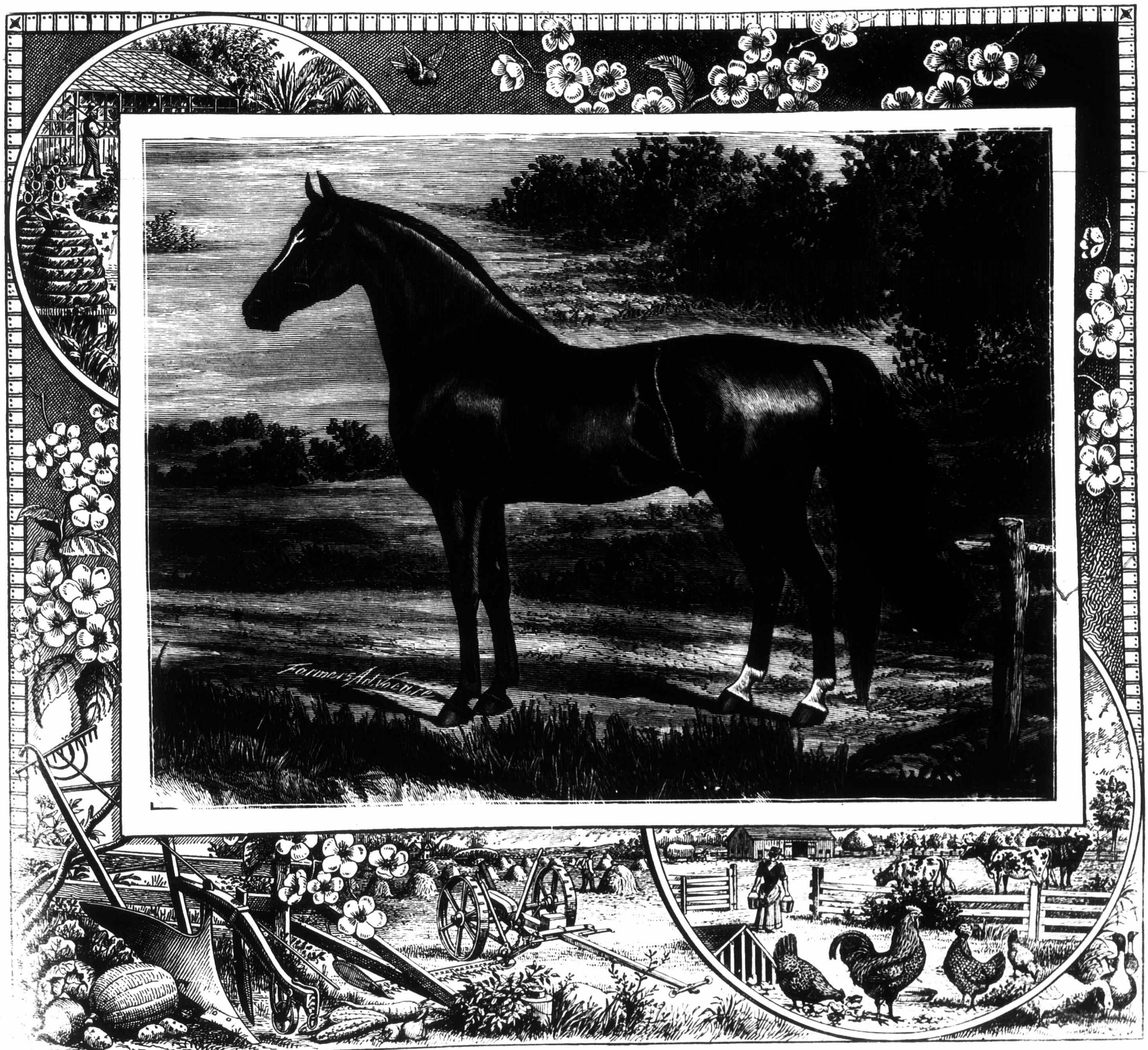


THE FARMER'S ADVOCATE

AND HOME MAGAZINE

AGRICULTURE, STOCK, DAIRY, POULTRY, HORTICULTURE, VETERINARY, HOME CIRCLE.
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VOL. XXXI. LONDON, ONT., AND WINNIPEG, MAN., MAY 15, 1896. No. 406.



THE STANDARD-BRED CLONWORE, 2:21, A PROGENITOR OF SPEED AND BEAUTY
OWNED BY MR. G. K. FOSTER, "ROCK FARM," DANVILLE, PA.

EDITORIAL.

Clonmore, 2:21.

The Standard-bred stallion, Clonmore 5288 (record 2:21), represented on our front page, is no stranger to Canadian, nor, indeed, American, horsemen who have watched the best performances of young trotting stock during the last few years. This horse is still at the head of Mr. G. K. Foster's famous Standard-bred Stud, "Rock Farm," Danville, P. Q., where he has sired a large number of the most popular trotting offspring. For a number of years members of his get have been successfully campaigned on noted American tracks, among the best blood in the world, and they always give a good account of themselves. Not only are they race winners, but their invariably useful size and gamey staying powers give them a value beyond the fast ones that have little to recommend them except their speed. Nor is this to be wondered at when the pedigree, conformation, and habits of their sire are taken into consideration.

Clonmore was bred by Mr. C. F. Emery, "Forest City Farm," Cleveland, Ohio, U. S. He was sired by Connaught 2432, record 2:24, sired by Wedgewood 629, record 2:19, the sire of Lucile, 2:14, and the dam of the famous John R. Gentry, 2:03. Connaught's dam was Consuela, the dam of Harold 413, who sired Maud S., 2:08, and the G. S. of Kremlin, 2:07. Harold was by Hamiltonian 10.

Clonmore's dam was Hopeless, by Hermes 548, record 2:27, the sire of Holmdel, 2:18, and many other standard performers. Hermes was by Harold 413, tracing to Hamiltonian 10, as above stated.

Hermes' dam was Hermosa, by Edwin Forest 49, sire of the second dam of Nancy Hanks, 2:04.

Hopeless' dam was Evadne, by Ericsson 130, by Mambrino Chief II., sire of dam of Director, 2:17. Evadne's dam was by Imported Consternation, sire of the 2nd dam of Trinket, 2:14. Were Clonmore not a getter of extraordinary stock, we would be compelled to lose faith in the law: "Like produces like."

The engraving, which is very true to life, shows Clonmore to be strong and handsome. He has not been raced to any great extent, so much in demand have been his services in the stud. His three-year-old record was 2:29, and his record of 2:21 was made to high wheels, which is as good as a mark of 17 or 18 to a bike sulky. His colts are all of good color, size, and style, and are frequently sold for big prices before maturity.

Taxation of British Agricultural Land.

We have before us a text of Hon. Mr. Chaplin's (ex-President of the Board of Agriculture) Agricultural Rating Bill recently introduced in the British House of Commons, where it is backed by the mover; also Hon. Mr. Long, present Minister of Agriculture; Hon. Mr. Balfour, Chancellor of the Exchequer; and other eminent men. We will not weary our readers at this busy season with its details. Substantially, Mr. Chaplin's proposal is that agricultural land (which shall be held to mean available meadows, pasture land, market gardens, and allotments) should, after March, 1897, be assessed at one-half its assessable value; buildings, however, to be assessed separately. This will, it is estimated, create a deficiency of £1,500,000, to be made up by grants from the Imperial Exchequer. It seems to be generally conceded that the burdens upon land are excessive, compared with other ratings, and the relief aimed at in the Bill voices the urgent request of farmers in all parts of the Old Country, where so much has been heard of late with regard to agricultural depression.

Slow, but Sure.

An English writer of prominence, in considering what experimental enquiry has done for the farmer, points out that there is a tendency to increase the number of experimental stations; but it must not be forgotten that the laying out of a number of plots or inaugurating certain tests and the recording of the results are not all that is necessary in the prosecution of useful experiments. As it is, he adds, results are published which have not received proper verification, and probably, if further trials were made, would never be verified. Such cannot be too strongly condemned. They have a deterrent influence on the adoption of sound lessons taught by other experiments that are more skillfully and carefully conducted. It might be invidious, he goes on to say, to single out those which a practical knowledge of farming shows must be misleading, though it would not be difficult.

The Position of the English Wool Trade.

The prospects of the wool trade are ably set forth in the English *Royal Journal of Agriculture*, by Mr. J. W. Turner, of Bradford, England (the "metropolis of the world's wool industry"), who is entirely conversant with the situation, being, as he is, one of the largest wool merchants in Britain.

It will be remembered by those who had wool to sell last year that the price of certain grades made a decided advance during the summer season. This was especially true of the luster and demi-lusters, which are common to the Leicester, Lincoln, Cotswold, and Romney Marsh breeds, which advanced between May 2nd and September from 9½ pence to 16½ pence. This extraordinary rise Mr. Turner considers not to end with a short-lived boom, but to remain for some time, thus lifting at least the special classes of wool above the depressed condition of other trade. To quote Mr. Turner's own words: "The long-continued depression of prices is coming to an end, and with the recovery of tone will come an increased discrimination between the value of special and the value of general production." This sounds much like what we have heard so much of during the last few years, that agriculturists must specialize and produce something above the ordinary. The advance was due to a change in fashion which placed bright, lustrous goods in the very front of fashion.

At this moment, says Mr. Turner, we are face to face with a serious deficit in the production of Merino wool in Australia, owing to the destructive drought of last season. For another reason, the best of these wools will continue to be in short supply from the effect of so much crossing of breeds in that country for the sake of better mutton carcasses. It is estimated that the enormous produce of the River Plate, originally Merino, is now quite half cross-bred. "Indeed," says Mr. Turner, "many Argentine clips which have come to England this season have been pure-blooded Lincoln and Romney Marsh." The great bulk of wool at present grown is of the cross-bred type, which will tend to keep the keenest competition among the medium grades. It is therefore evident that nearly all the British wools which have been displaced by colonial competition are wools of the half-bred class, which class seems to be extending all over England.

The writer discusses the situation entirely from a wool standpoint, and states that he feels safe in saying that the mongrel sheep grows wool which will have a continual tendency to take an inferior position in the wool market.

There are, however, wools which can be grown in Britain which are not so much subject to competition from foreign wools. The leading breeds are enumerated as follows:—

"1. The Scotch Blackfaced, in which the buyer principally requires length and strength of staple. The pure old breed possessing these qualities will always find a market for the carpet trade.

"2. The Cotswold, long, strong, and healthy wool, which has throughout the long depression sold better relatively than any other wool for making the hard, stiff goods known as camlets and lastings for the Eastern markets.

"3. Pure luster, the growth of Lincolnshire, Nottinghamshire, and the East Riding of Yorkshire. There is no wool precisely like this anywhere else in the world. It moves in price with alpaca and mohair. It can be mixed with, or used in place of, the latter, which, owing to the disturbances in the Turkish Empire, is scarce, and is likely to be scarcer; or it can be made into beautiful bright goods without any admixture. These goods are in fashion, and are using the wool rapidly. But the countryside is covered with sheep which will not grow it, and which are crowding out the legitimate tenants.

"4. Demi-luster, straight, silky-haired wool, not so bright as Lincoln, but a little finer, and which one has got into the habit of calling the Leicester breed. [Increased fineness in any of the foregoing would not be an objection, so long as it was arrived at by selection within the breed itself, but any crossing with Southdown spoils the original properties and produces the one class of wool which has to face the keenest competition.]

"5. Pure Down, a wool which is still unequalled for hosiery purposes, and which will always find a market of its own, sometimes quite independent of the general course of prices. Of this wool I should like to say—Keep to the old-fashioned style; keep it as short and as fine as possible; let no suspicion of a long-wool strain get into it; and, if I am not mistaken, pure Down wool will take a respectable place as regards comparative prices.

"Many of the so-called Downs are, however, nothing but half-breeds. I have often been asked, in effect, by growers to believe that what I called a half-bred clip was grown on the backs of the very purest Downs. But you cannot get the trade to believe anything except what it sees, and if you want Down prices, you must not sell half-bred wool."

In conclusion, Mr. Turner states that he cannot help thinking that the revival of the present fashion for lustrous goods will leave behind its good effects, which will operate for some time after the fashion itself has passed its first bloom. But as far as can be seen, the benefit will be conferred first and foremost upon the wools mentioned, as being most adaptable to special goods, which are even now receiving the attention of designers.

More Care in Horse Breeding.

It is long since the German Government saw fit to assume an oversight of the horse breeding interest of the country. For a number of years every stallion has had to pass the inspection of a committee appointed by the Government before he could be used in the stud. This rule is rigidly carried out under penalty of a fine or imprisonment if violated. In England there is felt the need of something of the same sort, though people of a democratic and naturally progressive spirit may not tolerate the paternal interference that prevails on the Continent. A writer in the *Mark Lane Express* advises that State aid be given to horse breeding, and offers the following outline of a scheme which he considers may be enlarged upon:—

(1) A county or other committee should be formed, comprising a number of practical farmers and others who are especially interested in the breeding of cart horses, and of one representative from each of the several local districts.

(2) Local districts of varying areas, according to the acreage and staple of arable land and the number of mares usually bred from each, should have a cart stallion apportioned to them.

(3) The fee for service be fixed at 10s. each mare, to be paid by the owner at time of first service, with an additional fee of 40s. at a certain fixed period for each mare which should prove in foal, 10s. of this sum to be paid by the owner of the mare, and 30s. from the general fund.

(4) Each stallion to be limited to 100 mares.

(5) Each stallion to be selected by two members of the committee and the member of the committee from that particular district in which the respective stallion is to travel.

(6) That soundness, substance, and activity of the stallions be studied by the select committee far more than mere fashionable breeding.

The suggestion is also offered that all stallions used should be provided with a veterinary certificate, stating that they are free from recognized hereditary diseases, viz., roaring, whistling, ring-bone, unsound feet, navicular disease, spavin, and cataract.

When the need of such care has become evident in those old countries, where genuine worth is recognized, and where America turns to for animals with which to improve its stock, this, together with our own experience in the way of unprofitable prices for the inferior or nondescript class, should impress breeders with the importance of breeding from only such sires and dams as will produce a class of stock that will be desirable because of its intrinsic merit.

Nappan Experimental Farm.

Col. Wm. M. Blair, who since its inception has been Superintendent of the Experimental Farm for the Maritime Provinces, at Nappan, N. S., recently resigned his position and the Government has accepted the resignation. Mr. Geo. W. Forrest, who from many years' experience has a practical knowledge of farming in the Maritime Provinces, has been appointed to the position.

Whatever else is grown or not grown upon a farm where cattle and sheep are kept, a few acres of rape should be tried this year. We hear of farmers sowing it among oats this spring, to be fed off in the fall. Try a piece this season, and find out how good or how bad it really is.

A practice which some far-seeing farmers have found profitable is to plant a small patch of potatoes when the seed is dear and a large area when they are so cheap as to be almost given away. Many who received low prices last year will plant less this season, which will make better prices for the 1896 crop.

The degree of LL.D. was conferred upon Prof. Wm. Saunders, Director Central Experimental Farm, Ottawa, and Mr. James Fletcher, Dominion Entomologist and Botanist, at the annual convocation of Queen's University, Kingston, Ont., on April 29th. For many years Mr. Fletcher has been one of our most valued contributors, our May 1st issue containing his latest article, a seasonable one on "Injurious Insects."

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THE FARMER'S ADVOCATE & HOME MAGAZINE

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You Will Want "Canada's Glory."

No home should be without a framed copy of our magnificent new light horse picture, which has been so enthusiastically received. Very flattering acknowledgments are being received almost every day. The work of sending out copies is now in progress. While the price of fifty cents is now nothing compared to the merits of the picture, we make the securing of it still more easy by giving a free copy to every subscriber who sends us \$1.00 along with the name of a new subscriber.

We are pleased to be able to state that all the premiums which we have offered during the winter and spring months have been eagerly worked for and secured by a very large number of our readers, who in every case have been highly satisfied with them. Our liberal offerings are still open to those who will apply themselves. For particulars see April 15th and previous issues.

Ontario's Highway Commissioner.

Mr. Campbell, whose portrait appears below, has been appointed Highway Commissioner of the Province of Ontario, and took office at the Parliament Buildings, Toronto, on Tuesday, the 12th inst. He was born in the Village of Wardsville, Ont., in 1863, and removed with his father, C. J. Campbell, in 1865, to the Township of Ekfrid, where his boyhood days were spent. He graduated in engineering and surveying at Toronto in 1885. From 1885 to 1891 he carried on a general engineering business, in partnership with Jas. A. Bell, having an extensive practice in all classes of municipal engineering in the Counties of Norfolk, Oxford, Middlesex, Elgin, and Kent, with headquarters at St. Thomas. Outside of these municipalities a large business was done by the firm in the construction of sewerage and waterworks systems. In 1891 he was appointed City Engineer of St. Thomas, a position since held and resigned to accept the new office. During the past five years he has given special attention to roadmaking as a branch of engineering, and experimented in constructing a number of miles of earth, gravel, Telford, and Macadam roads. He has also during that time edited the engineering department of the *Municipal World*, dealing with municipal engineering generally, but more particularly with the road question. It was during this time that the agitation for good roads in Ontario was commenced; this resulted in the formation of the Ontario Good Roads Association, of which he is one of the vice-presidents. He has addressed Farmers' Institute, dairy and other meetings in different parts of the Province, urging the necessity of (1) systematic and uniform work on the roads in order that better results might be obtained from the money and labor now expended; (2) combining as far as possible the efforts of all persons engaged in road reform; (3) trying to awaken interest in the subject among the people at large; and (4) discussing the methods of modern road building.



MR. A. W. CAMPBELL, C. E.

Last year the Ontario Toll Road Commission, of which he was a member, took evidence throughout the Province, and in this way he became acquainted, not only with toll roads, but with the opinion of many representative men in reference to country roads. The Government has secured a man pre-eminently well-qualified for the position, and we trust his work will confer early and lasting benefits upon the roads of the Province.

His duties will be under the direction and approval of the Minister of Agriculture; to give instruction in the building and maintenance of highways by oral or other communication to road overseers, pathmasters, and others, and to distribute such information as he may be able to collect from the various sources at his command, both in this and in foreign countries; by practically demonstrating the best methods of roadway construction, as opportunity may permit, in the presence of those interested, and in such other manner as may from time to time be approved of by the Minister.

In another column we give a timely article from Mr. Campbell's pen, on the subject of how to improve our roads, giving suggestions of value to pathmasters and others.

A Good Medium.

Mr. A. W. Campbell, the newly-appointed Highway Commissioner for Ontario, writes us:—"I appreciate very much your desire to publish information calculated to promote road improvement. Your readers form the class we wish especially to deal with, and it will be a great assistance to me to be permitted to contribute articles for publication in your paper. The success of my work will be due very largely to the assistance received from the press, and more especially your paper, which is an authority among farmers."

STOCK.

On the Eve of a Great Shortage.

To the Editor FARMER'S ADVOCATE:
DEAR SIR,—I am of the opinion that breeders are awakening to the fact that they are on the eve of a great shortage in the superior classes of horses. In this locality horsemen are looking forward to a liberal patronage this year. We have a large number of good mares in this section in all the various classes, but I am sorry to say too many of the good young mares have been sold out of the country. According to the present outlook, the trade will be dull. We have hardly any buyers this season so far for export stock; in fact, they are too hard to find. For the high-quality carriage and light harness horse, you could not find a first-class pair in a day's drive in the hands of the breeder. The demand far exceeds the supply in the high-class animal. We have no trouble selling all the good ones we can find, and cannot half fill our orders. We have some good young stock coming on in this locality, but only very few, as farmers almost quit breeding for the last three years. You ask what kind of mares should be bred? I answer, only the best. Breeders should quit breeding for the scrub market. Breed with some definite object in view; try for the best. Aim high—for the moon, if you like; and if you fall short you cannot help it. Secure the service of the best horse you can find, in whatever class suits your mare. Do not be controlled by the mighty dollar in your selection. Three or four dollars expended at the start may bring you a hundred when you come to sell. My advice is, always breed to the best, as like begets like.
J. F. QUINN, V. S.
Peel Co., Ont.

Good Sale for Heavy Drafts.

To the Editor FARMER'S ADVOCATE:
SIR,—I entirely agree with your remarks about the indifference to horse breeding on the part of farmers, and I think now is the time to breed heavy draft horses, as lately so few have been bred that the demand and price must increase, and are increasing already. I have bred four mares for several years past, and this year I intend to breed twice that number at least, perhaps more, as I have eleven pure Clydesdale mares. I shall give you an instance of one of the mares. I bought her when coming two years old, paying \$600 cash for her. Her first foal died through neglect. Her next foal (full brother to it) I sold for \$600 cash when 20 months old. I have realized from the same mare \$1,900 and now have five of her progeny. You ask what is the outlook for the horse breeding season this year? So far I have heard little about it; but you will see that I have faith in the future horse market. The breeding of horses has always paid me as well as anything on the farm. Breed the best and you will always find a market for it. The supply of salable horses is just ordinary, but might easily have been better if the owners had been more careful in breeding. The majority are by Clydesdale sires. In this district our means are limited and we cannot indulge in the fancy light breeds, and particularly when we have no great faith in their future. Unless we had pure-bred mares we would just be breeding scrubs, and there are too many of them already, and heavy draft horses will always be wanted. With regard to horse buyers being here, there have been any number of them; but good horses are scarce in this district. I have heard of several sales from \$175 to \$200 and down to \$50.
JAS. I. DAVIDSON.
Ontario Co., Ont.

Good Light Horses Scarce.

To the Editor FARMER'S ADVOCATE:
SIR,—Very few mares will be bred here this year. This is not much of a horse breeding section. Good mares are scarce in this district, and they are of a mixed type. Mares for this section of country should be fit to raise road or carriage horses. I should naturally say, breed these mares to a Standard-bred stallion. I may be prejudiced in favor of the Standard-bred, as all colts sired by Clonmore, in spite of the depression in the horse business, have been and can be sold for living prices. There have been very few buyers in this district the past winter, due principally, I think, to there being very few salable horses obtainable. The stock of one, two and three-year-olds here, in comparison to previous years, is small. There is not much use in trying to raise draft horses in this section, as we could not compete with the West. There are a few good saddle, carriage, and road horses growing up, but they are not very plentiful.
G. K. FOSTER.
Richmond Co., P. Q.

Practical Suggestions in Horse Breeding.

To the Editor FARMER'S ADVOCATE:
SIR,—I beg to submit what evidence is in my power as to the future encouragement of horse breeding. You must please bear in mind that as to Muskoka and Parry Sound districts, for which I can speak with some authority, being newly-settled countries, the conditions are not necessarily the same as elsewhere. My horses (Shires and Clydes), when introduced in 1880, were new breeds to the country, and probably the first horses of any standing which had ever travelled these districts. (By standing, I mean stock capable of winning either in the show yard, on the race track, or immediately connected on both sides with horses

capable of doing this.) When I first reached the country, in 1889, there were still a large number of oxen being used throughout the district, which have nearly all been replaced by horses during the last five years. Amongst others, a large number of street car horses, trotting stock, and some heavy mares have been introduced, principally by cattle dealers in exchange for stock; and as these have been bred to all sorts of horses, and the produce has not been salable at the low prices which recently prevailed, many of the farmers have a large stock of unsalable horses on their hands. So far as I know, there is no demand whatever for heavy stallions throughout the district, and I keep my own at home. Hackneys have taken fairly well. My stallion, Fireworks, did the best season for me last year that I have ever had, but was not run to his full capacity. There appears to be this year a very fair demand too, but no rush. I think farmers are coming back to their senses, but we will not see any boom before next year. There are here some very good mares, heavy and light, but not a large number. The ordinary farmer being so stuck on the general purpose horse, I would advise him to breed his mares to a heavy horse, with a view to getting express horses, which fetch good prices. Mares around us are not heavy enough for heavy draft. If he has well-bred mares, by all means let him breed drivers. As to sires, I would advise the use of Shires and Clydesdales, also Hackneys and Thoroughbreds. There have been no buyers through our district, that I know of, the last winter. There will be no prospect of draft horses for sale for several years. There will be some drivers in two or three years, and a few roadsters. There may be some express horses. In conclusion, let me ask you to impress on your readers the importance of feeding their stock well. Every farmer can afford to put in one-quarter or one-half acre of carrots, which will go a long way. Too many farmers fail to breed horses for sale, and consequently do not push them along. They seem to have an idea that it is perhaps a good thing for the mare to have a foal occasionally, just to keep her in practice, or the foal will amuse the children. Anyway, he may lose one of his horses some day, or his neighbor may have bad luck, in which case he can make a sale. Muskoka, Ont. HORACE N. CROSSLEY.

Future Horse Supplies Light.

To the Editor FARMER'S ADVOCATE:
SIR,—The outlook for horse breeding is perhaps a little better than last year, but owing to low prices farmers may still hold back. The supply of good brood mares is very good. They are the blocky type, from 1,200 to 1,400 pounds. Grade Clydes are a good class to breed from, if we had also more clean-boned mares, part Thoroughbred, to use to Coaching horses. We have had plenty of horse buyers through our district, but the prices offered do not seem to meet the seller. There is still a fair supply for sale. The supply from this out will be light, owing to mares not having been bred. There will be some young carriage horses in, say, two years, but no saddle horses to speak of. Chateaugay Co., P. Q. ROBERT NESS.

