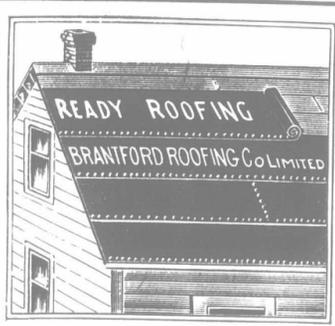


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TWO GRADES ROOFING.  
ONE, TWO, THREE EACH.



Each roll contains nails and cement to lay. Any handy man can put it on the roof. See directions on every roll.

**BRANTFORD ROOFING CO.**  
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**TENDERS FOR SUPPLIES, 1907.**

THE UNDERSIGNED will receive tenders up to noon on Thursday, 15th November, 1906, for supplies of butchers' meat, creamery or dairy butter, flour, oatmeal, potatoes, cordwood, etc., etc., for the following institutions during the year 1907, viz. —

At the Asylums for the Insane in Toronto, London, Kingston, Hamilton, Mimico, Brockville, Cobourg, Orillia and Penetanguishene; the Central Prison and Mercer Reformatory, Toronto, and the hospital for epileptics at Woodstock.

Exceptions—Tenders are not required for the supply of meat to the asylums in Toronto, London, Kingston, Hamilton and Brockville, nor for the Central Prison or Mercer Reformatory, Toronto.

A marked cheque for five per cent. of the estimated amount of the contract, payable to the order of the Provincial Secretary, must be furnished by each tenderer as a guarantee of his bona fides. Two sufficient sureties will be required for the due fulfillment of each contract, and should any tender be withdrawn before the contract is awarded, or should the tenderer fail to furnish security, the amount of the deposit will be forfeited. Specifications and forms of tender may be had on application to the Department of the Provincial Secretary, Toronto, or to the Bursars of the respective institutions.

The lowest or any tender not necessarily accepted.

Newspapers inserting this advertisement without written authority from the Department will not be paid for it.

W. J. HANNA,  
Provincial Secretary.

Parliament Buildings, Toronto, October 29th, 1906.

**Men Wanted**

to advertise and introduce our stock and poultry compounds to farmers and dealers. Work during spare time or permanently. This is an exceptional opening for a hustler. Write for particulars. **GOLDEN CREST CO., 48 BATHURST STREET, LONDON, CANADA.**

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**FREE COURSES**

IN JANUARY, 1907, AT THE

**Ontario Agricultural College, Guelph,**

IN

- Stock Judging** (2 weeks).
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Write at once for special circular to

**G. C. GREELMAN, B.S.A., M.S., President.**

**Maple - Sugar Makers!**

Do you devote the same attention to your maple sugar bush as you do to the other lines in farming? You can make more money in two weeks' work in your camp than you can in two months at ordinary farming.



Catalogue free.

The Grimm Mfg. Co., 58 Wellington St., Montreal

**THE CANDID CANNER.**

A canner unusually canny. One morning remarked to his granny: "A canner can can Everything that he can, But a canner can't can a can, can he?"

"So many prominent men are reported to be ill. What do you suppose is the matter with them?" "Probably suffering from exposure."

"Now, Jimmy, what is the shortest sentence in the English language?" "Chimmie.—Ten days or ten dollars."

**A Splendid Xmas Gift for any Family**

Nowadays, folk are too prone to take things for granted. They accept the wonderful speaking machines as a matter of course, and do not half appreciate what marvelous instruments they are.

The telephone, telegraph and automobile are marvelous. But just think how much more wonderful are the



**Victor or Berliner Gram-o-phones**

Just think of rolling your chair before the fire in the evening—lighting cigar or pipe—and listening to a concert that could not be brought to you for less than \$20,000.00 a night.

Caruso, Eames, Gadski, Scotti, Plancon—the most glorious voices in the whole world—right there in your room to sing at your bidding, and to keep on singing years after the artists are dead. Maud Powell, queen of the violin—Hollman, master of the 'cello—Sousa's and Pryor's Bands—and the great Victor Orchestra—are there waiting to play to you at your touch of the button—to say nothing of quartettes, comic singers, instrumental soloists, minstrel troupes and other entertainers. Think what a concert you may have for your friends, in your own home, any evening!

All this is possible only with the wonderful Victor or Berliner Gram-o-phone. It is the Victor or Berliner alone that mirrors every note—every tone—every shade of emotion of voice instrument.

Caruso sings only for the Victor or Berliner. He knows that these wonderful instruments alone will reproduce his voice in all its matchless purity and volume.

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Is it not the ideal Christmas present for the wife—for the children—for some dear friend who seldom has a chance to hear any good music?

Prices, \$12.50 to \$110.

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**USE CARNEFAC STOCK FOOD FOR THAT THIN HORSE.**

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Nine times out of nine you'll find a Stevens Firearm true to your aim.

Stevens Single Barrel Shotgun, - No. 107, \$8.50  
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If your dealer cannot supply, write direct to us.

Write for our 140-page free catalog. Any man or boy interested in firearms will find it full of helpful information on hunting, proper care of weapons, notes on sights, ammunition etc. Why not write to us to-day? Send 4c. in stamps to cover postage.

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Free, for 20 days' trial. We send out all machines on 30 days' free trial before we ask you to accept or pay for them. If not satisfactory, send them back at our expense.

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WINDSOR SUPPLY CO., Windsor, Ont.

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Farms—improved and unimproved. All kinds. Easy terms and right prices.

W. D. Jones & Sons,  
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Opposite C. N. R. station.

# Sunlight at Home After Dark

THE BECK-IDEN

## Acetylene Lamp

Generates and Burns Its Own Gas.  
Guaranteed Without Danger.

Costs one cent per hour for 45 candle power.

Gives the best light in the world—imitation sunlight.

No oil, no smoke, no dirt; easily handled.

The preparation used in the lamp is packed in 10-lb. cans, and may be kept on any shelf, as there is no danger.

Use this lamp once and you will never want any other light.



An ornament in any home.

Cheaper to burn and easier to handle than an oil lamp, without the danger.

Made entirely of oxidized brass.

A boon to readers and workers.

The lamp will last a lifetime.

Money refunded if not entirely satisfactory.

Write for particulars.

The light is so powerful and white that it cannot be appreciated until seen.

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ADVERTISE IN THE FARMER'S ADVOCATE.

## Clean Skimming Means Good Living

The hog trough is no place to put butter.

Wide awake farmers want the cream separator that skims the cleanest. It means more profit—better living. That separator is the Sharples Dairy Tubular—the separator that's different.

Sharples Dairy Tubulars have twice the skimming force of any other



separators—skim twice as clean.

Prof. J. L. Thomas, instructor in dairying at the agricultural college of one of the greatest states in the Union, says: "I have just completed a test of your separator. The skimming is the closest I have ever seen—just a trace of fat. I believe the loss to be no greater than one thousandth of one per cent."

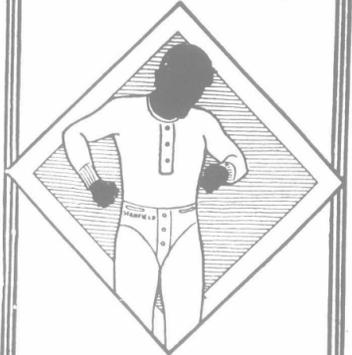
That is one reason why you should insist upon having the Tubular. Tubulars are different, in every way, from other separators, and every difference is to your advantage. Write for catalog \$1.00 and valuable free book, "Business Dairying."

The Sharples Separator Co.,  
West Chester, Pa.  
Toronto, Can. Chicago, Ill.

## The Man Who Thinks He Must Pay Big Prices

in order to get satisfactory Underwear, has never enjoyed the ease and comfort of

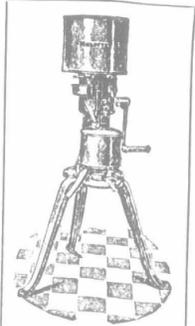
## Stanfield's "Unshrinkable" Underwear



It is made by Canadians—for Canadians—in sizes to fit all figures—and weights to suit all Canadian climates.

And it does not cost much, either.

Just ask your dealer to show you STANFIELD'S—the Underwear that won't shrink. Every garment guaranteed.



SIZES A, B, C, D.  
Capacity  
280 to 600 Lbs.

# WHY WAIT TILL SPRING

## Why Waste Cream and Butter all the Winter?

We say and can prove that the Melotte will pay for itself in increased cream and butter yield alone (at least 20%) before spring comes, to say nothing of improved quality of warm and sweet skim milk for calves and pigs, and the saving in time, labor, space and utensils.

Why not allow us to send you a Melotte on free trial, and let the machine speak for itself? If you have less milk now, remember it is more valuable, as butter is making better prices, and 20% more cream and butter every week is surely well worth saving.

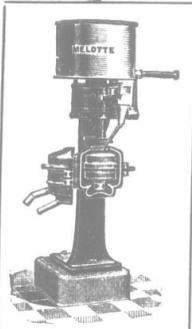
The universal advice of Melotte users to friends and neighbors is

## Be Sure and Get a "Melotte"

This is why the Melotte has to-day by far the largest sale in Canada.

Why not allow us to send you a Melotte on trial? State the number of cows and we will tell you the best size to try. There is no risk, no trouble, no expense to you, and cash or credit terms can be arranged.

We ask again: Why wait? Why not commence getting that extra butter yield at once? It is yours for the asking. Write to-day for illustrated catalogue.



SIZES 1 TO 6.  
Capacity  
400 to 1,300 Lbs.

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Agents Wanted Everywhere. Branches: Montreal, Winnipeg, Vancouver.

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WRITE FOR PRICES  
METALLIC ROOFING CO.  
LIMITED  
TORONTO, CANADA.

# The Farmer's Advocate

## and Home Magazine

"Persevere and Succeed."

Established  
1866.

VOL. XLI.

REGISTERED IN ACCORDANCE WITH THE COPYRIGHT ACT OF 1875.  
LONDON, ONT., NOVEMBER 15, 1906.

No. 738

### EDITORIAL.

#### A Restricted Immigration.

A proposal has been made that the immigration door of the Dominion should be thrown wide open for the admission of Chinese, Hindus and like classes, to provide cheap labor during the constructive era through which the country is now passing. Especially is it claimed that the Western Provinces need them for the more menial occupations, so-called, and the country east, west and middle for the rough labor of railway construction. If the first business of Canada is to pile up wealth in the hands of the few, the proposition will commend itself as likely to facilitate that process; but if the purpose of our efforts at nation-building is to produce an enduring race of men of high character, the attainment of that end will be made difficult, and in a large measure frustrated, by the plan proposed.

The present population of Canada is made up chiefly of descendants of the people of the British Isles and the nations of northern and western Europe, in the main a good secure foundation stock, the homogeneity of which we do well to preserve.

The fact is now very generally recognized that, in view of its extent of arable land, natural resources and concomitant advantages, Canada presents inducements to immigrants and investors which cannot be duplicated by any other land. This was not always the case, but the tide of population and capital is now flowing hitherward, and we need not be greatly concerned to hasten the overflow of the former from lands where the conditions of life are less favorable. We can afford to apply in some measure the principle of selection. The Government of the country professes to establish and maintain such conditions as will conserve to the people, life, liberty and the pursuit of happiness. Professedly for the material benefit of the people and the development of industry, this country utilizes, to some extent, the protective principle in her tariffs, so as to restrict foreign competition. As to the economic virtue of the policy, people are not all agreed, but surely there is at least greater reason for safeguarding our future as a people from the undesirable and the unfit. In fact, we have done it already by the per capita tax on the Chinese and by deporting the physically degenerate.

