfast is ready," she announced. Then she went

biscuits and the silver teapot on the table in the dinning-room, and went to the sitting-room door.

"Breakfast is ready," she announced. Then she went back to the kitchen. She had caught a glimpse of the taby, naked and rosy, and crowing on Letitia's lap.

"There are very few babies who don't cry when they are washed," said Letitia. "I have heard mother say so."

Betsey set out in the kitchen huddled over the stove. The breakfast was cold when the sisters came to eat it. They brought the baby with them wrapped up in a shawl, and Letitia held him while she ate.

After breakfast there were always family prayers in the Lyman house. Old Poctor Lyman had set up his family altar as soon as he was married, and his descendants bowed before it faithfully. Betsey was always present, and she was to-day; but she did not kneel when Hester and Letitia went down with soft flops of their black skirts, Letitia keeping one guardian hand on the baby's cradle. She sat upright and inflexible. The baby crowed and gurgled, and something like a shadow seemed to move over her dark face, but not a muscle strayed perceptibly. perceptibly.

After breakfast the sisters had what they called a serious

After breakfast the sisters had whatthey called a serious talk with Betsey Somerset. They reasoned and argued with her; they explained with a certain dignified pathos their notions for taking the child; they fairly pleaded for her sympathy and forgiveness. Betsey answered not one word. She stood waiting until they finished talking, then she went out into the

kitchen.

She did her work and prepared the meals as usual, but she did not speak. The armed peace went on for several days. The sisters cared for and worshipped the baby in troubled happiness. They pleaded with Betsey, and worried over the matter to each other. They tried to show the baby in his best dress, with little coral clasps in his sleeves, and an attempt at a curl on the top of his head, to Betsey, and move her heart. But she was obdurate. She did not speak until they had had the baby nearly a week.

Then, one pleasant afternoon, the two sisters carried the

the baby nearly a week.

Then, one pleasant afternoon, the two sisters carried the baby back to the North village. They carried the baby, and all his little wardrobe which they had made, and they came back patient and lonely.

Betsey Somerset, standing before them grim and inflexible, had told them that morning that unless the child left, she should, and go upon the town in her old age.

The sisters had not hesitated for a moment. The old woman belonged to all their past. She called out all the loyalty of their conservative natures; the baby merely filled and satisfied a hunger of their hearts from which they had always suffered. They could suffer it again, but the old woman with all her sacred prior claims which had no roots in their own selfishness must stay.

sacred prior claims which had no roots in their own selfishness must stay.

So they carried the baby back. They left him in charge of a woman who would care for him faithfully; they gave her his little clothes over which they had toiled so secretly and lovingly, and arranged to pay her well. The Lyman sisters had quite a large property.

Their manner toward Betsey was just the same; there was not a tinge of upbraiding or blame in it. Betsey became more inflexibly protective than ever. She cooked their favorite dishes, and often under her eye they ate when they would fain have not. When she saw that Letitia looked paler than usual, she brought up a little of the doctor's old port from the cellar, and Letitia drank a glass three times a day. It became quite

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she brought up a little of the doctor's old port from the cellar, and Letitia drank a glass three times a day. It became quite evident that Letitia was not well. She had caught a cold, and she had never had much power of resistance. Presently the chess game was cut short, and she went to bed earlier.

They called in the doctor who had taken their father's practice when he died, and Betsey listened at the door. He said that Letitia was run down. She needed change, a little pleasurable excitement; that the cold was not all her malady. He talked quite seriously to Hester at the door, and Betsey stood in the gloom at the end of the hall and heard that.

Presently Hester came out into the kitchen and pretended Presently Hester came out into the kitchen and pretended

to be busy about something, but it was only in order that the redness should disappear from hereyes before she returned to Letitia.
"He thinks she's pretty poorly?" said Betsey, with harsh

"He thinks she's pretty poorty: sand poorty; interrogatory.
"She wasn't ever very strong," Hester replied, evasively. Then she said, as if in spite of hesrelf, "She's been terribly disheartened lately. That is at the root of the matter."

Betsey did not say any more. She made a stew of which Letitia had always been very fond for dinner, but Letitia could scarcely eat a mouthful in spite of her, efforts. When Betsey carried out her plate, she tasted it herself. Then she shook her head with a tragic gesture. "It ain't the stew," she muttered. Hestered tried faithfully to fulfil the doctor's instructions

Hestered tried faithfully to fulfil the doctor's instructions regarding her sister. They had always led rather a reserved life, and had not mingled to any extent with their neighbors. Although not realizing it themselves, the two old gentlewomen had a certain innocent sense of exclusiveness, and a mild appreciation of their position as old Doctor John Lyman's daughters, aside from their naturally retiring dispositions. They had always felt themselves in their youth a little aloof, by the ordering of Providence, from the other village girls. Then, too, their education had been superior. They had read Bacon and Young when the other young ladies had read the story page of a religious newspaper, and even the almanae. Their pencil drawings of boquets of roses, and fine landscapes, wherein churches and castles and winding rivers were-swee'sly represented, hung on their walls instead of samplers. They had played chess instead of checkers; they had even played the piano, for which in their early girlhood there was, indeed, no parallel. Probably Dr. John Lyman had been somewhat reresponsible for this half-unconscious pride of his daughters, and it was the reflection in their obedient natures of a like unacknowledged quality in him.

But now Hester invited two ladies, her old schoolmates, with their husbands, to tea. She took outthe best Indian china and

the little solid silver tea service, and was anxiously and painfully social. She even had a wild dream of inviting an old bachelor, whom village gossip had always paired off with one of the Lyman girls, and the Doctor's uncle, who was a widower, to spend the evening and have a game of whist. But she did not quite venture upon that, considering it a rather desperate and dangerous remedy, like some on her father's shelves. Hester read aloud to Letitia the most cheerful and humorous of Lamb's Essays, and even John Gilpin's Ride, by way of extreme diversion. But Letitia drooped more and more in spite of the unwonted festivity which was to serve as tonic to her flagging spirits. And Hester also grew thin, and Betsey saw that she did.

The baby had been gone six weeks when, one day after dinner, Betsey disappeared. Hester missed her, and supposed she

The baby had been gone six weeks when, one day after dinner, Betsey disappeared. Hester missed her, and supposed she had gone to the store. As time went on, and she did not return, she felt a little anxious and puzzled, since Betsey never went into a neighbor's house. However, she said nothing to Letitia, who was lying upon the sofa. All that afternoon Hester read aloud to her sister, who tried to smile in the proper places.

places.

At six o'clock Betsey has had not returned, for Hester had kept a sharp eye on the window as she read. The sisters were in the dusk, Hester had laid down her book and was wondering, with growing alarm what she bad better do—whether she had better go to the neighbors or set out in search of Betsey herself. Suddenly she gave a start of relief. "There she is," she cried.

"Who?" asked Letitia, weakly.
"Betsey She has been read labels."

"W nor" asked Leulia, weakly.

"Betsey. She has been gone all the afternoon, and I have been wondering where she was."

"You suppose Mrs. Knowlton treats the baby well, don't you, Hesterf" asked Letitia; and she asked her sister the same question many times a day.

you, Hesterf" asked Letitia; and she asked her sister the same question many times a day.

"Of course she does. She is one of the best women I ever saw," replied Hester, soothingly.

Suddenly Letitia sat up, and clutched her sister's arm hard.
"What's thatf what's thatf" said she. Hester gasped and looked at her. They both listened.

Suddenly the door was flung open, and Betsey Somerset strode in. She held the wailing baby with a stern clutch across her bosom. She had walked all the way from the North village, four miles, with him, and he had cried all the way. Her brown dress was wet nearly to her knees where it had dipped into the slush of the roads, her face was rigid, but there was an effect from it like a smile—a smile which did not depend upon any action of the muscles. She put the baby forcibly in Hester's lap.

"There," said she.

Letitia sprang up from the sofa and threw her arms around Betsey, and wept hysterically upon her shoulder. Betsey stood stiff and straight, her arms hanging at her sides like a soldier. Hester was soothing the baby. "He knows me, I do believe he knows me!" she cried in a rapture.