That Mutton Test.

To the Editor FARMER'S ADVOCATE:
SIR,—In your last issue John Springer, Springfield, Ill., arrives at a misleading conclusion in writing about the lamb test at the Iowa Ex. Station. He does not take the fleece into account when he endeavors to have the Southdowns show the highest value. Southdowns sold for \$4.75 and Shropshires at \$4.62, while the fleece of the former weighed 6.75, that of the latter made 8.75. Allowing one cent a pound difference, we have the Shropshire fleece at fifteen cents unwashed (as I suppose it was), making \$1.31 + \$4.62 = \$5.93, while the Southdown fleece at sixteen cents made \$1.08 + \$4.75 = \$5.83 as the total. Prices are my own, based on markets. In same report we notice that when dressed the Shropshire lambs gave a percentage of 56.3 and the Southdown gave 55.4, and others higher than either, but a Shropshire yearling outdistanced all by making 62.3 dressed percentage.

I thought after the extraordinary showings that Shropshires and Shropshire grades made at Guelph and New York last fall the lovers of other breeds would for a time quit flitching the Shrops of their world-wide reputation. In this locality no lambs have sold at all up in price to that got for half-bred Shrops. In March one feeder got nearly \$7 each for his bunch and another got over \$6. Out of the latter lot I helped a dealer secure four in January at twenty-five dollars. Need more be written to convince the raisers of butchers' lambs that the Shropshire ram stands unexcelled as the getter of the highest priced and therefore money-making lamb?

A few days ago a dealer, in looking over my flock, noticed spring lambs which he considered would bring in Toronto—dull as meats are—\$6 each. With good, common ewes and a blocky, well-fleshed Shropshire ram, any farmer can secure somewhat similar results. Next to raising high-class breeding stock, there is no other line of farming in which I have as much confidence as in raising lambs for the market. JOHN CAMPBELL. Fairview Farm, Victoria Co., Ont.

The Nova Scotia School of Horticulture at Wolfville closed a very successful term on May 1st, with an enrollment of 64 students.

Our Scottish Letter.

We are into the throes of the show season in the west of Scotland, and one could easily spend every day in the week, except the first and second, attending these meetings. There are few parishes in Ayrshire which have not a show, and besides these there are many gatherings at the principal towns in the west of Scotland.

Clydesdale Sales.—During the week ending 25th inst. the Clydesdale has been very much in evidence. Sales have been held in Glasgow of stock from Professor McCall's stud, at Blairtummock, and at Keir, of the entire stud of Clydesdales founded many years ago by the late Sir William Sterling Maswell, Bart. Professor McCall is a great believer in strong, robust, big horses. He attaches little importance to the show-yard taste, and goes on his own way. He sold nineteen head on Tuesday at the average price of £52 3s. 4d.; on the whole, as much as the owner expected; and there were various satisfactory features about the sale, notably the presence of gentlemen from England, who bought several of the best. The Keir sale attracted an immense crowd, about 1,200 people being present from all quarters, and the result was eminently satisfactory; fifty-three Clydesdales of all ages were sold, the average price being £67 11s. 6d. The mares were in good demand, but the stud has for several years been poorly supplied with stallions, the three stud horses selling for £76 13s., £105, and £141 15s. respectively. These prices scarcely indicate the class of horse which would have been looked for in a stud of the best Clydesdale mares the world possibly has seen. The mares have grand bodies and are of great substance. The highest price was made by a mare which, strictly speaking, did not belong to the stud. This was Victoria, a three-quarter-bred Clydesdale, nine years old, for which Mr. Riddell paid 260 gs. Of the old stud, the mare which drew the highest price was New Hope Newstead Darling, for which Professor McCall paid 250 gs. One of the Peggy tribe, (from which Darnley sprung), Lorne Briton Peggy, drew 200 gs., her buyer being also Mr. Riddell. The Marquis of Londonderry gave 160 gs. for a two-year-old filly named Venus, and others of the same age sold for 70 gs. and 60 gs.; yearling fillies made up to 53 gs. and 52 gs.; the average price of thirty brood mares was £76 9s.; five three-year-old fillies made £49 10s. each; eleven two-year-old fillies, £54 2s. each; four yearlings, £42 15s. each; a yearling colt made £26 6s.; and three stallions made £107 16s. The average price of the 106 Clydesdales thrown upon the market during the past fortnight was £67 11s. 3d., or almost to a penny the Keir average. The sixteen sold from Edengrove made the splendid figure of £116 19s. 8d., so that it has had to make up the deficiency supplied by the lower rates ruling at the other sales.

The Show Ring.—Glasgow was a magnificent show. Seldom have we seen a better display of Clydesdales, and all through the principle of single judging which was adopted gave excellent results. The Montrave stud, of Mr. Gilmour, furnished the champion female, Montrave Maud 11780, a very gay and handsome mare got by Prince of Wales 673, out of the redoubtable champion mare, Moss Rose 6203. This is a mare of great substance; not particularly noteworthy when walking, but when trotted, a long way ahead of any mare of her age in this country. She has bred one foal of great merit—the three-year-old Montrave Mac 9958, by Macgregor, which was placed fourth in his section same day and is serving mares at £10 10s. each mare, foal or no foal. The champion male Clydesdale was Mr. James A. Wallace's Prince of Clay, winner of first prize in spring, and a great, massive horse with good middle piece and splendid fore legs. He was got by the celebrated Prince Alexander 8890, whose other stock took high places at this show, and his dam was the all but unbeaten mare Pandora, by Darnley, bred and owned by Mr. James Lockhart. He has thus a double cross of Darnley blood, his sire's dam being got by that same distinguished horse, and this will more than counterbalance the fact that Pandora's dam was a Shire mare formerly owned by Mr. Drew, to whom she was known as Flora by Lincolnshire Lad. Prince Alexander is owned by Mr. Wm. Renwick, Meadowfield, Corstorphine, and was purchased for £1,200 when little more than a weaned foal. At Glasgow he won first prize as sire of the five best yearlings got by one sire, and it is worthy of note that his two competitors on the occasion were, like himself, the produce of mares got by Darnley. These were Prince of Albion 6178, the Montrave stud horse, and Master Robin 8040, owned by Mr. Richard Dunn. All three are much above the average as breeding horses, and their dams were both well bred and very good mares. It is curious to note that Prince Alexander has twice beaten Prince of Albion—first when they met individually at the H. & A. S. show at Dundee in 1890, and now when they met for the first time as sires of groups of five yearlings. Another interesting group competition was that for brood mares and two of their progeny. The contest lay between Mr. W. W. Galbraith's Zeynal and Mr. W. S. Park's Hutton Beauty; and both, it is of importance to note, were daughters of Darnley. Thus for breeding purposes the tribe of old Darnley are fairly in the ascendant. In the five female classes at Glasgow two of the first prize winners were got by Prince of Wales 673, and one each by Goldfinder 6897, Burn's Pride 9122, and Fergusson 9526. In the three entire male classes the sires of first prize winners were Prince Alexander 8890, Prince of Kyle 7155, and Riddell's

Gallant Prince; all three sons of Prince of Wales 673. The champion gelding, a truly magnificent horse, was got by Lyon of Purdomstown 4549, a son of Macgregor 1487.

Hackney Breeding is making rapid progress in Scotland, and the exhibition at Glasgow was probably never excelled in Scotland. The champion and reserve champion horses were both bred in Yorkshire, but the champion and reserve champion females were bred in Scotland, and are regarded as the best pair in the United Kingdom. The champion horse was The Conqueror, got by Ganymede and owned by Mr. Alexander Morton, of Gowanbank, Darvel, Ayrshire, and the reserve was Moncreiffe Matchless, owned by Sir Robert Moncreiffe, Bart. The champion mare was the two-year-old filly, Lily Grant, got by Donal Grant, own brother to Cadet, out of the full sister of Danegelt, and the reserve, Daisy Danegelt, was got by Danegelt, out of a mare by Lord Derby II. Both were bred and are owned by Mr. James MacMeekin, Carnbooth, Busby, near Glasgow. A large number of the best Hackneys were got by the 3,000 gs. horse, Goldfinder VI., recently sold by Mr. Morton to Sir Gilbert Greenall, Bart., Warrington. Mr. Stevens has lately bought a very valuable shipment of Hackneys. His agent was Mr. Alex. Galbraith, of the American Clydesdale Association, who was accompanied by Mr. Gray. The animals selected are the highest-classed Hackneys that ever crossed the Atlantic, and include more than one champion winner at the London shows. "SCOTLAND YET."

Details of the Mutton Test by Prof. Curtiss.

SIR,—The lambs referred to in Mr. Springer's communication (May 1st FARMER'S ADVOCATE) are those that I purchased while in Ontario last season; and while the details of the experiment are not yet ready for publication, I take pleasure in giving you such information as is now available. We had in all 12 lots of lambs on full feed from January 1st to March 1st, during which time the 10 Southdowns gained 340 pounds; 10 Shropshires, 341; 10 Oxfords, 356; 10 Suffolks, 417; 10 Lincolns, 374; 10 Cotswolds, 419; 9 Leicesters, 317; 10 Dorsets, 362; 10 Merinos, 162; 10 half Shropshire-half Merino, 292; 10 range lambs, 282; and 5 Shropshire yearlings, 115.

The foregoing gains represent the difference between the first and final weights of the feeding period mentioned, but inasmuch as the sheep were weighed with the fleeces on at the beginning of the period, and had the fleeces off at the close, it is fair to credit the amount of wool clipped from each breed, so that the real gains are as follows:

	Flesh.	Wool.
Southdowns.....	340 plus 68	88
Shropshires.....	341 " 88	110
Oxfords.....	356 " 77	129
Suffolks.....	417 " 127	104
Lincolns.....	374 " 69	95
Cotswolds.....	419 " 75	51
Leicesters.....	317 " 51	51
Dorsets.....	362 " 51	51
Merinos.....	162 " 51	51
Cross-breds—Half Merino-half Shropshire.....	292 " 51	51
Range.....	282 " 51	51
Yearling Shropshires.....	115 " 51	51

ON THE MARKET.

Southdowns averaged 115 pounds and sold for \$4 75
Shropshires " 121 " " 4 62 1/2
Range " 91 " " 4 50
Half Shropshire and half Merino averaged 101 pounds and sold for 4 50
Oxfords averaged 142 pounds and sold for 4 50
Cotswolds " 142 " " 4 50
Lincolns " 142 " " 4 50
Leicesters " 153 " " 4 50
Suffolks " 146 " " 4 25
Merinos " 94 " " 4 25
Shropshire yearlings averaged 176 pounds and sold for 4 25
Dorsets averaged 121 pounds and sold for 3 75

AVERAGE NUMBER OF DAYS' GROWTH OF WOOL.

Southdowns, 366 days; average weight of fleece, 6.75 lbs.
Shropshires, 363 " " " 8.75 " "
Oxfords, 365 " " " 10.95 " "
Suffolks, 383 " " " 7.65 " "
Lincolns, 342 " " " 12.85 " "
Cotswolds, 334 " " " 12.65 " "
Leicesters, 348 " " " 11.5 " "
Dorsets, " " " 6.82 " "
Merinos, 359 " " " 9.5 " "
Half Shropshire and half Merino, 334 days; average weight of fleece 7.5 " "
Range, 321 days; average weight of fleece 5.12 " "
Shropshire yearling, 323 days; average weight of fleece 10.5 " "

*Have not the exact average for Dorsets yet.

The shearing was done from March 15th to 18th, before the oil was out of the wool, which made lighter weight fleeces than would have been obtained a month later. The percentage of dressed meat by breeds is as follows:—

Dorsets.....	59.6
Merinos.....	51.8
Half Shropshire and half Merino.....	53.7
Range.....	55.6
Leicesters.....	57.8
Lincolns.....	55.7
Southdowns.....	55.4
Cotswolds.....	54.9
Suffolks.....	53.6
Shropshires.....	56.3
Oxfords.....	55.2
Yearling Shropshires.....	62.3

The carcasses were cut upon the block and the weights taken of all the cuts of each breed. This, together with a great deal of other detail work, will appear in our report, to be published in the bulletin some time during the summer. The gains made by all of the pure mutton breeds, you will observe, are very creditable. Each breed was fed separately and a correct account of all feed consumed was kept for each day. We will probably repeat the experiment this year by again using

pure-bred lambs of the different breeds, and beginning with younger lambs and putting them on the market at an earlier age and lighter weight. All of our lambs were considered too large and too fat by the Chicago buyers, although they sold 15 cents higher with the fleeces off than any other sheep on the market that day, including fleeces.

Trusting that this information may be of interest, I am,

C. F. CURTISS,
Dept. Animal Industry.

Exp. Station, Ames, Iowa, May 6th, '96.

Horse Breeding -- Its Prospects and Needs.

SIR.—In compliance with your request, I take pleasure in the furtherance of your worthy efforts to direct the attention of breeders of horses to the necessity of giving the matter more careful consideration than has been done for the past year or two. Complaints of "too many horses" we hear all over the country. But send a buyer through the stable of the man so complaining and the probability is he will come away without making a purchase. He will tell you there was "nothing good enough" or "nothing fit." The trouble is not so much the want of judgment as the lack of the use of it in selecting suitable sires, and the want of more liberal feeding.

The outlook for the horse breeding season this year is very much brighter for the stallioner, but it is still far from satisfactory. Fees of ten and twelve dollars (and these are current) are not sufficient inducement to importers to invest their money in the business and travel horses of superior merit and breeding for what there is to be made out of it. I believe it would be better if some system of governmental inspection—optional, not compulsory—were adopted, and make this inspection very rigid both in regard to soundness and purity of breeding. Then the present custom of insurance is all in favor of the owner of the mare. If a portion of the fee were made payable at the end of the season it would bring out a higher class of breeding mares.

There are too few good, young, vigorous brood mares. What would have answered admirably have been sold out of the country. The non-salable females, and those past the marketable age, are too frequently put to breeding. Is this not courting failure in the enterprise?

Without hesitation, I would advise breeding the best mare on the farm. She is none too good for it, and because the horse best suited to her doesn't call at her stable door, a little extra trouble and expense to have her mated suitably will repay the owner and induce better care of the foal. The combination saddle and harness horse and the heavy draft horses can be depended on to sell in the future as in the past, at remunerative prices.

Buyers have been very alert all winter, and in this western portion of the Province, at least, there are several posted in every district shipping as fast as they can buy.

There are very few colts of any class in this locality.
ROBT. MCEWEN.
Middlesex Co., Ont.

Good Demand for Good Horses.

Reviewing the horse market outlook, the New York Herald sizes up the situation in a few words, as follows:—"There is nobody in the horse business just now doing any worrying. It is many years since there was such a genuine demand for good horses, and at really good prices. This has been brought about mainly by three prime factors: First, the restrictions in breeding operations, which are now beginning to tell; second, the fact that the number of those who can afford to buy and drive high-class horses is continually on the increase; and thirdly and lastly, everything that Americans are not smart enough to secure is gobbed up by agents for English and European firms."

The Sow and Pigs.

It is a long time since Ontario farmers rejoiced more when the time of turning out stock arrived than at this present season. The sight of dirty, lean cattle and swine is not a pleasant one to behold. We hear of heavy losses in young pigs, and no doubt the damp board beds have a right to a large share of the blame for such a condition. The farmer who has a nice red or lucern clover patch, or even a good grass pasture, to turn his sows and few little pigs upon has something to make him feel well. Whether or not such a favorable plot is at hand the growing pigs will do much better out upon mother earth than in the pens. Too close confinement causes "thumps" and straight tails, neither of which accompany money-making growth. Idleness and gluttony are deadly enemies to sleek, curly tailed pigs.

If the sow is to bear two litters a year, the pigs may be weaned at six weeks old; but when the dam is to be turned off fat next fall, or have no more offspring until next spring, many of our most practical authorities would say allow them to run together upon the grass until they wean themselves. When the feeding is liberal and succulent the milk flow will continue copious and very beneficial to the youngsters until they are nine or ten weeks old. Where the pasture lot is small, and desired to be kept in sod, the pigs are better "rungs" but should they have access to a bush or other large run, the rooting of the surface for phosphates and worms will do much towards their growth and prosperity. A pig does not, as some suppose, root from "devilment," but for something which its system requires.

FARM.

Better Road Work.

BY A. W. CAMPBELL, C. E., HIGHWAY COMMISSIONER FOR ONTARIO.

Country roads in Ontario are commonly divided into two classes—gravel and dirt. The terms "good" and "bad" are frequently regarded as synonymous with these, and as our roads are usually constructed, this interchange of words is to some extent not without reason. The way to construct a good gravel road is to first build a good dirt road from the natural soil.

A good dirt road to those who have driven through sloughs designated "bad" roads during the past spring will seem an impossibility. And yet these bad roads are chosen in June by the teamster in preference to the "good" gravel roads. These latter are now a collection of parallel ruts, with rocks firmly set, protruding or rolling loose under the wheels and the feet of the horses.

The diseases being so perfectly known, it is a poor recommendation for our inventive powers if we cannot produce the remedies. For dirt roads, take the water out and keep it out; for gravel roads, this and more. There will be less moisture remaining in the roads after the fall rains to assist the disintegrating and upheaving action of the frost. There will be less water to be carried away in the spring, and more ample means to do it quickly. A dry foundation for a road is as necessary as for any other structure. Were the benefits of drainage better known, our system of roads throughout this Province would soon be vastly improved.

Drainage must be secured at the surface of the road and beneath it. Underdrainage—there may be a few exceptions—will accomplish more than surface drainage. Where and how to place the drains is a matter regarding which no definite code of laws can be formulated, since each mile or less of roadway may lead to an entirely new combination of circumstances. Surface drainage is attained by rounding up the road-bed ordinarily with a rise of not less than one nor more than one and one-half inches to the foot, providing open ditches on each side of the grade. Crown the roadway on hills slightly more, so as to draw the water sharply to the ditches. Water allowed to follow the track of the wheels will wear them to ruts, and deposit a softened mass of mud at the foot of the hill.

The drains running parallel to the road about three feet below the surface and at the edge of the grade will usually afford the best method of underdrainage. Take advantage of all natural water-courses to relieve the ditches of their water. Use hard, well-burned tile laid carefully to a uniform grade, with a fall of not less than three feet to the mile, and if it can be obtained at reasonable cost, not less than six feet.

Provide culverts where needed, and do not allow the roadway to interfere with natural drainage. Do not build culverts higher than the approaching roadway, as muddy hollows in each side will result. If possible place small culverts below the surface, and cover with earth, as they will be then less subject to wear and will not interfere with the smooth surface of the road. Make culverts permanent. Avoid the use of perishable material. See that proper outlets are made for them and keep free. Water which is allowed to stand in them in frosty weather will destroy the best material.

The surface of the road should be kept smooth and free from ruts. Where gravel or other metal is to be applied it is best to dig a trench for its reception, otherwise the crown will be too high. Gravel is intended to perform the double service of a roof to shed the water and a floor to resist the wear of traffic and to lessen the amount of traction required. A forty per cent. greater load can be drawn by a team over a smooth gravel road than can be drawn over a yielding dirt road in an equally good state of repair. All the work should be done on a uniform plan in a systematic and permanent manner, with a view to its extension on the same plan in subsequent years; this in a short time will secure a perfect system of finished roads.

Modern road machinery, properly operated, is economical. The grader and roller are indispensable. The grader performs the work quicker, easier, cheaper, and more perfectly than can be expected from hand labor. The roller compacts the loose material, unites the different particles so as to better resist the load, prevents displacement which forms ruts, and reduces to a minimum resistance to traffic.

Lack of Drainage and Late Seeding.

SIR.—Most farmers are loath to plow up fall wheat, but in a run through some parts of Lambton, I have noticed several fields and portions of fields that will be an unprofitable crop. Several causes may account for the failure. In some cases the want of drainage has evidently soured the land, if not drowned the crop; but on making enquiries, I found late sowing is responsible. Many farmers are anxious to put in after a corn crop. The plan is a good one, but there is a deal of work in clearing corn land, and unless the farmer is well furnished with help, the sowing will be necessarily late. I have had a fair crop of fall wheat from sowing first week of October. That time is gone, and now I prefer the first week in September to anything later.

JOS. OSBORNE.

Lambton Co., Ont.

Rape Culture.

At the end of grain seeding on many farms the work of preparing for the season's crops is only commencing. This is due to the ever-decreasing acreage of grain and increasing area of corn, rape, roots, and other hoed crops, as stock farming increases and need for better feeding is realized.

The value of rape as a food for sheep and cattle is being appreciated more and more each year, as it is introduced into different sections. Rape, like corn and lucern, has come to stay and to be considered one of the mainstays of the beef and mutton producer. While most crops have a special season of planting, extending over a very short period, rape can be put in at any time between the early part of May and the 1st of August, and produce a profitable crop. It can, therefore, be used in the place of many of the other green fodder crops, and also at times when other crops are not obtainable. The greatest use, however, to which rape has been put so far is as a late summer or autumn pasture, especially for sheep, but frequently for young cattle. For the former it fills a great want when well grown at the time lambs are weaned, which is on many farms about the 1st of August. To this end it should be sown from June 1st to 15th, which is about the time turnips are sown. When land is put in good condition by that time, and the rape sown in drills, about two and a half pounds of seed per acre, it will yield a luxuriant crop of the best possible feed for growing stock. As is fairly well known, the preparation of the soil is much the same as for turnips or mangels. The rape crop is accused by some of being exhaustive to the land, which after all is not a bad fault, as a crop that will readily appropriate what we give it in the shape of manure affords us an opportunity of making the best use of the soil. Land is manured to give crops, and the more a crop uses of this, the nearer does it fulfill our requirements. It is not, however, exhaustive to the soil when it is pastured off by sheep or cattle. When land is clean and open, sowing broadcast about four pounds to the acre will answer well. But as such crops are generally sown on land that needs cleaning, it is well to sow the seed in drills like turnips, either flat or raised, say 26 inches apart. When the rough leaf has made a good start, about the size that turnips would be scuffled, the cultivator should be introduced. It should run as close to the line of the rows as is consistent with the safety of the plants. The value of frequent surface cultivation applies as much to rape as to any other crop. It is well to run through the crop with a hand hoe once or twice to remove weeds that have escaped the cultivator. Cultivation may well continue until the plants have made a near approach between the rows.

Bean Culture.

BY W. A. M'GEACHY, KENT CO.

Although present prices of beans are ruinously low, a large acreage will be planted to this crop the coming season; in fact, the area under beans is constantly increasing, owing, no doubt, to the fact that they have been one of the best paying crops up to the present time that the farmer could grow. As many are growing them this year for the first time, a few notes as to their culture would not be out of place.

Soil Preparation.—Although raised on all soils, from light sand to heavy clay, a well-drained but moist loam is the ideal bean land. If not rich it should be made so, and just here we might say opinions differ as to which is the better method of applying the manure, viz., to plow it under or work it into the soil after plowing. We have obtained best results by fall plowing a clover sod, manuring it during the winter and beginning to work the manure in as soon as the land permits it in the spring. It is worked over every ten days or two weeks from then until planting time, for the double object of incorporating the manure in the soil and sprouting any weed seed that it may contain, and also to secure a fine tilth, which is so essential to bean growing.

Planting.—In this section (Kent) we plant, if the weather is warm and favorable, about the 25th of May, although planting is often continued to the second week in June. It is poor policy to rush them in too early if the soil or weather is not warm, as it takes them longer to come up, and while sprouting they are liable to the ravages of a worm that cuts the two first leaves off, thus leaving the plant useless, or at best, so late in maturing as to be of little value. If, however, the season is favorable, plant early, as it is easier to replace the seed if the crop should be frozen in the spring than a frosted crop in the fall.

Planting is done with either an ordinary grain drill or a planter manufactured for the purpose. The latter plants two rows at once, twenty-eight inches apart, and drops the beans in hills about eight inches apart, which makes hoeing them a much easier matter. About three pecks is the quantity planted per acre, a little less than this is sufficient when Pea beans are planted.

Varieties.—The Medium, until late years, was the leading bean, but the Pea (lately introduced) is a superior bean in every way. It ripens ten days to two weeks earlier, stands the drought better, yields as much or more per acre, and commands from five to ten cents more per bushel.

Cultivation.—As soon as they are up large enough, cultivation should begin by running the cultivator shallow, as the roots lie close to the surface, which

should be continued at intervals as long as is possible to get through between the rows. Last year, as an experiment, we put the "hillers" on our double cultivator (Gale) and went through just as they were coming through the ground. It worked splendidly. It stirred the soil, thus killing all weeds that had started, and covered those in the row, which answered the same purpose, and did not harm the beans in the least.

Harvesting.—As soon as the beans have assumed a yellowish color, pulling commences and is rapidly performed by the various bean-pulling attachments supplied with several makes of double cultivators. Morning and evening is the best time to pull, as the pods are damp and are less liable to break open when struck by the horse's feet. When pulled, they are forked into windrows composed of four single rows, left to season a couple of days, then turned, and two or three days afterwards, if the weather is favorable, they are fit to mow away. When turning them we place them in bunches, each containing a small forkful. In loading them, a wide-tined fork is used, running the fork under the bunch, not through it as in loading hay. This reduces the loss from shelling, which is very great if they are carelessly handled.