We need population. That is admitted; and we need more railways—but we will be a better nation, and our development will be more satisfactory and secure if we take our time about both. Under present reasonable safeguards, let us welcome our kinsfolk from the British Isles and the types of north-western Europe who have done well with us in the past, adapting themselves readily and thriving under Canadian conditions and institutions. Even as it is, too many morally undesirable have been crowding in. The Grand Jury at Winnipeg, in their presentment, the other day, were compelled to make the following significant observation: "We regret to note the increase in crime in this judicial district, as evidenced by the large number of cases brought before us. A large percentage of these cases originate among what is called the foreign element. We hope that in time these people will learn to appreciate the privileges and liberties we have in Canada, and become, as a class, law-abiding citizens."

The argument has been advanced that we do well to encourage the inflow of Eastern races in order to Christianize them. Without venturing to offer expert testimony on such a point, we believe it to be the lesson of history that that object can better be accomplished in the native

habitat of these people, under the well-tested missionary system of the past hundred years.

Thus far, some 1,500 Hindus are reported to have reached British Columbia, and the majority of those employed are in the sawmills. The racial, social, climatic, economic and other conditions are all adverse to the natives of India, and those who have been encouraging the immigration should stop it voluntarily, for the added reason that these people have a British status. We are pleased to note that Mr. T. C. Mazoondar, of the University of Allahabad, as a commissioner to British Columbia, has, after a careful investigation, reported against the emigration, and has advised the press of the Punjab to use every effort to cause its cessation.

Suppose the new railways of Canada cannot be built quite so rapidly; that is not a very serious matter. The cheaper labor would benefit chiefly a few contractors. Better pay a little higher rate of wages to a class of people who will spend more in the country, and give out more of the work to the new settlers who are filling up the districts through which the lines are being run.

If they remained in the country at all after the railways were constructed, these alien navvies would want to settle in communities, and our experience of that sort of thing in the West has been bad; and if they married with our own people, the results would probably be worse.

For purposes of unholy greed, the United States, half a century ago, allowed an alien race to be poured into the South, and the penalty was four years of bloody war, and a race problem still unsolved.

The latter may be an extreme example, but it emphasizes the lesson we are seeking to draw, that this country should discourage the coming of the undesirable, and adopt special measures, if need be, to promote the immigration of our kinsfolk of the British Isles and the European peoples who, in color, racial characteristics and aspirations, correspond with the foundation stock of the Dominion. The difficulties in respect to our foreign relations are apparent, but should not be beyond the resources of modern statesmanship and diplomacy. In the main, the civilization, humane spirit and progress of the white races, under the ægis of Christianity, commend themselves to the enlightened Eastern leaders, and they probably discern that they stand to gain by the open-door policy on their part.

#### Canadian Dairymen Stand Comparison.

We have recently had a fine example of how truths stated without adequate complementary assertion may be perverted to unfair conclusions. At the medical congress in Toronto, Prof. Harcourt, of the Ontario Agricultural College, read a timely paper on the control of milk supply, criticising the manner in which milk is kept and handled in Canada, and adding his opinion that if a commission were appointed to investigate the conditions under which milk is handled and delivered to the consumer, its report would be as bad as the revelations relating to the meat-packing plants of Chicago.

As might be expected, this one point of Prof. Harcourt's address has been bruited about without its context, and, reaching the Old Country, has aroused a real or feigned concern of the press, and we in Canada are now being regaled on warmed-over editorials of Old-Country papers, commenting inferentially in alarmist tones on the quality of the cheese made in a country where such things may be said of the local city milk supply.

That the press alarm will have any serious effect on the price of our export cheese, is improbable, for it holds too well-deserved a place

in British esteem, and consumers will wisely reflect that its quality has not been affected one way or the other by newspaper notoriety.

Now, there is every reason to believe that Prof. Harcourt's indictment of our milk producers is not overdrawn, and, while on the subject, we may as well make a clean breast and say that the average milk supplied to our creameries and cheese factories is little better than that retailed in our cities and towns. But we hasten to add what we believe Prof. Harcourt himself would have added had he expected such publicity, that Canada is better than most other countries—probably better than Britain herself. Certainly, there is no comparison between our dairy products and the average of those in the neighboring Republic. We are away ahead, not only in care of raw material, but in cleanliness and skill of our cheesemakers and creamerymen. Therefore, there is no occasion for discrimination against Canadian dairy products—rather the reverse.

The crux of the matter is that the conditions of milk supply (which should be more carefully supervised than any other phase of human food supply) have been sadly neglected in this and other countries. It is time the searchlight of public investigation, which has disclosed so effectually the raw spots of the meat trade, should be turned on the milk business. We need not pause to enumerate the dozens of common ways in which milk may suffer bacterial contamination, but may simply point out that for one chance of pork or beef being rendered impure and unwholesome in an ordinary abattoir, there are probably ten chances of milk being injuriously affected. Hygienists have long deplored the indifference of producer and consumer towards the matter of cleanliness in dairying; but so accustomed are we to dirt and germ pollution that it is only when the milk sours more promptly than usual that we think about germs, and it is only when an outbreak of typhoid occurs that the ordinary person gives any thought whether the cows that furnish his baby with milk drink from a clean trough or from a miry barnyard pond. We believe the majority of Canadian dairymen exercise care in these respects, and there are many good wells being sunk every year, but there are few of us, indeed, who need not improve in the matters of water supply, stable sanitation and personal cleanliness, and there are some who should not be permitted to keep cows at all until they have been made to do as the packers did—clean up. However, so long as they may be careless with impunity, some will disregard ordinary decent precautions to insure cleanliness. It is true most cities make some attempt at inspection of the dairies from which vendors procure their supplies, but often the inspection is superficial and much too lenient. The very best dairymen are taking only proper care of their milk, and the majority are far behind these. Inspection could do no one any harm, for it costs no more to produce clean than impure milk, if a man sets himself conscientiously about it.

It is of interest to note, in this connection, for the assurance of our Old Country friends, that a feeling is growing among our leading dairymen of Ontario favoring a law to provide for thorough inspection of dairies supplying milk to co-operative creameries and cheese factories. We beg also to remind them: that the latter are under careful sanitary supervision by a staff of Government inspectors, specially appointed for that purpose. The consideration given these radical steps is evidence that Canada is by no means indifferent concerning the kind of dairy produce sent across the water to paternal John Bull. Canadian dairymen are far from perfect, but they can well stand comparison with other countries.

## THE FARMER'S ADVOCATE AND HOME MAGAZINE.

THE LEADING AGRICULTURAL JOURNAL IN THE  
DOMINION.

PUBLISHED WEEKLY BY  
THE WILLIAM WELD COMPANY (LIMITED).

JOHN WELD, MANAGER.

AGENTS FOR THE FARMER'S ADVOCATE AND HOME JOURNAL,  
WINNIPEG, MAN.

LONDON (ENGLAND) OFFICE:  
W. W. CHAPMAN, Agent, Mowbray House, Norfolk Street,  
London, W. C., England.

- 1. **THE FARMER'S ADVOCATE AND HOME MAGAZINE** is published every Thursday. (52 issues per year.) It is impartial and independent of all cliques or parties, handsomely illustrated with original engravings, and furnishes the most practical, reliable and profitable information for farmers, dairy-men, gardeners, stockmen and home-makers, of any publication in Canada.
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Address—THE FARMER'S ADVOCATE, or  
THE WILLIAM WELD COMPANY (LIMITED),  
LONDON, CANADA.

### The Eighth Commandment.

Mr. Bernard Shaw, the playwright and author, is reported, in the newspapers, to have come to the conclusion that the Ten Commandments are out-of-date for this advanced age. That this is the working theory of a good many people, is evidenced by their conduct. If we may judge by the unearthings of the season of 1905-6 in Canada, it looks as though the eighth injunction in the decalogue were becoming obsolete, or else there is a deal o' haziness as to what it means. Shakespeare's "Iago" draws the lines more closely than at the taking of a loaf of bread, a mint of money, or a block of land. He says:

"Good name in man or woman  
Is the immediate jewel of their souls.  
Who steals my purse steals trash;  
But he that filches from me my good name,  
Robs me of that which not enriches him,  
And makes me poor, indeed."

What shall be said of the extortions of the Plumbers' Combine, the scandalous dissipation of the savings of the people in the York Loan and its blood-sucking auxiliaries, or the million-dollar wreck of the Ontario Bank through unauthorized stock-gambling? It does appear to be high time for press and pulpit to set about giving some lucid expositions of the application of the four simple words, "Thou shalt not steal," in financial and commercial transactions, all the way from watering milk to the highest (or lowest) flights of frenzied finance. Once the public mind is properly clarified on this branch of the case—or simultaneously with that process—let us have a demonstration of the administration of justice which will adequately punish the convicted culprits, first for their crimes, and also as an effective object lesson to the rising generation. Sermons and editorials do not reach the Tom-and-Jerry political element, and moral essays run over the minds of the men who have been juggling with other people's money like water off a duck's back. Jail's the thing.

### To Our Subscribers.

Our great aim for 1907 is to improve "The Farmer's Advocate and Home Magazine." People tell us it is first-class now, but we know that with the co-operation of our subscribers we can make it still better. Now, the more subscribers we have, the more money we shall be able to spend in improvements. We want to double our subscription list right away this fall, and are going to depend largely on our present subscribers to help us in doing this. Let each present subscriber obtain for us just one new subscriber, and the thing is done.

A little less than 3 cents per week for "The Farmer's Advocate and Home Magazine," 52 copies per year, Christmas numbers included! Surely it should not be hard to obtain one new subscriber when these facts are pointed out. Perhaps, too, you might call attention to our special rates to new subscribers as an inducement—from now until the end of 1907 (two Christmas numbers included) for \$1.50. The earlier the subscription, the more copies to be received.

Do what you can for us, and help us to make the fall of 1906 the banner season in the history of "The Farmer's Advocate."

### Notes from Ireland.

#### AN AGE OF COMMISSIONS.

At present, no fewer than four Royal, Viceregal, or Governmental, Commissions are enquiring into matters closely affecting the future welfare of Ireland. There may be some political significance in this, for such a wholesale stocktaking of any country is too remarkable to be regarded as commonplace affair. Indeed, with vague promises (or threats—all according to the spectacles through which one looks) of extended local government, or Home Rule concessions by the Liberals, floating about, these inquiries might lend some color to the fancy that we will soon witness important developments in connection with the government of the country. Be that as it may, however, this is neither the place nor the time to deal with such topics, and until some epoch-making event actually transpires, the political aspect of these commissions may be left alone. The commissions, I may mention, are engaged in inquiries in the following directions: First, into the constitution and working of our Dublin University (Trinity College), which is the subject of much bitter religious strife, and where, by the way, a chair of agriculture has lately been established; second, into the working of the Department of Agriculture and Technical Instruction, whose operations in the cause of farming development now ramify practically the entire country; third, into the working of the Irish railways and canals, the proper control and efficient service of which are, needless to say, most potent factors in the development of any country; fourth, into the working of the Congested Districts Board.

This last-named institution, it should be explained, is a Government body, which was entrusted some years ago with looking after the poorer portions of the west of Ireland. Emigration has, of course, wrought such a change in most of these places that they now present anything but a "congested" appearance. Nevertheless, when the Board was called into existence, things were different, and the districts along the western seaboard were rather thickly peopled with poverty-stricken families. The change that time has brought about, and the inevitable overlapping of the Board's work by that of the Department of Agriculture, rendered the inquiry at present taking place a matter of necessity. It may not be a surprise to find the C. D. B., as a result, being merged into the Department, but one is not wise to attempt a dogmatic prophecy in such a matter.