Betsey disengaged Letitia's clinging hands, and urged her toward the sofa. "You'd better lay down again now," said she

she.

"You dear, blessed woman!" sobbed Letitia.

"I've always thought more of you two than anything else in the world," said Betsey in a slow voice. "I ain't never wanted anything else. I'll go out now, and make his por-

ridge."

Betsey Somerset as she made the porridge saw no reflection of herself in her own thoughts. Her hand slipped as she poured out the boiling milk, and she burned it severely. But she carried in the porridge before she bound it up, that the sisters might not know. She even stood for a moment and watched the baby eat. Then she went back to the kitchen, bound an old linen rag around her hand, and got supper. The fiery smart of a martyr shot through her whole body from her hand, but the triumphant peace of a martyr was in her heart.

### MINNIE MAY'S DEPARTMENT

#### Our Irish Letter.

DEAR CANADIAN SISTERS AND BROTHERS:

I shall begin this month's letter by telling of a very bright scene I witnessed last Sunday—a "Labor Day" celebration. As a rule, I avoid Sunday celebra tions-I do not care for them, but this is one which cannot take place any other day; the laborers must be unemployed in order to take part in it.

We went into town early, and first attended service in Christ's Church Cathedral, then I went to the Alexandra Club, which being in the principal street, (Grafton), the procession must pass on its way from St. Stephen's Green, where the muster took Phænix Park, where platforms had been erected to enable the different speakers to speak from above the dense crowds which were expected. My husband went straight to the park, and waited in town to see this procession. Thirty-six trades took part in it—I counted each as they pass ed; they were each headed by a carriage, in which the big-wigs of the particular trade sat supporting their huge banner, with the trade's union signs on it, and a picture representing the trade painted in glowing colors. Some of them were very pretty. Each had their band, and as one ceased playing the next in rotation took it up. It was a most orderly respectable crowd, and quite pleasant to look at Not so pleasant the news which a little newsvender attracted me by calling out: "Extra Sunday Edition! Attempt to blow up the four courts!" My friend got a paper and we saw that during the night some wietched miscreant had attempted to do so, fortunately failing. This friend went straight to view it for me, and indeed found the news too true, Every pane of glass in the immense building had been shattered; somewhere about sixteen pounds will have to be expended on glass alone before it can be used. Fortunately no lives were lost, or other damage done. It is thought to have been a mild reminder of the Phœnix Park assassinations, which that day was an anniversary of,-a kind of gentle "here we are again" business. I should think they meant to do much more harm than they actually succeeded in, because some canisters were found which should have ruined the entire building, had they taken effect. And this word "ruin" brings me to another subject, one which affects my poor purse; I had my best frock ruined one day, or rather one evening, lately. I had been visiting in town, and thought I should enjoy a quiet walk home by the Donnybrook road, when lo! as I came along I met one carriage, then another, then another, and so on, until I found myself literally enveloped in drags, tandems, bugles, toaches, drums, riders, carriages, cornapeons, cars, dust and songs; I never remember feeling more dumbfounded. No gentleman with me, not even a boy, son. When remaining.

I got home, no tramp could have looked more dreadful—dust from crown to toe—and I had been rather smartly got up for visiting, which annoyed me all the more. I gave my husband tally-hofor not reminding me of the races, but 'he went to them, so draw your own conclusions as to why he did not do so. Men are deceivers ever.

The Lord Lieutenant and suite passed me on this road. I wish he had thought me the tramp which by this time I must have looked, and thrown me his purse; perhaps he had not much in it, tho', returning from Leapardstown. He drove four-in-hand; another carriage followed (with six horses) full of ladies and children. (His sister does the Viceregal honors for him; he is a widower, with three little daughters.) Then a third carriage, with the ladies in attendance, and several tandems. One mail phaeton closed the party, with the exception of the outriders and dragoons in escort. Lord Houghton is a young, clean-looking man—I use this odd word, because it is exactly expresses him; he seems always spic and span, and I have come across him several times. He is a painter, a sculptor, and

writes for magazines, as your humble servant does.
I shall tell you of the Kosmos Fete in my next letter. It is going to be a bazaar on a very, very large scale, the proceeds to be applied to the enlargement of the City of Dublin Hospitaland endowment of several beds. My daughters are to assist at different stalls—one at the Down stall, which the lovely Countess of Annesly, nee Miss Armitage Moore, is to preside at, the others at the hospital stall. The dresses for the latter are to be nurses' costumeshave you uniform for your hospital nurses in Canada? I think they are sweetly pretty—"fetching," as a young nurse expressed herself regarding them one day to me. We have small dark bonnets, brown green or navy blue, according to hospital; long cloaks same color, dress same, with large snowy ap ron, body and straps fastening at waist behind linen collars and long white cuffs, small cap with streamers at back, but when actually attending in sick room they must loop these up, to prevent their catching in or on anything. I think it is refreshing even to look at a good class of nurse—the contained face and firm mouth, which as a rule they all have, and then an expression in the eye (which I at least never have seen except in members of the medical profession and in nurses) crowns all, to me. I admire them more as a body than any other I haveever known; to be sure, there are giddy exceptions, but taken all in all nurses are a grand institution. Good-bye. Ever, your sincere friend, S. M. STUDDERT-KENNEDY.



#### A Splinter in His Foot.

There he sits with the splinter. He tries to catch the end with his nails, but they are too short, it will not come. If he leave it it will grow worse, and yet he has not the courage to take his knife and open it up. He is only a boy, not a surgeon yet, and it takes some moral courage. If his mother were only here with her needle he could shut his eyes and let her do it; she wouldn't hurt any more than is necessary, for her hands are mark but your kindle easily would truck his rough but very kindly, and would touch him carefully. Like a celebrated minister, who in preaching got a fly in his mouth, and did not know whether to swallow it or let it go and stop his sermon, concluded to do the former, it will be better for our little man to make one determined effort and get the thing out, then he will be on the road to recovery. It's bad enough to get a splinter or a thistle in one's foot, but there are much worse things. An old book, or rather a collection of books bound in one volume, tells us we cannot touch pitch and not be defiled, and also about a disease that eats as doth a gangarene, and also about something which is "as rottenness in the bones. Let us, learn our lesson from the splinter, and feel glad it is clean wood in a healthy boy's foot, which in a few days will be all healed, with scarce a scar

#### UNCLE TOM'S DEPARTMENT.

MY DEAR NEPHEWS AND NIECES:-

Now that the potatoes are planted and the garden seeds sown and roots growing, you have a little leisure to enjoy looking around you. In these long evenings, as you water the flowers and vines and shrubs, you cannot help stopping to see how many yellow crocuses are looking out at you from the front bed, or see once more the tints of the tulips. Then, how smooth the lawn looks since it was raked, and, yes, yonder is a full-blown rose showing among the buds and leaves, breathing out its perfume. June, beautiful, beautiful June, is here once more, and, like some haunting tune or half-forgotten rhyme, brings back memories of long-gone happy days. Alike to mind come the orchards, flowerladen, with the hum of bees and whispering leaves, the wood-flowers shy, the winding stream kissed by the alders and willows; the quiet lake, just rippling on the sandy shore or reflecting in its depths rock and fern and tree. Memories of calm June days, of sunlight and fragrance, of moonlight and sparkling dew-drop, of the whip-poor-will in the twilight. How well it is these come so fresh to mind while the work and worry and care are wellnigh forgotten as memory turns the past over for contemplation; the sunbeams of joy and beauty remain, and the clouds and darkness and discord are forgotten. Amid the memories, however, and rising far above them, are the faces of the friends with whom these things are associated. Alone, among even such beauty, no remembrance of happiness would be left. And this brings me to say, with Pope,

"The proper study of mankind is man." I have seen how deeply my nephews are interested in that row of trees they set out this spring, and how glad they are to see them coming on so well, rejoicing when the showers water them. I have seen them, too, go into the stable to groom and feed that well-formed, strong-limbed horse, with which, in their eyes, no Arab's steed can compare. I have seen the girls so combining nature and art in arranging their boquets as to make a pleasing resting-place for even weary eyes. I have seen, too, the spring hats and dresses, "sweet girl graduates with their golden hair." But above all the flowers and the dresses were the girls themselves. Everything fails to reach the human being, and all else seems wasted if it tend not to develop and ennoble the person, be that boy or girl, man or woman, or the infant of a day. Made after God the Creator's image, what a privilege to co-work with Him and make those around us more like

So, my young friends, as you plant and water your trees and flowers, care for your dogs and rabhits and pigeons and hens, just think over these

> "There is in every human heart Some not completely barren part,
> Where seeds of love and truth might grow
> And flowers of generous virtue blow.
> To plant, to watch, to water there,
> This be our duty, this our care."