If the land has been properly worked before and after planting, it will be in the best possible condition for seeding to wheat without much further working, and thus in a measure enables us to compete with the more cheaply grown Northwest product.

Potato Culture.

Seldom does it happen that the whole Continent is so abundantly supplied with potatoes as has been the case this past year. Almost everywhere an increasing area had been year by year devoted to this crop, culminating in the spring of 1895, when a tremendous acreage was planted in potatoes (for instance, many of the big wheat farmers of Manitoba and Dakota planted whole sections of land with potatoes). The season was favorable and the crop enormous, with the very natural sequence that the price was ruinously low, many acres being left undug in some parts of the country.

A reaction is almost sure to follow, and comparatively few potatoes will be planted this spring. The lateness of the spring will also tend to diminish the area, by keeping farmers longer at the main crops, leaving little time for attending to the planting of a crop so recently unprofitable as potatoes. Again, it is unlikely this season will be so universally favorable to the production of big yields of this crop. Therefore we believe it will pay to have a fair-sized potato patch. Even if the market price is not high, many, from the experience gained this year, have learned the value of potatoes as a stock food.

A few hints on cultivation, etc., will not be out of place at this time. A large yield tends to reduce the cost of production. While the average production of this country is probably not much over 100 bushels per acre, 500 bushels per acre can be raised. Aim high!

While potatoes will grow in almost all kinds of soil, the best on the farm is none too good. A rich, sandy loam, naturally well drained, is perhaps the best. Manure will benefit almost any soil, but raw manure should not be so applied as to come in direct contact with the tubers.

Give deep and thorough cultivation. If soil is light and season likely to be dry, plant the sets deep, say four or five inches, using potatoes of fair size, uniform and smooth, cutting in halves or quarters; plant in rows three feet apart, dropping seed pieces eight to twelve inches in rows. Harrow frequently until plants are well up, which will kill many weeds and fine the soil.

Potatoes require plenty of moisture. Surface cultivation conserves moisture by forming a mulch, thus hindering evaporation. Cultivation should be frequent to keep down weeds, and should always be shallow. Deep cultivation injures the roots of the plants and decreases the yield of tubers. Potatoes should not be ridged up, but cultivated nearly level, except, perhaps, on cold, wet land. The potato ground should be set out in rows long enough to permit the use of a horse-hoe, which can do all the cultivating after the plants are too big for harrowing.

Potatoes should be kept in a dark place at a low temperature (32° is said not to be too low). To allow seed potatoes to get warm and sprout, and then rub off the sprouts, weakens the vitality of the seed and tends to decrease the probable yield.

Potatoes should not be grown more than twice in succession on the same land, particularly if any disease gets among them. Potatoes affected with scab should be treated with corrosive sublimate, if it is necessary to use such for seed. For the benefit of new readers we reproduce the directions for treating potatoes, as published in these columns last spring:—

Procure an ordinary barrel, and fit into the base a common wooden faucet. Purchase of a druggist two ounces of finely pulverized corrosive sublimate (*mercuric bichloride*). Empty this all into two gallons of hot water, and allow it to stand over night, or until apparently all dissolved. Place in the barrel thirteen gallons of water, then pour in the two-gallon solution. Allow this solution to stand in the barrel four or five hours, during which time it is several times thoroughly agitated to insure equality of solution before using. Select as fair seed potatoes as possible, wash off all the old dirt, and immerse as many as

you can or wish to treat at one time in the solution one hour and a quarter. At the end of that time turn off the solution into another vessel. The same solution may thus be used a number of times if wished. After drying, the potatoes may be cut and planted as usual. Plant upon ground that has not previously borne the disease. Remember this chemical is a deadly poison, so exercise becoming caution. The solution should not be put in metallic vessels.

We have observed some potatoes, grown on low spots in the Red River Valley, with brown streaks through the center. This "internal brown rot," as it is called, is reported as being prevalent one year in Manitoba, disappearing the following year. Such potatoes should certainly not be used for seed.

As to varieties, the old sorts, Beauty of Hebron and Early Rose, when they have not run out, seem to hold their own against new comers for general croppers. Morning Star, Crown Jewel, Rosedale, Freeman, and Burpee's Extra Early are all well spoken of by our crop correspondents.

Salt on the Land.

SIR,—I notice an inquiry and answer, on page 120 of the *ADVOCATE*, as to whether salt that has been used for curing pork is of any use to sow on crops. I may say that your answer corresponds very closely with my experience. Some 27 years ago I tried salt on a small scale, using half a pail of refuse that my wife had packed eggs in. I had been trying various other things, such as lime, ashes, plaster, etc., applying each at the time of sowing on different pieces of spring wheat, but none seemed to give as good results as the salt, which caused the grain to head out several days earlier than in any other part of the field. The straw was stiffer and brighter and the grain better. This so encouraged me that the next spring I sowed four tons of refuse salt got at the pork factories, in Ingessoll, that had been used in dry packing or curing pork. I sowed this on both spring wheat and oats, leaving one land unsalted. The difference was very noticeable. I sowed about 300 pounds to the acre, but I now sow 200, or perhaps a little over that amount. I never think of sowing spring wheat without it, and I sow more or less every year; and the last two years it was better than my fall wheat. I once sowed a seven-acre field of gravelly loam with spring wheat, sowing a barrel of salt per acre, and leaving a land unsown with salt. At harvest time this land of wheat was quite inferior. The next year this field was sown with oats. The same difference was seen in the oat crop. It therefore shows that it influences more than one crop. It stiffens the straw and renders it less liable to rust, and also seems to draw moisture from the atmosphere at night. I like to sow it on oats and barley. I also think it is good for root crop, especially mangolds. It is good for potatoes if put on the ground and worked in before planting; but it should not come in contact with the potato seed direct, else it will cause injury. I also put wood ashes on my potato ground and worked them in before planting. I have found them to pay me at the rate of 25 cents per bushel in first crop when potatoes sold at 50 cents per bushel or 75 cents per bag. I like to salt at the time I sow the grain, if I can, and cross harrow the drilling and roll immediately if the ground is dry. I have sown salt on fall wheat both in the fall and in spring, but never could see any benefit from it.

Oxford Co., Ont.

JOSHUA BOBIER.

How Thickly Should Corn be Planted?

It seems almost impossible to convince some men that corn for fodder, especially where no silo is to be used, should be planted in rows well apart and thin in the rows. The article upon "Corn for the Silo," by E. D. Tilson, in our March 16th issue, should be convincing enough; but some cling with such death-like tenacity to their old ways that more yet is needed to convince some that big, leafy stalks bearing good ears are better than fine, watery stalks that have little in them but water, but are easily masticated by the animals. Now, it is just possible to starve a cow to death on this watery, fine, easily-masticated corn, grown from seeding about two bushels or more of seed per acre. (Many of our best corn growers consider one-half a bushel, sown with a drill, too much.) Just think for a moment how the fine, early rhubarb boils down until one can suck it through a straw. Now, soft, fine corn would boil down much the same if it were tried.

In order to get a substantial flesh and milk-producing corn crop we must give the plants plenty of room. If we crowd or shade them we are depriving them of a proper amount of sunshine, rain and dew, and by refusing nature a chance to perform her kindly offices we get spindling specimens of corn plants, without any ears. Must we blame nature or man for the failure? A little thinner planting will produce stalks which bear nubbins of ears, which are somewhat better than the earless crop. The real value of corn depends upon the size, quality of stalk and leaf, and maturity of the ear. A well-developed ear of a strong-growing sort is equal in food value to the stalk upon which it grows, and when these are well cured and cut up (when a man has no silo) they produce the very best results in cattle feeding that corn is capable of when fed in the dried or cured condition. While planting with the corn planter, in hills, we may get the best results, yet, if it be sown with an ordinary grain drill, in rows at least three feet

apart, and stalks from six to twelve inches apart, we will be pleased with the results, if the land be in proper shape, proper cultivation given throughout the season, and the crop harvested and cured as it should be. Plant about two inches deep and follow the suggestions in our article on "Corn Cultivation."

Corn Cultivation.

BY E. D. TILSON, NORFOLK CO., ONT.

I had by this time (as recorded in the *ADVOCATE* for March 16th) arrived at the most satisfactory thickness to plant the crop, but the expense of giving sufficient cultivation by means of the hand hoe and horse scuffer ranged from \$1.50 to \$2.00 per ton. Two years ago I heard of the Breed weeder. It is very similar to a sulky horse-rake, with three sets of spring teeth. This machine is made in different widths. The one I like best for all purposes is the walking weeder, eight feet wide. With it a man and one horse can do fifteen acres a day.

We have our land, which is a light soil, well prepared before planting—cultivated, harrowed, and rolled several times. Three or four days after planting we start the weeder, before the weeds have time to get a start. We go over the field every four or five days, cultivating with the rows and also across them. This not only keeps down the weeds, but it keeps the soil moist. The weeder does not go deeper than about an inch, and, therefore, does not interfere with the corn roots. The common cultivator cuts the roots very badly, which does a great injury to the crop. Neither will these weeders tear up the corn by running over it up to the time it is two feet high, and even at three feet high it can be gone over without injury. If desired, the weeder can be narrowed to go between two rows, but this is unnecessary if the weeds have been completely subdued until the corn is three feet high. Mine was sandy land.

[NOTE.—A good plan is to start a wide sweeping harrow, just as the corn is coming up, crosswise. In about a week go over the field again the other way, and in a few days a third time. This may seem harsh treatment, but the corn will thrive under it. Members of our staff have used the harrow in this way with splendid results in the shape of crops. Weeds are exterminated and moisture conserved. When the corn gets up too high for the harrow, a one-horse scuffer or two-horse riding cultivator, like that made by the Detroit Harrow Co., which is also used as a grain seeder and general field cultivator, is started, doing two drills or both sides of one row of corn at a time. A boy and a smart team can cultivate easily a very large field in a day, and do it well. Once going through with the hoe may be necessary to pick out any thistles or weeds that may have started up in the hills or rows of stalks, as the case may be. The Canadian corn area this year will be larger than ever before, and if correspondingly large crops are to be secured we must have proper soil preparation, manuring, seed selection, judicious planting or sowing, and thorough subsequent cultivation.—EDITOR.]

Gleanings from Farmers' Institutes -- Division No. 9.

Specialties.—Joseph Haycock, M. P. P., Frontenac, thinks that a profitable income might be obtained by attention to branches that are often neglected. In the neighborhood of towns and cities, poultry forced along so as to be ready for the market early always commands high prices, and winter eggs always are in demand and can be produced profitably if care is taken. Gooseberries and currants are very profitable crops and bring good prices. They are also good shipping fruits. Any good corn land will bear these fruits. Do not plant the English varieties of gooseberries, as they mildew. Plant far enough apart to cultivate and harrow with horses. Keep the ground clean and well fertilized. Do not trim the bushes when they show signs of failing—set out another plantation. Ordinarily a plantation will last eight years.

Balanced Rations for Man.—Miss Millar, of the Ottawa School of Cookery, drew attention to the fact that farmers now are paying very much attention to feeding animals balanced rations. If it is important to feed animals a scientifically constructed ration, how much more important to properly feed the highest of all animals—man. If the human race were fed foods properly prepared and selected, there would be less disease, better teeth, bones, hair, etc.

Feeding Dairy Cows.—Alvin Gilroy, of Glen Buell, in a paper on "Care and Food of Dairy Cattle," emphasized the necessity of warmth, ventilation, regularity, cleanliness, and pure water in the production of cheap milk. Mr. Gilroy got very satisfactory results this winter from feeding well-matured ensilage, cut cornstalks, small quantity of hay, and five pounds provender daily.

The Corn Plant.—The subject that drew the most lively discussion was the growth and preservation of the corn plant. As to varieties, the general opinion was that the largest growing variety that would give the most grain per acre and ripen in the locality was the most profitable. As to preservation, the great bulk of opinion was that the silo is the most satisfactory way, not only as to monetary value per acre, but also as to cheapness of handling. Allowing corn to become too dry before putting in the silo was given as a common cause of mouldy spots in the ensilage. Where, through various causes, corn becomes too

dry for the silo it was found to be an advantage to wet it with water. There was considerable difference of opinion as to whether planting in hills or drills gave the best results, but the advocates of hills brought forth some strong arguments, such as: (1) Easier handling in cutting. (2) More thorough cultivation and a better chance to clean the land. (3) Better quality of corn. Having more sunlight would give earlier, sweeter, richer corn, with a larger amount of grain per acre.

Mr. Zavitz, B. S. A., O. A. C., gave the results of several years' experiments with regard to this point—hills vs. drills: (a) A little larger total yield per acre from drills. (b) A little larger yield of grain per acre from hills.

Mr. D. M. McPherson, of Lancaster, had best results from Mammoth Cuban and a sugar corn obtained from Omaha, raising, it was claimed, over thirty tons of corn per acre in 1895 from highly manured land.

Pastures—In some localities, especially in rocky, stony lands, the natural grasses of the country were highly prized, it being found that the milk, butter, and cheese produced from such pasture had a superior flavor to the common timothy and clover pastures. Some of the best farmers advocate the application of a top dressing of farmyard manure annually. The results obtained by Mr. McPherson in 1895 are so extraordinary that it would be well to give his rotation: First year—Corn for silo on sod heavily manured. Second year—Oats or barley seeded very heavily with mixed grasses and clovers. Third year—Hay. After the hay was cut, as soon as convenient, usually in July, top dress with farmyard manure. Keep all stock off this land. The grass soon comes with a rush and covers the manure, keeping it constantly wet. It soon decomposes, furnishing food for the grass, which gets a very strong root and is able to stand the winter well and starts strong and vigorous as soon as spring opens. On thirty-five acres of pasture treated as above, Mr. McPherson pastured seventy cows the summer of 1895. It is only fair to add that they had an abundance of rain.

Manures—We found that very few farmers are using artificial fertilizers, it being found more profitable to buy the fertilizers in the form of bran, oil cake, cotton-seed meal or other rich foods; feed them, have some profit on the operation, and have the manure for less than half the cost of commercial fertilizers. As to application of farmyard manure on lands not subject to wash or overflow, the leading farmers favor drawing and spreading on the land as soon as made. After the snow is, say, six inches deep, drop in small piles. If spread when snow is very deep it is liable to wash away when a thaw comes. If dropped in small heaps before the snow comes it will freeze solid to the earth and hold the frost for weeks beneath the heaps in the spring.

THOS. H. MASON.

DAIRY.

Corn Silage for Milch Cows.

Although the present prospects for abundance of growth are good, changes come about so suddenly that the lessons learned from the experience of the last few years in the matter of stock fodder should not be forgotten. Nor is it likely to be for some time, after a winter of such close feeding as has just past. Elsewhere in this issue, "F. J. S." makes some good points in favor of green fodder as opposed to silage for summer feeding. We herewith give a brief summary of what the New York (Geneva) Experiment Station has found to be true regarding corn silage for milk cows. The points made are as follows:—

For sustaining the milk flow a succulent food is especially desirable. Fresh and tender pasturage, natural and efficient food for this purpose, is available but a short time during the year.

Corn is one of the best foods when mature, and besides gives heavy crops. In ordinary seasons it can be fed fresh when at its best for only a few weeks. In the form of silage the crop can be stored and fed as cheaply as by any other methods that have been as thoroughly tested. The average results of a number of feeding trials may be summarized as follows:—

1. When corn silage replaced some other food or the amount of silage in the ration was increased,—

- (1) There followed in seven instances a decrease in the cost of milk, once an increase, and in one instance little change in cost.
- (2) There followed an increase in the yield of milk in six instances, and in three instances a decrease.
- (3) There followed a decrease in the cost of fat in six instances, an increase twice, and little change once.
- (4) There followed an increase in the amount of fat in five instances, a decrease in one, and little change in three instances.
- (5) There followed an increase in the percentage of fat in the milk in six instances, a decrease in two instances, and little change once.

2. When the change was from a ration containing corn silage to one containing less silage or not any,—

- (1) There followed an increase in the cost of milk in four instances and little change in one.
- (2) There followed a decrease in the milk yield in four instances and little change once.

- (3) There followed an increase in the cost of fat in five instances.
- (4) There followed a decrease in the amount of fat in three instances and little change in amount twice.
- (5) There followed a decrease in the percentage of fat in the milk in two instances, an increase in two instances, and little change once.

3. In general there was found an increase in milk flow accompanying the use of corn silage in the ration, and at the same time an increase in the amount of fat produced, the percentage of fat in the milk not diminishing.

4. At the relative prices ordinarily holding for different foods, milk was generally produced at lower cost, and the cost of fat production was lower when corn silage constituted part of the ration than when many other rations were fed.

Ensilage as Summer Feed in the Dairy.

BY F. J. S.

There are signs of a coming boom in the use of ensilage as summer feed. Why? First, and chiefly, because of that profit-preventing, success-debarring system, that careless, shiftless, ne'er-do-well practice, that ever-increasing, never-decreasing evil—sole dependence upon pasture. Secondly, because ensilage is a very profitable food, unquestionably the cheapest known winter feed, under our conditions. And, thirdly, because little, comparatively, is known of other summer foods.

Presumably, summer feeding begins when we stop feeding winter rations, which usually means turning out to grass. Now, our ordinary grass pasture is our cheapest summer feed—while it remains plentiful and in good, succulent condition—for about six weeks, or less; or till about July 1st. We are well aware that there is the possibility that on very valuable land it will not pay to pasture at all. Thus far these cases are rare, and it would be comparatively easy to prove that under our average conditions grass is king as stock food during its season. Where it is not profitable to grow grass or clover, then some kind of ensilage will doubtless be a necessary thing at this period; meanwhile, we maintain that it has no place while grass and clover are in their prime.

From the failure of grass until corn is again ready is a crucial period. When green corn is available, ensilage made from corn grown the previous year is no longer the cheapest nor most satisfactory fodder. That corn gains nothing by being ensiled is certain. Not only so, but a pound of silage costs more than a pound of green fodder corn. Further, it is not the easiest thing to keep corn in a silo during our hot July and August weather in as good condition as during cold weather. It will usually get too sour before being fed, as presumably no more animals are fed from the silo, and the surface is not removed fast enough to offset the higher temperature. Under these conditions it is patent that silage is not our best, nor yet our cheapest fodder after corn comes in. But when does corn come in? Flint corn may be ready for use, in an average season, about the middle of August, occasionally earlier; dent varieties a little later. Sweet corns are available two weeks earlier than either of the others. As a rule, by a proper selection of varieties, green corn fodder may be had by August 1st, or at least quite early in that month. Granting all this, there is still a period of four or five weeks, from July 1st forward, that is really the decisive test of the season. Here, if anywhere, silage finds its place as a cheap and useful summer fodder.

Which are our best available fodders at this season? Without doubt, a mixture of our common cereals and legumes. Lucern, where it can be well established, is excellent at this period, but our common grains are our chief reliance. Peas and oats, vetches and oats (that incomparable milk-producing fodder), or all three are most excellent combinations. These as a basis, with perhaps a sprinkling of barley in the first sowing, to hasten to maturity, and a little two-rowed barley or spring wheat in the second sowing, make most desirable rations for any class of stock. In any case we always wish one or other of the legumes present. Variety is more than the spice of life in the fodder of farm stock.

And now for a comparison of the value by weight of this mixture of green fodder and corn ensilage. We much regret that exact, practical experimental data is not available to assist us in this respect; but perhaps our experimental stations will waken up and give us this soon, since there is not a more important question in the whole range of our animal husbandry. By composition, these fodders stand thus:—

	Albuni- noids.	Carbo- hydrates.	Fat.	N. R.
Oats and peas.....	1.9	8.0	.25	1:4.8
Corn.....	.9	7.9	.3	1:8.5
Clover.....	1.7	8.7	.4	1:5.7

The above are, of course, the digestible constituents. A reliable analysis of corn silage not at my hand, I have substituted that of fodder corn, which will tend to give a rather more valuable composition than really belongs to silage. We have appended the composition of green clover to more thoroughly attest the value of these green cereals and legumes as stock food. It will be noted that the total digestible nutrients are but slightly in favor of clover. The composition of peas and oats (vetches are superior to peas in point of composition), as here quoted from reliable analyses, proves

their superiority to corn, and in actual practice we find this abundantly borne out. That other factor governing fodder values—palatability—is also materially on the side of the fresh green fodder. We would not attempt to place an actual dollar-and-cent difference on their value, but from experience we are convinced that they are worth materially more at this season, for milk, beef, mutton or pork production, than an equal weight of our average corn ensilage.

But what of the relative cost of production, as it is these two, cost and value, that determine the matter? The cost of corn silage is usually estimated at about \$1 per ton to \$1.50, with a crop of about fifteen tons per acre. We will estimate it at \$1.25. This includes seed, rent, and labor of cultivation and of filling the silo. It does not allow for cost of silo, not an unimportant item. But what is the cost of a ton of our cereal and legume combination? We think it is as easy to grow four and a half tons of green fodder as fifteen tons of corn. We offer an estimate of the cost of an acre of green fodder:—

Rent of land.....	\$2 00
Seed (1/2 bus. oats and 1 bus. peas).....	1 00
Cultivation (twice harrowed, once cultivated and drilled in).....	50
Cutting and drawing to barn.....	1 50
Four and a half tons cost.....	\$5 00
One ton costs.....	\$1 11

If this is correct, the cost per ton of green fodder and of silage grown twelve months earlier is in favor of the green fodder. But let us not forget that a year has been lost in the case of the silage. Under existing conditions we have now enough idle capital in farm practice, and this feature of summer ensilage is one to be strongly discountenanced. There is more than euphony in the oft-quoted statement, "Small profits and quick returns." Both, then, in value per pound and cost per pound, as well as in economical business practice, green fodder leads. We placed the rent rather lower in our estimate than is usual with corn, remembering that this green fodder will not occupy the land the whole season. But let us look further.

The month of September has become the busiest in the farmer's year. Fall wheat seeding, corn cutting and siloing, grain threshing, exhibitions, closing up summer work and preparing for fall work, supplying stock with fodder, etc., all saddle the farmer heavily at this season. To add to this, by siloing an extra quantity of corn for a year ahead is intrinsically bad. Corn depletes the soil immeasurably more than green fodder, and while this fertility is largely returned, it requires a richer soil for full returns than the other. There is less likelihood of failure in getting a stand of grain than of corn on all heavy soils. To depend upon silage between June 1st and October 1st, we are convinced is, in the main, radically wrong.

Separator Cream vs. Deep-Setting.

SIR,—I do not quite understand the drift of "Invicta's" two questions about cream and fat, but I know, on the authority of good men, that the per cent. of cream raised by deep-setting bears no fixed relation to the per cent. of butter-fat in the milk, while a given per cent. of cream by centrifugal separator has a fixed relation to the per cent. of butter-fat in milk. Since the Babcock test was used many interesting tests of this per cent. of cream have been made; Gurler found a difference of 25 per cent. in the butter value of milk that showed the same per cent. of cream in the glass test tube. The milk of fourteen different creamery patrons was tested by the Babcock test, also by the cream gauge, and showed:

Per Cent. Cream.	Per Cent. Fat.	Per Cent. Cream.	Per Cent. Fat.
8	3.80	17	4.30
8	3.00	17	3.85
10	4.05	16	3.85
10	3.70	16	3.80
10	3.60	15	3.40
14	3.50	15	3.00

Then, he gives records of individual cows giving milk testing 5.4 per cent. fat and 18 per cent. cream, another 4 per cent. fat and 18 per cent. cream, and another 3.30 per cent. fat and 18 per cent. cream, which shows the cream test is not reliable, and that a given quantity of cream raised by deep-setting does not represent a given quantity of butter, even if raised from milk testing same per cent. of fat, or, that two inches of cream in one can may mean one pound of butter, while two inches of cream in another can, raised from milk of same butter value, may mean one and one-quarter pounds of butter. Then we are asked to suppose "that 5 per cent. of the whole milk is taken as cream by both processes." I would ask, Where is the farmer who takes 5 per cent. of his whole milk as cream by deep-setting? I don't think it is ever done except in shallow pans. Deep-setting, as shown above, gives from 14 to 18 per cent. of the whole milk as cream, so to make comparisons we must stick to practice, and not give deep-setting the advantage of rich cream which it is not entitled to. But with the separator we can take such per cent. of the whole milk as cream as will best suit our purpose. Now, it is a fact that cream containing 35 per cent. of fat can be churned, if properly handled and ripened, at a temperature of 50° to 52°, and give the most exhaustive churning in 45 minutes (I mean the buttermilk to be drawn at that temperature); the butter will be very free

from cheesy matter, and need not be washed. Now, seeing that that temperature suits our winter conditions much better than handling thin cream, such as is raised by deep-setting, which must be churned at a temperature of 58° to 60°, and if the temperature falls below that the cream swells and fills the churn, and the butter won't come, or if it does come we find our buttermilk testing from 1 to 3 per cent. of butter-fat; so it may be claimed that the separator gives us complete control of the cream, to suit different conditions of climate; no milk to care for; rich cream in cold weather and thinner cream in warm weather, if we wish it; the best of skim-milk all the time for our calves (I raise all pure-bred calves on skim-milk), besides a cash market for our butter if we wish it, and a gain of a few cents per pound on our butter. It can be said that the separator can be managed to give us the cream of the most churnable quality all the year round, so as to make more and better butter than can be made by cream obtained by deep-setting. J. F. HINDMARCH.
Assiniboia.