Of course, of the quartette, the commission possessing the greatest and most direct interest

for farmers is that sifting the affairs of the Department of Agriculture. Its labors should now be getting near completion, for the sources to which it was advisable to resort for evidence must be pretty soon exhausted. Sitings have been held in all the leading centers, and evidence has been taken from practically every standpoint from which the work of the Department could be viewed. The great bulk of the evidence has been of an appreciative nature, and, even in those cases where the Department's methods have been found fault with, the best part of the criticism indulged in has been more of a constructive than of a destructive character. Personalities have been allowed to enter into the evidence in some places, and the head of the Department, Sir Horace Plunkett, has been rather bitterly spoken of on such occasions. However, the reason for this is easily found. Sir Horace, a few years ago, published a notable book, which he called "Ireland in the New Century," and in which he discussed several aspects of Irish economics. Among other matters, he wrote pretty plainly on the question of excessive church-building, priestly influence, and other highly-controversial ecclesiastical subjects. The book's appearance was the signal for a great outcry from the clerics and prominent members of the Roman Catholic Church, by whom it was stigmatized as an unwarranted insult to their beliefs and practices. This portion of the book may have been injudicious, from a public man in such a position, but it was doubtless an honest, outspoken expression of opinion. Nevertheless, the prejudice which it excited against the writer will die hard in some quarters, and it is to be feared that it accounted for a lot of the adverse criticism. However, leaving that particular matter aside, it is confidently to be expected that the whole inquiry will have a beneficial effect on the Department's work, probably enlarging its sphere of influence, and giving the country generally a deeper sympathy and more hearty co-operation with its work.

#### PRICES FOR AGRICULTURAL PRODUCE.

The collection of statistics of any description, for a whole country, is a task that requires some time, and it was only this month (October) that the Department of Agriculture succeeded in giving publicity to the annual return showing the average prices current in Ireland for different descriptions of farm produce during the year 1905. Needless to say, information of this kind is always interesting and valuable, as, even if the returns cannot, in the very strictest sense, be accepted as infallible, yet, for all practical purposes, they are useful for the sake of comparisons. It may be here remarked that the prices of Irish farm produce are influenced directly by the conditions of supply and demand in the British markets. In other words, if the consumptive demand in Great Britain (from bigger population or more prosperous conditions) increases, prices in Ireland are likely to advance; whereas, if foreign imports increase, Irish prices are depressed. The variations occurring from year to year are due mainly to the effects of these two circumstances. The returns to which I have above referred, when taken in conjunction with the official figures of the Board of Trade regarding imports, etc., afford interesting study for our economists. They show that beef was 1s. per cwt. cheaper during 1905 than in 1904, and mutton underwent a similar reduction, the great contributory cause in each case being, no doubt, the marked increase in the imports of foreign dead meat. In regard to dairy produce, a satisfactory advance in price, amounting to 10s. per cwt., was registered during the year, there being a substantial decrease in the quantities of butter received from abroad; indeed, the only country that sent a larger supply during 1905 than 1904 was Canada. In connection with the butter question, an interesting table shows how considerable are the variations caused by the uneven output of produce at different seasons of the year; for, as I have pointed out in one of my earlier letters, winter denying is very much neglected in Ireland. Consequently, the fact in question shows that, taking creamery butter for example, the average prices per cwt. during the four quarters of the year were:—Earlier date, 105s. 1d.; ending June, 93s. 3d.; ending September, 104s. 7d.; ending December, 106s. 3d.

Among other things, what is returned as having

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averaged per cwt., 6s. 10 $\frac{1}{2}$ d., a decrease of 3 $\frac{1}{2}$ d.; oats, 5s. 7 $\frac{1}{2}$ d., an increase of 1 $\frac{1}{2}$ d.; barley, 7s. 1 $\frac{1}{2}$ d., a decrease of 1 $\frac{1}{2}$ d.; potatoes, 2s. 10 $\frac{1}{2}$ d., a decrease of 6d.; hay, 3s. 1 $\frac{1}{2}$ d., a decrease of 1d.; grass seeds, 9s. 8 $\frac{1}{2}$ d., an increase of 10d.; and flax, 55s. 6d., no change. Most of the foregoing prices, of course, are influenced by the character of the season, whether favorable or not to big crops. With regard to wool, the upward tendency is shown to continue, 13d. per pound being returned as the average for the year, and this contrasting very markedly, indeed, with the 5 $\frac{1}{2}$ d. which ruled no further back than the year 1902.

#### THE LONDON DAIRY SHOW.

It was my privilege to attend, during the second week in October, the great annual exhibition held in London each year under the auspices of the British Dairy Farmers' Association. We have nothing like this fixture in Ireland. It was, this year, a wonderfully comprehensive exhibition of all kinds of British dairy produce, comprising not only typical representatives of leading milk- and butter-producing breeds, but also exhibits of the roots and feeding stuffs required for their use; of butter, cheese, cream, skim-milk bread, churns, separators, milk cans, carts, etc. A large number of Irish creameries competed, with great success, in some of the butter classes, winning several prizes. The quality of the samples from this side of the Channel fully upheld the reputation of Irish buttermakers, but in some instances the methods of packing were at fault—an important point which will need to have more attention from some of our producers. I noticed an extensive series of exhibits from New Zealand and the Australian Provinces, but I looked in vain for samples of Canadian stuff. The show lasted over four days, and during its progress there were unceasing milking and buttermaking competitions of great interest. A number of Irish girls from the Munster Dairy Institute, Cork, entered in the last-named tests, and it is to their credit that they succeeded in carrying off two first prizes, one second, one third, and a number of cards of high commendation.

#### PROMOTING HORTICULTURE.

A fruit and flower show of considerable dimensions, in conjunction with which was a conference on a number of phases of the fruit-growing industry, took place this week at Ballsbridge, under the auspices of the Royal Horticultural Society of Ireland. It was one of the most practical things the Society ever attempted, and the success with which it was attended was therefore all the more encouraging. Close on 2,000 exhibits were tastefully staged in the fine Main Hall of the Royal Dublin Society's Show premises. The great bulk of these consisted of apples and pears, and they afforded a striking reminder of the fact that, as a fruit country, Ireland is capable of successful development. At the conference, which was probably the most important portion of the proceedings, some very useful addresses were given, the discussions—introduced by expert authorities—dealing with the following topics: "The Varieties to Grow," introduced by Mr. F. W. Moore, Curator of the Royal Botanic Gardens, Glasnevin; "Insect Pests," introduced by Professor G. H. Carpenter, B. Sc., Royal College of Science; "Fungi Diseases," introduced by Dr. G. H. Pethybridge, Royal College of Science; and last, but not least, "Methods of Packing, Grading and Marketing," introduced by Mr. I. W. Harper, the fruit expert brought from America by the Department of Agriculture. Among the visitors to the show was the Hon. John Dryden, who stated that he was pleased with the evidence afforded by the exhibition of the fruit-growing possibilities of Ireland.

"EMERALD ISLE."

"The Farmer's Advocate" is the champion of farmers' rights, and the most reliable, impartial and effective exponent of agricultural interests. And the subscription price is less than 3 cents a week for the 52 copies in the year, including the Christmas and other special numbers.

Everybody is now "knocking" the poor dummy director.

#### A Lesson in "Getting There First."

There are always a great class of people who get wise a little too late—their forethoughts come afterwards. Many of these are now lamenting that we have left American investors to capture the richest stakes in Cobalt, and they are urging our people to rush in yet and secure what can be got. Toronto Saturday Night hits the case off to a nicety:

"Those who are working up a boom in mining stocks tell us that Canadians are slow, and there is some truth in it. When silver was struck at Cobalt, our young men should have rushed in and taken chances; our capitalists should have come forward and made the purchases that were soon after made by New York men. Some of our people have managed very well, but of the aggregate wealth of Cobalt, most of it will fall into the hands of the widely-experienced mine owners who have headquarters in New York. They will pay a fortune for a mine, take several fortunes out of it, and should its ore give out, stock it and sell it on its reputation to the public. They will have prospectors all through the north; they will have agents in every camp, ready to lay down marked cheques to any amount to purchase profitable mining properties. They know their business from a to z, from grub-staking a lucky prospector to measuring the resources of a mine, squeezing the utmost value out of its ores, developing it sensationally, with loud and conspicuous secrecy concealing, yet exaggerating, the story of its

the lesson need not be lost upon us. We need alertness in farming, to induce us to try new ideas more promptly, especially inexpensive ones, as, for instance, alfalfa-growing, testing of dairy cows, the split-log drag, and dozens of others. In agriculture there is not such supreme necessity for getting ahead of the other fellow as in mining, but there is need for promptness in availing ourselves of good ideas, so as to increase returns speedily and reduce unnecessary or unprofitable labor as early as possible. Enterprise generally pays when combined with reasonably good judgment.

## HORSES.

### Crib Biting.

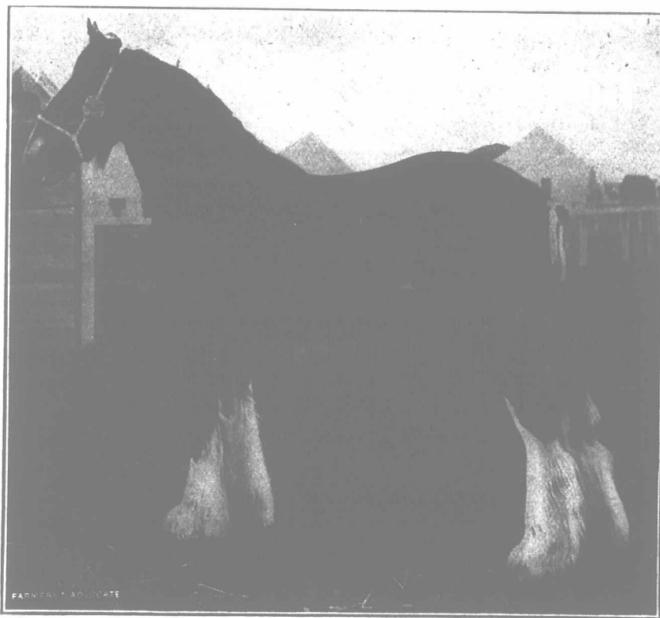
The eminent English veterinarian, Harold Leeney, M. R. C. V. S., writes on this subject in the London Live-stock Journal as follows: "Is it playfulness or vice, deliberate and premeditated, or involuntary? Many horsemen, familiar with the objectionable practice, will be surprised that the question should be asked, but in an age when only sympathy for criminals is shown for those who have 'materialized their thought-errors,' as an American author describes the inmates of gaols, we may well pause to ask ourselves if animals are really guilty of 'vice' at all.

"Solleysell, as long ago as the year 1664, compared it to the taking of snuff and smoking tobacco in men. While many have watched the act of windsucking with a feeling akin to disgust,

few have, perhaps, thought out the modus operandi. Even those who inhale cigarette smoke may not have done so, yet they are imperfect wind-suckers, who draw the smoke down into the pharynx, but stop short at swallowing it. To the many who have been through a veterinary course in the Army or one of the agricultural colleges, and have a general knowledge of anatomy, the explanation given of the act by the late Captain Hayes will be interesting: 'The exact process (of crib-biting) is that during a temporary interruption of breathing and visible contractions of the muscles on the anterior margin of the throat (sternothyroid, omohyoid, sternohyoid) the larynx and base of the tongue are drawn downwards, whereupon the upper part of the pharynx becomes filled with air, which, during the then following act of swallowing and return of the larynx and tongue base to their former positions, partly escapes forwards, or the whole may be swallowed, by which one or two champing sounds are produced—peculiar tones, like belching.'

"The causes are various. Ennui has already been suggested, idleness being the parent of vice. The contemplation of a blank wall for hours at a time, in the long intervals between meals, must be anything but exhilarating to animals of highly nervous temperament, even if possessed of all the intelligence and powers of reflection with which they are credited by ardent lovers of horseflesh. To find amusement to while away the hours, they minutely examine the few articles within reach, licking the manger, the crib, the walls, nibbling the halter, or picking up and dropping the chain, and finding additional pleasure in the noise the latter makes. From playing with the mobile lips to cribbing with the teeth, and from biting to windsucking, is an easy transition, and the art, once acquired, is very rarely forgotten, although in abeyance when at grass or in circumstances unfavorable to its practice.