The words of J. G. Holland's "Gradatim" are miliar to some of vou

"I count this thing to be grandly true:
That a noble deed is a step toward God;
Lifting the soul from the common clod,
To the loftier aim and the broader view."

The fact of doing a right act often turns the scale for right through a lifetime. You know how natural it is for each of us to uphold what we have done; if it is wrong we stray, if it is right it throws our. whole weight on that side, and once having

taken that stand, it is easier to take it again.

I would just like to tell you how small the things are which influence a life. The deep, wide Saskatchewan River starts away up in the Rocky Mountains—a tiny stream, but its volume increases as it journeys, and wide and deep and swift it majestically sweeps on its journey to the sea.

P. S.—I see some of you are becoming very impatient to see "Our Souvenir Photograph," and I'm not surprised. We have been delayed by a few who were late in sending their photos, but the group will be ready for distribution in a few days now; it is tastefully arranged, and mounted on a card ten by twelve. The only unpleasant part I have in connection with it is, that I must charge each recipient seventy-five cents, as I had to pay \$9 a dozen for getting them reproduced.

#### Answer to Correspondent.

Have great trouble with dried raspberries and apples getting wormy if kept for any length of time. Can you suggest a cause and remedy? J. S. G.

When your fruit is dried and ready to store away, fill a large tin and set it in the oven and let it get so hot you can scarcely handle it. Be careful in heating not to scorch the fruit. Stir occasionally. Then take out and throw a thin cloth over it to keep flies away until it cools. Then put up in paper bags and tie tightly. It is the fly that posits its larvæ when the fruit is drying, that causes it to be wormy months after it is stored away, and getting it so hot kills the germ that causes your trouble.

#### POETS' CORNER.

#### Prize for Selected Poetry.

HENRY REEVE, HIGHLAND CREEK, ONT. John Greenleaf Whittier.

·A good sketch of Whittier's life having already appeared in the Poets' Corner, I shall add nothing further, but will give the estimate of Whittier as expressed by his compatriot and fellow-poet, James Russell Lowell, in his "Fable for Critics." It runs as follows, Apollo being the supposed speaker:

Russell Lowell, in his "Fable for Critics." It runs as follows, Apollo being the supposed speaker:—

There is Whittier, whose swelling and vehement heart Strains the strait-breasted drab of the Quaker apart, And reveals the live man, still supreme and erect, Underneath the bemummying wrappers of sect.

There was never a man born who had more of the swing Of the true lyric bard and all that sort of thing;
And his failures arise (though perhaps he don't know it), From the very same cause that has made him a poet,—
A fervour of mind which knows no separation

Twixt simple excitement and pure inspiration,
As my Pythoness erst sometimes erred from not knowing If 'twere I or mere wind through her tripod was blowing. Let his mind once get head in its favorite direction,
And the torrents of verse burst the dam of reflection,
While borne with the rush of the metre along,
Content with the whirl and delirium of song.

Then his grammar's not always correct, nor his rhymes,
And he prone to repeat his own lyrics sometimes.—
Not his best, though, for those are struck off at white-heats,
When his heart in his breast like a trip-hammer beats,
And can ne'er be repeated again any more
Than they could have been carefully plotted before.
Like old what's-his-name there at the Battle of Hastings
(Who, however, gave more than mere rhythmical bastings),
Our Quaker leads off metaphorical fights
For reform and whatever they call human rights,
Both singing and striking in front of the war.
And hitting his foes with the mallet of Thor:
"Anna hase," one exclaims on beholding his knocks,
"Vestis fillii tui, O leather-clad Fox"?
Can that be thy son in the battle's mid-din,
Preaching brotherly love, and then driving it in
To the brain of the tough old Goliath of sin
With the smoothest of pebbles from Castaly's spring.
Impressed on his hard moral sense with a sling?
All honor and praise to the right-hearted bard
Who was true to the voice when such service was hard,
Who himself was so free he dared sing for the slave
When to look but a protest i

#### Maud Muiler.

"The finest of his ballads, which first appeared in 1838," Maud Muller, on a summer's day, Raked the meadows sweet with hay; Beneath her torn hat glowed the wealth Of simple beauty and rustic health.

The judge rode slowly down the lane, Smoothing his horse's chestnut mane. He drew his bridle in the shade Of the apple tree, to greet the maid,

And ask for a draught from the spring that flowed Through the meadows across the road. She stooped where the cool spring bubbled up, And filled for him her small tin cup,

And blushed as she gave it, looking down On her feet so bare, and her tattered gown. "Thanks" said the Judge, "A sweeter draught From a fairer hand was never quaffed."

He spoke of the grass, and flowers and trees.
Of the singing birds and humming bees;
Then talked of the haying, and wondered whether
The cloud in the west would bring foul weather.

And Maud forgot her briar-torn gown, And her graceful ankles bare and brown; And listened, while a pleased surprise Looked from her long-lashed hazel eyes.

At last, like one who for delay Maud Muller looked and sighed "That I the Judge's bride might be.

"He would dress me up in silks so fine, And praise and toast me at his wine. My father should wear a broadcloth coat; My brother should sail a painted boat.

I'd dress my mother so grand and gay, And the baby should have a new toy each day; And I'd feed the hungry and clothe the poor, And all should bless me who left our door." The Judge looked back as he climbed the hill, And saw Maud Muller standing still. A form more fair, a face more sweet, Ne'er hath it been my lot to meet.

"And her modest answer and graceful air, Show her wise and good as she is fair. Would she were mine and I to-day, Like her a harvester of hay;

"No doubtful balance of rights and wrongs And weary lawyers with endless tongues, But low of cattle and song of birds, And health of quiet and loving words."

But he thought of his sisters, proud and cold, And his mother, vain of her rank and gold. So, closing his heart the Judge rode on, And Maud was left in the field alone.

But the lawyers smiled that afternoon When he hummed in court an old love tune; And the young girl mused beside the well, Till the rain on the unraked clover fell.

He wedded a wife of richest dower, Who lived for fashion as he for power. Yet oft, in his marble hearth's bright glow, He watch'd a picture come and go,

And sweet Maud Muller's hazel eyes, Looked out in their innocent surprise. Oft when the wine in his glass was red, He longed for the wayside well instead; And closed his eyes on his garnished rooms To dream of meadows and clover blooms. And the proud man sighted, with a secret pain, Ah, that I were free again, Free as when I rode that day,

Where the barefoot maiden raked her bay. She wedded a man unlearned and poor. And many children played around her door. But care and sorrow and child birth pain Left their traces on heart and brain.

Sometimes her narrow kitchen walls Stretched away into stately halls; The weary wheel to a spinnet turned, The tallow candle an astral burned. And for him who sat by the chimney lug Dozing and grumbling o'er pipe and mug, A manly form at her side she saw And joy was duty, and love was law. Then she took up her burden of life again, Saying only "It might have been." Alas for maiden, alas for Judge. For rich repiner and household drudge. God pity them both and pity us all, Who vainly the dreams of youth recall, For of all sad words of tongue or pen, The saddest are these: "It might have been." Ah, well! for us all some sweet hope lies Deeply buried from human eyes; And in the hereafter, angels may Roll the stone from its grave away."