More Harmony Between Maker and Patron.

Messrs. Bell, of Tavistock, Beam, of Black Creek, and other leading members of the Dairymen's Association, emphasized, at the cheese and butter convention held at Guelph, Ont., in March, the importance of more harmony between patrons and cheesemakers. There has heretofore been too much holding aloof from each other, as though each were trying to beat the other in his department. A moment's unbiased reflection should not fail to show that the success of one department is necessary to the success of the other. The maker cannot make good cheese except he has good, clean-flavored milk to do it with, and except the cheese be first-class the price obtained cannot be the highest. Now, what appears to be needed is greater confidence by the patrons in the maker, who ought to be, if he knows his business, in the best possible position to give advice as to the care of the milk.

Mr. Bell pointed out that in the great majority of cases milk out of condition was the result of want of knowledge in reference to its care. So that it is wise on the part of the maker to cultivate a friendly intercourse with the patron; not only giving practical suggestions, but by frequent reminders stimulating a care that may be overlooked through sheer thoughtlessness. Let it be remembered also that the patrons are reading and observing, and it is idle for the maker or factory owner to demand A1 milk if the factory and surroundings present a slovenly and filthy appearance. The factory should be a bright and shining example to the whole neighborhood.

Will Alfalfa Flavor the Milk?

SIR,—Will you please tell me, through your paper, if the use of alfalfa, as a pasture, gives the milk any flavor? I seeded down a field of four or five acres, two years ago; had a large yield from it last year; cut it twice, and could have cut it the third time, but used the last growth for pasture. The field was a marked contrast to all other fields, being bright green and in vigorous growth, while the others were parched brown, nearly dead from the drought. My neighbors are going into the alfalfa strongly this season, but many claim that it gives the milk a flavor. I put my cows in the old pasture for half a day, and would leave them in the alfalfa only for two or three hours in the afternoon. There was a strong taste to the milk; but my neighbor's milk, who had no alfalfa, was just as strong, so I am not satisfied that the alfalfa caused it. I account for the strong taste in this way: After the rain set in—the pasture grass being nearly all burnt out by the continued drought—the weeds got the start, and the cows ate up everything green, greedily. Perhaps some of your readers who have used alfalfa several seasons would let us know if they noticed any flavor in the milk from its use. With many wishes for the continued prosperity of the FARMER'S ADVOCATE, I remain,
Stormont Co., Ont. E. D. AULT.

POULTRY.

Brooder Management.

BY MRS. IDA E. TILSON, WISCONSIN.
I rented a brooder last April, with which to raise part of my chicks. In fact, I used it as a nursery or infirmary, putting in all the lame, feeble or small ones. For the first few days, its quietness, peace, and even temperature no doubt saved several lives, and even put them ahead of those chicks left under the hens; but the second week those outside secured more exercise, and forged a little ahead. Though we get knowledge in many ways, the famous kindergarten maxim is very true, that "We learn to do by doing." I certainly learned some things about preparing for and buying a brooder. The one I used had its glass in one end, consequently the chicks all crowded there to the light, as soon as they knew enough to do anything, and two feeble creatures, the only ones lost, were trodden to death by their companions. In a glass-topped brooder the chicks would scatter and stay wherever the temperature suited them. A glass top would also be much more convenient to look through at thermometer. Instead, I got down to peak through the end till my knees were like rusty hinges. I hung the thermometer so the bulb would

come about on a line with a chick's head and breathing apparatus, and, by bending the supporting nail, finally got the figures turned in the most favorable light to read. Only one little corner of the brooder was open to let out the sweepings. I should want a whole side movable; in sections it might be, if there was danger of chicks jumping out. I have heard considerable discussion on the height of the incubators and brooders. The incubator, wherein eggs stay till done, might as well be put on longer legs, like some new styles, and prevent so much stooping. With brooders, another point comes into consideration: the higher up, the more reluctant are chicks to venture down and out. By having their ladder wide, I had no great trouble, however.

The main thing in previous preparation is to have a place for every such machine or implement, where it can be kept without moving and without endangering other buildings. No person who has not helped to lift one knows what a massive edifice even a brooder is. In spite of makers' assurances, I have yet to meet a brooder successfully used right out of doors in our far North. Think of the variations to which it thus must be subjected. If placed in the dwelling house, where is the grass run? If in the cellar, there is danger of sore-eyed chicks, as I know from a Dakota correspondent. Although a brooder lamp is no more dangerous than any other light, yet there is risk, and some insurance companies require application for a "permit" to run either incubator or brooder in a dwelling. As Nellie Hawks lately suggested, bargains in old buildings may often be obtained. That meat-market refrigerator, costing \$50, but bought for \$5, must have made her a capital brooder house. A neighbor of mine bought cheaply for his whole hen-house a temporary sort of shanty erected after a fire.

I located my brooder in a shed, open on two sides, and succeeded very well, but during one wind storm the blaze flared so I put out the lamp temporarily and blistered a finger doing this, so hot had the burner become. A brooder out in draughts generally has its lamp boxed, and that tends to overheat burners and makes work getting at the lamp. Newspapers are nice to put in main part of brooder, below the sand or rubbish, and lift out for a cleaning, instead of scraping the wood, but cannot be used in outside draughts, as I found on a few trials, nor my favorite chicken tablecloth of brown paper, for which I substituted stiff strips of shingle, easily removed and cleaned. Our cats are trusty, and did not molest my brooder chicks, though the latter were in and out of their lath yard. Such chicks are more defenceless without their mother's warning voice and sharp beak; hence, if one wishes to be free from all worry about cats or dogs, he needs a yard of fine, high wire.

Before beginning operations with either incubator or brooder, I dig any soot out of receiving tube as well as I can and boil up the lamp burner in soda water, then start with a new wick and the best quality of oil I can buy, though we cannot obtain here the highest tested oil. I should advise filling the lamp each morning and each evening. Being used to a hot water incubator, which kind takes about a day to warm up, I was surprised to find this hot air brooder respond to my wishes in one and a half hours. Of course, should any accident happen, its temperature would rise or fall much more rapidly than hot water allows, hence the latter is generally considered safer. Practice in running an empty incubator or brooder is the cheapest and safest way of learning to manage it occupied. The unpleasant, sickening smell of fresh varnish, etc., will then have disappeared. The first temperature was advised to be 90°. I had proved, by previous trials with two thermometers, that 80° in main apartment meant 100° under the "mother" part, and found that combination a successful average, which was gradually but quite rapidly reduced. Though the chick runs out into a much colder temperature when he leaves his natural mother's feathers, he can immediately return and nestle against her warm skin. Cold air braces him and us, but not a continuous chill. Those with much experience handling brooders say, "Have the 'mother' part warm enough," because the chicks can go out into the main portion of brooder if too warm in former; but keep an even temperature, because the helpless chick has no other refuge if the whole is wrong. English poultry papers give a lower range of temperature for brooders, owing, I think, to their softer climate. Perhaps I succeeded because my brooder was not overcrowded. The provisions for ventilation are sometimes so poor that many brooders really accommodate but one half those they are listed to hold. I found the machine most difficult to run in comparatively warm weather, when the lamp had to be put out occasionally; hence, I believe brooders are designed for early and wholesale work. An incubator is similar, and needs the fresh eggs and eggs all one age. They must also be good for the circumscribed village lot, and I would suppose for fancy poultry, which needs to be well watched over. Farmers working on a small scale, with poor conveniences, better adhere a while longer to the "old way."

Setting Hens.

It is well to set not less than three hens at a time if it can be done. On the tenth day test the eggs, remove the unfertile ones, and give the balance, if possible, to two of them. The third one may be reset. The two full broods, when hatched,

can be given to one hen to be reared. The other hen will soon commence to lay again.

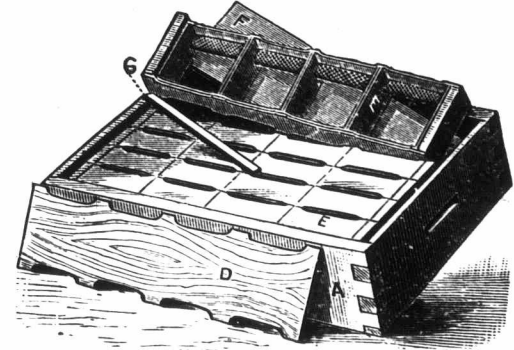
The Poultry Chum recommends sprinkling the eggs and nest of a setting hen with flowers of sulphur to destroy vermin. It is also well to dust the hen with insect powder when she comes off with her brood.

APIARY.

Comb Honey.

As the season of the honey flow approaches, the colonies should be strong and overflowing. Light colonies may be strengthened by occasionally giving a frame of hatching brood from some strong colony which will suffer no injury from the loss of it. This, however, must be done cautiously, and no old bees carried from one hive to the other, as that is most liable to start robbing.

For comb honey the old-fashioned surplus boxes, holding 25 to 30 pounds, are regarded as relics of the past, and even if for home consumption, pound or two-pound sections are always preferable. Section holders, illustrated in the accompanying figure, reproduced from Frank Benton's (M. S.) Honey Bee Manual, with sections folded and in place, each section supplied with thin foundation, preferably full sheets, should be in readiness before the opening of the harvest. Forty to fifty sections for each hive should be prepared.



Super with sections and section holders in place. A, super; D, separator; E, section; F, follower; G, wedge.

The foundation for sections should be the quality known as "thin surplus," or if full sheets be used, "extra thin surplus." In cutting foundation, either for sections or frames, the edge to be attached should be perfectly straight. These should be secured to the wood by pressure, combined in some instances with heat.

Starters half to three-quarters inch in width are sometimes used at the bottoms of sections to secure firm attachment of comb there. Top starters an inch or less in width may be used alone as comb guides when it is desirable to avoid great outlay for foundation.

The use of strips of tin or wood as separators (shown at D) between the sections insures straight combs with smooth surfaces, thus convenient to handle and ship. It is better not to put surplus honey receptacles on the hive until the honey flow actually begins, as no work will be done in them until then. Moreover, all the heat is needed in the brood department during the early part of the season.

VETERINARY.

To Prevent Joint-ill.

The foaling season, which has already commenced, will soon be general. A disease of young foals which occasionally assumes serious frequency in large studs in some districts is what is commonly called joint-ill or navel-ill. The diseased condition of the joint is supposed to arise from an infection of the navel by some specific poison or microbe. The manifestation of the disease is generally appreciable before the thirtieth day after birth; in the majority of cases before the twenty-first; in most, indeed, before the seventh day, according to Professor Penberthy, in a recent address delivered before the Midland Counties Veterinary Medical Association. There is much more hope, he said, for the preventive than the curative treatment. "One most inevitable cause of maintaining the disease," said Professor Penberthy, "was the foal-box. By bringing the mares to the one box everything became contaminated. Therefore the mares should foal in their own boxes, which should be disinfected as much and as frequently as possible immediately before the time of foaling." In addition to such a precaution the navel of the newly born foal should be immediately cleansed and well disinfected with carbolic acid or some ingredient that does not irritate, and in the case of valuable animals something should be used to cover the part for a day or two. The dying parts of the navel cord should be dressed as often as possible with a strong antiseptic. The dusting on of some dry powder, such as sulphate of zinc or a little borax and flour, was what Professor Penberthy generally advised, and it had been followed by extremely good results if the parts had been well washed. One speaker at the meeting very truly remarked that the disease was seldom observed in the case of animals which were foaled out of doors. "Let a mare be in a perfect state of nature and there is little fear of joint-evil."—Live Stock Journal, England.

GARDEN AND ORCHARD.

Apple Trees Among the Nova Scotia Granite.

BY AN OLD FARMER.

On land thoroughly drained and the soil of sufficient depth, apple trees are found to flourish and bear equally as well among the granite rocks as those planted on land free from stone if given the same care in pruning and protection from the cold north wind. Thousands of acres of such land could be made profitable in growing apple trees where clearing off the rocks would cost more than the land is worth for tillage. On many farms throughout the Valley of the Annapolis a large portion of the land is rocky, where among the rocks is found the very best soil for the growth of apple trees. Many of our young men, instead of leaving to seek employment in a foreign land, would find it more profitable to occupy their leisure time at home in clearing and draining the land and planting an orchard of apple trees, to accomplish which very little money is required, say from five to ten dollars per acre for the land, and with his own labor could do all that is required to give him an orchard that in ten years would produce nearly a barrel of apples for each tree, and in twenty years, with proper treatment, five or more barrels each.

How to Plant.—In setting out young trees, cut off the tap root, if any, and set the tree on the surface level and haul sufficient earth (sandy loam is best) and cover the roots a foot or more, and annually after the tree has started to grow spread two or three inches in depth of loam or bog mud around the tree as far as the branches extend to replenish the soil that has been washed away by the rains and protect the roots in dry weather.

The best trees are grown by planting the seed where you want the tree to grow, and whether the seed is planted or young trees set out there should not be less than forty feet space between them, so that they may attain full growth without shading the whole ground, as they require the warmth of the sun to ripen and flavor the fruit; but many persons favor planting nearer, and say they will do equally as well for a number of years and bear as much per tree, and when they are grown so as to shade the ground, cut some out and leave sufficient room for the others to grow. But seldom, if ever, is the man found with the courage of his convictions to cut them down, but leaves them to encumber the ground without producing good fruit.

Pruning.—Start the tree with not more than three branches about five or six feet from the ground and prune so as to form low and spreading branches. Cut out all the suckers and limbs that cross each other and chafe the bark, and keep the tree well thinned out annually so the sun may shine on the fruit, which very much improves its flavor. Any time is better than no time, but April is a good month to prune, when the frost is out of the wood and before the buds start; it then has the whole season to form a new growth of bark where the limb was cut off.

Cultivation and Fertilizer.—If sufficient net wire is fastened to stakes around the trees to prevent the hogs from injuring them, and they are allowed to root up the ground, the trees will not require any other cultivation or fertilizers.

Pruning the Orchard.

Perhaps no department of the farm is receiving more consideration at present than the apple orchard. That it should be pruned occasionally goes without saying. The time and manner of doing the work is worthy of careful consideration. With regard to the proper time for pruning, an old adage says: "Prune in winter for wood, and in summer for fruit," and probably no better rule can be given. The *Canadian Horticulturist* says that the philosophy of this is explained by the fact that anything which checks the wood growth of the tree tends to the metamorphosis of leaf buds into fruit buds; and, on the contrary, that which favors wood growth lessens that tendency. Thus, while a tree is young and growing rapidly, it produces little or no fruit; but when it has attained a certain degree of maturity, and grows less vigorously, it begins to produce fruit. On the same principle, a tree that has been girdled will often be overloaded with blossoms, though not yet of the usual bearing age, or limbs which are artificially bent down will yield fruit before the other limbs of the same tree. Now, summer pruning checks the growth of the tree, and therefore tends to increase its fruitfulness. By it the foliage is removed just when it is in active operation, taking in from the atmosphere carbon

and otherwise transforming the crude sap into a suitable liquid for building up the cellular tissues of the tree. To a limited extent this may be done in safety, but done too freely the tree will be some time in recovering its strength.

In favor of the summer time it is urged that wounds made then heal more readily than when made in the winter; but perfect healing will also follow winter pruning, provided the wound is properly protected from the air and moisture by paint or varnish. Generally speaking, summer pruning should be done from the middle of June to the middle of July.

A caution which the *Horticulturist* notices is never to prune in spring after the buds begin to swell and the first growth is pushing, for the sap, being active and not yet sufficiently matured for healing the cut, will leak, and this so-called "bleeding" will continue for a long time.

The proper manner of pruning is perhaps of more importance than the time of doing it. It is altogether a bad custom to neglect to prune until the limbs are very large or to cut them out in such a way as to leave a stump sticking out from the trunk. When dead stubs are allowed to project from the trunk they are almost certain to decay right back into the body of the tree, thus sooner or later rendering it hollow or rotten-hearted. Large limbs should never be removed, if possible to avoid it; but if necessary, they should be sawed as closely as possible to the trunk, and the wound should be immediately covered with some preparation which will exclude the air. Various preparations have been recommended, as a coating of thick paint or coal tar of such consistency that it may be applied with a brush. A satisfactory preparation is made by taking a quart of alcohol and dissolving in it as much green shellac as will make a liquid of the consistency of paint.

8th its leaves showed some brown spots, which soon gave the foliage a draggled appearance. The fruit continued to look well until August 8th, when the branches were bending with the load they carried. The fruit fell from the tree largely from the middle of August until the middle of September, when an excessive drought was experienced. The picked apples which showed no rot, taken from the tree on September 19th, weighed 43 pounds and numbered 416. Forty-eight per cent. of these had been attacked with codling moth. The rotting apples numbered 117, of which 64 per cent. were injured. We might add that several other trials all resulted in favor of spraying, some of them even more strikingly than the one illustrated herewith.

Planting Evergreens.

In passing a farm where the owner has appreciated the value of trees to such an extent as to decorate his homestead with them, one at once becomes anxious to learn who this well-to-do, sensible man is. And yet how few, comparatively, take the trouble to go and do likewise. It requires no persuasion to convince one that a lot tastily decorated with evergreens and deciduous trees is more beautiful, more comfortable, and much more valuable, if put upon the market, than the bare homestead, having few if any more trees than those of the fruit orchard somewhere out at the back. Why this is the case, every man owning a farm bare of ornamental and shade trees will be able to answer for himself if an answer is desired. This and other countries are recognizing the importance of more attention to this work, and have established "Arbor Day," which we regret is not more practically recognized than it is, although the extent to which it is observed cannot but prove a great benefit within a very few years.

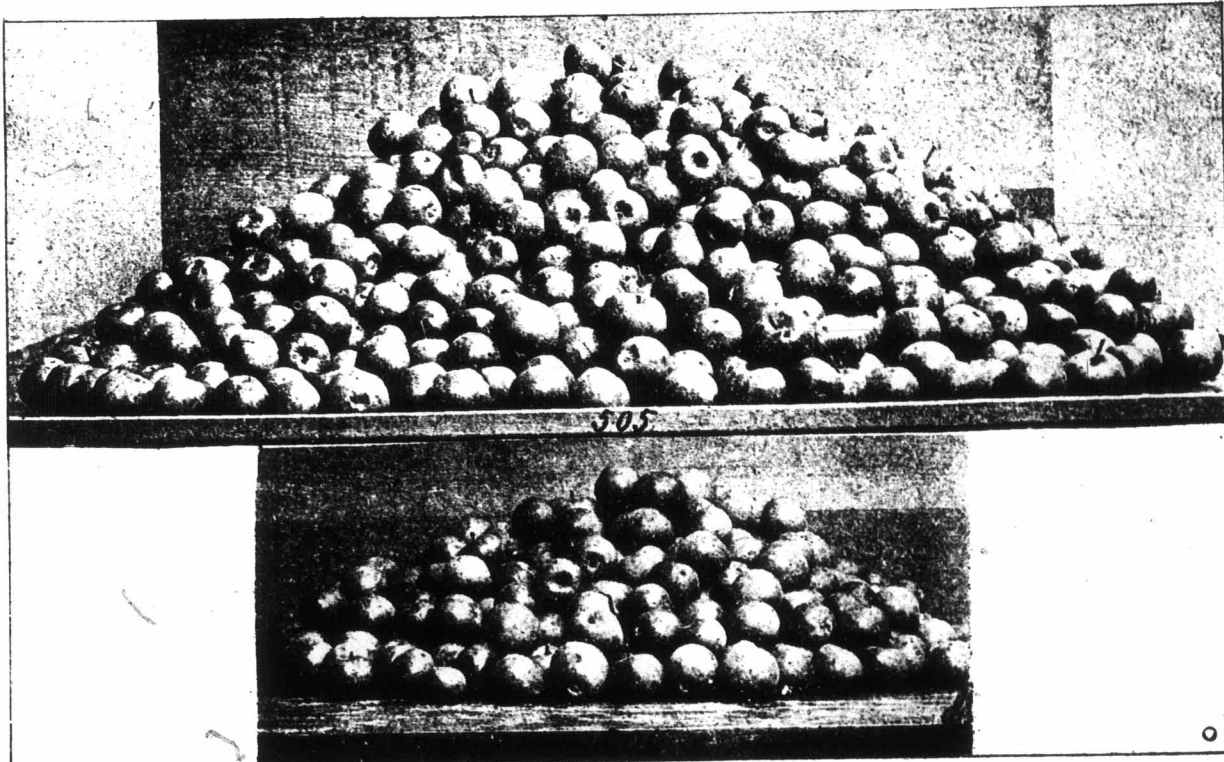
It goes without saying that no "front" is at all perfect without at least a few nice, shapely evergreens. We do not approve of stiff moulding and trimming trees into monotonously uniform bunches; neither is a loose, straggling, sprawling evergreen a thing of beauty.

Hedges are entirely becoming and always admired, and, of course, must be kept trimmed. Now, to obtain a cedar or spruce hedge is not a difficult nor expensive matter. First of all the ground must be prepared in much the same manner as it would be for fruit bushes, or even for a corn crop, by cultivation and manuring, so that a fine, mellow, rich tilth is obtained. This can be done at leisure some time before the planting is to take place. While the worth of a beautiful hedge surrounding a lawn or bordering a walk is fairly well recog-

nized, its true value when on the north and west sides of a fruit garden is not appreciated to nearly its full extent. Not only does it protect fruit bushes from bleak and destructive winds, but it also prevents the forming of heavy snowdrifts, which are so destructive to currant and berry plants and bushes.

A very fine pair of cedar hedges on the farm of Thos. Baty, near London, Ont., which have only to be seen to be admired, were planted and cared for in the following manner: The ground had been plowed the fall previous to planting, and furrows left where the hedge rows were to stand. Immediately after spring seeding, a cedar swamp was visited, where young cedars from 18 inches to three feet high were pulled up and hauled home on a hay-rack. They were planted the following day about a foot apart in the row. The larger plants were trimmed back to about the height of the lower ones, and these seemed to grow the best. A number that were over were planted in a block in the garden and used the next spring to replace those that had died. The ground on each side of the row was hoed the first year and mulched the second. The hedges took care of themselves after that, except that they have been trimmed once a year. Another equally good hedge in the same county was treated much the same, except that it was planted towards the end of May. It is preferable to secure the young trees from fairly high ground. Many persons will require to get nursery-grown stock.

The value of windbreaks at the north and west sides of outbuildings and residence can be appreciated to their full value only when lived behind for a time. A single or double row of Norway spruce answers exceedingly well for this purpose. They may be set out in either spring or fall, but the ground should be fallowed some time before the time of planting. A few hours with a team three or four times in the season will put the ground in



505—Apples picked from sprayed tree—weight, 135 pounds. 506—Apples picked from unsprayed tree—weight, 43 pounds.

As to the form in which to shape the tree, it is well to study the natural habit of the tree, and prune to favor that, some sorts being spreading, others pyramidal. Begin the work after the young trees are set out, and continue year by year removing the suckers and small branches that threaten to cross others or make the head too thick. A too common practice is to leave trees till nearly of mature size and then begin cutting out large limbs, a system of reckless butchery that soon leaves a decrepit, dying orchard.

Spraying vs. Non-Spraying.

To spray or not to spray is the question which many orchardists are debating in their minds this season. The accompanying illustration is a grand object lesson, showing the difference between the product of sprayed and unsprayed apple trees growing side by side in 1895, as much alike as possible in everything but spraying. The cut is reproduced from Bulletin No. 59, on spraying experiments in 1895, conducted by Kentucky Agricultural Station.

The trees were of the Ben Davis variety, of medium size and very thrifty. The tree from which the apples represented by Fig. 505 were taken was sprayed after much the same fashion as is recommended in the spray calendar published in April 15th issue of the *Advocate*. From this tree 1,351 apples, not rotting, and weighing 135 pounds, were picked September 20th; 248 (18 per cent.) were mined by codling moth. Of rotting apples, 335 were taken from the tree, and 130 (39 per cent.) of these were injured.

The tree from which the apples represented by Fig. 506 were taken bore more apples than the sprayed tree, but lost most of them before picking time. During the fore part of the season its leaves and fruit remained in better condition than that of other unsprayed trees. On June 8th its leaves were unspotted and its apples sound. By August

excellent form. For planting, nothing surpasses a tree six or seven years old, which has been transplanted at least three times. Most failures come from the use of spindling trees which have not been transplanted in their nursery career. In putting out the row there is no more convenient way than to open a furrow each way and stand the roots in the bottom, well spread out; then carefully fill in by hand. The ground should be kept cultivated for two or three seasons at least after the trees are planted. This can be done as easily as a row of corn. Many apply a mulch of straw or chips, which answers well instead of cultivation. The writer saw an excellent row a short time ago that was planted last November, in which about 90 per cent. are alive and very thrifty.