"It is infectious, according to the popular acceptance of the word, young horses readily learning it from a companion, and in this way a large proportion in a stable will acquire the trick. That windsucking is hereditary is beyond doubt, and, curiously enough, it is more frequently transmitted through the sire than the dam. In this connection, the observations of Collin are of peculiar interest. He traced the descendants of a famous Anglo-Norman stallion, and found forty-five of them to be crib-biters, many of whom developed the habit at a remarkably early age, 'one foal at three months, two at seven and eight, five at from ten to twelve months, the majority in their second and third years, and one after three



Shire Filly, Dunsmore Picturesque.

First at Bath & West of England and Oxfordshire Shows, 1906.

wealth, and, at last, sensationally selling it on the stock market. They know their business, for they made the business what it is, and no mining camp, however wealthy, can upset for long the methods of the profession. But if Canadians have been slow, it will advantage us nothing to prove that we are likewise soft, easy, and green. If we did not get in on the wealth of Cobalt, it is not necessary to step forward and bear the losses and put balm on the disappointments of others who failed, like the rest of us, but who have bought mines that the experts have no fancy for, and that the agents of mining capitalists will not purchase."

This is correct beyond peradventure. Those who get into the Cobalt game at this stage are simply putting their gills into the speculators' net. A few may get through, and perhaps manage to help devour several companions, but the great majority will sooner or later furnish a nice fry for the astute fishermen of Toronto and Wall Street. "The Farmer's Advocate" believes that the lesson we Canadians should take from this Cobalt experience is to avoid "bucking" the foreign tiger over his prey, but be on the alert next time to beat him to the quarry.

That is the lesson for our capitalists. Farmers had better keep a respectful distance from speculations of that sort, no matter how good. But

years.' Crib-biting in the finer-skinned and more sensitive animals is thought to be developed by rough strapping or too energetic grooming, many irritable horses in this way acquiring a habit of laying hold of the manger and fixing the breath during the operation.

"It has been supposed that indigestion, producing those feelings known to ourselves as 'heartburn,' have prompted the crib-biting habit, and the stomach lesions (chronic catarrh, dilation, thickening of the walls, etc.) have been pointed to as evidence in favor of the theory, but they are more probably the result. The enlarged abdomen does not precede the habit, but follows on it, and the post-mortem examinations of horses that have but recently acquired the trick do not show these alterations of structure or diseased conditions.

"There are quite a variety of ways of 'crib-biting,' and many degrees. Some horses only press the incisor teeth of the upper jaw upon the object, while arching the neck and using the muscles connected with deglutition previously named. Others employ both top and bottom teeth. If there is no manger to lay hold of, some other object will be found by the confirmed victim of this habit, such as the bars of the hay rack, the halter chain, or strap, the pole of the carriage when harnessed, or anything that will afford them a slight hold. Confirmed crib-biters have been known to use their own knees and feet for the purpose, and Gunter speaks of having seen foals use their mothers' hocks. Then, there are air-snappers who have so cultivated the art that they are able to do without any object on which to set their teeth. They stand back, with arched neck, the muzzle approaching the breast, make some nodding movements with the head and a smacking of the lips, with a final jerking movement upwards at the moment of accomplishing their object. Crib-biters of the first and second classes may only indulge the habit occasionally, or for a spell, but air-snappers become so obsessed that they take little interest in anything else when not eating, and some will interrupt themselves during a meal to indulge in the practice. Sooner or later wind-sucking ends in ruined digestion, distended abdomen and loss of muscular energy, and shortness of breath. They are wasteful and undesirable animals, dropping much food and making but ill use of what they consume. They are bad neighbors, and often suffer from flatulent colic.

The vice or trick may often be completely cured at the commencement by removing the animal from familiar biting places; by putting him into a loose box instead of a stall; by feeding in a trough on the ground or on the ground itself, in a brick or stone built box, with nothing to lay hold on; by a run at grass, or feeding only with long stuff, which occupies much time and gives the fullest functional activity to the salivary glands and some amount of fatigue to the muscles of deglutition. Punishment only answers while a person is present, and it is observed that many horses only do it when they think they are not observed. Increased labor and less time for amusement offers a cure in some cases. Other remedies tried are movable mangers, used only when feeding; close-fitting muzzles, throat straps of various designs, but all acting on the principle of producing pressure upon the muscles chiefly concerned in wind-sucking. That the strap is the most efficient remedy, probably most will agree, and that any objections to its employment are outweighed by the results. Its habitual use tells its own tale to purchasers, who may see the mark on the poll, if there is nothing to show on the throat. In buying horses, one should look for teeth rounded by crib-biting, as well as for marks of the strap."

#### Stallion Inspection and a Lien Act.

Editor "The Farmer's Advocate":

At a public meeting, held in Paisley, Ont., on Nov. 2nd, by Messrs. John Bright, Myrtle, Ont., and H. G. Reed, Georgetown, the two commissioners appointed by the Ontario Government to inspect stallions and get information regarding the horse industry in the Counties of Huron, Grey and Bruce, over one hundred horse-breeders were present, representing the County of Bruce. The meeting was unanimous in favor of a law providing for compulsory inspection and licensing of all stallions kept for service, the requirements for licensing to be freedom from hereditary unsoundness, and registered in a recognized record of the Dominion of Canada; and also a reasonably good conformation. The meeting was also in favor of a lien act being passed that would give the stallion owners a lien on the mare and foal, as a security for stud fee. R. NELSON.

#### Is it Unanimous for a Stallion License and Lien Act?

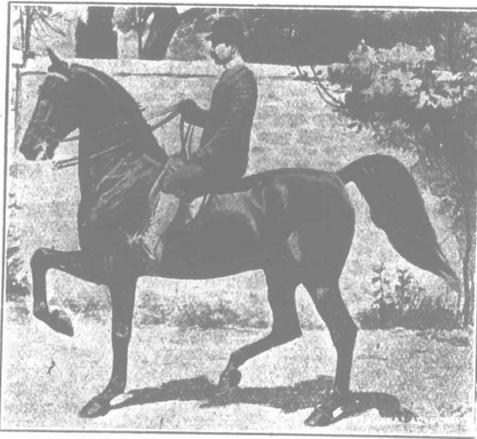
From voluntary reports coming to this office, it appears that stallion inspection and licensing is quite favorably regarded by horsemen in Ontario. The idea of a legal lien on mare, colt, or mare and colt, for protection of the stallion-owner, also seems to meet with favor. Are there any dissentients? Now is the time to ventilate all views.

#### The American Saddle Horse.

The United States has created two breeds of horses, distinctive in type, and of conspicuous utility—the American saddle horse, and the American trotting horse. On the origin of the saddle horse, Leigh Gordon Giltner, in Bob Taylor's Magazine, says:

"The gaited saddle horse of America may be said to have been primarily the outgrowth of a necessity, the creature of environment and circumstance. Transportation facilities follow always the trend of civilization, and the saddle inevitably antedates the auto and the palace-car. In sparsely-settled regions, where roads are poor and horse-back travel is a necessity rather than a pastime, there arises imperative need of a horse capable of covering long distances, with the minimum of fatigue to himself and the maximum of ease and comfort to his rider. Such conditions and such need existed in the South more than half a century ago, when, out of the exigencies of the situation, was evolved the progenitor of that splendid type known to-day as the American saddle horse.

Back in the days when Kentucky was growing into Statehood, the pioneer settlers began to bring into the region, destined subsequently to become the most notable equine nursery in the world, two classes of horses—the Virginia Thoroughbred and half-blood, and the pacer from Canada. A cross of these breeds resulted in the production of a very useful type, endowed with intelligence, endurance, ease of movement under the saddle, and some degree of beauty—qualities which, by judicious breeding, have been perpetuated and enhanced until, in their descendants of the present day, the ideal is nearly approached. Gen. John B. Castleman, president of the American Saddle Horse Breeders' Association, fixes the origin of the American saddle at a period antedating by ten years the foundation of the trotting family, when the Thoroughbred stallion, Denmark,



The Frenchman.

A model gaited saddle gelding.

sired by Imp. Hedgeford, was brought into Fayette County, Kentucky. The sons of this great sire became the progenitors of the Southern saddle, nine-tenths or more of the present famous Denmark strain tracing to Gaines' Denmark, No. 61. By continued adherence to type, there was established a family notable alike for utility, finish and beauty, and as distinctive for utility, finish and conformation as is the standard horse. From his Thoroughbred ancestry, the saddle derives his fineness of conformation, gameness, courage and quality, while from the humbler and unpedigreed strain from which he springs he inherits the ability to acquire the gait peculiar to his class—the result being a type adapted alike for pleasure-riding, for long-distance travel, and for cavalry service, it having been repeatedly demonstrated during the Civil War that the saddle-bred horse possessed powers of endurance superior to those of other types.

For the improvement and extension of this notable type, there was organized at Louisville, Kentucky, in 1891, the National (now the American) Saddle Horse Breeders' Association, and a register, similar to that of the Thoroughbred and trotting horse, was established for the gathering of the blood lines of the breed. The task of laying a basic foundation upon which to build in the registration of saddle stock, involved a vast amount of labor and research. The material at hand was scant and poorly-assorted; the pedigrees of some of the chosen progenitors tangled or incomplete, and data concerning them frequently conflicting and inaccurate. Yet, at length, the task was performed, and the register thus established has been invaluable for the guidance of the breeder, the protection of the interests, and the betterment of the saddle horse by adherence to recognized type.

"The list of fourteen sires originally selected as foundation stock was reduced in 1892 to ten by a revisory committee selected by the association. The revised list is as follows: Denmark (Thoroughbred), by Hedgeford; John Dillard, by Indian Chief (Canadian); Tom Hal (imported from Canada); Cabell's Lexington, by Gist's Black Hawk (Morgan); Coleman's Eureka (Thoroughbred and Morgan); Van Meter's Waxy (Thoroughbred); Stump-the-Dealer (Thoroughbred); Peter's Halcorn; Davy Crockett; Pat Cleburne, by Benton's Gray Diomed."

On the gaits of the saddle horse, Herbert J. Krum writes:

"Until within the past two years, the gaits requisite to be shown for registration by performance were: First, walk; second, trot; third, rack; fourth, canter; fifth, either (a) fox trot, (b) running walk, or (c) slow pace—and five were essential. The walk and canter are natural gaits with all breeds of horses. We find that in walking a horse really lifts his feet one at a time, but that the extensions of the front near and off hind foot are made so nearly together as to convey the impression of moving in pairs. It may be observed here that by the ear, and not by the eye, is the only true way to observe the succession of movement in a horse. In the trot the diagonally opposite feet strike the ground together, resulting in a two-beat sound. In the pace, the fore and hind leg on the same side are extended together; two-beat gait. I think the word 'rack' is a misnomer. It is at best a colloquialism, or, perhaps better, a localism. In the authorities, the words rack, pace, and amble, are practically synonymous, and none have the sense of our use of them. However, as used by horsemen, the word 'rack' means the same thing as the term 'single-foot,' which I prefer, on the ground of expressiveness. Single-foot—that is, each foot striking the ground singly—aptly and truthfully tells the story of this four-beat gait to the ear. While the impulses arise almost in pairs, as in the pace, yet the extension of the hind legs is retarded sufficiently as to alternate with the fore legs, giving in the rapid one-two-three-four sound peculiar to this gait. The slow pace differs from the pace in point of speed. The canter is the slow form of the gallop or run. The perfection of a canter is measured, not by its speed, but by its slowness. The mass is propelled by one hind foot, the other three feet striking the ground practically together and the impelling foot following after. Nevertheless, the legs on each side move in pairs. This leaves us the running walk and fox trot for consideration.