#### Alexander Pope.

Alexander Pope was born May 2nd, 1688, in Lombard St., London. At a very early age he showed great abilities. At the age of twelve he was recalled from school, and lived with his parents in a pretty cottage by the wayside, separated from the road by a row of elm trees; and so sweet and tranquil was his home, that he at once broke into rhyme and wrote the "Ode on Solitude." He was a great sufferer from severe headaches, and was unable to join in boyish sports. Thenceforth he taught himself, and formed a plan of study from which he never deviated. He was a great admirer of Dryden. At fourteen, he made a version of the first book of the "Thebias" of Status; he transfirst book of the "Thebias" of Statius; he translated also the epistle from Sappho to Phaon—from Ovid; and modernized Chaucer's "January and May," and "Prologue to the Wife of Bath." He also wrote his poem on "Silence," in imitation of Lord Rochester's "Nothing." In 1749 the "Pastorals" were published, and in the same year he wrote the "Essay on Criticism: "this was followed by the beautiful poem "Messiah," and several other fine poems. In 1711, Pope produced that poem which at once placed him on the highest eminence of fame, "The Rape of the Lock." He translated "Homer's Iliad," and also "Odyssey," beside writing many satires and essays, and died, greatly beloved, in 1744. And, after a century and a-half, we often see quoted those almost proverbial lines:—

"To err is human; to forgive divine."

"To err is human; to forgive divine."

"A little learning is a dangerous thing."

"An honest man's the noblest work of God."

"Worth makes the man, and want of it the fellow;
The rest is all but leather and prunella." etc., etc.

The production of this great poet that is admired the most is his "Essay on Man." The following ode, "The Dying Christian to his Soul," was written by the desire of Steele, and is written in imitation of the famous sonnet of Hadrian to his departing

The Dying Christian to His Soul. Vital spark of heav'nly flame!
Quit, oh quit this mortal frame:
Trembling, hoping, ling'ring, flying,
Oh, the pain, the bliss of dying!
Cease, fond nature, cease thy strife,
And let me languish into life.

Hark! they whisper; angels say, "Sister spirit, come away!" What is this absorbs me quite? Steals my senses, shuts my sight, Drowns my spirit, draws my breath? Tell me, my soul, can this be death?

The world recedes; it disappears!
Heav'n opens on my eyes! my ears
With sounds scraphic ring:
Lend, lend your wings! I mount! I fly!
O grave! where is thy victory?
O death! where is thy sting!

#### Ode on Solitude.

Happy the man whose wish and care A few parental acres bound, Content to breathe his native air, In his own ground.

Whose herds with milk, whose fields with bread, Whose flocks supply him with attire, Whose trees by summer yield him shade, In winter fre.

Blest, who can unconcernedly find Hours, days and years glide soft away, In health of body, peace of mind, Quiet by day,

Sound sleep by night; study and ease, Together mixed; sweet recreation; And innocence, which most does please With meditation.

Thus let me live, unseen, unknown,
Thus unlamented let me die,
Steal from the world, and not a stone
Tell where I lie.

#### Hernward R. Cockin,

Hernward R. Cockin is one of the most popular of Canadian poets. His poems are full of feeling, and are being widely circulated. He is a frequent contributor of the magazines of the present day. He has also published a book of poems. The following selection was written in 88, and first appeared in Saturday Night:

Epitaph on an Early Settler. Tread softly, stranger! reverently draw near! The yanguard of a nation slumbers here. Perchance he wander'd once by Yarrow's side, Or dream'd where Severn rolls his volumed tide. Mayhap his infant gaze first saw the light, Nigh lordly Snowdon's heaven-ambition'd height. Or thrill'd his boyish heart, in bygone days, 'Neath the sad tones of Erin's mournful lays. Amidst the crowded marts of Old World strife. He yearned to live a nobler, purer life. Brave heart, beyond Atlantic's sullen roar, He sought a home on this wild western shore.

In peril's midst he built his log hut rude, And lived, his one companion—solitude. Yet not his only one, where'er he trod, In childlike faith he walk'd with God. His stalwart might, and keen, unerring aim, Taught lurking savages to dread his name. With quenchless courage and unflinching toil, Redeem'd he, day by day, the unwilling soil. Primeval gloom, beneath his sturdy blows, Beam'd forth in glebes that blossom'd as the rose. And years roll'd by. Europe her exiles sent Around him grew a thriving settlement. But 'tis not good for man to live alone, He woo'd and won a maiden for his own. The flowers of June smiled on his marriage kiss, And thrice ten years he tasted wedded bliss. His children, born 'neath Freedom's own roof-tree, Were cradled in the lap of Liberty. They lived to bless the author of their birth, And, by their deeds, renew'd his honest worth. His neighbours loved the kindly, honest way. Of one whose yea was Yea, whose nay was Nay. And did dispute arise, his word alone Was jury, judge, and verdict blent in one. Dark day that saw, and gloomier hearts which said, The father of the settlement is dead. Yes: full of years, beloved on every hand, His spirit left them for the Better Land. Tread softly, stranger! reverently draw near, The vanguard of a nation slumbers here.

#### Puzzles.

1-CHARADE.

Dedicated to Sir Henry Reeve. "His Royal Highness," hear the boy talk,
"Chief High Lord, King and Ruler;"
Methinks, perchance, you're a little off
Your base; pray, draw it cooler.

You seem to talk so terribly queer, "Three in one, and one in three;" "Arise, Sir Knight," and explain yourself, As to what your meaning might be.

"Thou gracious one." Ha! Ha!! Ha!!! let me see,
Whom do you think you're addressing?
I TOTAL think for a moment, but then
You know, I'm LAST good at guessing.

"On bended knee," come down off your perch, And "don thy robes of state." Young Devitt a middy of might first be, In the good ship Advocate.

Have you been getting a Gov'ment sit
That makes you feel so funny?
Or have you been out, on Sunday night,
Sitting up with your honey?

#### FAIR BROTHER. 2-CHARADE.

2—CHARADE.

Since I was an urchin of ten or eleven,
I've been a great puzzling gilly;
I've puzzled so much,
I wonder it didn't send me silly.
Just about ten years since I entered this "Dom,'
And Uncle Tom, he raised no objection,
But my puzzles he did reject.
PRIME you picture my dejection?
And then I toiled on, and was awfully sad,
Because I got LAST into the section.
But an Advocate I received one day,
With one of my puzzles so fitting;
I couldn't help dancing around on my ear,
And some of the furniture splitting.
And thus 'twill be with you, my friend,
If to enter our circle you're trying;
You'll find you total succeed unles you work,
And never give way to sighing or crying. ou'll find you TOTAL succeed dines you.... And never give way to sighing or crying. HENRY REEVE.

#### 3—CHARADE.

I met a man from a foreign land;
ONE said he was wedded to Two;
And THREE he wandered from place to place,
Having evidently nothing to do.

He finally landed in Cana And told four he would no more roam, Because it was the most TOTAL place He had seen since leaving home.

ADA ARMAND. H-CHARADE.

As I walked along the street,
Though I didn't mind it;
Through my LAST I saw my FIRST,
With a man behind it.

Then when I went to bed, You perhaps may wonder, I saw my whole, and in a trice I put my body under.

IRENE M. CRAIG. 5-DIAMOND. 5—DIAMOND.

My first is in "metaphor,"
My second "an animal small."
My third it is "uncommon,"
My fourth is "a breast-high wall."
My fifth is "moderately warm,"
My sixth "a color bright."
My seventh is in "merriment,"
And also in "delight."

ADA SMITHSON. 6-QUEER WORDS.

If it should reverse me and add to itself, you will find a thief, but if it should me reverse before it you will find to discharge; and if it should come between me you will find a tiny spider, but if it should be reversed and put before me you will find an opportunity.

A. HOWKINS.

#### Answers to 1st May Puzzles. Miss Smith-son.



#### Names of Those Who Have Sent Correct Answers to 1st May Puzzles.

Addison and Olive Snider, Henry Reeve, I. Irvine Devitt, Thomas W. Banks, A. Howkins, A. R. Borrowman, Geo. W. Blyth, Morley Smithson, Ada Smithson, Agatha Prudhomme, Lily Day, Josie Shechan, George Rogers, Minnie Morrison, Elsie Clark, Frank G. Moore.