There are many other portions of the farm upon which evergreens are peculiarly suited, viz., along the front of the farm, upon one or both sides of lanes, or they may be well used as a beautiful covering to waste or unsightly spots. In fact, there are a score of places on almost every farm where the presence of a few nice evergreens would become actually things of beauty and joy for all future time.

Diseases of the Potato.

Carefully conducted experiments have been carried on with potato diseases at Cornell Agricultural Experiment Station, and from the information gained bulletin 113 has been supplied, a summary of which is as follows:—

Potato rot, or late blight, is caused by a fungus which may develop with extreme rapidity under favorable circumstances. It may cause the decay of all parts of the potato plant, including the tubers.

A leaf affected by late blight normally shows distinct brown and mostly large areas of varying form, but usually not circular spots; these may enlarge very rapidly, the under surface of the leaf showing a frost-like growth in the parts first attacked. Unaffected portions of the leaves retain their healthy green color.

Tubers affected with potato rot assume a dark color where the fungus is found. Where decay takes place slowly, the dead portions become dry and shrivelled; during rapid invasions considerable moisture may be present in the rot.

The early blight of potatoes does not cause the tubers to rot. A more or less rapid drying and curling of the leaves and stems mark the presence of the disease. The edges of the leaves are first visibly affected; the color changes to yellowish-brown, while the central parts of the leaflets gradually become lighter green or even yellow and more or less spotted. Eventually all portions above ground turn brown.

Potato scab, as commonly found upon the tubers, is due to the presence of a fungus. Similar blemishes have also been ascribed to the work of bacteria, and to insect injury.

The late blight of potatoes may be successfully treated by spraying the vines two or three times with the Bordeaux mixture. The first application should be made during the latter part of July; it may be repeated at intervals of one to three weeks.

The early blight of potatoes may be treated with partial success by means of the Bordeaux mixture. The vines should be sprayed when about two-thirds grown, and the application should be repeated as necessary, the foliage at all times being well covered with the mixture.

Proper methods of fertilization and of cultivation have also proved to be of much value in reducing injury from early blight, as was shown by greatly increased yields.

The apparent increased yield per acre of potatoes sprayed with the Bordeaux mixture was 44.8 bushels.

The increased yield per acre of potatoes well fertilized and cultivated, as compared with partially neglected plants, was 100 bushels per acre.

Seed potatoes affected with scab may be cleaned and made fit for planting by soaking them in a solution of corrosive sublimate.

Land in which the fungus causing potato scab is known to exist should not be used for growing potatoes or beets except at intervals of several years. Even treated seed will produce scabby potatoes, if the scab fungus is in the soil.

Potato beetles may easily be destroyed by means of the arsenites. Paris green and London purple are the safest insecticides to use.

Flea-beetles cannot be controlled satisfactorily. Bordeaux mixture, thoroughly applied, appears to be the best practical remedy against these insects. This material probably does not kill the beetles, but simply keeps them away.

Pumps for driving the liquid through nozzles in the form of a fine spray are on the whole most satisfactory. They can be arranged so that several rows may be sprayed at once.

Horse-power sprayers can be recommended for spraying potatoes. If the plants are sprayed for the potato beetle, one nozzle over each row is sufficient; for flea-beetles and for fungous diseases, it is better to have two nozzles for each row, that a more thorough application may be made.

The Armenian farmers are entirely without seed, and unless the Government helps them there will be no sowing. Relief disbursers at Gurun have been arrested, and many persons are dying of hunger. At Bitlis, American relief agents are allowed to distribute.

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.

CHRONIC LAMINITIS.

T. A. M., Carman:—"I have a fine mare, seven years old, that for about seven months has been sore in front feet—in fact quite lame; hoof seems very hard, and when pared out in the sole there are red streaks, like blood, in the hoof close by the frog. Please prescribe?"

[Probably incurable. Keep the hoofs soft by soaking in tepid water, and the application of a poultice three or four times a week. If the animal is kept shod, have shoes moved every four or five weeks. At each alternate shoeing, apply tar and oakum to the sole, and put sole leather between hoof and shoe; during the period that this is applied, soaking and poulticing should be discontinued. If the animal is not required for work, remove the shoes, apply a blister to the coronet, and turn out to pasture for at least two months.]

W. A. DUNBAR, V. S., Winnipeg.]

LIVE STOCK MARKETS.

Toronto Markets.

There was a decidedly better tone to the cattle trade. Prices advanced a shade over my former quotation. Some of the firmness is accounted for by the opening of navigation and the presence of four buyers for the French and Belgian markets. Mons. Henri Vaulandegheim and Theophile Classim took a ship load, about 700 head, at 41c. per lb. These were prime quality, the best that have appeared on this market for some time. Mr. Halligan received the commission to buy, and will want a further consignment next month. We are informed that if this shipment is successful, it is likely that a considerable trade will be done with both these countries in cattle, lumber, and cheese; they are shipped to Havre, in France.

There were 14 carloads of cattle from Manitoba, fed and watered on the track. About 20 carloads went from this market for shipment on Monday. Mr. Joseph Wilson and Mr. H. A. Mullins have returned from the Northwest and Manitoba, where they purchased 225 head of cattle, which they sold to Messrs. Ironsides to ship through to Britain.

Export Cattle.—Although a good number of cattle were in the right sort for export were hard to get. As the export trade has fairly commenced, we had a much more active market every thing offered was sold before noon. Shippers, 31c. to 41c. per lb. Mr. Jas. Eakins, Mr. Crawford, and Mr. Winnett were the buyers for export.

Butchers' Cattle.—The men from Montreal were buying freely. The market was improved, not only more active, but prices were better by about two dollars a head. Prices ruled 21c. to 31c. One picked lot sold for 31c. per lb. Mr. Peterman and Mr. Cranson sold out before noon—3c. to 31c. per lb. Nearly everything sold before the close of the day, being the best market on record for the year. A load averaging 1,050 lbs. sold at \$3.30 per 100 lbs. A load averaging 980 lbs. sold at \$2.85 per 100 lbs. A load averaging 1,000 lbs. sold at \$3.10 per 100 lbs. Eighteen cattle, weighing 21,610, sold for \$31c. less \$2 on the deal; 21 cattle, weighing 21,150, sold for 31c. less \$2 on the deal; 6 cattle sold at \$32 per head; 7 cattle, bought for shipper, 1,150 lbs. average, 31c. per lb.; 5 cattle, 1,050 lbs. average, 32 per head.

Bulls.—Mr. Macdonald is about the only buyer in this line, shipping a lot by way of Portland. A buyer here purchased a large consignment of heavy bulls for Belgium; this gave more strength than usual to the market. Prices quoted \$2.50 to \$3.25 per 100 lbs. Some stock bulls went as low as 2c. per lb.; one, weighing 1,270 lbs., sold for 3c. per lb.

Stockers and Feeders.—Buying was fairly active; there was a fair demand for nice sized, lean little stockers; one dealer took 50 head, about 1,000 lbs. average, for \$2.60 per head. About 450 head were purchased for the Northwest; these were bought at \$2.75 average. Good feeders fetch 3c. per lb.; light stockers quiet at 21c.; half fat wanted.

Sheep and Lambs.—Yearling and spring lambs somewhat scarce; ruling figures for 4c. to 5c. and 51c. per lb. Spring lambs wanted at from \$3.50 to \$5 each.

Calves.—Prices ruled from \$3 to \$5 to-day; market somewhat flat. The majority of good calves sold for \$1.25 per head; those somewhat better touched \$1.50 per head, but choice calves sell well at \$5 each; 202 on the market.

Milk Cows.—About 25 head on offer; most of them sold at prices as quoted, \$20 to \$40 per head. Good milkers in request for city dairymen, and will fetch top prices.

Hogs.—Offerings surprisingly liberal for this time of year, but all sold eventually. Best selections of bacon hogs held firm at 4c. per lb., weighed off cars. Thick fat were in too large supply, and dropped off in price. There were on this market 3,000, making 8,482 for the week, the largest number ever received in one week since the market was opened. A slight advance may be looked for next week. Choice selection, 4c. per lb.; thick fat, \$3.50; stores, \$3.75; sows, \$3; stags, \$2.

Dressed Hogs.—The deliveries of dressed hogs were freer, and for anything choice from \$5 to \$5.25 was again paid, being a slight advance on Saturday's quotation of \$1.75 to \$1.80.

Grain Markets.—The receipts of grain were very small all the week; only two small lots of oats offered on the street market at 27c. No wheat offered for the last two weeks; 60c. for goose wheat per bushel offered. On the street market today one load of barley sold at 34c. per bushel.

Hay is still coming in freely, about 25 loads per day, and sold down to \$15 per ton.

Straw.—Offered at \$12 to \$11 per ton.

Hides.—The market keeps quiet, and the movement in all lines is very limited. No. 1, green, 5c. per lb.; No. 1, cured, 51c. per lb. The tone is healthy, and prospects decidedly better.

Skins.—Calfskins—No. 1, green, 6c.; No. 2, 5c.; cured, 70c. each. Sheepskins—Fresh, \$1 to \$1.25; and early, 40c. to 60c. A large quantity of black harness leather was shipped for export last week, the first on record.

Wool.—Fleece combing, 20c.; tub washed fleece, 15c. to 19c. Butter.—There is no improvement, tendency lower. Creamery fresh made, tubs, 17c. to 18c.; pound prints, 18c. to 19c.

Eggs.—Market easy and unchanged; single case lots at 10c. per doz. New laid about the same price or a little better; 2 doz. for 20c., or 1c. per single dozen.

Poultry.—Prices irregular; very scarce.

Cheese.—Small lots are quoted at 8c. "Meadow Sweet," a full cream cheese, per package (in great demand), at 10c. May 8th.

Chatty Stock Letter from Chicago.

(BY OUR SPECIAL CORRESPONDENT.)

Top prices for different grades of live stock, with comparisons:—

	1896.	1895.	1891.	1883.
CATTLE.				
1500 lbs. up.....	\$ 4.55	\$ 6.00	\$ 4.75	\$ 6.00
1350 @ 1500.....	4.50	6.00	4.75	5.75
1200 @ 1350.....	4.50	6.00	4.60	5.75
1050 @ 1200.....	4.35	5.75	4.25	5.30
900 @ 1050.....	4.25	5.50	4.15	5.10
Stallions.....	4.35	5.40	4.15	5.10
Stags and F.....	4.00	4.75	4.00	4.75
Side cows.....	4.10	5.00	4.00	4.75
Canners.....	2.30	2.60	2.75	4.75
Bulls.....	3.25	4.50	3.65	2.70
Calves.....	4.75	5.00	4.25	4.30
Texas steers.....	4.10	5.25	4.10	5.15
Texas C. & B.....	3.40	3.75	2.90	3.00
HOGS.				
Mixed.....	3.65	4.90	5.30	7.92
Heavy.....	3.60	4.97	5.35	8.00
Light.....	3.75	4.85	5.30	7.85
Pigs.....	3.80	4.65	5.20	7.50
SHEEP.				
Natives.....	3.90	4.75	4.60	6.00
Western.....	3.80	4.50	4.70	6.10
Texas.....	3.75	3.75	3.75	5.25
Lambs.....	5.10	4.75	5.10	5.60

Of the 10,479 carloads of cattle and 9,274 carloads of hogs received at Chicago last month, 3,862 cars of cattle and 4,345 cars of hogs were shipped from Iowa, 2,267 cars of cattle and 2,597 cars of hogs from Illinois, and 1,479 cars of cattle and 821 cars of hogs from Missouri. About 39 per cent. of the cattle and about 45 per cent. of the hogs received during the month came from Iowa.

The forwardness of spring in a wide section of country is very unusual, and the promise is for good crops, though, of course, it is a long time between seed time and harvest. Cattle, hogs and sheep are putting on pounds of flesh at an unusually rapid rate.

Joseph J. Martin, of the old-established cattle exporting firm of Martin, Fuller & Co., died at his home in Philadelphia. The quality of stock coming to market is exceptionally good. Buyers and sellers often find weights running heavier than expected, as feeders have been very liberal in throwing out corn this season. It makes a difference in the size of the scoop whether one is scooping out 15c. or 40c. corn.

There are large sections of country in the West where the fuel question is a serious one. In Nebraska, where fuel is scarce, buyers can get shelled corn to much better advantage than ear corn, as farmers want the cobs to burn.

Fine stock breeders are doing very good business this spring. Some choice Shorthorn cows recently sold in Kansas at \$15 to \$17.50 per cwt., with an average of \$260 for 30 head. Cattle feeders have been losing money lately, and those who have heavy cattle are very anxious to unload. Well they may be, as buyers are discriminating more and more against old-fashioned heavy beefs.

Cattle values have regained about 60c. per 100 lbs. in the past two or three weeks. There has recently sprung up quite an inquiry from farmers in Ohio, Pennsylvania and Virginia, a strong demand for feeding cattle.

Montana and Dakota cattle are expected to be about 10 to 20 per cent. short of last season. The cattle out there are scarce on account of late storms, but are in good condition and feed is plenty.

It is now just between seasons for Texas "fed" and "grass" cattle. Not many Texas cows coming. Some choice Texas cattle sold at \$1.10.

Exporters bought cattle at \$3.75 to \$4.50, chiefly at \$4 to \$4.35.

The first distillery cattle of the season arrived the first week in May. Some averaging 1,291 lbs. to 1,320 lbs. sold at \$4.25 to \$4.35. These cattle ought to come forward quite freely. The Kentucky crop of distillery fed cattle is being rapidly bought at private sale, largely by exporters.

The horse market is not so buoyant as it was. The opposition which has lately sprung up in England against the importation of American horses cuts a serious figure.

Hog prices are very low and there seems little chance of recovery, as the supplies at all points are large. Young pigs are plenty, and with no end of feed it looks as if buyers would have things their own way.

Sales of Texas sheep included 1,710 head, averaging 91 lbs., which sold at \$3.75. Exporters bought choice 118 to 118-lb. corn and screening-fed Western wethers at \$3.80 per 100 lbs.

April receipts of sheep were the largest on record for the month, and that fact gave some justification for the low prices. However, sheep feeders have not been losing any money except in comparison with what they may have expected to make.

Montreal Markets.

Cattle.—With the opening of navigation better prices have been obtained for all grades of cattle, the demand from exporters for the best cattle having the effect of keeping the market pretty well cleaned up, so that butchers had to pay in small lots have the prices paid by exporters. Quite a few range has been around 4c. for tops, 31c. for a very good animal suitable for export. These lots have only been for filling up fag ends. Butchers have had to pay as high as 31c. and even 4c. per pound on the last two markets in order to get what they wanted (that is for the pick); fairish and medium cattle ranged from 3c. to 31c. per pound; common grades down to 21c. per pound.

Sheep and Lambs.—A few old sheep are occasionally brought in, which realize from 31c. to 4c. per pound. Lambs are coming in more freely, but are meeting with a fairly brisk demand, and sell freely from \$2 to \$4.50 each, as to size.

Calves.—The offerings of calves continue very heavy, from 2,500 to 3,500 per week being brought in. On the whole they meet with a very good demand, though the heavy supplies keep extreme prices down. There are a goodly number of these, which would readily realize more money on a less overstocked market, but they are kept down in price by the large numbers of poor and inferior lots offered. Tops range from \$7 to \$8 each; medium, \$1 to \$6 each; culls running down as low as \$1.

Live Hogs.—Light receipts of hogs are keeping prices up, the price in the yards here being somewhat jumpy, but contract lots from the West cannot be obtained under \$4.40 per cwt. off cars, and there seems to be the impression that the live hog is going to cost more money yet at a very early date.

Hides and Skins.—Outside of the usual monthly advance in lamb skins, of 5c., nothing new has transpired. The market is in a rather dormant condition, receipts coming in freely and hides, heavy and light, Nos. 1, 2, 3, 90c. each; 4, 3, 2 cents per pound respectively; sheepskins, 75c. to 90c. each; lambs skins, 15c. each. Calf skins are a big yield, but the market so far remains steady at 6c. per pound for No. 1 and 4c. for No. 2.

The British Markets.—These markets are anything but encouraging at the present time, the best States cattle in the best markets only making up to 100c., according to quotations, but the actual sales do not seem to bear these quotations, shippers claiming to lose money on cattle bought in Chicago on a favorable market and to suit the market to which they were sent forward.

Ocean Freight for cattle is in sympathy with the prevailing markets and is very weak, Glasgow being the best under a limited number at 42s. 6d. insured. The range to other ports is given all the way from 35s. to 40s., and even less is said to have been taken.



A WASTED LIFE.

BY WILLIAM M. HINSDALE.

I first met the deacon under rather odd circumstances. A persistent touch of rheumatism under my left shoulder, which defied liniments and plasters, sent me to the Hot Springs, seven miles north of Boonopolis, Southern California.

To reach the Hot Springs, the traveller crosses five miles of desert country, where the cactus flourishes like the green bay tree, and the coyote shrills at night his peculiar lay. Then he climbs "the grade," a rise of 1,000 feet in two miles. This part of the way is over a mountain road which skirts precipices and winds in and out among canyons in a way that makes timid people dizzy.

One beautiful winter afternoon Deacon Hardwicke started for the hotel. That morning he had procured at Boonopolis a livery team and a driver, and had been taken to different points about the valley, looking at lands which were offered for sale. Having completed his inspection, he was driven to the foot of the grade, and there he dismissed the team. He had in his hands a little black leather wallet containing deeds, and, as he walked along in his slow and dignified fashion, his eyes bent on the ground, he looked like a gentleman of leisure, perhaps a wealthy Eastern tourist out for an airing.

At the foot of the grade is a little ranch house, and just beyond the road makes a turn almost at right angles and skirts the edge of a canyon where the traveller is hidden from view in either direction.

In this angle of the way a man was waiting for the afternoon stage, which was about due. It carried the mail for the hotel, and sometimes considerable express matter, to say nothing of the passengers.

But the deacon happened to come first, and, as he turned the corner, plodding slowly along, he heard a smooth, clear, firm, but not impatient, voice say:

"Wait a moment, sir. And kindly hand over that grip-sack and your money."

Glancing up, the deacon beheld a big revolver pointed at his head.

Deacon Hardwicke was surprised and grieved. He was not a coward. He had lived in many a lawless community had seen men lynched, had himself been a target for bullets more than once. If he had been armed, he would have fought—as he afterwards assured me.

But the appalling fact flashed over him that he had no "gun," and that the gentlemanly stranger "had the drop" on him.

"Come," said the highwayman in a more threatening tone. "I mean business. Drop your wallet. Give me your money, or I'll let daylight through you."

The deacon halted and shook his fist at the man. What he said is not material to this recital. Then he turned and ran down the grade.

The highwayman fired twice, and the deacon afterwards stated that the balls whistled in close proximity to his head. The shots flustered him. He stumbled, tripped and fell. He bruised his shins and tore the skin from his wrists. The wallet flew from his hand, and he lay in the road, howling with rage and pain.

The marauder advanced leisurely and picked up the wallet. Just then the stage, which was a trifle late, as usual, rolled slowly around the turn in the road.

The deacon's assailant leaped down the steep bank of the canyon and rolled headlong among the chaparral.

The remarks of the passengers on the stage, which picked him up and brought him to the hotel, did not tend to make him better natured.

"Guess it was all a fake." "I didn't hear any shots." "More scared than hurt." These were some of the whispered comments that came to the deacon's ears.

"If I had only had a gun," he said to me, "that fellow would never have got out of there alive. It's the disgrace that hurts. I don't see how I was careless enough to leave my gun at home these times," he said, with tears in his eyes.

"Do you think you would know the fellow should you ever see him again?" I asked.

"I should know him anywhere. He is short and wiry, dark hair, mustache, no beard, black eyes. And there is a great, red, flaming scar across his cheek—knife wound, I reckon."

"I'll tell you what we'll do," I said. "Let us go to Boonopolis and find him. He will soon see that there is no pursuit, and will certainly go there. Perhaps we can arrest him yet."

Boonopolis at that time was only an infant among the cities of Southern California. There were huge gaps among its business houses, now filled with stately edifices. There were no pavements, and where 100 globes of electric fire now glare at night upon the passer-by there was then only the dim and fitful gleam of lamps from the windows of the scattered stores.

After an elaborate supper at the Transcontinental, served by retired cowboys from Arizona, we sallied forth to visit the saloons and gambling places in search of our robber. We made three or four circuits of the town without success, and finally found ourselves in the Magnolia Club rooms.

I was enjoying the character of amateur detective hugely. So far there was a pleasant tinge of excitement—or rather an expectation of excitement—and very little danger. But as we scanned the faces of the company without seeing our man the deacon's brow grew black with disappointment.

It was now after midnight. The cigar store was closed, but the bar was kept open all night. Disappointed in our search, we became absorbed in watching the game.

There is something of the gambler in every man, and as I looked upon the tense, excited faces of the players, the contagion of their example seized me, and I felt in my pocket for a coin. Finding nothing but silver, which I did not like to stake, as there was none on the table, I was on the point of borrowing a double eagle from the deacon when I heard a quiet but distinct voice at the end of the room say:

"Hands up, gentlemen, if you please."

"Glancing around, I saw a man standing at the door leading to the bar, a revolver in each hand pointed at us. He was a short, slight man, with dark hair and a flaming scar across his face.

There was no confusion. One of the loungers quietly placed his back against the door leading to the cigar store and drew two revolvers, which he pointed along the table. Two others, evidently confederates, also stood at ease awaiting the next order. The rest of us lifted our hands simultaneously.

"The gents that are seated will kindly rise," said the voice near the door.

The gamblers rose as one man.

"Now, then. Everybody right about and face the wall," was the next command.

We advanced in two rows to the opposite sides of the room and stood, as directed, ranged against the walls. Then the two confederates stepped leisurely to the table and scooped the gold into a couple of little sacks which they produced from their pockets.

Having secured the money on the table, the brigands proceeded to rob our persons. With a great show of politeness they requested us to give up our watches, money, and weapons.

The fellow tossed my revolver and my few silver dollars into his sack and grabbed at my watch.

Just then there was a crashing, explosive sound, deafening in the narrow confines of the room—then another—another—and another. Then came darkness, a quick rush of feet, a tumult of shouts and groans.

It was the deacon, of course. I knew it before the welcomed hurried arrival of men from outside with lanterns. He had "turned loose" at the leader. They had exchanged three or four shots before the light went out, quickly and mysteriously.

The men with the sacks and the money were gone, but the deacon was bending over a form that was stretched upon the floor.

The fellow tried to lift himself upon his elbow.

"I know you, pard," he said. "You're the man I stood up this afternoon. You've held over me this time. I'm gone."

The deacon's eyes softened. He dropped his revolver, put his long arm under the other's head, and tried to turn him into a more comfortable position.

"I am sorry for you," he said slowly and simply.

"Oh—it's—all—right," gasped the wounded man, evidently speaking with difficulty. "I came—into—the—game—on—a—bluff—but—you've—called—me—sure."

"Is there anything that I can do for you?" asked the deacon.

"Bend down here," said the man.

The deacon lowered his head, and the other whispered something to him.

"I'll do it," said the deacon.

The next day, in the afternoon, the deacon and I sat on the veranda of the hotel at Hot Springs, enjoying a sun bath and admiring the diversified landscape before us.

"Now, there was that young fellow yesterday," said he. "Had he told me who he was, I would have lent him \$100 to go east, and there he might have amounted to something. He simply threw his life away."

"What did that young fellow say to you?" I asked.

"Told me his name. You would know the family if I should mention it. Wanted me to see that he was decently buried, and to write to his father and mother."—San Francisco Argonaut.

The Mysteries of a Pack of Cards.

A private soldier by the name of Richard Lee was taken before a magistrate recently for playing cards during divine service. It appears a sergeant commanded the soldier at church, and when the parson had read the prayer, he took the text.

Those who had a Bible took it out, but this soldier had neither Bible nor common prayer book, but pulling out a pack of cards, he spread them before him. He just looked at one card and then at another.

The sergeant of the company saw him and said:—"Richard, put up the cards; this is no place for them."

"Never mind that," said Richard.

When the service was over, the constable took Richard before the mayor.

"Well," says the mayor, "what have you brought the soldier here for?"

"For playing cards in church."

"Well, soldier, what have you got to say for yourself?"

"Much, sir, I hope."

"Very good. If not, I will punish you more than man was ever punished."

"I have been," said the soldier, "about six weeks on the march. I have neither Bible nor common prayer book. I have nothing but a pack of cards, and I'll satisfy your worship of the purity of my intentions."