"The running walk is a slow gait—faster than a walk, not so fast as a trot or rack. An extremely exaggerated walk, in point of speed, comes very nearly being accurate. But there is a peculiarity about it, too. In this gait a horse moves forward with seemingly very little leg motion. The knee action is next to nothing, and, on the other hand, the ankle or fetlock-joint motion is excessive. One might fairly say stiff-legged, so far as the upper joints are engaged. Really, the horse seems to easily glide forward in a rapid, four-beat gait, each leg moving independently. For ease to the rider, it is the very 'poetry of motion' idealized. The fox trot, too, is a slow gait. It probably owes its name to some fancied resemblance to the rapid, swinging, all-day trot of the fox in his native haunts, and which he will maintain hour after hour, to the despair of the most ardent hunter. It is the two-beat trot reduced in point of speed—but also with a peculiarity. While the diagonally opposite legs move in pairs, there is a shortening of the extensions, resulting in a peculiar rhythm of what sounds like a one-two, one-two recurrence. Another characteristic is that the hinder parts of the horse feel as though slightly elevated, and cause the sensation to the rider of his being tilted forward in a small degree.

"The slow pace is the gait par excellence for ease and comfort. In this, as in the pace, the two side legs move in union, and the result is a smooth, even effect on the rider, wholly devoid of jolt or jar. In the fast pace, however, there is too much of the rolling motion for great comfort. This brings us, then, to the rack. This is a fast gait, and may be said to be between a pace and a trot. It is considered an easy gait to ride, no matter how great the speed. The rider sits fast in the saddle, simply helping to maintain his equilibrium by carrying the weight of the legs in the stirrups. A person can ride as far as he could ask a horse to go at a fast gait on the rack, without any fatigue or effort. In point of ease and comfort to the rider, the running walk and the fox trot are akin in that they are wholly pleasurable. This consideration of the slow gaits brings prominently to mind the fact that there are really two sorts of saddle horse. The slow gaits and the racks are characteristics distinguishing one sort from the other. They have given rise to a saddle horse called 'the gaited horse,' as distinguished from what is known as the 'walk, trot and canter saddle horse.' The term used in connection with each of these horses characterizes their abilities."

LIVE STOCK.

How Cattle are Handled at Montreal.

According to figures compiled by the Montreal Gazette, the export live-stock business of Montreal last year, counting the value of the stock, freight, insurance, feeding and handling, totalled \$9,134,131, being made up by 118,296 cattle and 21,036 sheep. This, together with much stuff consumed at home, and hogs packed at Montreal for export, passed through two stock-yards at that city. The Montreal Stock-yards Co. handle the

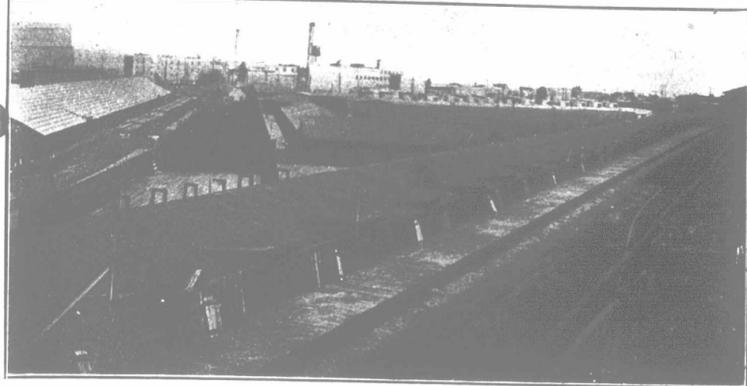
the cattle are being "roped." Roping is accomplished by driving the cattle into a chute, where they stand single file, twenty to forty together. The ropes are quickly put around their necks, so the animals will be ready to tie up when they get on board ship. Branding is quickly performed by stamping them with a monogram VR mark, consisting of red paint. Until recently, this branding, or "marking," as it is more properly called, has been compulsory, but the regulation has lately been abrogated, and marking is now optional with the inspectors.

The Montreal Stock-yards Co was organized many years ago for the accommodation of ship-

pers and for the sale of live stock. The yards are situated at Point St. Charles, and are closely connected with the Grand Trunk Railway. Part of the premises lie in the form of a triangle to the south of St. Etienne St., with the apex towards the south. It is flanked by a railway switch on each side. The east track is used principally to accommodate American stock unloaded in transit. The other side is for stuff to be marketed locally and for export stock.

North of St. Etienne St. is the abattoir owned by the company, and here also, are killing and yarding pens. Altogether, we should judge, the yards were somewhat smaller cents, calves 15 cents, and sheep 10 cents. Offal is worked into fertilizer by the company. The Montreal Stock-yards also slaughter for one of the hog-packing houses in its immediate vicinity. A fine new stable has been put up this summer, to be used mostly for the winter export trade. It has a capacity of 800 head of cattle, tied in stalls; is provided with means of electric-lighting, and is floored throughout with concrete—the only pen or stable at either yard where we saw concrete floor, although it must be only a question of time, one would think, till that material alone will be used.

Apart from the abattoir business, the company makes its profits from the feed supplied. The prices seem high, compared to ruling market quotations, but when one considers that this charge includes free attendance, water, light and stabling accommodation, it is not out of the way. In fact, the superintendent of the C. P. R. yards assured us there is no profit in their yards except the indirect one in the accommodation afforded shippers. The schedule of rates is uniform at both yards. It is as follows: Hay fed in yards, \$20 ton; meal, \$40 ton; peas, \$1.25 bushel; corn, \$1.00 bushel; oats, 60 cents bushel; stabling horses per day, 60 cents; stabling imported horses (stallions) per day or fraction thereof, \$1.00; leading imported horses from boat, \$1.00 each; leading horses, 25 cents each, minimum \$1.00; meals for horses, 25 cents each; slatting cars, \$5.00 each. The Stock-yards Company furnishes all hay or straw required in cars for feeding and bedding stock in transit. Charges for weighing are 2 cents per cwt. for sheep, hogs and calves, and 10 cents a head for cattle. It will be seen that the company has a virtual monopoly in its way, but it is doubtful if shippers could obtain the service more cheaply, all things considered, if they provided feed, etc., themselves. Taking things all round, the facilities appear to be first-class, especially at the Point St. Charles yards, which are decidedly ahead of those at Chicago. We heard no complaints whatever from stockmen, and a day's observations discovered no complaints either in equipment or handling of the stock.



General View of Premises, Montreal Stock-yards Co., Pt. St. Charles.

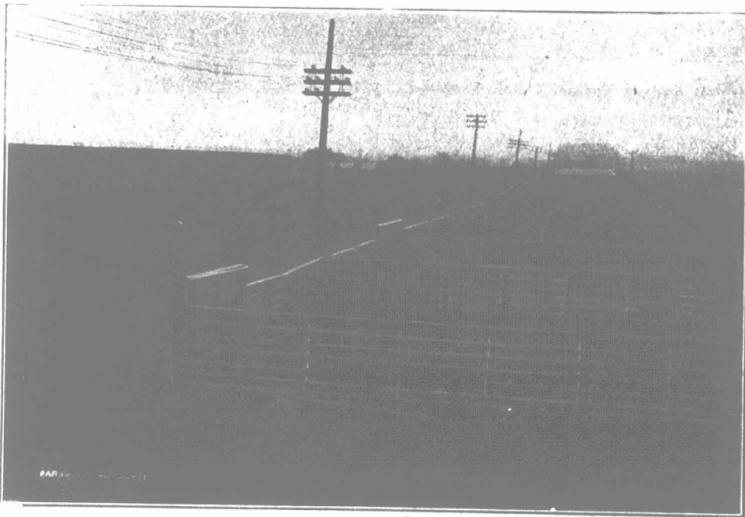
An abattoir and three packing plants in the background.

business contributed by the Grand Trunk Railway System. The Canadian Pacific has its own stock-yards at Hochelaga. The latter is the transshipping point for practically all the range cattle from the Northwest, and the share of the export-cattle business coming to this point might be put down roughly at nearly two-thirds of the total. On sheep, Point St. Charles and Hochelaga probably break about even, taking one season with another, but the former has the bulge on hogs, being situated alongside several packing plants. The hogs, of course, do not figure in the live-stock export-trade statistics.

While passing through Montreal lately, a member of "The Farmer's Advocate" staff visited the yards, and obtained some particulars which, following the description of the facilities in handling our cattle in the Old Country, printed in our issue of Sept. 27th, should be interesting to our readers. The C. P. R. yards at Hochelaga are out at the east end of the city, and only export trade comes through them. A yard for local butchers' trade is situated about a mile distant, where there is also a public abattoir. This market and abattoir business is sub-let to a Philadelphia firm, but the C. P. R. retains direct control of the export-stock yards. The latter are about fifteen to twenty acres in extent, exclusive of the ground alongside that is owned by the leading exporting firm of Gordon & Ironside. The capacity of the C. P. R. yards alone, as given to us by the Superintendent, Mr. R. Gow, is about 4,000 cattle, 5,000 sheep and 500 horses. Gordon & Ironsides could handle some 1,500 or 2,000 cattle, and accommodate quite a flock of sheep as well. A considerable area of the stock-yards is roofed, and the whole is floored with plank. The sections are systematically laid out, and so arranged as to facilitate unloading from cars. All herding here is done by men on horseback. The dock where the barges tie up is only a few hundred paces from the yards, and most of the cattle are driven down to it, along the public street, which crosses an electric-car line on the level and the Grand Trunk track by an overhead bridge. The attendants say the cattle go quietly enough along the earth street, but when the gangers strike the hollow-sounding bridge they are inclined to become excited, and require careful handling. Now and then a carload or a train-load come in which are too wild to be trusted on the street; these are reloaded into cars after being fed and watered and run down to the dock-yards by a railway switch. Down at the dock are pens with a capacity for holding 700 head. By an inclined gangway they are walked up on to the barges, which will carry from 250 to 300 cattle each, according to the average weight, and overhead is room for a deck of sheep. Out in the river the stock is loaded onto the steamers.

Before leaving the yards all the cattle exported from Canada, except those going to the U. S., are inspected by a Government veterinarian. Dr. C. M. Baker is the official at the C. P. R. yards, and Dr. B. A. Sudgen at the Montreal Stock-yards premises, while Dr. Chas. McEachren is the man who looks after the health of imported horses. After being inspected, the cattle are watched and branded by the inspector's foreman and his assistants. The branding is usually done while

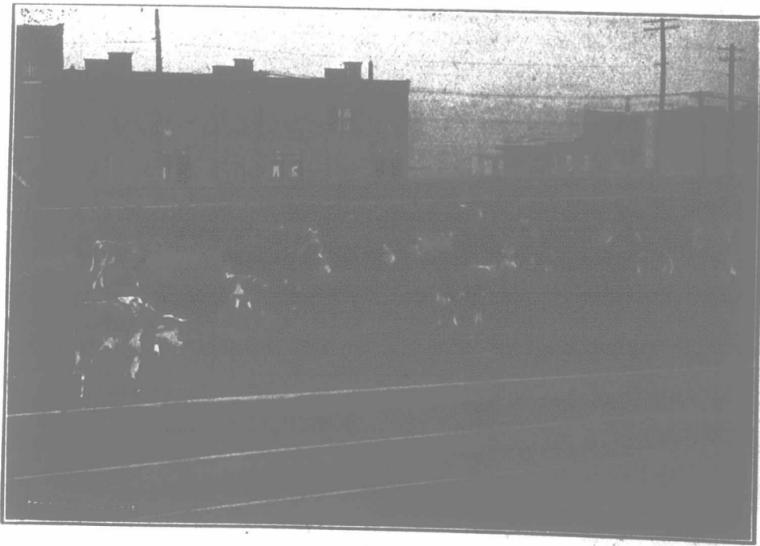
also, are killing and yarding pens. Altogether, we should judge, the yards were somewhat smaller



Glimpse of the C. P. R. Stock-yards at Hochelaga.

in area than those at Hochelaga, although no figures are at hand. The accommodations and fittings at these yards are of the very latest and best order, nearly all the space being covered with sheds, the floors closely planked, and everything provided to facilitate handling of the stock. The company has a first-class double-decked market, the ground floor of which is used for the sale of cattle, and the upper floor for sheep, lambs, calves and hogs. The company has also a modern abattoir, with a capacity for killing 3,000 head of cattle, 5,000 hogs and 5,000 sheep and calves per week. Here animals are slaughtered for the city butchers, who are obliged to have all their killing done at one or the other of the public abattoirs. The charge for slaughtering and cooling cattle is 50 cents per head, hogs 30

avoid the possibility of infecting his sound cattle with contagion introduced by the newcomer.