Glos head King

at of CO. vill the

H. . Bulls Alber best heifer half i

V liberal bulls a also a ed sire grand stock,

#### **Economical Summer Drinks**

cream of tartar, one pint of yeast, one pint of mo- regulated by taste. lasses, six quarts of cold water. Mix and let stand a few hours, until it begins to ferment; then bottle it and set in a cool place; in eight hours it will be

Superior. - White sugar, five pounds; lemon juice, quarter pint; honey, quarter pound; bruised ginger, five ounces; water, four and one-half gallonr. Boil ginger in three quarts of water for half an hour; then add the sugar, lemon juice and honey, with the remainder of water, and strain through a lons more and add to it the cold; then put six cloth; when cold, add the white of an egg and a pounds of molasses, with one-quarter pound of essmall teaspoonful of essence of lemon. Let the

Ten pounds white sugar, nine fluid ounces of lemon juice, one pound of honey, eleven ounces of ground ginger. Boil the ginger in three gallons of water for half an hour; then add the sugar, the lemon juice and the rest of water, and strain through a cloth. When cold, add the white of an egg and half a fluid ounce of lemon. Stand four days and bottle.

GINGER POP.

Take two gallons of hot water (boiling); mix two ounces of ground ginger and the peel of two lemons, one teaspoonful cream of tartar, two pounds of white sugar. Let this stand until milk-warm. Then put in the other parts of the two lemons, one teaspoonful saleratus, four tablespoons of yeast and the whites of four eggs to clear. Add cinnamon and cloves to your taste.

LEMONADE POWDERS.

One teaspoonful of ground ginger, one spoonful

The quantity to be put into a glass of water to be Mix together citric acid, one part; finely pow-

BOTTLED LEMONADE.

One-half pound white sugar, one quart of water. Boil over a slow fire. Two drachms of acetic acid, four ounces of tartaric acid; when cold, add essence of lemon. Put one-sixth of the above into each bottle filled and add 30 grains of carbonate of soda. Cork it immediately and it will be fit for use.

SPRUCE BEER.

Put into a cask capable of holding the whole sence of spruce. When the heat is reduced so as to whole stand four days and bottle. This will keep be just luke-warm, add one-quarter pint of good yeast. Stir the contents well. Leave bung out for two days. Bottle well and pack in sawdust or sand, and leave for three weeks.

COMMON BEER.

Take one peck of bran, good and sweet, and put Take one peck of bran, good and sweet, and put into ten gallons of water, with three handfuls of good hops; boil till the bran and hops sink to the bottom. Then strain, and when about luke-warm add two quarts of molasses. When the molasses is melted, pour into a ten-gallon cask, with two teaspoonfuls of yeast. When the fermentation has subsided bung up cask, and in four days it, will be subsided bung up cask, and in four days it will be

SILVERTOP-A TEMPERANCE DRINK.

Mix one quart of water, three and a-half pounds of white sugar, one teaspoonful of lemon oil, one tablespoonful of flour, with the whites of five eggs, well beaten up. Then divide the syrup and add four ounces of carbonate of sodato one part, and add three

ounces of tartaric acid to the other part; bottle each separately. Put enough fresh, cold water to half-fill two pint tumblers. Put one tablespoonful of the syrup from each bottle to each of the half-filled tumblers and pour together and drink. This makes a superb drink.

CHEAP BEER.

Boil four ounces of hops in two quarts of water: strain, and add two to three pounds of sugar (according to taste), two cups of blackstrap and four and one-half gallons of luke-warm water, and put into a six-gallon cask with one-quarter pint of good yeast and let work for a few days. A cheap but refreshing drink.

RASPBERRY SHRUB.

Four quarts of red raspberries to one quart of vinegar; let stand four days, then strain. To each pint of vinegar add one pound of sugar. Bottl and keep in a dry and cool place. TOPER.

#### Our Library Table.

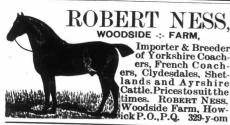
L'Art de la Mode, New York; \$3.50 per annum. This artistic monthly comes to us more artistic than ever, and illustrates by colored plates all that is new, rare and beautiful in ladies' fashions.

Is new, rare and beautiful in ladies fashions.

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This bright little publication excells all others in the variety of its reading matter and the interesting articles which it contains.

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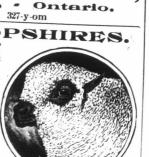
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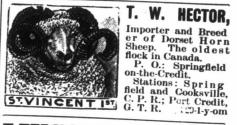


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The undersigned offer for sale this month a few sows, Yorkshires, five months old. Also a choice lot of young pigs, both Yorkshire and Berkshire. Pairs supplied not skip.

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Thirty-five choice
Breeding Sows from
the best English
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Stock supplied for exhibition purposes, registered and guaranteed to be as described. Personal inspection
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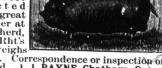
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Macgregor, Rams and Ewes of this year's importation.

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"The Hollies," West Felton, Shropshire, Eng.
Invites all American and Canadian buyers to
visit his flock, which has sent more than one
winner across the Atlantic. A choice lot always
on hand to select from. Visitors always welcome, No trouble to show sheep. Address as
above.

322-1-y-om

## SHROPSHIRES.



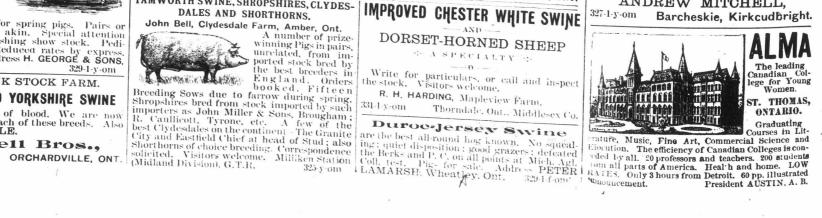
Foreign buyers are invited to visit the Wolf's Head Flock, as there is always a good selection of ewes and

selection of ewes and rams for sale, and we handle none but the best, and can supply select specimens for breeding or exhibition purposes, and residing in the centre of the Shropshire Sheep Breeding District buyers are assisted in selecting from other flocks. Write for prices or visit us before going elsewhere. Visitors met by appointment at Baschurch Station, G. W. R. Address—J. & T. THONGER, Wolf's Head Farm, Nesscliff, Baschurch, Shrewsbury, Eng. Telegram: Thonger, Nesscliff. 322-1-y-om

BARCHESKIE HERD OF AYRSHIRES Andrew Mitchell,



ANDREW MITCHELL, 327-1-y-om Barcheskie, Kirkcudbright.



& Co and e ing t sisal with neve what We hitch balls.

comn is no point dred and in State It is I is te Term cents samp office. to far cash. will n and actrated

HAN THRE

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Small farmer The AD Catalo S. S. KI Craig

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### NO COMBINE BINDER TWINE

At only ten cents per pound STANLEY MILLS & Co., of Hamilton, are offering the very pick and choice of all the American brands of binding twine. We have handled the same pure sisal brand for four consecutive seasons, and with all our experience in selling twine we have never yet had any other twine of any material whatever to give the great satisfaction that this Stanley Sisal Pure White Unmixed Binding Twine has given our customers in the past. We guarantee every ball to pass without a hitch through any and every machine. No knots or snarls or bunchy gatherings in the balls. It is not the nature of pure sisal to have these bunches of waste material, which are so common in manilla and in mixed twines. There common in manilla and in mixed twines. There is no oil in this twine whatever, but its great point is the way it works. Our customers all agree that it is the best and most even-working twine they ever used. It runs from five hundred to five hundred and fifty feet to the pound, and is stronger than any other twine produced. This twine is manufactured in the United States, and outside of the great twine combine. It is put up in sacks of sixty pounds. Our price is ten cents per pound, f. o. b. Hamilton. Terms, cash with the order. We have only one price, viz., ten cents per pound. We make no preduction for carloads, but have only one price for any quantity, large or small. Send two cents in stamps for sample, or fifty cents for sample ball, and name your nearest express office. We are a wholesale firm, selling direct to farmers and any others who can pay spot cash. We issue catalogues twice a year, and will mail you one if you will send us you name cash. We issue catalogues twice a year, and will mail you one if you will send us your name and address. These catalogues are simply illustrated price books of our entire stock; forty pages of interesting matter, if you are a cash buyer. Free to all.