And, spreading the cards before the mayor, he began with the ace:—

"When I see the ace, it reminds me there is but one God. When I see the deuce, it reminds me of Father and Son. When I see the tray, it reminds me of Father, Son, and Holy Ghost. When I see the four spot, it reminds me of the four evangelists that preached—Matthew, Mark, Luke, and John. When I meet the five, it reminds me of the five wise virgins that trimmed their lamps—there were ten, but five were foolish, and were cast out. When I see the six, it reminds me that in six days God made heaven and earth. When I see the seven, it reminds me that on the seventh day He rested from the great work He had created, and hallowed it. When I see the eight, it reminds me of the eight righteous persons that were saved when God destroyed the world, viz., Noah and his wife, with three sons and their wives. When I see the nine, it reminds me of the nine lepers that were cleansed by our Saviour—there were nine out of ten who never returned thanks. When I see the ten, it reminds me of the ten commandments which God handed down to Moses on tablets of stone. When I see the king, I am reminded of the King of Heaven, which is God Almighty. When I see the queen, I am reminded of the Queen of Sheba, for she was as wise a woman as Solomon was a man. She brought with her fifty boys and fifty girls, all dressed in boys' apparel, for King Solomon to tell which were boys and which were girls. King Solomon sent for water for them to wash; the girls washed to their elbows and the boys to their wrists, so King Solomon told by that."

"Well," said the mayor, "you have given a good description of all the cards except one."

"What is that?"

"The knave," said the mayor.

"I will give your honor a description of that, too, if you will not be angry."

"I will not," said the mayor, "if you do not term me to be the knave."

"Well," said the soldier, "the greatest knave I know is the constable that brought me here."

"I do not know," said the mayor, "if he is the greatest knave, but I know he is the greatest fool."

"When I count how many spots there are in a pack of cards, I find three hundred and sixty-five—as many days as there are in a year. On counting the number of cards in a pack, I find there are fifty-two—the number of weeks in a year. I find there are twelve picture cards—representing the number of months in a year; and on counting the tricks, I find thirteen—the number of weeks in a quarter. So you see, sir, a pack of cards serve for a Bible, an almanac, and a common prayer book.—Etc.

THE QUIET HOUR.

Conversation.

Keep a watch on your words, my sisters,
For words are wonderful things;
They are sweet, like the bees' fresh honey—
Like the bees they have terrible stings!
They can bless like the warm, glad sunshine,
And brighten a lonely life;
They can cut, in the strife of anger,
Like an open two-edged knife.

Let them pass through your lips unchallenged,
If their errand is true and kind—
If they come to support the weary,
To comfort and help the blind,
If a bitter, revengeful spirit
Prompt the words, let them be unaided;
They may flash through the brain like lightning,
Or fall on the heart like lead.

Keep them back, if they're cold and cruel,
Under bar and lock and seal;
The wounds they make, my sisters,
Are always slow to heal.
God guard your lips, and ever,
From the time of your early youth,
May the words that you daily utter
Be the words of beautiful truth.

The Door of the Lips.

Possibly there are two distinct species of busy-bodies; some may be heedlessly liable to pass on a piece of spicy news, letting the tongue wag simply from unrestrained habit, but others with a more deliberate purpose to injure. The latter, as a matter of course, fall under the condemnation of all decent people, and would probably be slow to admit themselves to be consciously guilty of such an offence. Yet, even so, they are also not free from censure, just as the consequences of their gossiping may manifest the workings of a poisonous sting. How easily an innocent reputation may be all unknowingly blasted, and without opportunity of defence or reparation, by ugly gossip based on unfounded rumor. And, if "the costliest treasure mortal times afford is a spotless reputation," how irrevocably—or, at least, for a considerable season—a man may be robbed of the most precious thing he owns!

Pondering upon these things, as well as upon the expectation of having to account in the judgment for every idle word, a Christian will surely be "slow to speak."

Nor does this necessitate a cowardly concealment of actual wrongs, the promulgation of which would be the first step to their abatement or correction. There is such a thing as criminal silence, which may make the silent one accessory to the wrong, if not hold him amenable, in a degree only slightly inferior to that attaching to the principals themselves. There is a time to speak, and to speak unequivocally, with a view to effect some betterment. But there is also a time to be silent; and ever and always it is in order to meditate upon and make use of the prayer, "Set a watch, O Lord, before my mouth, and keep the door of my lips." St. James understood both human nature and ethics when he wrote: "If any man among you seem to be religious, and brideth not his tongue, but deceiveth his own heart, this man's religion is vain."

Words.

Words have a fearful power. Swift-winged messengers are they for good or evil. Could each human soul possess a tablet upon which, by some mysterious agency, words might be engraven in appropriate characters, how varied and full of meaning would those characters be, and how potent their spell! Light words, the interchange of friendly civilities, the little occurrences of everyday life, would be but faintly impressed and recognized only by the charm investing them. Gay words, the pointed and brilliant scintillations of wit and fancy, sparkling as just dropped from a diamond point. Bitter words, stinging, withering words of reproach and scorn, engraven as with a pen of iron, and darkly enveloped with gloomy shadows. Noble words, the embodiment of the glowing thoughts and conceptions of genius, set with gems, and enriched with a halo of glory. And words of mercy, loving words of sympathy, burning with a radiance mild and lovely as the breathings of an angel-presence. This is not all fancy. Words are indeed engraven upon more enduring tablets than those of ivory or brass; that of immortal minds. Take the continual interchange in the particles of matter; particles thrown off from one substance filling the places in the formation of another. So words are the particles which minds are throwing off, to become incorporated with other words, to be unperishable as the mind itself.

It becomes us, then, to consider well the power of this influence for good or evil in our keeping. That careless, thoughtless word of thine may carry with it a thrill of agony—almost too bitter for the sensitive spirit to endure. A kindly word may awaken in some soul energies which shall burn on forever; or its opposite crush to earth some timid soul, and destroy within it the power to rise. A word of encouragement, fitly spoken, may cause the sweet flowers of hope and joy to spring up in the heart, and sweetly lure the bright buds of promise to unfold in beauty. One little word may touch some chord which shall vibrate tones of joy or sorrow through the endless ages of eternity.

Five words cost Zacharias forty weeks' silence.—Fuller.

THE CHILDREN'S CORNER.

A "Proverb-Hunt" will now begin this column. A prize is offered for correct solutions of the first three pictures. Only children of subscribers may compete, and competitors must be under sixteen years of age. Answers should be sent in for each group, e. g., 1-3, 4-6, 7-9, etc. A prize is offered for each group of three pictures, and a better one at the end of the year for the largest number of correct answers. Letters marked "Proverb-Hunt" will not be opened until ten days after the third picture of each group is issued. The first letter opened, containing correct answers, will be prize winner; all others will receive honorable mention. Address your letters to Cousin Dorothy, FARMER'S ADVOCATE, London, Ont., and mark them "Proverb-Hunt"—outside the envelope.



HIDDEN PROVERB—NO. 15.

The Allison Four.

(Continued from page 194.)

Two weeks slipped quickly away and there were no failures on the part of any of the "Allison Four," as our girls were often called. Maud was especially diligent, keeping such a supply of cakes on hand that some of them grew stale, and trying so many new recipes that her mother was obliged to caution her against expense.

The third week the weather was excessively warm. Mabel grew hot and cross over the ironing, and Blanche begged to visit a friend living some miles away, and her red lips wore a decided pout when reminded that the dusting would not admit of her making a two-days' visit. Bernice's task had to be done twice a day, but she kept bravely on, only declaring in confidence to papa, one morning as he watched her turn her shining pans in the sun, that when she grew up she should never keep cows.

"But you love milk," he said.

"Oh, I can buy that of a milkman," and she ran merrily away to romp with old Rover.

One week more and Blanche abandoned the race.

"Write and tell Auntie May I love her, but I can't have one bit of fun, and I'd as soon have my vacation as a pony," she said, and although her mother looked grave she offered no remonstrance.

The fifth week a party from a neighboring city camped on the shore of a lake near the Allison farm. Among the campers were several friends of our girls, and many invitations came to the farmhouse, some of which had, in spite of pleading faces, to be declined. Friday evening a neighbor sent for Mrs. Allison to watch with a sick child, and she, knowing her daughters were competent for the next morning's work, went gladly. The little child was so ill when morning came she lingered, and at noon it died, so it was sundown when she reached home.

The house seemed deserted, but when she reached the kitchen, she found Bernice at the sink, her bare arms deep in the huge dish pan. After the little girl had heard her mother's sad story, Mrs. Allison asked:

"Where are the other girls?"

"Oh, mamma, Lizzie and Hilda Turner came over from the camp before we had finished the morning work. They stayed to dinner and the girls went back with them to play tennis."

"Why did you not go, Bernice?"

"Well, mamma, I wanted to. But I knew if you did not come home to-day, there would be no one to get supper for papa and Tim. Then the house was not in order for Sunday, and I thought—"

Here the little girl stopped, and as her work was finished, she came out and nestled down by her mother on the lounge.

"Thought you would give up pleasure to help others, my darling," her mother finished for her, as she drew the dusky head to her bosom.

It was nine o'clock when the Turners brought their young guests home. Meanwhile, Mrs. Allison had discovered that both the cake box and the cookie jar were empty. Nor was this the worst. Several garments dampened by Mabel the day before were badly mildewed. But she was a wise and patient mother, so the merry girls who so rapturously described their afternoon's sport were kissed and sent to bed unscolded.

The next morning brought to Maud and Mabel unpleasant recollections of yesterday's neglected work, but their mother only said:

"Mrs. Lewis needed me and I was glad I could stay, although it was hard for Bernice."

Blanche was wiping the breakfast dishes, and she let the towel drop to demand, "Haven't we spoiled our chance for the pony?"

The mother looked gravely into Maud's gray eyes, where the tears were gathering, and said, "Auntie must decide that."

When Mrs. Taylor returned from her journey and heard the whole story, she called the girls to her room and asked:

"Now, my darlings, who deserves Flirt, the spotted pony? It will arrive to-morrow."

They were justice-loving girls, so Maud answered with a sigh: "Bernice does, although somehow it makes me feel when I say it as if I was owning that she loved our mother best. And I am sure she don't."

"Well," was auntie's reply, "watch lest the seeds of selfishness sprout in your hearts and overrun that love." And with this queer wee sermon the conversation ended.

Flirt proved to be a gentle, yet spirited little creature, and, between you and me, thought it really belongs to Bernice, it seemed to be owned by all the "Allison Four."

MINNIE MAY'S DEPARTMENT.

MY DEAR NIECES,—

Have you not asked yourselves often during the past year, "What's all this talk about the New Woman, and when will it end?" With the coming of spring it has sprung into new life. No newspaper but has its little caricature; no magazine without its little discourse, more or less profound, on the New Woman. And the breeze of discussion by newspapers and periodicals has swept aside the parson's notes and headlines, and he has laid aside the evangel to propound his little theory on "The New Woman and Her Sphere." With prophetic foresight little short of the miraculous he looks through the coming years, and then announces to the woman waiting in breathless anxiety for his verdict: "Your sphere is the home;—there, and only there, need you look for success." How good of him to tell us so.

Without intending any disrespect to his reverence, we would humbly inquire: "But has she not already achieved success elsewhere? Is she any the less womanly because of this success?"

Without venturing to imply that this clerical advice, and the unclerical also of the same variety, could be suggested by jealousy at the success that has crowned woman's efforts in spheres of activity hitherto occupied by man, we venture to remark that there may be another view to be taken into consideration when discussing the evils resulting from woman's competition with man. Plaintive is the wail that the young man working for the small salary which is the direct result of competitive female labor cannot afford to marry. It may be irrelevant, but we can't help wondering whether, in case the aforesaid poor young man should rashly determine to marry, and later on find himself in the position of pater familias to a large family of girls, would he find the burden as great as his father and forefather did?

But to return to the New Woman. Without pausing to notice the frothy chatter of those whose ideas of the New Woman are confined to the "bloomer girl"—ideas derived from some fifth-rate newspaper—and without entering into any discussion as to the propriety or impropriety of bloomers, or wherein they are more immodest than those décolleté gowns which have had so long the approval of the fastidious masculine mind, let us turn for a moment to a more interesting phase of the question, that of the New Woman's attitude toward marriage.

Could some foreigner, who had lived hitherto in happy ignorance of all this nonsense about the New Woman; could such a one be set down in our midst, he would be forced to the conclusion, by the general tone of the discussion, that women were deserting matrimony by the wholesale. Are they? How many find ambition mightier than affection? What class of women is passing by the altar for a new field of labor? Is it those who, had such avenues been closed to them, would have married for love? Or is it simply those who resort to matrimony as a means of subsistence—who marry for a home, as the saying goes? Is the world likely to be any the worse for a diminution in the number of such wives? Other things being equal, will there not be fewer unhappy unions?

Who is the New Woman? Because woman has now the right to enter university halls and cultivate whatever talent her Creator bestowed upon her; because she is now allowed to take her place at the bar of justice, on the platform, at the editor's desk, in the professor's chair, or in the physician's consulting-room, is she any more a new woman, any less a true woman, than was her grandmother, who, sickle in hand, kept side by side with man in the harvest field? Not a new woman, but the same woman, only with the right now to labor wherever her tastes or talents call her;—alas, that it should ever have been denied her! The same woman still. Human nature is very much the same to-day as it was when the Gates of Eden closed behind our first parents, and woman just as ready, just as fit for matrimony to-day as she was the day after her Creator said: "It is not good for man to be alone. . . . I will make an helpmeet for him."

MINNIE MAY.

I would say to all, use your gentlest voice at home, watch it day by day as a pearl of great price, for it will be worth more to you in days to come than the best pearl hid in the sea. A kind voice is joy, like a lark's song, to a hearth at home. It is a light that shines. Train it to sweet tunes now and it will keep in tune through life.

UNCLE TOM'S DEPARTMENT.

Puzzles.

All matter for this department should be addressed to Ada Armand, Pakenham, Ont., who has charge of this department. Please write on only one side of paper, and sign name on next line to each puzzle, giving answers in another place.

1—PUZZLE.

My FIRST is on Jack's hand, and if well laid on the face it will keep it from exposure to the weather; My SECOND is on Jack's face, on sea or on the land, and is also connected with the making of leather. My WHOLE is a garment worn in the North of Scotland by the Highlanders.

IRENE M. CRAIG.

2—ANAGRAMS.

Names of popular music.

'Twas at a city band concert,
I truthfully affirm,
That I first heard the melody
Whose title's "TIOS. TERM."

The air was sultry, but was stirred
By a delicious wind;
We drank it in and listened, as
The band played "LAIRD DO MIND."

The music banished all our cares,
And why should we be sad?
As thrilling through the trees there rang
The strains of "WINTER GLAD."

We wandered from the people,
O'er the soft grass and moss;
The atmosphere vibrated to
The tune, "ROW OVER LOSS."

Then back we came with quickened steps,
To waltz-time keeping pace;
The crowd was surging with the bars
Of the gay "BILLY DASE."

Again I live thro' that sweet scene,
Tho' time has dimmed my eyes;
Again I hear the limpid notes
Of charming "MATE WE RISE."

We left before the crush began;
The band made each pulse thro';
We paused by the gate for a little space,
And WE THEN PLAYED "DAN LOR."

ANNIE P. HAMPTON.

3—CRYPTOGRAM.

The words are from a poem by Sir Walter Scott.

Huk av opz shza, zavba Wlyif yblk
Aol mnaas johuji; mvy doui ol zavok
'Nhpuzi mlhymbs vkkz pu kllhkf mlbk,
Huk mlss htpk aol myhf,
L'lu dpao opz kfpun copjl ol jpylk,
'Ohk Rllshky iba illu ha if zpkl,
Fvby ylhjoiyvz htibzo ohk illu zpylk—
P ohk uva kpik av-khf."

CLARA ROBINSON.

4—NUMERICAL ENIGMA.

My 7, 13, 5, 9, 17, is a name.
" 4, 14, 10, 19, 21, is to be on the feet.
" 6, 20, 16, 1, 12, 8, 2, 8, is dignity of mind.
" 11, 15, 18, is a fan or morass.
" whole is a quotation from Tennyson.

LILY DAY.

5—CHARADE.

In ALL dreamy contemplation
Sat a melancholy owl;
He had a most impressive blink
And an awe-inspiring scowl.

FIRST honest wisdom had the bird,
And like FIRST men to-day,
He showed his greatest cleverness
By LAST he didn't say.

G. W. BLYTH.

6—CHARADE (Phonetic).

My FIRST, loud chattering through the air,
Leaped in the tree-tops high,
And saw his image shadowed where
My SECOND rippled by.
Taking it for a friend, he went
Down where my SECOND did roll;
And was, you know, what lots are made
The first day of my ALL.

MORLEY SMITHSON.

7—TRANSPOSITION.

To Geo. W. Blyth.

It's high time you were coming back;
The band of "ninety-three."
The puzzle group, have all strayed off,
'Cept Lily Day and me.

And then our cousins, who have joined
Since we appeared in group,
Are getting in an awful stew—
Perhaps it is the soup.

T. W.'s wan with primal toil,
His friend has struck a spark,
Miss A. P. Hampton flirting is
With Harmond in the dark.

And Miss Irene is mad, I think,
Or else she cannot feel;
She's planned to take a trip around
America on a wheel.

Besides, the girls are beating us,
At answers and at P's.
I've mentioned all their names except
Miss Clara and Louise.

So we will have to hurry up,
Their little game to end.
I hope you'll heed this sad final
And strive our cause to mend.

CHARLIE S. EDWARDS.

8—DIAMOND.

My first is in the Advocate;
My next a Hebrew measure;
My third is nice and dainty food,
So you may eat at pleasure;
My fourth a southern flowering-tree;
My fifth to overlay;
My sixth to see at a distance;
My seventh is in "display."

G. W. BLYTH.

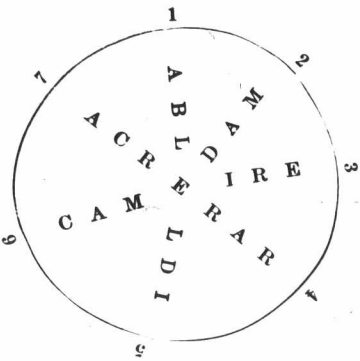
9—NUMERICAL ENIGMA.

My 6, 4, 2, 3 is a constellation.
My 1, 4, 5, 6 is a measure.
My whole is more prized than money,
For 'tis neither bought nor sold;
When it we couldn't be funny,
So some'll try to hold.

CLARA ROBINSON.

Answers to April 15th Puzzles.

- 1.—Harmond Bradley.
- 2.—Two of a trade never agree.
- 3.—



- 4.—Spark—Park—Ark.
- 5.—Wan.
- 6.—C L I N G
L U N A R
I N D I A
N A I L S
G R A S S
- 7.—
C
R A N
R O V E D
C A V A L R Y
N E L L Y
D R Y
Y
- 8.—Wheatear.
- 9.—Complain (Come-plain).

alike to his heart and his judgment. He represented Wilkie as "a young Scotchman second to no Dutchman that ever bore a palette on his thumb." Sir George Beaumont was the great art authority of his day, the giver of reputations, though some of his dicta that have been recorded cast but a dubious light upon his judgment. He had, however, taste and discernment enough to perceive Wilkie's talent. He gave his valuable approbation to "The Village Politicians," and became a generous friend to its creator. Hayden's account of the introduction of this picture to the public has a little side hit at the friendly Sir George, which may, perhaps, illustrate that good nobleman's style of criticism. "The winter of 1806 approached," he writes, "and Wilkie began to make a great noise. Sir George described him as 'a young man who came to London, saw a picture of Tenier's, went home and at once painted the 'Village Politicians.' At once! My dear Lady Mulgrave—at once! and off all crowded to the little parlor of 8 Norton street, to see the picture painted by the young Scotchman who never painted a picture or saw one until the morning when he saw the Teniers, and then rushed home and produced the 'Politicians.'"

"The Village Politicians" became the center of attraction at the Academy exhibition of the year when it was produced. A very appreciative article on the picture appeared in a leading organ of the time. The impulsive Hayden was one of the first to see it, and rushing off to Wilkie's studio, he encountered Jackson on the way. Together they

who made the famous reply in the Irish Parliament to the argument about considering the claims of posterity:—"I don't see, Mr. Speaker," he said vehemently, "why we should put ourselves out of the way to serve posterity. What has posterity ever done for us?" A universal roar of laughter interrupted and disconcerted him, but he hastened to explain. "When I say posterity, sir, I do not mean our ancestors, but those who are to come immediately after them."

For Husbands.

- Don't think when you have won a wife that you have won also a slave.
- Don't think that your wife has less feeling than your sweetheart. Her relationship to you is simply changed, not her nature.
- Don't think that you can dispense with all the little civilities of life towards her on marrying. She appreciates those things quite as much as other women.
- Don't be gruff and rude at home. Had you been that sort of fellow before marriage, the probabilities are that you would be sewing on your buttons still.
- Don't make your wife feel that she is an incubance on you, by giving grudgingly. What she needs give cheerfully, as if it were a pleasure to do so. She will feel better, and so will you.
- Don't meddle in the affairs of the house under her charge. You have no more right to be poking



THE VILLAGE POLITICIANS.

SOLVERS TO PUZZLES IN APRIL 1ST ISSUE.
Clara Robinson, Geo. W. Blyth, Ada M. Jackson, J. S. Crerar.

SOLVERS TO PUZZLES IN APRIL 15TH ISSUE.
Clara Robinson, Annie P. Hampton, Ada M. Jackson, Louise McLachlan, Joshua Bobier, Joshua Umbach, Geo. W. Blyth, Charlie S. Edwards, J. S. Crerar.

Mary Ross and Amanda Wardle sent correct answers to puzzles some time ago, but were too late to appear in proper time, as they were sent to London.

The Village Politicians.
BY SIR DAVID WILKIE

This picture was Wilkie's first step out of struggling obscurity into the sunlight of fame. Art has often proved a hard mistress to her apprentices, even to those of the fairest promise, and Wilkie experienced the full weight of her hand in no pleasant mood; but his Scotch pluck and endurance carried him through her harsh discipline with undaunted spirit, and to him, as to all who can achieve work of worth, and wait its due with prudence and endurance, come honor and wealth in good time.

Wilkie had a rough study of this picture by him, which attracted the attention of Lord Mansfield. This nobleman asked the price of a finished picture from the sketch. Wilkie answered fifteen guineas; but no more was said about the matter. At the chance of acceptance, however, Wilkie went to work and produced the masterpiece. His artist friends were delighted. Jackson, one of them, brought his work to the notice of Lord Mulgrave and Sir George Beaumont, two of his own patrons, with a free-hearted appreciation which does honor

burst in upon the startled Scotchman with the glorious news. "I roared out," said Hayden, "Wilkie, my boy, your name's in the paper!" "Is it, re-al-ly?" said David, and, finding that it "re-al-ly" was, the three took hands and danced round the table till they were tired. The fortunate originator of the art sensation of the year went with his two enthusiastic friends to gaze upon the crowds that did homage to his work, and the only expression he could give to his bewildered delight was "Dear, dear, its jist wonderful!"

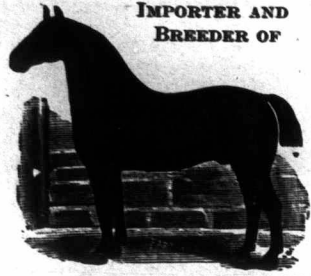
The Earl of Mansfield does not appear to much advantage at the end of the story of "The Village Politicians." As soon as the picture became famous, he wrote to the artist, claiming it at the price of fifteen guineas, which Wilkie had named on the occasion of his visit. To this the artist not unjustly demurred, as the offer had not been accepted. A good deal of cavilling followed, ending with the nobleman obtaining, with little credit to himself, one of the masterpieces of the British School for thirty-one pounds, ten shillings, or some hundred and fifty dollars.

Irish Bulls.

A great number of "bulls" are placed to the credit of good old Sir Boyle Roche. It was he who described himself on one occasion as "standing prostrate at the feet of royalty." He also it was who in the days of threatened rebellion wrote to his friend: "You may judge of our state when I tell you that I write this with a sword in one hand and a pistol in the other." This worthy Irish gentleman again it was

- your nose into the kitchen than she has to walk into your place of business and give directions to your employes.
- Don't find fault with her extravagance in ribbons, etc., until you have given up cigars, tobacco, whiskey, etc.
- Don't leave your wife at home to nurse the children, on the score of economy, while you bolt down town at night to see the show or spend a shilling on billiards.
- Don't bolt your supper and hurry off to spend your evenings lounging around away from your wife. Before marriage you couldn't spend your evenings enough with her.
- Don't prowl in the loafing resorts till midnight, wasting your time in culpable idleness, leaving your wife lonely at home to brood over you neglect and her disappointment.
- Don't think the woman you promised to "love, cherish, and protect" becomes your servant as her part of the contract.
- Don't think that board and clothes is a sufficient return for all that a wife does for you.
- Don't expect your wife to love and honor you if you prove a brute, unworthy of love or honor.
- Don't caress your wife in public, and snarl and growl at her in private. This proves you both a hypocrite and a dog.
- Don't wonder that your wife is not as cheerful as she used to be, when she labors from early morning till late at night to pander to the comfort and caprice of a selfish being, who has not soul enough to appreciate her.