Western Range Cattle.

A bunch of Gordon & Ironsides cattle in their own yard, adjoining the C. P. R. yards, at Hochelaga.

The T in the Ear.

A subscriber asks us the meaning of the big T-shaped punch-mark in the ears of imported cattle. This mark is placed there by the Federal Government's veterinary inspectors at the quarantine stations, and means that cattle carrying the mark have failed to pass (reacted to) the tuberculin test. The stockman, knowing that, will be able to arrange his cattle accordingly so as to avoid the possibility of infecting his sound cattle with contagion introduced by the newcomer.

**Formalin for Calf Scours.**

The South Carolina Experiment Station has been investigating calf scours, and makes a favorable report of the use of formalin. We quote the following paragraphs from their report:

**Prevention.**—The study of the cause of the disease and the conditions favorable to its operation, teaches us that cleanliness and care in the handling and feeding of the milk and proper quarters for the calf are necessary, if the disease is to be avoided. The milk must be fed fresh, and at blood temperature. Increase in the amount fed must be gradual, and overfeeding avoided. Calves do well when the milk is fed twice daily, but three

It requires, moreover, the frequent administration of medicine, which is not always convenient, and is never pleasant.

The condition demands a method of treatment that can reach and destroy the fermentative and putrefactive bacteria, whether they are located in the milk, in unclean feeding vessels, or in the stomach or bowels of the calf. The addition of formalin by a German investigator to cows' milk intended for the nourishment of infants, to protect them against tuberculous infection, suggested the use of formalin for this disease. Investigation developed that in laboratory experiments it had been found that one part of formalin added to

half ounce of formalin. The solution was put in an amber-colored bottle, and kept in a cool place to prevent decomposition. One teaspoonful of this mixture was added to each pint or pound of milk to be fed to the affected calf. This gave the drug in the proportion of one part to 4,000 parts of milk. In ten of the cases treated the formalin solution was put into the milk at the time of feeding. In two cases it was added to the skim milk immediately after separation. While no difference in results was observed, it would seem advisable to add the formalin solution to the milk to be fed to affected calves as soon after separation as convenient.

The calves used in the experiment were left with the cow the first twenty-four hours, then fed the dam's milk in a self-feeder for a week, and then gradually changed from whole milk to skim milk, at the same time having access to a box of corn meal or ensilage. The whole milk was fed fresh from the cow, but the skim milk was always twelve hours old. The milk from the cows was hauled from the barn to a dairy, a distance of one-fourth mile, after each milking. After being separated, the skim milk was placed in a spring until the wagon arrived from the barn with the next milking, about twelve hours later, when it was warmed to 98 degrees Fahrenheit, and hauled back to the barn and fed to the calves. The feeding vessels were rinsed after each feeding with hot water hauled from the dairy. Seven of the calves were brought in from another herd at one and two days old, and only received the dam's milk twenty-four to forty-eight hours.

The effect of formalin on the disease was tested under these conditions. When the first symptoms appeared, the amount of milk fed was reduced one-half to one pound, and one teaspoonful of the formalin solution was added to each pound or pint given to the calf.

**Summary.**—Twelve milk-fed calves affected with scours were treated by adding formalin to the milk in the proportion of one part of the drug to 4,000 parts of the milk.

Eleven recovered without any additional treatment—seven on the second day after the use of the formalin was begun, three on the third day, and one on the ninth day.

The other calf required additional treatment, but finally recovered.

Three cases of scours in calves being fed on grain and running at pasture were treated with formalin, but the drug did not prove effective in this form of the disease.

The efforts of a certain Chicago live-stock paper to exonerate any and all of the big packers from mistakes or slack methods in preparing food products, smells to Heaven far more than hundreds of condemned pieces of meat.

At the recent Birmingham Show, every one of the forty-six bulls sold at over 100 gs. had more or less Cruickshank blood in their veins, and the best group of five yearling bulls was declared to be "one more triumph to that excellent infusion of blood, the Bates with the Cruickshank."

**THE FARM.**

**Sandy Fraser's Advice.**

Editor "The Farmer's Advocate":

Wad ye min' gie'in' me anither wee bit space in yer columns, to be used for the lastin' benefit o' yer farmer readers, and may happen their wives. Noo that I'll be havin' a wee spell frae the wark, I dinna' think I cud dae better than be exercisin' ma brain for the weelfare o' society in general, and the farmers in particular.

Sae noo, ma frien', gin ye'll listen tae me, I'll gie ye a few pointers in regard tae yer business that may no' be oot o' place at this time o' year, an' if I say onything that disna' agree wi' a' that I hae said in the past, ye maun juist remember that a mon has aye the richt tae change his min'. Noo, in the first place, regarding oor occupation, gin we are tae keep up oor reputation, we should na' lose an opportunity at hame or awa' o' rummin' doon the business an' grumblin' at oor bad luck, or the hard times, or the hard wark. Ye can aye fin' something to fin' fault wi' if ye hae onything o' an imaginative min'. Ye ken the winters in this country are awfu' cauld an' snawy, or else they are sae warm that we hae na' eneuch snaw tae cover oor hayfields, and the frost kills it a'. Then, in the spring, which may happen along about the first o' June, if a' goes weel, ye are like to hae ony amount o' trouble wi' yer coos an' ither stock, if ye hae been as sparlin' o' the fodder durin' the winter as ony savin' man should. I've kenned o' farmers havin' all their coos' tails polished like whipstocks, frae helpin' them to get up in the spring o' the year. Hooever, this is naething, if ye save the feed and bring them through alive. If they dinna' gie vera much milk durin' the summer, it will be sae much the less for yer auld wunman to carry frae the stable an' attend tae, for nae doot ye are gude



**Roping and Branding Export Cattle Preparatory to Loading on Ships.**

feeds are better. After each feed the feeding vessels must be thoroughly cleaned, rinsed with boiled water or steamed, and then exposed to the sun. All the other vessels used in handling the milk must, of course, be properly cleaned. The calves must have dry quarters and protection from chill winds and rain. If these details are attended to, the disease will not occur, but constant vigilance is required, or something will be overlooked or neglected, and the trouble will appear.

**Curative Treatment.**—The usual method of treating the disease is to administer a laxative, such as castor oil, to clean out the bowels, conjoining with it an antiseptic, as creolin, to disinfect the digestive tract; and then follow this with drugs having an astringent and sedative effect upon the stomach and bowels. This treatment is directed to the removal of the irritating substances from the stomach and bowels, the destruction of the fermentative and putrefactive bacteria within those organs, and the soothing of the irritating substances and bacteria. Therefore, this method of treatment is not always efficacious.

4,000 parts of milk did not interfere with the action of any of the digestive ferments in digesting the milk. In another experiment, milk containing the drug in proportion of 1 to 4,000 was fed to calves for over a month without any injurious effect upon the digestive organs. Contrary to interfering with the digestive function, formalin in this amount appeared to favor it, for the milk containing the formalin was more completely digested than the milk without it. The effect of formalin on the bacteria of milk had also been tested, and it was found that one part of formalin in 4,000 parts of milk would prevent the development of the common bacteria of milk.

**Formalin Was Tried.**—It was therefore decided to try the effect of formalin in this proportion in the treatment of milk-fed calves affected with "scours." To make the administration of the drug as convenient as possible, it was diluted with water in such quantity that when a teaspoonful of the mixture was added to each pint or pound of milk fed the drug would be present in the proportion desired. This was accomplished by adding 15½ ounces of distilled water to one-



**Ready to Be Loaded on Cars for Boston, Montreal Stock-yards Co., Pt. St. Charles.**

tae the wumman. Ye should hae a care, hooever, that ye dinna' tak' taw daein' her wark for her, such as milkin' an' churnin', for ye'll only mak' her lazy an' lose her respect. Wumman was made tae help mon, an' he is there tae see that she does it.

An' anither thing, ye dinna want tae be 'ettin' the wee weans be wastin' much o' their time at schule. Ye can use them tae, better advantage at hame diggin' potatoes and such like wark; an' if ye let them gae tae schule, it's vera likely they'll end up by bein' meenisters or lawyers, or go tae the bad in some w'y.

An' I want tae warn ye richt here aboot hae'in' ony papers o' ony kind comin' intae the hoose, an' mair especially an' agricultural paper like "The Farmer's Advocate," for instance (beggin' yer pardon, Mr. Editor). These papers juist pit a handle o' foolish notions intae yer heid aboot buyin' new kinds o' coos an' pigs, an' sowin' new kinds o' seed, which does naething but tak' the bawbees oot o' yer pocket. Its eneuch for ye tae read yer Bible, without a' these papers an' magazines; an' if ye dae that, ye'll see that oor father Adam pit himsel' oot o' a job juist by experimentin' wi' a new kin' o' apple. So tak' my advice, an' leave fancy farmin' to the fancy farmer wha has made his money by the death o' an uncle, an' can afford tae lose it.

An' noo, anither thing I must draw tae yer attention: Why is it that sae many farmers will be pittin' up sheds an' such like builidin's tae pit their machinery in, when they micht juist as weel leave it oot in the yard where it will be makin' a gude roost for the hens maist likely, an' where ye can juist hitch tae it in the spring, or whenever ye want tae use it. I saw a great plan for coverin' a binder the ither day. The mon had put cornstalks aboot a foot deep a' over it, so, I suppose, that it wad a' rot and rust awa' thegither, an' he wad na' be under the necessity o' buyin' repairs. I tell ye what, its mony the gude points ye can be gettin' frae these same men that get their wark done sae easy like. One o' them tauld me the ither day that he was gaein' tae saw wood for the auld wumman and her stove na' mair. "I tauld her," says he, "tae juist pit ane end o' the stick in the stove an' the ither on a chair, an' as the stick wad burn she cud move up the chair." An' she was daein' it, too, the auld wumman.

An' noo, my friens' I must close for the present, or ye will sune be knowin' as much as mysel' aboot hoo tae rin a farm "in the gude old-fashioned way," so wishin' ye all as much gude luck as yer common sense will bring ye. I am yours as ever,  
SANDY FRASER.

**Agricultural Progress in Newfoundland.**

Newfoundland naturally is a fishing center, and not till recent years has agriculture been seriously considered; indifference on the part of our people has been the means of retarding farming. The first step taken to promote the industry in Newfoundland was the appointment of an agricultural board about seventeen years ago, the object being to introduce improved stock, seeds and farm implements, to encourage agricultural societies and establish stock or model farms, hold agricultural exhibitions, etc. After their appointment, they imported pure-bred cattle—Holstein, Ayrshire, Jersey and Kerry cattle, which were sold at auction under bonds that the purchaser was to keep them for a term for breeding, and that the Board were to have the option to purchase the male progeny at a price named. As a result, many were provided with a good stock of cattle. The Board next provided a stable where imported stallions and bulls were kept for service. Many improved cattle and horses are now to be found throughout the country. After a short time the Board purchased and distributed to the different districts male animals—bulls, sheep and pigs—for the improvement of stock. This distribution has gone on several years. The animals sent out in this way are under bonds for three years, and in consideration of their keep, the keeper becomes the owner. Some eight years ago the Board established a stock farm, about 40 acres, quite close to the City of St. John's, the stock of animals kept there consisting of Ayrshire, Jersey, Short-horn and Holstein cattle. German Coach and draft stallions have been selected in England, Scotland and Canada. This farm provides all the feed (but grain) required to feed some fifteen head of cattle kept.