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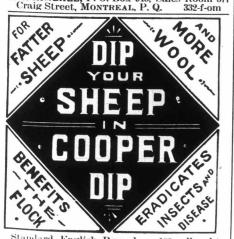


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Small sizes made as strong as the largest. The farmer wants a safe as well as the merchant. The ADVOCATE is using three of my large safes. KIMBALL, P. O. prices by sending to P. O. Box 945, Sales Sales Room 577 Craig Street, MONTREAL, P. Q.



Standard English Remedy. 100-gall. pkt., \$2; 25-gall. pkt., 50c. George J. Thorp, Wool Dealer, Guelph. 333-1-e-0 333-1-е-о \$2.00

per aere will buy a few farms within six miles of the great

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Mrs. E. M. Jones' New Book, "DAIRYING FOR PROFIT," Tells the Whole Story.

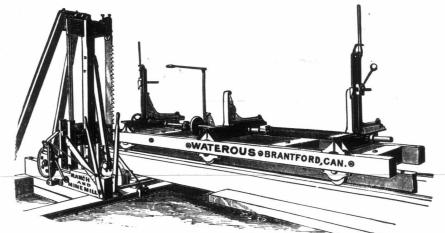
-0- -0- -0- -0-So anyone reading it can do the same, and secure a comfortable independence. 60,000 COPIES SOLD ALREADY! Orders still pouring in. Price, 30c. by mail; four copies to one address by mail, \$1.

BOWN, ABOUT.

BOX 324, BROCKVILLE, ONTARIO, CANADA.

The COLUMBIA

The Farmers' and Threshers' Sawmill.



A - CHEAP - SAWMILL - FOR - CUSTOM - WORK CAN BE RUN BY 6 TO 12 HOGSHEADS WATER, WIND OR STEAM.

Capacity, 1500 to 2000 Feet Per Day. SO SIMPLE ANY MECHANIC CAN SET UP AND OPERATE.

-:- JUST THE THING FOR BACK SETTLEMENTS, OR FARMERS' OWN USE.

PRICE, WITH SIX SAWS, \$400 f. o. b., WITH PLAN TO ERECT.

# 34,000 CHATHAM MILLS NOW IN USE!



1,000 MILLS SOLD IN 1884 1,330 MILLS SOLD IN 1885 2,000 MILLS SOLD IN 1886 2,300 MILLS SOLD IN 1887 2,500 MILLS SOLD IN 1887 2,500 MILLS SOLD IN 1888 And 3,600 Baggers.

More than have been sold by all the other factories in Canada put together and doubled.

#### OVER 16,000 BAGGING ATTACHMENTS NOW IN USE

Bagging Attachment is run with a chain belt that cannot slip. The elevator cups are also attached to endless chain belt that cannot slip nor clog. Cleaning Alsike clover and Black Eye and Marrowfat peas a special feature. The mill is fitted with screens and riddles to clear and separate all kinds of grain and seed, and is sold with or without a Bagger, but it is not wise to do without a Bagger. Satisfaction guaranteed. Send for Catalogue and prices.

FORTY-FIVE CARLOADS SOLD IN ONTARIO SINCE JAN. 1st.

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#### 5,000 ACRES OF LAND FOR SALE FROM \$5 TO \$10 PER ACRE.

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THE CALIFORNIA of THE DOMINION This is a young and rising country, with productive powers for grain, fruits, vegetables, stock and poultry raising, second to none in

America.

We offer lands on the Islands of the Gulf of Georgia and on the water front of Mainland, where there are no cold winters, no snow and no frost, with good facilities for marketing.
"Settlers located on Government lands."
For further particulars apply to

MACKINNON, MACFARLANE & CO., 39-1-y-om P. O. Box 926. VANCOUVER, B. C.

\$0.25 A DAY is what in g Giant Fence and Stretchers. Fence costs 25c. per rod. ONE AGENT WANTED in each township. Write immediately. T. J. ANDRE, Wauseon, Ohio. 334-b-o

#### **OLD STAMPS WANTED**

All kinds of Canadian, Nova Scotia, New Brunswick, Prince Edward Island, British Columbia, Newfoundland and United States Columbia, Newfoundland and United States p o s ta g e stamps used B E F O R E v a l u e a stamps used stamps used to save dechase for and will pay to \$10 each cording to are more acwhen left on ter or cover. Do not cut them off. Look up your old letters. It will pay you. Send all you can find on approval, and highest price will be remitted to you by return mail. Common stamps now in use are not wanted.—ATWELL FLEMING, 129 Kent St., London, Ont.

FLEMING, 129 Kent St., London, Ont.

J. G. MAIR, Howick, P. Q., Importer and Breeder of Imp. Large Yorkshire Pigs. Young pigs (imp. in dam) and bred not akin, for sale at the lowest possible prices. Now is the time for parties starting herds to obtain good foundation stock cheap. Write for prices at once.

325-1-f-om

# Only the Scars Remain.

"Among the many testimonials which I see in regard to certain medicines performing cures, cleansing the blood, etc.," writes HENRY HUDSON, of the James Smith

Woolen Machinery Co., Philadelphia, Pa., "none impress me more than my own case. Twenty years ago, at the age of 18 years, I had swellings come on my legs, which broke and became running sores. Our family physician could do me no good, and it was feared that the bones would be affected. At last, my good old mother urged me to try Ayer's RILLA Sarsaparilla. I took three bottles, the sores healed, and I have not been troubled since. Only the scars remain, and the memory of the past, to remind me of the good

Ayer's Sarsaparilla has done me. I now weigh two hundred and twenty pounds, and am in the best of health. I have been on the road for the past twelve years, have noticed Ayer's Sarsaparilla advertised in all parts of the United States, and always take pleasure in telling what good it did for me."

For the cure of all diseases originating in impure blood, the best remedy is

#### AYER'S Sarsaparilla Prepared by Dr. J. C. Ayer & Co., Lowell, Mass.

Cures others, will cure you

#### STOCK GOSSIP.

Mr. Frank R. Shore, White Oak, received on May 23rd, per Donaldson line, the three-year-old Hackney stallion Prince Confidence (H. S. B. 3878), by the Confidence (D'Oyly's) horse King Confidence (2531). His dam is Trifolia (H. S. B. 141), by Dux. He is a particularly richly-bred horse. His blood lines are full of the names of old-time winners, while he fully bears out his breeding in his superb quality, and high brilliant action.

action.

The American Shorthorn Breeders' Association, independent of the cash prizes and medals offered for Shorthorns by the Columbian Exposition, adds the following amounts, but the awards will follow the decisions made by the Awarding Committee appointed by the Exposition authorities. Entries must be made not later than July 15, 1893, in the breeding classes, and not later than August 15 in the fat stock classes. The date fixed for the exhibit of breeding cattle is from Monday, August 21, to Sept. 21, but cattle will be received three days before the show commences. Ages of cattle will be computed to Monday, Sept. 11, 1893. The date fixed for the exhibit of cattle in the fat stock classes is from Monday, October 16, to 23. For prize list, address Hon. W. I. Buchanan, Acting Chief of the Live Stock Department, Columbian Exposition, Chicago, Ill.