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3 young mares, Cleveland Bay breeding; 3 Durham cows and heifers forward in calf; 2 heifers, not in calf; 3 Durham bulls, fit for service. Registered Berkshire hogs and sows. Prices reasonable. **A. J. C. SHAW & SONS,**
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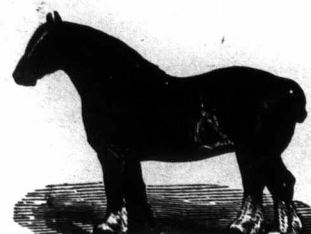
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Montrose, The Ruler, Carruban Stamp, Knight Errant and other celebrities. My stock in the above lines were very successful at all the large shows last year. Call and examine our stock before purchasing elsewhere. Terms reasonable.
19-1-y-om

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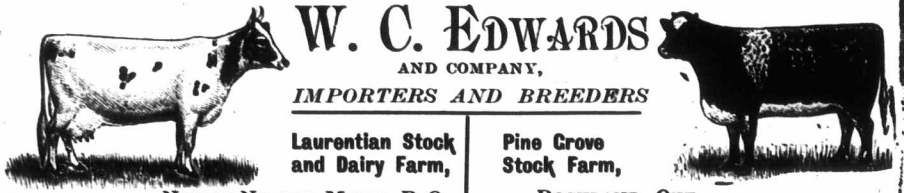


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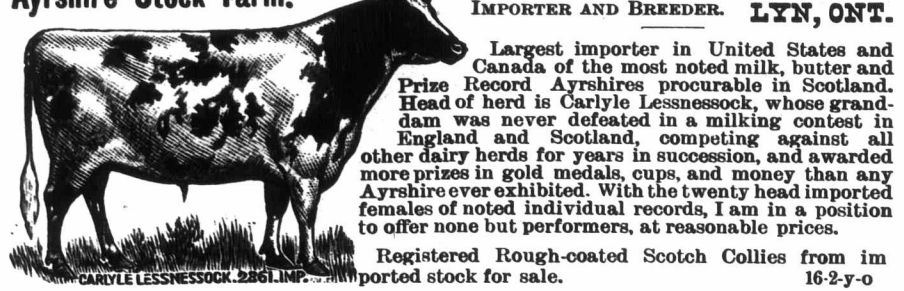
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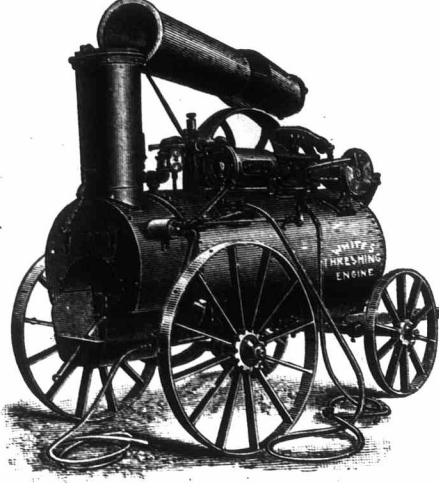
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Correspondence solicited. Putnam Sta., C.P.R.; Aylmer Sta., G.T.R.; Springfield, M.C.R.

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(ASHTON FRONTVIEW FARM), breeder of choice SCOTCH SHORTHORNS. Young stock of either sex, and choicest breeding, for sale at reasonable prices. Correspondence solicited.
Bolton Station, C. P. R. 22-2-y-o

HOLSTEINS!

WE now offer young stock that have won prizes, and calves from our show herd, from one month to one year old, whose dams have large records—any age or sex—FOR SALE, at very low prices to quick buyers. Also some Poland-China Pigs, 1 and 6 months old; same quality (the best).

A. & G. RICE, Brookbank Stock Farms, CURRIE'S CROSSING, Oxford Co., Ont. 18-y-om

MAPLE HILL HOLSTEIN-FRIESIANS.

Can still supply a few choice yearling heifers and heifer calves, but an entirely sold out of heifers in calf. Great individual merit, rich breeding, and reasonable price tell the story. Also a few excellent bull calves of Aargie and Netherland breeding. Correspondence solicited, and visitors welcome.
om G. W. CLEMONS, St. George, Ont.

"Gem Holstein Herd."
NAP! \$40.00 CASH

For bull calf dropped March 4th, dam Clarabel Sjut, No. 18813, H.F.H.B.; she has averaged us five gallons of 3.8% milk every day during six months, and over 1,500 gallons and a calf per year. Prize winner at World's Fair, Chicago, and at Toronto Industrial Exhibition.

ELLIS BROTHERS, BEDFORD PARK P.O., ONT. Shipping Station, Toronto. 7-y-om

LINDENCOURT HOLSTEINS. Herd Established 1883. Original stock imported direct from the best dairy lines in Holland. All stock well developed and good size. Just what will suit the practical farmer. Prices moderate. Before purchasing write for particulars. Address—A. GIFFORD, Meaford, Ont. 4-2-0

Ingleside Herefords.
UP-TO-DATE HERD OF CANADA!

Bull Calves OF THE RIGHT SORT For Sale.

Address—**H. D. Smith, INGLESIDE FARM, Compton, Que. 17-y-om**

GUERNSEYS

This is the Dairy breed for ordinary farmers. Large, vigorous and hardy, giving plenty of rich milk. Several fine yearling bulls and bull calves for sale at farmers' prices. A few heifers can be spared.

Address: **SYDNEY FISHER, Alva Farm, Knowlton, P.Q. 17-y-o**

For Sale—A Thoroughbred of choice breeding, Guernsey Bull two years old. For particulars address: 10-a-om THOS. HILL, Ridgeville, Ont.

POLLED ANGUS BULLS.—I offer for sale my two bulls which took second honors in their classes at the Toronto, Montreal, and Ottawa exhibitions last fall. Also a few Berkshire Boars and Sows, fit for breeding, at prices to suit the times. W. R. BOWMAN, Mount Forest, Ont. 12-2-y-o

120 J. L. ROE.

Dana's Ear Labels for sheep, cattle, etc. Stamped with any name or address and consecutive numbers. This is the genuine label, used by all the leading record associations and breeders. Samples free. Agents wanted. C. H. DANA, 6-L-om West Lebanon, N. Hamp.

GLEN ROUGE JERSEYS.

WILLIAM ROLPH, Markham, Ont., offers twelve Jersey Bulls and Heifers (pure St. Lamberts), out of tested cows. Grand individuals. Prices right. 21-y-om

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CORN is what you want for ensilage purposes. It stands more dry weather and will produce more ensilage on poor or good soil than any we know of. Ask your seed dealer there for it, and use no other. It is endorsed by some of the best seedsmen throughout Canada. Don't let them press you into using any other, but insist on having your seed dealer show you our book of testimonials and invoice dated this season. It will pay you. Also ask for our Yellow Dent, which is very choice. Our sales this year have been very heavy.

Tilsburg, Ont., 4-1-96.
Messrs. E. R. ULRICH & SON, Springfield, Illinois:
Gentlemen—
In reply to your favor of March 27th, beg to say that the WHITE ENSILAGE CORN that we planted last spring, from which we grew such heavy crops of Ensilage, was seed we purchased from you, and I have no objection to your making use of the fact in advertising your corn. I inclose a printed circular. I had so many enquiries asking what seed I planted, and how I cultivated my corn and saved it in silos, I had not time to answer so many letters, and so had some printed. Also one on the silo.
Yours truly,
(Signed) E. D. TILLSON.

E. R. ULRICH & SON, Springfield, Ills. WRITE FOR FREE SAMPLE. WE SELL TO DEALERS ONLY.



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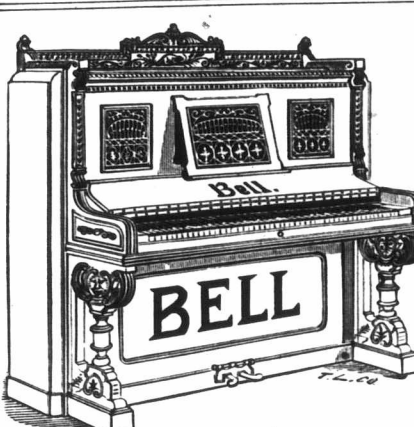
FREEMAN BONE FERTILIZERS.
Wide-awake farmers and fruit growers make money by using Fertilizer.
It is a complete plant food. It is soluble in water and feeds the plant from start to finish. It will increase the yield of your crops and improve their quality. Ask for and use only Freeman's High Grade Bone Fertilizers.

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(Send for Catalogue.) 3-n-o

USE Queenston Cement

FOR BUILDING... STABLE, SILO, AND OTHER WALLS, CISTERNS, STABLE FLOORS, HOG TROUGHS, ETC.
As the building season has commenced, all parties using our cement, and where its use is not understood, kindly give us about ten days' notice and we will come or send an expert at our own expense. We shall be behind our orders this year; on this account order cement two or three weeks before you want to use it.
SEND FOR OUR NEW PAMPHLET CONTAINING FULL INSTRUCTIONS, FREE.
For prices of Cement and other particulars, apply.

ISAAC USHER & SON, Thorold, Ont. 13-y-o



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SUPERIOR IN Tone, Quality, Construction and Finish.
Full description to be found in our Catalogues. Mailed free on application to

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OVER **75,000** OF OUR INSTRUMENTS NOW IN USE.

The American Jersey Cattle Club Annual Meeting.

At the annual meeting of the A. J. C. C., on May 6th, Mr. E. A. Darling, of New York, was re-elected president; Hiram Hitchcock, treasurer; J. J. Hemingway, secretary; Valancey E. Fuller, special agent; and the following directors were chosen: Messrs. H. A. Huntington, Tennessee; Nathan Robins, of New Jersey; G. V. Green, of Kentucky; Heulings Livingston, of New Jersey, and Geo. E. Peor, of New York.

The Treasurer's report showed that the receipts for the year were as follows: Membership fees, \$1,000; sales of register and text books, \$640; entry fees for bulls, \$7,592; cows, \$18,336, which, with other receipts, amount to \$41,308. The expenditures for the year have been \$39,273.85, which left on March 31st, 1896, a balance of \$2,034.14.

A committee was appointed to suggest some changes in the by-laws. The report of the special agent with regard to the Randall Litsey matter—forgeries and irregularities—was accepted and approved. An addition to be made to the premises of the Club was authorized. A resolution looking to some means being adopted for the better identification of cattle registered than the mere markings was passed, referring the matter to the Board of Directors. The Secretary was instructed to enforce strictly the by-laws with regard to the giving of date of service in all cases, and not to record any transfer or entry after May 1st, 1897, on which the service is given as being "in pasture."

It was one of the largest meetings of the Club that has taken place for years, and great enthusiasm prevailed, reflecting the growing interest in Jersey cattle and the increased demand for them which has taken place the past few years.

Shorthorn Dairy Record.

The Executive Committee of the American Shorthorn Breeders' Association, to which the matter was referred, has approved a plan for the establishment of a Dairy Shorthorn Record. An average yield of 200 pounds per year of butter being assumed as a reasonable and workable basis, a female must have produced at least one pound per day for seven consecutive days, as determined by the Babcock test, supervised and certified to by duly authorized representatives of the various experiment stations, in order to be eligible for registration. In the case of bulls, it is recommended, to begin with, that "all sons of tested cows and all bulls that have not less than five tested daughters accepted" be admitted.

The Committee also recommend as foundation stock, without further test, all cows that participated in the Columbian dairy competition, and of all cows that have won prizes offered by the American Shorthorn Breeders' Association for dairy animals of this breed at agricultural fairs.

Another recommendation is to the effect that as soon as the standard of admission be adopted and satisfactory assurances have been received from experiment station officials, the Secretary of the Association be directed to issue a full statement as to the basis of the proposed record, its objects, etc., and mail a copy of same to every member of the Association, and to all other interested parties who may apply for same. The onus of making the Dairy Record a success will then rest with the breeders themselves.

A number of gentlemen in England, desirous of lifting the dairy qualities of Shorthorns well to the fore, have organized a fund, offering a £10 prize to each of eighteen different show societies for the best dairy Shorthorn cow or heifer, the societies to give a second £5 prize.

GOSSIP.

A prominent man in scientific agricultural circles has recently passed over to join the great majority, in the person of Mr. John M. Denton, of London, Ont. This highly-esteemed gentleman, who followed mercantile pursuits, lived for a number of his early years upon a farm in Northumberland, Eng. He was one of the early members of the Ontario Entomological Society, in which he always took a lively interest. Mr. Denton also took a deep interest in fruit culture and other lines of horticulture, upon which he was frequently called to address agricultural meetings. He was for years a director of the Ontario Horticultural Society.

THE SPRINGRIDGE HERD OF POLAND-CHINAS.

In founding his herd, the proprietor of Springridge Stock Farm, Mr. William J. Duck, of Morpeth, Ont., has embarked in the breeding profession in such a manner as should lead to certain success as a breeder and exhibitor, providing judgment and care are used henceforward, as we are sure will be the case, judging from the first selections and the enthusiasm evinced in the breed of his choice. Believing that the best is none too good, Mr. Duck, in establishing his herd, purchased from the Messrs. Jones, of Mt. Elgin, Princess—773—, one of their choicest young sows in 1884, a winner of first premium at all the leading Canadian fairs last year, viz., Toronto Industrial, Montreal, Ottawa, and Guelph Fat Stock Show. She has matured into a grand sow; has plenty of size, good bone, and is full of quality. She was sired by Ella's Moore—460—, and is out of the grand sow Comparised—619—. She has now had her second litter for Mr. Duck, and is proving herself of the right sort as a breeder, and as like begets like, she is also producing winners; she, with her daughter Blanch and a fine young boar, also from her, being winners of twenty first premiums and two seconds in 1895. The above two sows are now nursing litters of little beauties, out of Blackmoore, a grand young boar, now about a year old, recently imported from the herd of M. F. Sterling, U. S., to head the Springridge herd. Blackmoore is a typical Poland and a winner of first premium in his class, and one of a record prize pair at Mercer Co. Fair, Ill. He is out of one of Mr. Sterling's best sows, appropriately named Sterling's Choice 38830, and sired by John Lynn 11337. Therefore, parties desiring young pigs of choice individuality and the best breeding should note Mr. Duck's advertisement and send in their orders early, as young pigs bred from such choice individuals on both sides will undoubtedly go quickly.

GOSSIP.

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

MESSRS. J. & W. RUSSELL'S SHORTHORNS.

The writer recently spent a pleasant afternoon at the beautiful home of the above gentlemen, near Richmond Hill, Ont., and among their choice Shorthorns—a herd that has for many years been ranked as one of the best on the Continent. In competition with the world, at the Columbian, Chicago, as is well known, Messrs. Russell won many of the very highest honors: the much-coveted prize for the young herd also being allotted to them. The Chicago winners are thriving finely, and are certainly a select lot of Shorthorns, the equal of which is very seldom seen. Lord Stanley, the white bull that made such a wonderful record as a winner at Chicago, is in capital form. As a two-year-old he was a world beater, and as a mature animal he would probably carry the same honors with grace; and were we inclined to criticize him, we admit we would be at somewhat of a loss to know where to begin. As is well known by most readers, this bull won the sweepstakes prize as best bull under two years old; his winnings in all being five firsts, heading three first-prize herds, and winning more money and first prizes than any Shorthorn bull shown at Chicago. To attempt to describe the heifers shown in the first-prize herd at Chicago—Centennial, 25th and 23rd, and Nonpareil 51st—would simply mean a description of ideal Shorthorns. The imported cow, Roan Princess, carries her age remarkably well and could easily be put in such form as would make her a hard one to compete with in the show ring. She was a winner of first at the Highland Society show, Scotland, and has proved herself a most valuable cow to her owners. She is the dam of three of the first prize winners at Chicago, including the sensational Lord Stanley. Queen Mary is also a very fine type of a Shorthorn—similar in many respects to her dam (the above mentioned cow) and having the appearance of a grand milker. We were also much pleased with a couple of choice yearling heifers; one, a beautiful roan, being out of the same dam as the sweepstakes heifer at Chicago, and sired by Lord Stanley; also other choice young individuals sired by him testify to his grand breeding qualities. A couple of strong, thick young bulls are still on hand; one, a red, about eighteen months old, out of the imported cow, Roan Princess, and by Prince of Kinellar; the other, out of Centennial Isabella and about sixteen months old. They should both prove ready sellers. Among the calves, which were some thirty-six head, there are many beauties to be seen. We counted in all some sixteen bull calves, and we were particularly pleased with a most beautiful roan, now about nine months old. He is out of a full sister to the sweepstakes heifer at Chicago, and by Lord Stanley. The yearling first prize and sweepstakes bull at Toronto last year was bred in this herd, and the above calf promises to follow in his footsteps. A six months old bull calf, out of same dam as the sweepstakes bull at Toronto last year, and by Prince Royal, also promises to make his mark in the show rings. Prince Royal (above mentioned, and the sire of a number of the young things) was a winner of first for two years at Toronto, and headed the first prize herd in 1892. Among the bull calves, four fine red ones were pointed out to us as being from the Chicago winning heifers. In fact, all the females shown at Chicago have fine calves at their sides. Among the heifer calves several exceptionally fine ones were seen; but the two that pleased us most were a lovely roan, out of Miss Ramsden and by Prince Royal, and a very fine red, from a Nonpareil cow and by Scarlet Velvet.

Among the numerous recent sales from this herd was a two-year-old bull out of the imported cow, Roan Princess, as already stated, the dam of several first prize winners at the Columbian; the purchaser being Mr. Jno. E. Smith, of Brandon, Man. A fine roan two-year-old heifer, straight and growthy, sired by Lord Stanley, and a thick, heavy-fleshed yearling bull out of Miss Ramsden and by Prince Royal, are also sold to go to Manitoba. The herd, which now numbers about one hundred head, contains many other fine individuals well worthy of special mention did space permit. Parties desirous of purchasing will find at Messrs. Russell's a large and varied stock from which to select, and undoubtedly can get their wants supplied satisfactorily.

A GOOD SALE.

At the Shorthorn sale of S. J. Pearson & Son, Meadowvale, Ont., on April 15th, the following animals realized the mentioned prices:—
Cows and heifers—
Nonpareil 40th—Price, \$85; purchaser, Geo. Paul, Mt. Forest.
Nonpareil 39th—\$100; Jno. Isaacs, Markham.
Nonpareil 2nd—\$130; A. Johnston, Greenwood.
Nonpareil 11st—\$120; Jno. Wylie, Streetsville.
Nonpareil 43rd—\$70; Jno. Isaacs, Markham.
Nonpareil 44th—\$70; Paul Kennedy, Limehouse.
Nonpareil 45th—\$80; Jas. Crier, Shakespeare.
Nonpareil 46th—\$90; Mr. McCracken, Meadowvale.
Nonpareil 47th—\$90; A. Robertson & Sons, Oakville.
Nonpareil 48th—\$70; Jas. Guardhouse, Highfield.
Mina Lass 4th—\$170; Jno. T. Wilson, Gorrie.
Cecilia 6th—\$95; M. A. Stein, Meadowvale.
Cecilia 9th—\$85; Jas. Brown, Norval.
Cecilia 11th—\$85; Fred Gardner, Britannia.
Cecilia 8th—\$85; Mr. Elliott, Stanley Mills.
Cecilia 5th—\$65; Sam'l Moore, Cooksville.
Jilt—\$150; Jno. Isaacs, Markham.
Sowerby's Bridal Wreath—\$70; Wm. Wilson, Brampton.
Bulls—
Mina's Gladstone—\$100.
Chief Statesman—\$100; Paul Kennedy.
Captain Earl—\$60; A. Black, Mt. Charles.
British Comet—\$80; Geo. Gooderham, Meadowvale.
Nonpareil Statesman—\$70; Geo. Boucher, Meadowvale.
British General—\$65; Jno. Shockett, Rockwood.
Royal Statesman—\$70; J. L. Dinmore, Thornbury.

A LESSON IN COOKING

When a recipe calls for a cupful of lard or butter, use two-thirds of a cupful of Cottolene—the new shortening—instead. It improves your food, improves your health, saves your money—a lesson in economy, too. Genuine **COTTOLENE** is sold everywhere in tins with trade-marks—"Cottolene" and steer's head in cotton-plant wreath—on every tin.

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Head Office, MONTREAL

NEW BRANDS FOR 1896:

Red Crown and Blue Crown

THESE TWINES ARE BEING MANUFACTURED WITH SPECIAL CARE, AND WE GUARANTEE THEM EQUAL TO ANY WE HAVE EVER MADE. BINDER WILL RUN ALL DAY WITHOUT ANY STOPPAGE EXCEPT TO CHANGE BALL.

FARMERS WILL DO WELL TO USE THESE BRANDS FOR 1896. FOR SALE EVERYWHERE. ENQUIRE FOR PRICES.

The Dale Steel Land Roller is the strongest, heaviest, most durable and most economical roller for farming purposes at present made in the world.

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ADVERTISE IN THE FARMER'S ADVOCATE.

A. HOOVER & SON,
EMERY, ONT., BREEDERS OF
Holstein-Friesians of the choicest blood type: selections from our herd won the herd prize at Toronto Industrial and Montreal in 1895. Herd now headed by the two-year-old Baron Witzde, who has never yet been beaten in the show rings of Canada. Stock for sale. Prices right. 10-2-y-om

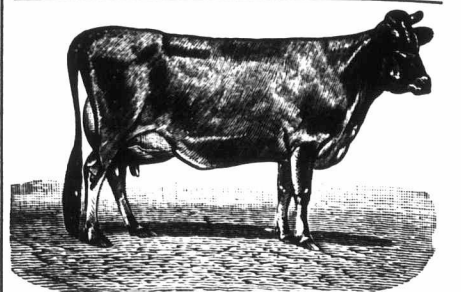
FOR SALE!

HALF THE FAMOUS BELVEDERE HERD OF JERSEYS, owing to most of my farm being sold. Not a Culling Out; but purchasers given their choice at Lowest Prices I ever offered. For many years I have taken everywhere

FIRST HERD PRIZE, and some of these animals, with their descendants, are for sale. There is seldom such an opportunity to get together a superb Dairy Herd, that will also SWEEP THE SHOW RINGS.

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"Dairying for Profit,"
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Best book ever written. 50 cents by mail.
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JERSEYS FOR SALE.—Young Cows and Heifers in calf. Heifer Calves and Bull Calves, richly bred, best testing strains, and good color. Also first-class Berkshire Boars and Sows, bred straight from imported stock. Come and see or write for prices.

J. C. SNELL, - Snelgrove P.O., Ont.
R. R. Station, Brampton, G. T. R., and C. P. R.
8-y-om

WILLOW GROVE HERD OF JERSEYS.
Sweepstake herd of 1894.
Stock from imp. bulls and imp. and home-bred dams of St. Lambert, St. Helier, and Signal strains.
Young of splendid individuality always for sale; also Plymouth Fowls. Eggs, \$1.00 per setting. Highfield St., G. T. R.
6-2-y-om **J. H. SMITH & SON.**

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The entire herd of A. J. C. H. R. Lee Farm Jerseys. Forty head of reg. bulls, cows, heifers, and calves; same number of high grade cows and heifers. Excellent chance to start a herd cheap, as they must be sold within the next 90 days. Come and see, or write

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RIVERSIDE FARM, Ormstown, Que.,
Breeder of Ayrshire cattle. Herd is headed by the prize-winning bull, White Prince of St. Anne's—6108—Choiely bred stock for sale at all times, including some very choice young bulls and heifers. 4-2-y-o

Thos. Drysdale,
Allan's Corners P. O., Quebec, Breeder of high-class Ayrshires, headed by Lord Sterling, winner at Montreal in '95. Extra choice young bulls and heifers for sale. Farm 1 1/2 miles from Bryson St., G. T. R. 4-2-y-o

AYRSHIRES FOR SALE.
Several good yearling bulls by Earl of Percy and Prince Leopold, also cows and heifers. My spring calves will be by the noted bulls White Prince, Sir Colin, and Earl of Percy. Prices right.

F. W. TAYLOR,
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J. YULL & SONS,
MEADOWSIDE FARM, CARLETON PLACE, ONT.
We have a few young Ayrshire bulls left—2 two-year-olds, 1 yearling, and a fine lot of calves of both sex; also Shropshire sheep and Berkshire pigs; not akin for sale. Visitors met at Queen's Hotel. Give us a call before buying. 20-y-o

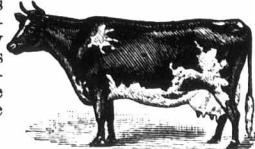




HAVE NOW 3 Young Ayrshire Bulls, ON HAND 1, 2 and 3 years old, respectively; all prize winners; the 3-year-old having won 1st at leading exhibitions. Write: 19-y-om MESSRS. ROBERTSON & NESS, Howick, Que.

GLENGARY STOCK FARM.

My herd comprises the best strains procurable. Am now offering young bulls and heifers descended from the importation of the late Thos. Brown. PRICES RIGHT. JNO. A. McDONALD, JR., Williamstown, Ont. 4-2-y-



Prize-Winning AYRSHIRES FOR SALE.

I have at present one of the largest and best herds in Ontario, which has been very successful in the prize ring. They are deep milkers and of a large size. Bulls, cows and heifers for sale always on hand.



JAS. McCORMICK & SON, ROCKTON, ONT. 20-2-y-o

Ayrshires!

PURE-BRED, of different ages, and both sex. No inferior animals. Write for particulars.