The Board recently closed a most successful exhibition of produce, including grain and vegetables, flowers and poultry. The exhibits in each department, while limited, surprised our visitors, especially those from Britain, the United States and Canada.

His Excellency Sir William McGregor, K. C. M. G., our very popular Governor, in his speech at the opening, expressed himself as highly pleased, and stated that the exhibits were equal to many he had seen in some of the great agricultural countries, and complimented the farmers on the

splendid result of their industry, and the Board of Agriculture on the great success of the exhibition. Some figures given by His Excellency were a surprise to many, especially to those who have no faith in Newfoundland as an agricultural country. If some of those people who brand Newfoundland as a fog-and-fish country were to see the exhibits at the late exhibition, they would be convinced that we are not behind other countries in agriculture. We hope at future exhibitions to show our live stock, when a still greater surprise will be in store for many.

I feel sure that if the agricultural industry were encouraged as other industries are, in the shape of protection or bounties, in a very short time the products would be largely increased. Only within the last few years has the duty on agricultural implements been removed, and, as a result, farmers are introducing machines on their farms, which is a great saving of labor. As yet there is no provision made for taking the returns of agriculture yearly, but it is most important that it should be done without delay. It is primitive to wait ten years for the census return before you can arrive at the agricultural figures to see what progress that important branch is making, especially in these days when a number of our people are turning their attention to farming. Large sums have been spent by our Government in bounties for clearing the land, and, while this is very desirable, yet many think it could be improved on by going further and granting a bounty for crops raised on the land so cleared, say for three years. If this was arranged, we think more land-owners would take hold in earnest, and that much more land would be cultivated and the home market be well supplied. I am a believer in agricultural education, and think if instructors were sent to our farming centers that much good would result, and I also think that a text-book on agriculture should be in our schools.

J. B. S.

**Better Than the English Papers.**

Editor "The Farmer's Advocate":

I am a new subscriber, and I want to say I am well pleased with your paper. When in England, farming, I took the \_\_\_\_\_ for years, and other papers, but I must say I like yours the best so far. I see you cater very much to the breeders; perhaps more so than to the struggling farmer. I suppose the reason why is that the breeder advertises, and that's what makes the mare go. There are many small farmers near cities that take your paper that would appreciate an article in each paper on market gardening, how to cultivate, market and store roots, with a plan thrown in now and then. Will you let us know how to make a split-log drag? Will you give us an article on "How to Keep Roads in Winter?"

A. B. C.

[Note.—To make a split-log drag, the two halves of a split log, ten to twelve inches thick, are set on edge thirty inches apart, both flat sides to the front. Three cross-pieces are used to connect. These are of strong oak or hedge bars, the ends of which are wedged in two-inch auger holes, bored through the slabs. A couple planks are laid on the cross-bars, and the ends of the chain is attached to the two outer bars just behind the front slab, and the doubletree is hitched to this chain in such a way that the drag will be drawn at an angle, so as to bring the earth always toward the crown of the road.—Editor.]

**Computing Weight of Hay in a Stack.**

A subscriber has asked for a rule that will apply in computing the weight of hay in a stack. It is impossible to give instructions that will allow for all kinds of cases, but we quote the following, by Prof. Ten Eyck, of the Kansas Agricultural College:

"The rules for measuring hay in the stack will vary according to the length of time the hay has been stacked and the kind and quality of the hay, and also according to the character of the stack. With alfalfa or prairie hay which has been stacked for thirty days, it is usual to compute an eight-foot cube, or 512 cubic feet as a ton. When the hay has been stacked five or six months, usually a 7½-ft. cube, or 422 cubic feet, is calculated for a ton. In old stacks, which have been stacked for a year or more, a 7-ft. cube, or 343 cubic feet, is allowed for a ton.

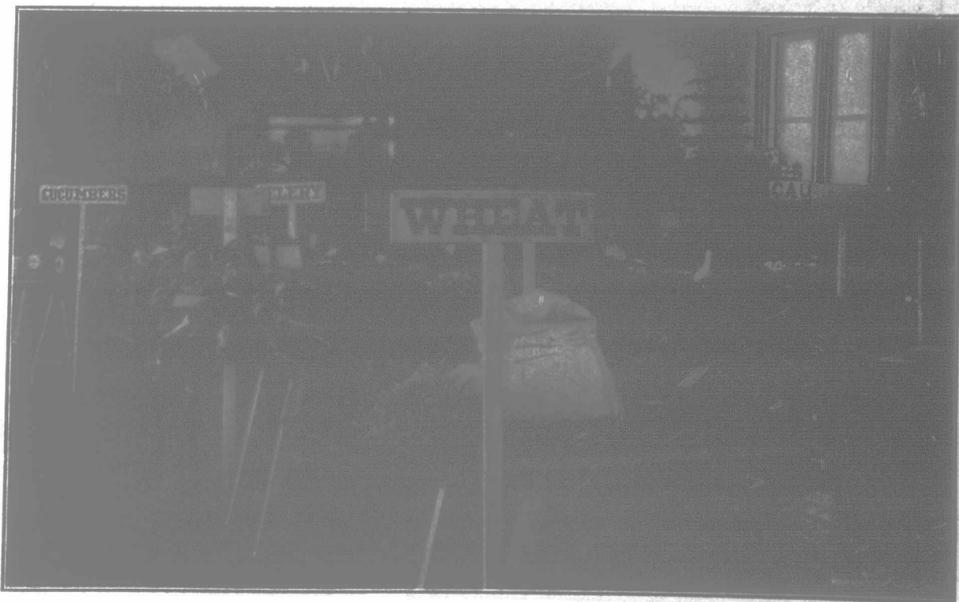
"There are different methods of measuring stacks, depending upon the shape of the stack and also upon its size. For a long stack or rick, the usual method is to throw a line over the stack, measuring the distance over the stack, from the bottom on one side to the bottom on the other; add to this the average width of the stack, divide this sum by four (which equals one side of the square), and multiply the quotient by itself, and this product by the length of the stack. This will give you the number of cubic feet in the stack, which may be divided by 512, 422 or 343, in order to find the number of tons. For small, low ricks, the rule is to subtract the width from the 'over,' divide by two, multiply by the width, and multiply the product by the length, dividing the result by the number of cubic feet in a ton.

"There is no established rule for measuring round stacks, but this one will approximate the contents of a stack of the ordinary conical form: Find the circumference at or above the base of bulge, at a height that will average the base from there to the ground; find the vertical height of the measured circumference from the ground, and the slant height from the circumference to the top of the stack. Multiply the circumference by itself and divide by 100, and multiply by eight, then multiply the result by the height of the base plus one-third of the slant height of the top. The hay in a round stack is necessarily less compact than in a rectangular stack, hence a greater number of feet should be allowed for a ton—with well-settled hay, probably 512 cubic feet.

"The rules given may also be used for measuring any kind of hay, cane, or Kaffir fodder, in the stack. However, for cane or Kaffir fodder, only approximate results can be procured by stack measurements, because the fodder is apt to vary greatly in weight, according to the moisture which it contains."

Eight thousand five hundred bushels of grain, threshed in one twelve-hour day, is reported from a town in Saskatchewan.

Konsider the postage stamp, my son; its usefulness consists in sticking to one thing till it gets there.—[Josh Billings.]



Section Exhibition, St. John's, Newfoundland, Held at British Hall, Oct. 17 and 18, 1906.

# The Farm Colony at Hadleigh, England.

(Editorial correspondence.)

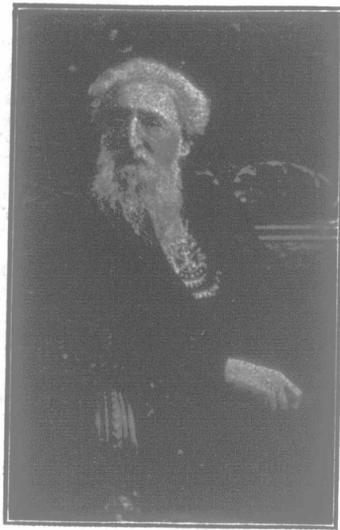
With the zeal of an evangelist and the devotion of a martyr, General William Booth, founder and head of the Salvation Army, combines the genius of a statesman, the discernment of a prophet, the leadership of a captain of industry, and the practical common sense of a successful farmer. He guides the organization with the autocracy of a Czar and the democracy of a Canadian. Over forty years ago he had a vision of Darkest England and the Way Out. Henceforth his once business was the rescue of human driftwood and the making of men. A dramatic figure is this white-haired old man, as alert and vigorous at nearly 80 as most men are at 30. A phenomenon of energy, his labors during the past half century would have put a dozen ordinary men upon the shelf. On any purely human hypothesis, his life is inexplicable. The past summer he was able to make a 2,000-mile motor tour, visiting a hundred towns, and delivering probably three times as many addresses. The genesis of the name Salvation Army is interesting. About 1887, one of Mr. Booth's aides, an expugilist named Cadman, advertised a "Hallelujah Army" meeting. Then, with an inspired stroke of the pen, Booth changed the word "Volunteer" in a report to "Salvation" Army, and some one dubbed him "General." The name stuck. Then came other officers, uniforms, bands and all the rest that has caught and held the unchurched millions. From the day, 41 years ago, when he stood almost alone, facing that continent of misery, vice and crime—the east end of London—the Army's work has grown, till probably millions of soldiers have been enrolled. It has over 19,000 paid and 50,000 voluntary officers, and 17,000 musicians; issues over 60 periodicals, in 24 languages, totalling 1,000,000 copies per week. It carries on some 650 social, preventive or remedial institutions; feeds 200,000 hungry ones in its food depots every week, and houses nightly 25,000 homeless outcasts in its shelters, giving employment in its own 76 factories or elsewhere to 16,000 men; conducts 18 farm colonies; nurses thousands of sick poor; inaugurates an emigration propaganda that will send 25,000 people to Canada next year, and becomes the instrument in the regeneration of multitudes. The Army has outlived scorn, obliquity, and the brutal opposition of mobs and jails, and has won the commendation of kings, presidents and prelates, while great ecclesiastical organizations are imitating its methods; the London County Council adopts its plans for the homing of the people, and philanthropists are establishing a farm colony for women.

Booth's plan of campaign is sound—individual regeneration. He starts at the center of the being, but knows that it is not enough to say, "Go in peace, be ye warmed and filled." So he cares for the suffering and the starved body,

which must be cleaned, clothed and fed; and across the street from a Shelter, where the homeless man gets a bath, supper and clean bunk for a nominal fee, the Army sets up a big sash-and-door factory, or mill, where he goes to work next morning to earn something, making him a man instead of a pauper. This is the theory that runs through all the Army's work.