#### Making a grand total of \$10,465

Making a grand total of \$10,465

Smith Bros., of Churchville, Ontario, write: The demand for Holsteins of best milk and butter strains continues to increase, and we have to report 15 sales in addition to the 20 head sold since last February. Mr. J. Baily, of Huntsville, has secured the son of Brema 2nd. He will be one of the pioneers in that country. Mr. J. H. Loucks, of Smith's Falls, purchased 8 head. They are Cucamonga 2nd, Heike Witzyde and calf, Maid of Clinton, who gave 1573} lbs. of milk in 30 days, Flamboro Queen, Aaggie Mink Mercedes, Lady Wedo 3rd's Mink Mercedes, Mountain Netherland Queen, and Edgely's Girl's Queen. These contain individuals of the Mercedes, Netherland, Aaggie, Wedo and Edgely strains. Mr. E. D. Tilson, of Tilsonburg, has got a fine young herd. The bull Netherland Mink Mercedes King, has the two most popular strains in his get up, namely, Mercedes and Netherland. With him goes Nettie Tensen's Queen, who is descended from the great Cornelia Tensen, who gave 19 lbs. of butter in a week and 14,184 lbs. of milk in 10 months; Mountain Duchess, who comes from butter producers; Princess of Lansdowne and Sjut Slepkje Queen, two very choice heifers of excellent breeding and quality. These five will make a grand young herd, and Mr. Tilson will give them the best accommodation, for he has the best barn we have seen anywhere, and we have seen scores. His barn is beautifully situated in easy view of the central part of Tilsonburg, and is admired by all advanced stock raisers, and is well worth going to see from any part of Ontario. We sent to Mr. Collinson, of St. Davids, a fine young heifer. Wede Castine Queen, and the inquiries still come in. Our Large Improved Yorkshire Pigs have been in demand. We shipped three head this week. Our sow, Jess B., has given us a litter of 12 pigs, all doing nicely.

CLYDESDALES AT THE COLUMBIA.

At the late meeting of the executive com-

CLYDESDALES AT THE COLUMBIA.

At the late meeting of the executive committee of the American Clydesdale Association additional rings were provided for the displays additional rings were provided for the displays noted below, viz:

Best display of five head of yearling Clydesdales, to consist of either or both sexes, the five head to have been bred by the exhibitor.

Best display of five head of two-year-old

Best display of five head of two-year-old Clydesdales, to consist of either or both sexes, the five head to have been bred by the exhibitor. Gold medal.

Best display of five head of Clydesdales, to consist of either or both sexes, under four years of age, the get of one sire, the five head to be the property of the exhibitor. Gold medal.

Best ten head of Clydesdales, of either or both sexes, of any age, the ten head to be the get of one sire, the sire not to be shown. Gold medal.

medal.

The special list of cash prizes offered by the American Clydesdale Association for exhibits of Clydesdale stallions and mares at the Columbian Exposition are as follows: First premium, \$200; second, \$100; third, \$75, and fourth, \$40. The amounts named above are offered for stallions 5 years old or over, 4 years old, 3 years old, 2 years old, 1 year old, and under 1 year old.

year old.

The same cash premiums as noted above for stallions are offered by the American Clydesdale Association for marcs of corresponding

ages.
Gold medals are offered for breeding rings, to consist of a stallion and three colts of his get of either sex, and for a mare and two of her colts of either sex.
Only American-bred stallions and mares recorded in the American Clydesdale Stud Bookers eligible to compete for the cash premiums

are eligible to compete for the cash premiums

\$10,700 00 The amount of cash to be given Columbian exhibitors of Clydesdales residing in Canada and the States will be liberal, and will doubtless increase the aggregate inducements for display of Clydesdales at the World's Fair to at least \$15,000.

at least \$15,000.

A prominent Scotch breeder of Clydesdale horses offers a special premium of £50 (\$250) for the best ten head of Clydesdales exhibited by the owner; said display to consist of either or both sexes of any age, the get of one stallion.

#### STOCK GOSSIP.

LT In writing to advertisers please mention the Farmer's Advocate.

The London (Eng.) Live Stock Journal notes the sale of six shearling Oxford Down ewes by Mr. John Treadwell, of Upper Winchendon, to Mr. Main, of Ontario.

Mr. Robert Miller, the well-known breeder and importer, has, we understand, secured in his last purchase of sheep some of the finest show animals ever brought by him from England.

The U. S. ninety days' quarantine regulation has prevented the appearance at the World's Fair of an exhibit of French cattle and two Kerries and six Dexters from the South of Ireland, where they were secured by Lady Aberdeen for shipment to Chicago. The Irish dairymaids will therefore be obliged to secure their milk supply from other cows at the fair.

Mr. R. A. Brehin, St. John's, Newfoundland, has purchased from Mr. Frederick Howlett. Yaxham, Norfolk, for the Newfoundland Government, the fine Hackney horse, The Baliff. He is of splendid quality and fine all-round action, and is got by D'Oyly's Old Confidence. The Baliff stands 15.2 hands high, and is sure to do much to improve the breed of the hackneys already possessed by the Newfoundlanders.

The following extract from a business letter.

already possessed by the Newfoundlanders.

The following extract from a business letter received from H. B. Sumerville speaks for itself:—"I consider the FARMER'S ADVOCATE one of the very best advertising mediums in Canada for live stock, as before I had received a copy of the paper containing the advertisetisement of Jersey bull, I had received five different letters from parties who had seen it in the ADVOCATE, and though too late—for the first customer got him—the letters still continue to come."

Mr. Weller of Cibara & Welley & D. O. 19

Mr. Walker, of Gibson & Walker, of Denfield and Ilderton, on his recent visit to Lincolnshire, England, made the following selections of pure-bred Lincoln sheep, which have since landed safely at Quebec:—Ten ewes from Mr. Henry Dudding, Riby Grove; fifteen ewes from Mr. E. Clarke, Ashby-de-la-Launde; five ewes from Mr. Bayles, Welton Cliffe; three rams from Mr. Nelstrop, Branston; and forty ewes from Mr. Baton, Risehölme, a rising young breeder, whose sheep were much admired at the late April fair, and whose late father was always most careful in breeding the best Lincolns.

Best Lincolns.

R. Johnston, Qu'Appelle, N. W. T., visited Ontario a short time ago and purchased eight pure-bred Shorthorn bulls from Mr. James Graham, Port Perry, Ont. These were a fine, strong, useful lot of youngers, varying in age from one year to fifteen months. They were good in quality and well bred. Mr. Graham is an experienced breeder, who has for the last thirty years been a well-known figure among the Shorthorn men of Ontario. He has developed his herd along milking lines. Besides these bulls, Mr. Johnston took with him to Qu'Appelle twenty-one horses—four drivers, the remainder heavy workers.

Messrs. Wm. Goodger & Son, report the en-

Messrs. Wm. Goodger & Son, report the enquiry for swine brisk. Below are some of their recent sales:—Boar, to Robert Cuthbert, Sweaburg, Ont.; boar, to R. Bowles, Springville, Ont.; boar, to John Campbell, Belmont, Ont.; boar, to H. J. Taylor, Richmond Station, Quebec; sow, to T. E. Wilson, Thomasburg, Ont.; sow, to Jas. Hunter, Bright, Ont.; sow. to Edmund Karn, Woodstock, Ont.; boar and two sows, to Alexander Coventry, Sweaburg, Ont.; boar, to W. H. Stewart, Beamsville, Ont.; boar, to R. Speers, Bronte, Ont.; sow, to Henry Chadwick, Strathallan, Ont.; sow to Stanley Gorin; sow, to W. E. Gillet, Petrolia, Ont.; two sows, to James Carrigan, Granton, Ont.

Mr. Thos. Guy, of Oshawa, informs us that he has disposed of all his yearling Ayrshires at an average of \$100 each, all sales being made as a result of his advertisement in the FARMER'S ADVOCATE. Out of ninety-eight letters of enquiry received, all but two were in response to advertisement in the ADVOCATE. His herd was never in as good condition as at present, his never in as good condition as at present, his crop of calves being the best he has ever raised. His present stock bull, a portrait of which will shortly appear in the Advocate, is well night a perfect animal, and certainly one of the finest in Canada. The udder of one beautiful three year-old heifer, which Mr. Guy expects to go to the World's Fair, measures no less than five feet in circumference. The herd now includes about forty females. about forty females.

about forty females.

At all state and provincial fairs where separate classes are provided in 1893 for recorded Southdowns, the American Southdowns Breeders' Association will offer a special premium of the first four volumes of the American Southdown Record for the "two best recorded lambs"—one ram and one ewe bred and exhibited by a resident of the state or province in which the fair is held., These premiums are offered, conditioned:—First: That the competing animals be recorded in the American Southdown Record prior to date of entry at the fairs, and that lists of such entries be furnished the Secretary of this Association at the close of the fair. Second: That these offerings and conditions be printed in the premium list of the fairs in connection with the classification of sheep, or that reference be made at the close of the elassification of sheep, to the publication of this announcement elsewhere in the premium list.