A. McCallum & Son,

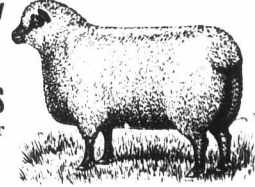
Spruce Hill Dairy Farm, DANVILLE, QUE. 22-y-o

AYRSHIRES - AND - YORKSHIRES.

The largest herd in the Province of Quebec; selected from deep milking strains. Also choice Yorkshires. Orders booked for young pigs. W. F. & J. A. STEPHEN, Trout River, Que.

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W.S. Hawkshaw, Glanworth, Ont. IMPORTED SHROPSHIRE EWES and their lambs for sale; singly or by car lots. Glanworth Station. American Mammoth Bronze Turkeys for sale. 14-2-y-o



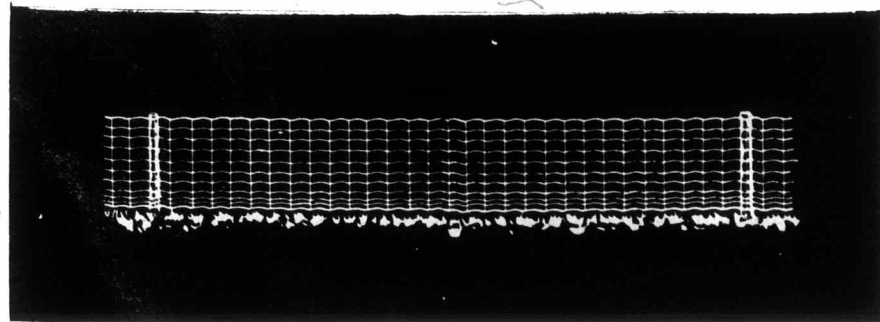
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Henry Arkell, ARKELL P. O., ONT. Pioneer importer and breeder of registered Oxford-Down sheep. Won many honors at World's Fair. Animals of all ages and sexes for sale reasonable at all times. 9-y-om

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KILLS AND PREVENTS TICKS, LICE AND SCAB. MAKES WOOL GROW. Dipping pamphlet free from COOPER & NEPHEWS, Galveston, Tex. If druggist cannot supply, send \$2.00 for 100 lb. pkt. to WILLIAM EVANS & SONS (Ltd.), Toronto and Montreal. Reduced prices on quantities.



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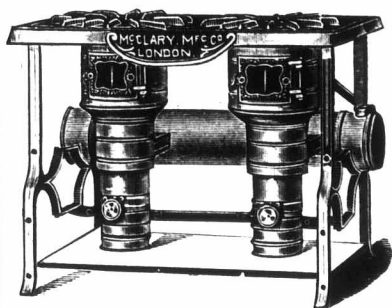
IS STRONGEST, IS NEATEST, IS MOST DURABLE, IS MOST EFFICIENT, IS PIG TIGHT, IS BULL STRONG, IS HORSE HIGH, IS ELASTIC, IS READY MADE, HAS MOST WIRES, HAS STRONGEST WIRES, HAS MOST CROSS WIRES, IS MOST ECONOMICAL, IS LIKED BEST, IS USED MOST, and IS THE CHEAPEST FIRST-CLASS FENCE.

FOR PARTICULARS WRITE

THE PAGE WIRE FENCE COMPANY OF ONTARIO, Ltd.,

WALKERVILLE, ONT.

In the Kitchen



The heat from cooking during summer months with an ordinary cook stove is very fatiguing.

Cooking Can be Done on a "Splendid Oil Cook Stove" With Comfort

at a small cost. No odor. Wicks easily replaced. Powerful 8-inch circular burners. Polished brass burners and oil tank. Steel top, tray and frames. Three sizes—1, 2 and 3 burners.

BAKING, BROILING, AND ROASTING CAN BE DONE TO PERFECTION.

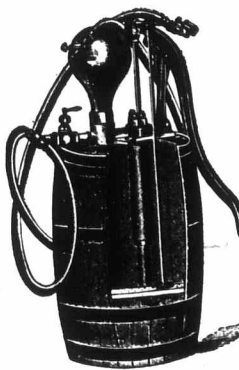
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Don't wait until the trees are in blossom, but order now one of our

"LITTLE GIANT" or "GEM" SPRAYING OUTFITS. IN HAYING TOOLS, OUR HAYMAKER CARRIER and PATENTED STEEL TRACK are unexcelled. It won't pay you to harvest without them.



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The Best and Cheapest STOCK FOOD in the World!

Most SATISFACTORY, because it preserves healthy action at all times. Most ECONOMICAL, because it fattens the quickest. Most PROFITABLE, because best conditioned stock are secured.

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DON'T WAIT till it rains and then seek your umbrella. Decide now on purchasing a "DUPLEX" FEED MILL for next autumn. Send in your order. It grinds corn on the cob.

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ADVERTISE in the ADVOCATE.

GOSSIP.

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

East Lambton has arranged for eleven meetings of the Travelling Dairy, from June 10th to June 26th.

A department of comparative pathology, devoted to a study of the causes and cures of human and animal diseases, has been endowed with \$100,000 in Harvard University.

The champion heavy harness horse at the Boston Show was Mr. Harry Hamlin's half-bred Cogent, by Mambrino King, standard bred, out of a French Coach mare. Cogent was counted the best heavy-harness horse at the New York Show last November, although ineligible (being over height) to the cup competition which was won by Dash.

Swine fever seems to be steadily spreading in Great Britain. During the first quarter of the present year there were 1,524 outbreaks, compared with 1,306 in the first quarter of 1895, and 1,107 in 1894. The number of swine slaughtered as diseased or exposed was 19,306, against 9,581 in the first quarter of 1895, and 14,057 in 1894.

An interesting point cropped up at the recent annual meeting of the Lincolnshire Red Short-horn Association, official notice being received from the Shorthorn Society of Great Britain and Ireland, objecting to their use of the word "Short-horn" in their title. Having taken legal advice, the Lincolnshire men declined to alter the registered name of this organization.

Scottish Farmer:—Single judging has had a fair trial at Glasgow, and the experience gained is likely to increase the popularity of the system. Not for many years has there been less grumbling in our hearing, and while of course all would not have seen eye to eye with the judges, it was freely admitted that the work had in every case been conscientiously performed.

The annual report of the English Lincoln Long-wool Sheep Breeders' Association, which was presented at the annual meeting, on Tuesday, April 21st, reflects the buoyant condition of pedigree sheep breeding in the Fen County. The majority of breeders will have reason to remember the past season with the kindest recollections. The wonderful demand for luster wool, and the foreign demand for long-wool sires, have been the two main features of 1895. The complete success of the season has been somewhat tempered by the distracting losses among lambs during the autumn; but, taken all over, 1895 has been wondrous kind to Lincoln sheep breeders. The Association has deposited a substantial sum and increased about seventy per cent. in membership since 1894, while it is in so flourishing a financial condition that it proposes to undertake the advertising of the ram sales under its own prescient wing.

BOOK TABLE.

The Flock Book of the Suffolk sheep, Vol. X., has been received from the Secretary, Mr. Ernest Prentice, Ipswich, Suffolk, England. The frontispiece is a fine engraving of the President, the Most Honorable the Marquis of Bristol. The volume contains a history of the Suffolk sheep, scale of points, regulations for entry, etc., besides the pedigrees of rams Nos. 3622 to 4020. The book is substantially bound in boards, and well compiled and printed.

The Hampshire Down Flock Book, Vol. VII., has been received from the Secretary, Mr. James Edward Rawlence, 49 Canal Salisbury, England. The pedigrees contained in it are of rams Nos. 1718 to 2033. It also contains a record of flocks registered in Vols. 1, 2, 3, 4, 5 and 6, also by-laws, list of members, etc. Together with the Flock Book came a little pamphlet on the Hampshire Down Sheep, their merits, to quote the writer, as "the best mutton and wool producing breed of the present day." The book is well printed and bound.

The Herd Register and Breeders' Journal, the American Guernsey Cattle Club's official organ and herd book, is issued quarterly in regular, attractive form. Its function is the publication of matters of business in connection with the Club, reports of Guernsey milk and butter tests, and other important items of information. Each issue contains also the pedigrees of animals registered with the Club during the three months previous to its issuance. Many of its pages bear illustrations of typical and heavy-producing animals. The Journal is published at Peterboro', N. H., U. S. A., where the able Secretary and Treasurer of the Club, Wm. H. Caldwell, also has his office. It must be indeed gratifying to the Club to find that Guernsey interests are so steadily increasing, as indicated by the registrations and otherwise, showing that the merits of the Guernsey are winning a place for her in popular favor, to do which it does take real merit nowadays.

NOTICE.

On the accompanying page is shown a cut of the "Splendid" Oil Cooking Stove, made by the McClary Mfg. Co., London, Ont. These are made for summer use, to take the place of the ordinary cook stove and avoid the stifling heat which accompanies cooking by an ordinary stove, besides being cleaner and cheaper. They burn ordinary coal oil without odor, and give an intense heat directly under the cooking utensil, thus making a little boil in a few minutes after lighting stove. A rough estimate of the consumption of oil is: one gallon will last, with one eighth inch circular burner, about seventeen hours, so that the actual cost for fuel is about one cent per burner per hour. Burners and tank are made of brass and cannot rust; the latter is so situated that oil cannot become heated, and thus makes the stoves absolutely free from odor. New wicks can be easily placed. The stoves are made in three sizes, having 1, 2 and 3 burners. Baking oven can also be supplied, which will bake perfectly. Every farmer should have one of these stoves, which are fully guaranteed by the maker, who will gladly send a catalogue for the asking. Drop the line to post paid.

Poultry Almanac will tell all about raising chickens. 10 cents. C. C. Snow, Editor, Publ. Freeport, Ills.

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Specialty of Improved Large Yorkshires
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A choice lot of Boars of either breed, fit for service, for sale. Young Sows in pig, and a lot of very fine Boars and Sows three months old.
Herd won 65 firsts and 45 second prizes at leading fairs, 1895. Inspection invited. Address, H. J. DAVIS, Woodstock, Ont.
8-y-o

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A number of very fine young Berkshires Boars fit for service; young sows fit to breed, and younger ones of all ages, either sex, of choicest breeding. All stock guaranteed to be as represented. Write me for prices, or come and see my stock.
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We are fully ready for the season of '96 with a choice lot of weanlings of excellent quality. More sows to farrow in January. We solicit a call from all intending purchasers. Correspondence solicited.
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For Sale—Six Berkshire boar pigs, seven months old, eligible for registration; also two Shorthorn bulls, twelve and fifteen months old, of A 1 milking strains. Prices right. Correspondence solicited.
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Two one-year-old Berk. boars at \$12 each; three six months old Chester Whites at \$7 each; two litters of Berks. (soon ready to ship) at \$1 each pig; two litters of Chesters (soon ready to ship) at \$1 each pig. This is a special offering in order to reduce stock on hand. Pigs will be crated, put on board cars, and pedigrees furnished free of any extra charge.
JAS. H. SHAW, Simcoe, Ont.

IMP. CHESTER WHITE and TAMWORTH SWINE.
Having won the sweepstakes for the best boar and two sows at Toronto Exhibition of 1895, we are booking orders for spring pigs from imp. stock in pairs not akin. Stock for exhibition purposes a specialty. Pedigrees furnished. Reduced rates by express. Drop a card for prices before buying elsewhere.
H. GEORGE & SONS, Crampton, Ont., Middlesex County, 7-y-o

CANADA: WILKES
Boars fit for service. Sows of all ages, at lowest prices consistent with the times and quality of stock. Orders for spring pigs taken; trios and pairs not akin. Eggs for hatching: 13 for \$1.00, 30 for \$2.00. Any assortment of the following, except Pekin Ducks (Hallock strain), which are \$1.50 for 11 eggs, 25 eggs for \$3.00; Barred Rocks, Brown Leghorn, Black Spanish, and Silver-Gray Dorkings. Send for new illustrated catalogue of stock, free. Address, 17-y-o CAPT. A. W. YOUNG, Tupperville, Ont.

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WM. J. DUCK, MORPETH, ONT., breeder of **Poland-China Swine.** Imp. Blackamoore at head of herd. Nothing but first-class stock shipped.
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FROM SILVER WYANDOTTES
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From three pens of Barred Plymouth Rocks, selected from 300 birds, at \$1.00 per setting; three settings, \$2.50. Reduced prices on larger quantities. Also a few settings of Indian Games at same prices. Pekin Duck Eggs at \$1 per 11. These ducks are direct from Jas. Rankin's yards, the greatest duck man in America.
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Found.—A large fortune and an honorable title. This seldom happens, but, to a certain extent, both can be had by buying from me your Golden and Silver Wyandotte eggs at \$2.00 per 15, and Bronze turkey at \$3.00 per 11. For further information send for fine new catalogue. JAMES LENTON, PARK FARM, OSHTAWA, ONT. 8-d-o

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8-f-om A. STEVENS, SALFORD, ONT.

Preston Poultry Yards
L. and D. Brahmas, B. Langshans, B. and W. Rocks, Blk. and W. Leghorns, and Silver Wyandottes. Eggs, \$1.50 per setting, \$2.50 per two; B. and P. Cochins, W. C. S. and G. Polish and Games, \$2 setting, \$3.50 per two settings. 8-f-om G. D. SMITH, Preston, Ont.

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when they are 7c. to 10c. per doz. for your own use or sell them when they are 20c. to 25c. and double your money. I have a recipe to make a pickle that will keep eggs for two years if necessary, which I have used for 15 years. Will send it to any one sending me \$1.00 (registered letter).
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Chattahoochee Valley Expo., Columbus, Ga., 1888.

HIGHEST AWARDS
St. Louis Agricultural and Mechanical Ass'n, 1889.

SIX HIGHEST AWARDS
World's Columbian Exposition, Chicago, 1893.

HIGHEST AWARDS
Western Fair Association, London, Can., 1893.

SIX GOLD MEDALS
Midwinter Fair, San Francisco, Cal., 1894.

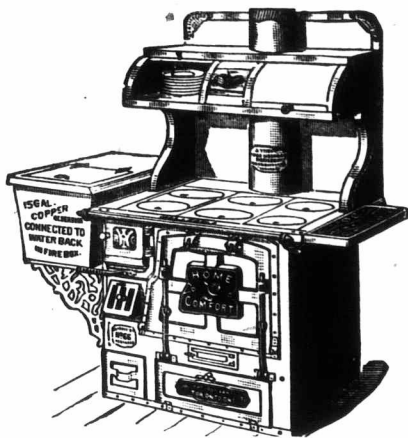
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Toronto Exposition, Toronto, Canada, 1895.

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ADVERTISE IN THE ADVOCATE

STOCK GOSSIP.

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

The Regents of the University of Nebraska have established a school of agriculture, with Prof. T. L. Ryan as director.

Governor Morton, of New York State, has appointed Chas. A. Weiting, of Cobleskill, as State Commissioner of Agriculture, to succeed Frederick C. Schraub.

In 1895 the Bavarian authorities spent over \$5,900 in compensation for animals slaughtered compulsorily in combating outbreaks of contagious diseases. Anthrax caused the expenditure of \$3,230, which was paid on account of 502 animals; glanders, \$615 for thirty horses destroyed, and pleuro, \$44 for four cattle.

The sale of Jerseys belonging to Mrs. Starkie, at Monk's Hall Farm, Saffron Walden, proved very successful, the average being \$30 10s., while the highest price was 105 gs. Altogether the sale was the best for the breed that has been held for a long time, and will give a fresh stimulus to the breeding of these valuable butter cows, remarks the English Live Stock Journal.

The following are given as the average prices for horses at the Lincoln (Eng.) Fair a short time ago:—Matched pairs (very scarce) from \$180 to \$250; high steppers, suitable for broughams, \$130 to \$200; carriage horses with good action, \$80 to \$120; high-stepping saddle horses, \$80 to \$120; hunters, \$60 to \$120; horses for cab work, \$18 to \$30; horses suitable for van, bus, or tram work, \$25 to \$40; draft horses for town work, \$60 to \$70; and agricultural horses, \$35 to \$45 each.

Walter W. Law, proprietor Briar Cliff Farms, Whitson's, N. Y., who recently made an investigation of the Simmenthaler cattle in Switzerland, has ordered a herd for his farm, which will be used for dairy purposes. He expresses the opinion that bulls of this breed will cross well with the Jerseys and grades which he has been keeping at Briar Cliff. In addition to his own herd, Mr. Law directed the purchase of a number of Simmenthalers for Mr. W. D. Sloan, who maintains a fine country place and stock farm at Lenox, Mass. John Mayer, manager of Mr. T. A. Havemeyer's Mountain-side Farm, at Mahway, N. J., was the pioneer U. S. importer of the Simmenthalers.

Hon. John Dryden, Minister of Agriculture for Ontario, writes:—"Since a member of your staff visited my farm, 'Maple Shade,' I have had the honor of a visit from the Hon. Thomas Greenway, Premier of Manitoba. Mr. Greenway, like myself, is a farmer, and combines the duties that devolve upon him as Premier of our sister Province with the work of his farm, situated at Crystal City. He already possesses the nucleus of a Short-horn herd, but complains that many of the animals are not as good milkers as he would like. His visit resulted in the purchase of three animals, which are expected to correct this deficiency in his Short-horn. He takes the young bull, Emperor Earl, whose dam is an exceedingly good milk, and who belongs to a good milking family. Her sire was out of an imported cow, which also had good milking properties. This bull, of pure Crutchebank blood, and which was noticed in the herd by your representative, is a very handsome animal, and it is believed will do good service in Manitoba. The two females are Scottish Belle, with heifer calf at foot, and Roan Mary, a heifer of considerable promise. Both these females are of good milking strains, and have splendid Scotch pedigrees. Mr. Greenway agrees with me that in these difficult days the most must be made out of everything on the farm, and that it is desirable to have, if possible, animals that combine the essential qualities of milk and beef."

A. HOOVER & SON'S HOLSTEIN-FRIESIANS.

This herd has now been established some four years, and have succeeded already in winning many of the best prizes in the best rings of Canada, last year carrying off the herd prizes at both Toronto and Montreal, and other good prizes in their classes. Some eighteen firsts and two medals were won by this herd last year, and from present appearances they promise to repeat their successes the coming season. The aged bull that headed the herd last year (Emery Prince) was a grand specimen of the breed—a typical bull in most respects, and a winner of several firsts and a bronze medal at Montreal in same class at Ottawa. The two-year-old Baron Witzde is a model Holstein, and an improvement on the old bull, if such were possible. He is a monster in size and still retains a smoothness and finish seldom seen in one of his proportions. We would judge from present appearances that he would tip the scales at 2,000 pounds as a two-year-old. He has never yet been beaten, and we should judge that it will take something good to take the ribbon from him this fall. He was bred by J. C. McNeven & Son, of Winona, Ont., and was sired by Siepkje 3rd dam Witzde 847 761. The foundation cows of the herd were purchased from S. Shunk, Jr., Edgeley, Ont., whose stock were imported from Holland by B. B. Lord & Son, N. Y. Among the good ones in the Emery herd we might mention Edgeley Lilly 97, a beautiful cow of capital conformation and keenly marked; she is a half-sister to Emery Prince (above mentioned), out of imp. Lilly (95) and sired by Earl Parrington, imp. (2903). A daughter of hers, Emery Beauty, gives great promise as a milker. She was the winner last year, at Gananoque Dairy show, in the three-year-old test, and also won second at Toronto and third at Montreal in her class as a three-year-old. Edgeley Treva 1674, a full sister to Emery Prince, is a grand cow, and also a successful winner, having captured first at Montreal and Ottawa and second at Gananoque and first at Woodbridge. Edgeley May 294, by Edgeley Pilot, was shown in the first or best class. She is rather dark in color and of good dairy conformation. We also noticed in the herd the imp. cow, Aggie Gem 2nd 47, bred by T. G. Yeomans & Sons, Walworth, N. Y., and sired by Prince of Wayne 5th 199, dam Aggie Gem. A few nice young things were also seen. Messrs. Hoover's farm is located at Emery, on the C. P. R., and but a short distance north-east of Toronto. Note their announcement in our advertisement columns.

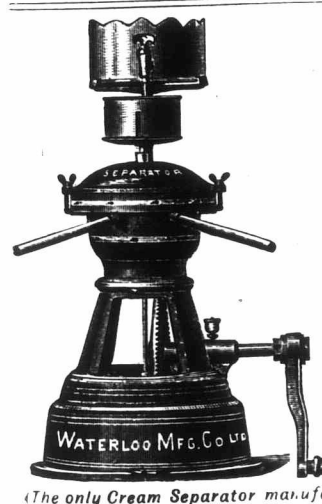
THE HYSLOP WHEEL
BEST ON EARTH

REGENT WHEELS
SECOND ONLY TO HYSLOP

FLEET WHEELS
BEST \$75 WHEEL IN CANADA

THE SPARTAN WHEEL
\$50 COMPARE IT WITH OTHERS AT \$75

HYSLOP, SON & M'CBURNEY.
THE WHEELMEN OF CANADA.



Reasons Why It Pays

TO USE A CREAM SEPARATOR.

You realize from 15 to 25 per cent. more cream. The quality of your butter will be 20 per cent. better, and the price higher accordingly.

You dispense with hours of hand work and drudgery every day, setting pans, skimming milk, etc.

You will have fresh, sweet, warm-skimmed milk morning and night for rearing calves, saving the trouble and expense of heating skimmed milk.

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Manufactured by **THE WATERLOO MFG. CO., Ltd.,** WATERLOO, ONT.

(The only Cream Separator manufactured in Canada.)

BREEDERS' DIRECTORY.

27 Cards up to six line space inserted under this heading, one issue a month, 25 per line per annum; every issue, 25 per line. Payable in advance.

A. ELLIOT, Pond Mills, breeder of Collie Dogs, Tamworth and Duroc-Jersey pigs, Oxford Sheep & sweepstakes strain B. Turkeys.

D. G. HANMER & SON, Mt. Vernon, Ont., Importers and Breeders of high-class Shropshire Sheep and Berkshire Pigs. 2-2-y-om

F. S. WETHERALL, Cookshire, Q., breeder of Jersey Cattle, Shropshire Sheep; W. H. Fox, Irish and Scotch Terriers, and Beagles.

H. I. ELLIOTT, Danville, P. Q., breeder of Scotch Shorthorns & Southdown sheep

J. AS. TOLTON, Walkerton, Breeder and Importer of Oxford Sheep, also Breeder of Shorthorn Cattle and Bronze Turkeys.

JOHN SANDILANDS, Williamstown, Ont., Breeder of choice Ayrshires. Young stock for sale. 4-3-y

J. P. PHIN, Breeding and Importing Shropshire Sheep & specialty. 2-2

T. GUY, Oshawa, Ont., Breeder of Ayrshire Cattle—prize winners at the World's Fair.

W. M. SMITH, M.P., Columbus, Ont., breeder and importer of Clydesdale Horses, Shorthorn Cattle, and Cotswold Sheep. Stock for sale. Terms and prices liberal. 2-2-y

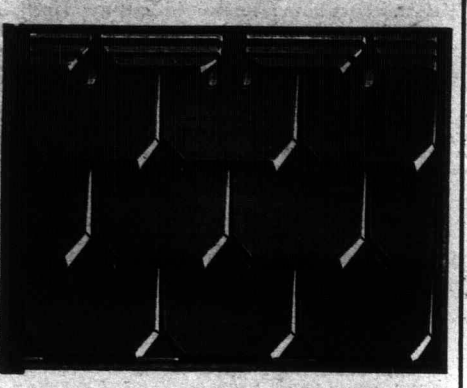
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Directions for Use.—As speedily as possible after the animal is attacked with COLIC, GRIPES, or SPASMS, give this draught in half a pint of cold water; if relief is not obtained in half an hour, repeat the dose, which proves effectual.

It is of the highest value in CHILL, a state of the animal which, if not prevented, frequently terminates in either INFLAMMATION OF THE LUNGS, BRONCHITIS, PLEURISY, or RHEUMATISM.

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Our pamphlets are not advertising circulars boasting special fertilizers, but are practical works, containing latest researches on the subject of fertilization, and are really helpful to farmers. They are sent free for the asking.

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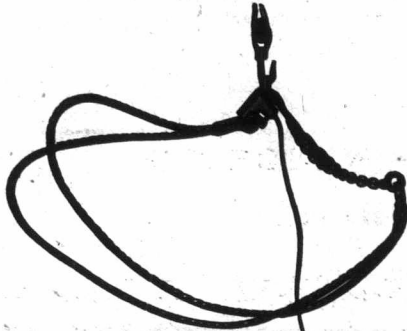
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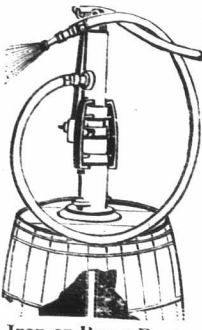
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The People's Wholesale Supply Co.

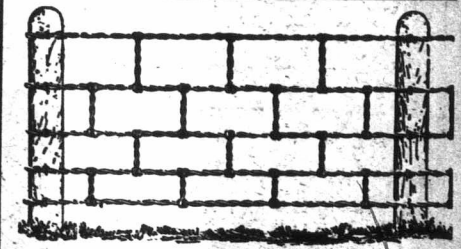
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