We have received from the secretary.

We have received from the secretary, Mr. Henry Wade, a copy of the eighth volume of the Dominion Shorthorn Herd Book, which contains the pedigrees of 1182 bulls and 284 cows, thus making a total in the eight volumes of 15,282 bulls, and 21,200 cows. All animals recorded up to Dec. 31st, 1891, are printed in this volume. The bulls are arranged as in former volumes, but a new departure has been made with regard to the cows, which are all printed under the names of the owners, for the first time since amalgamation. This will enable catalogues to be prepared with very little search, but at the same time it has involved a vast amount of cierical labor upon the secretary. The chronological history of imported Shorthorns is continued, and gives the importations of 1884. Altogether this book reflects credit upon the editor, and the Shorthorn breeders are to be congratulated upon having so painstaking a man to conduct their records.

# THE HUDSON'S BAY COMPAN

HAVE

## **GENERAL STORES**

АТ BAIE DES PERES,

- BATTLEFORD, CALGARY, CHAPLEAU, DAUPHIN,
- DELORAINE, EDMONTON, FORT WILLIAM, KAMLOOPS,
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- MATTAWA, MORDEN,
- NELSON, PINCHER CREEK, PORTAGE LA PRAIRIE, PRINCE ALBERT,

**QU'APPELLE**, RAT PORTAGE,

- - RIDING MOUNTAIN, RUSSELL, SHOAL LAKE, \_ -

- - - SUDBURY,

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If you should move west at any time, go direct to the Company's Stores for anything you require; you will find there the best goods at moderate prices, imported direct from all the principal markets of the world.

# FARMING AND GRASS LANDS

In every Surveyed Township in

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Under its agreement with the Crown, the Company are entitled to Sections 8 and 26 in each township. These Sections comprise some of the best

FARMING, -STOCK-RAISING AND COAL LANDS In the country. They are now offered for sale at

MODERATE -: PRICES, On Easy Terms of Payment

#### - AND WITHOUT ANY CONDITIONS OF SETTLEMENT

TOWN LOTS FOR SALE IN

Winnipeg, Fort Qu'Appelle, Fort William, #Edmonton,

Rat Portage, Prince Albert, Portage la Prairie, Rosemount.

If you contemplate moving west and have a little money, it will pay you to purchase a farm from the Company at reasonable prices in well-settled districts, convenient to churches, railways and schools, rather than to take up homestead land in outlying parts of the country.

Full and accurate descriptions of the Company's lands will be furnished to intending purchasers on application to the undersigned, either by letter or personally, at the offices of the Company, Main and York Sts., Winnipeg.

C. C. CHIPMAN, Commissioner, Hudson's Bay Company, WINNIPEC.



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Of the universe striped the rainbow of the heaven. Striping is the universal style of decorating. The specialty artist, whether he be creating a picture or striping a farm implement, must produce eye-pleasing effects. It's not the stripes which make an implement, but an implement is oftentimes reckoned by the striping of it. The perfection of the whole is in the attention to detail. The finest implements, inappropriately striped, never look well and cannot sell well.

#### ST. GEORGE IMPLEMENTS

are striped by a born striper—an artist in stripes. He lives by striping. His work helps you choose ST. GEORGE IMPLE-MENTS. The best striper in the country is not the only best man we have. We calculate to have best men in every department. Our goods are "built on honor". Ask for Catalogue.

## B. BELL & SON,

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An Abell Engine

Be Happy.

JOHN ABELL ENGINE - AND - MACHINE - WORKS, Toronto, Ontario,

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\* \*\*\* \* Branch Office: 141 KING ST.,

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Each panel repre. sents one rod (161 feet), 7 wires, 4 steel stays. The crimp in the wire, in combination with steel clamp, when locked acts as a spring, adjusting the fence to heat or cold.

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Safe, Stronger, Better AND CHEAPER

than any other fence.

This is, without doubt. the best fence on the American continent.

All persons having wire fences erected in the past, should use the stays and steel clamps of the Locked Wire Fence Co. on them. The crimp consumes all the slack, makes the fence tight, and adds over 100 per cent. to its value at a very small cost.

We desire to inform the farmers and pub-lic generally that we are prepared to supply the material or erect this fence throughout the Dominion of Can-

THE BEST

FENCE

MADE FOR

Farms and Railroads.

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FOR SALE.

Agents Wanted

In every Township.

Send for cir-culars and par-ticulars.

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### THE SYMMES HAY AND GRAIN CAP.



The most practical, cheap and efficient Hay and Grain Cap yet introduced. For particulars, send for circular.

THE SYMMES VECETABLE AND FLOWER COVER.



Thoroughly waterproof, tough and durable. Size, 11½ inches high and 12 inches diameter at bottom. Valuable for covering transplanted plants and flowers, protecting them from sun and frost. Manufactured by THE SYMMES HAY CAP CO., Sawyerville, P.Q. 331-e-0



You get this one on UNICORN ADY MIXED PAINT

and we guarantee it to be the best in Canada. Paint your house with it every time. Buy no other. 40 different shades.

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IVE STOCK AUCTION SALES Conducted in all parts of the country.
Pedigree stock a specialty. Write for terms. References; J. C. Snell, Edmonton; Hon. M. H. Cochrane, Compton, P. Q., or this office. 333-1y-o JOHN SMITH, Brampton.



#### **BUSINESS HENS** PLYMOUTH ROCKS

EGGS—Best prize pens, \$3 per 13, \$5 per 26; grand selected pens, \$2 per 13, \$5 per 40. Twenty per cent. discount if you mention ADVOCATE. Order now and get fowls that pay. Send P.O. Order payable at Fonthill, Ont. Catalogue free. Address, C. W. ECKAR BT. Hazelton Fruitand Poultry Farm Bidge. Fruit and Poultry Farm, Ridge-ville, Ont. 327-y-om



319-1-y-o

Sweepstakes at Chicago, 1891. 25 years a breeder. Valuable inc.
25 years a breeder. Valuable inc.
25 wars a breeder. Valuable inc.
25 years a breeder. Valuable inc.
25 years a breeder. Valuable inc.
25 years.

327-1-y-om

## GOOD CROPS OR POOR CROPS,

Which Shall it be for 1893?

W. A. FREEMAN, Esq., Hamilton, Ont.:

Dear Sir,—I have used your fertilizers on field carrots with the very best results. I had a fine crop of very large carrots. I would recommend your fertilizers to those requiring a first-class manure.

Yours, etc., (Signed) Chas. Carson 1898

Vours, etc., (Signed) CHAS. CABSON.

Vours, etc., (Signed) CHAS. CABSON.

Dear Sir,—I received to-day seven sacks fertilizers, for which I enclose \$28. I found your fertilizers especially good for turnips last year, although the season was very dry, so this year I would like to enter the turnip contest. Please send me a book of your rules when convenient, and I will do my best to give the fertilizer a help along, and oblige,

Yours, etc., (Signed) ISAAC C. WILSON.

Send for FREEMAN'S NEW CATALOGUE,

Treating on Manuring and how to grow large and paying crops. — SENT FREE BY ADDRESSING

W. A. FREEMAN,

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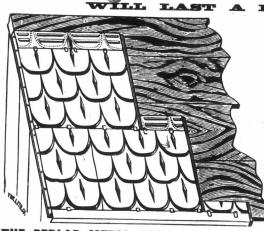
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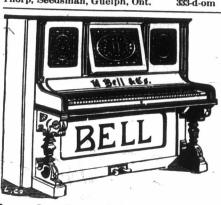
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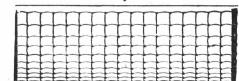
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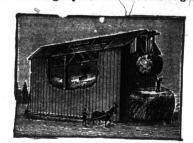
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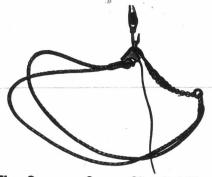
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