Some fifteen years ago General Booth conceived the idea of a big farm for rejuvenating men who were battling their way back to sober, decent lives. With courageous optimism, he purchased a 3,000-acre property at Hadleigh Village, on the north bank of the Thames, in Essex, about 39 miles from London, on the London, Tilbury & Southend Railway. This has been designated

cattle, includes market gardens, orchards containing 1,200 fruit trees, and a large quantity of bush fruit; farm land for growing wheat, oats and root crops, beside two large brickyards. The products sold and consumed last year would aggregate over £32,000, and the total outlay would reach about £33,500. During the year ending March 31st, 1906, employment was provided on the farm for 478 men, and, on an average, the number will probably reach 500 per year, for longer or shorter periods. In addition to the colonists, about 50 regular employees, including horsemen and plowmen, are engaged. The live stock for work and other purposes numbers: horses, 56; cattle (Shorthorn grades), 121; sheep (Hampshires and Sussex), 274; pigs, 23; poultry, 1,800. From the balance sheets submitted for the writer's inspection, the market and industrial departments of the institution pay best. There have recently been planted some 4,000 apple trees, 5,000 plums, and 1,500 pears. Owing to the proximity of the Colony to London, there appears to be a disposition to develop the fruit and vegetable-gardening departments, as likely to yield the most profitable returns. A great deal of the soil, both in the pasture and tilled areas appears to be very fertile, and the crops of wheat, oats and roots, growing or harvested, were most creditable to the officers in charge. The photo-engravings which we publish will give our readers an idea of different features of the farm. Like many English farms, it is very irregular and scattering in its lay-out, which increases the cost of management. The deficit last year was some £1,500, but it is reaching a self-sustaining position. Run as an ordinary business proposition, there is little doubt but what this farm could be made to pay handsome dividends, and is steadily increasing in capital value. It is now worth many times its value when purchased by the Army. But when all the circumstances and the moral and physical achievements upon the paupers and wretches cared for, are considered, who would cavil at the outlay? After getting thoroughly straightened up, and becoming more or less familiar with farming, some of the colonists go to work on regular farms, and a goodly number come to Canada. For the colonists, very comfortable dormitories and dining-rooms are provided, and plenty of wholesome food. As soon as these people are able to work to any advantage, they receive wages, which are increased as their capability develops. With improvement in conduct and service, we observed that they are given better sleeping quarters—fewer in a compartment, pictures on the wall, and a comfortable reading room in the evenings. The good order, discipline and sobriety of the colony were most noticeable, abstinence from drink being, of course, one of the regulations. Most of the men and boys tell the same story of how they got there—out of work, starving on the streets, or "gone to the bad." A young cook was interviewed:



General William Booth.

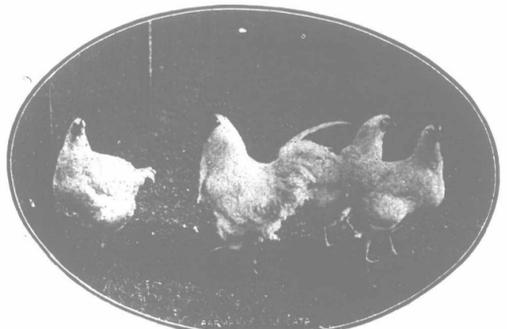
with the rather cumbersome title, "The Salvation Army Industrial and Land Colony," because they carry on brickmaking and other work, as well as farming and gardening. A good view of the whole colony may be obtained from the ruins of Hadleigh Castle, nearby, where Anne Boleyn was once imprisoned. By dyking and other improvements, the farm has now reached a total value of some £140,000. A portion covered by tides is let for fishing, and a part is still farmed by tenants whose leases have not yet expired. The main colony—over 1,000 acres—is farmed by the Army, and, in addition to pasture for sheep and



Men in the Making by Orchard Tillage at the Salvation Army Farm Colony, at Hadleigh, England.



Castle House, 200 Years Old, at Hadleigh, Eng., Used by the Army.



Cock-a-doodle-do!



Col. Laurie (seated) and Staff, Salvation Army Farm Colony, Hadleigh, Eng.

"What were you before you came to the colony?"  
 "Brushmaker in London, sir."  
 "Did you fall out of work?"  
 "Yes."  
 "Got in a bad way?"  
 "I did in London and around the country."  
 "The Salvation Army picked you up?"  
 "They did."  
 "Doing all right now?"  
 "Yes."  
 "What do you look forward to doing ultimately?"  
 "I want to go to Canada in the spring?"

"The Farmer's Advocate" representative enjoyed his visit to the Farm colony, which, unfortunately, was all too brief, but yet sufficiently long to discern the general features of the institution and the commendable nature of the work being accomplished.

**Experience with Blasting Stumps.**

Editor "The Farmer's Advocate":  
 We have carried out the practice of dynamiting stumps to a very considerable extent. We think it effective, but also expensive. Our practice is to make a hole as low down towards the root of the stump as possible—that is, a point where we can get the greatest hold—and in most cases one explosion will dispose of the largest kind of stump. To make the hole, we use a crowbar, simply plugging the hole under the stump, and make the explosion in the usual way, with caps which are furnished with the explosive. The last price we paid for dynamite was 10½c. per pound. The boxes are put up in fifty pounds each, and each individual explosive weighs nearly a pound. A much smaller explosive will dispose of a very great number of stumps. Again, we say, we think it effective, but at the same time we think it expensive. It is our opinion that one of the best type of stump-pullers is a cheaper way of getting rid of stumps than dynamiting.  
 Russell Co., Ont. WM. C. EDWARDS.

**THE DAIRY.**

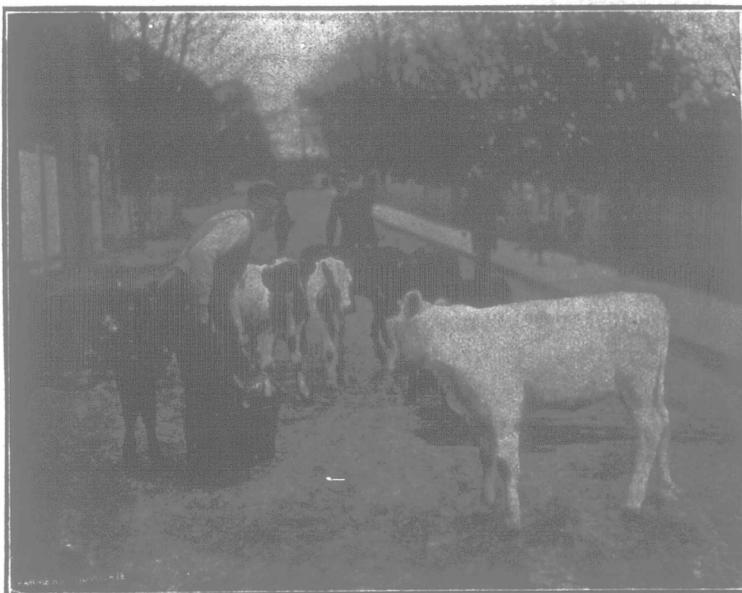
**Size and Qualities of Holstein Cows.**

We are all tolerably familiar with the proper type of the dairy cow, so I will spend no time on her form. But there is some difference of opinion on the method of feeding her. Some think her performance depends upon high feeding, and some think there is great danger of injuring her by high feeding. Some think many of our cows have been weakened in constitution and their breeding powers impaired by official tests for the Advanced Registry. We constantly hear criticism of the Holstein cow because she eats so much and cannot pick up a living in stony and brushy pastures like the Devon and the Ayrshire. To my mind, the rapacious appetite of the Holstein cow is one of her most valuable traits. There may be good cows that eat very little, but I have never seen one of them. All the good cows that I have ever owned have had capacious stomachs and paunches, and have been capable of turning large quantities of food in good milk. Cows can no more make milk without food than men can make brick without straw.  
 The Holstein cow has been developed on rich herbage of the Netherlands, and if we desire to

preserve their size and capacity, we must give them plenty of good food from birth to death. Just as soon as we begin to skimp their food, either in the barn or pasture, they will begin to deteriorate in size and capacity. I believe there is very little danger of exhausting their vitality by high feeding, if fed at suitable times and on suitable food. The blacksmith's arm grows stronger with constant use, the human brain improves with use, and more people are injured by idleness than by work. The unused machinery in a factory will soon rust out and become worthless. The intense energy we perceive everywhere in nature keeps things alive and holds the planets in their orbits. It is the same in the animal kingdom. Animals are not apt to exceed their natural capacity. There is a prevalent notion in the community that the enormous yields of milk and butter of the champion cows of the world have exhausted their vitality to such an extent that there is a loss of vigor in those cows and their progeny, but there are no well-ascertained facts to support this belief. As a matter of fact, the greatest producers of all breeds began to attract attention to their extraordinary yields when young, and they usually surpassed themselves and other cows when well along in years.

duction of milk and butter were the ones that produced the distinguished cattle of our times. Therefore, I say that if we desire to maintain the milk or butter-producing powers of our cows for the greatest length of time, and to obtain the most profit, we must feed them up to their natural capacity. Of course, this does not mean overfeeding or stimulation by use of drugs, but it does mean the necessity of liberal feeding in order that our cows may be as productive and profitable as nature will permit.

What is true in regard to the liberal feeding of our cows is equally true in regard to the feeding of our calves. We cannot have good bulls and cows without good calves. The proper raising of calves is fully as important as the proper management of the cows. They should be fed so abundantly that they will grow vigorously and continuously from birth to maturity. They should have plenty of milk, with rowen and some grain. They should be kept in dry stalls or yards, and fed out of clean pails. They should not be bred until they are fourteen or fifteen months old. A heifer, when she comes in milk, should weigh from 800 to 1,000 pounds. Our greatest danger of deterioration in the size of our cattle comes from the improper feeding and care of our calves. It is a sad truth that too many of our breeders do not have any real knowledge of calf-raising. Their calves have a scrawny and ill-fed appearance that writes them down as careless or unintelligent stock-raisers. You see nothing like this in Holland or Denmark. Here you frequently see a farmer with a good herd of cows well cared for, while his calves, if he has any, are unthrifty and stunted for life. In many cases ignorance is the real cause of this state of things. The truth of the matter is that our farmers are mostly engaged in milk-production alone, and many of them have lost the art of calf-raising. And right here is the opportunity of the breeders of pure-blooded stock, they should raise good cows for the milk farmers, and when the milk farmers find out that a good Holstein cow that will produce ten or twelve thousand pounds of milk per year is cheaper at two or three hundred dollars than an ordinary cow is at fifty dollars, then there will be a demand for the good heifers and cows of the breeders who make a business of raising pure-blooded cows for the market.  
 —[B. W. Potter, in Holstein Register.



Colony of Thriving Calves at the Hadleigh Farm.

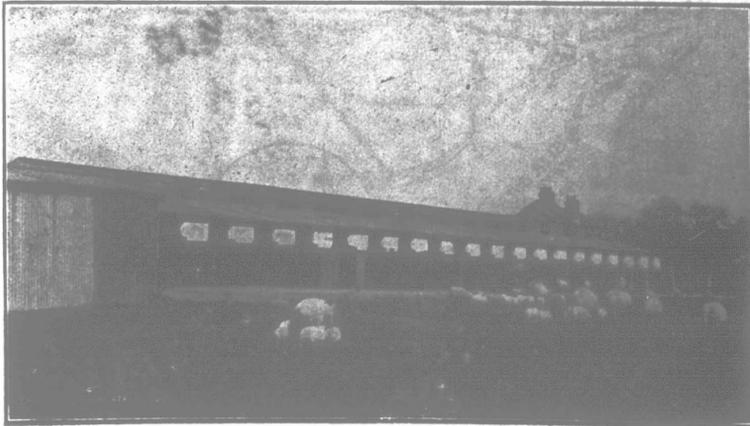
De Kol 2nd did her best work when eleven years old, and she had vitality enough to impress her great qualities on all her progeny. Did not Sadie Vale Concordia astonish the world by her great performance when ten years of age? And the present world champion in butter-fat, Aaggie Cornucopia Pauline, is a granddaughter of De Kol 2nd, and began her great record before she was three years old, and is still strong and vigorous and shows no signs of exhaustion. And the great De Kol Creamelle, the present world champion in milk production, is not a yearling, and her vitality is not exhausted.

These cows came up to this natural capacity by intelligent feeding, but they did not exceed it. The distinguished cows of to-day will produce the famous butter cows and bulls of the future, just as those in the past who were prolific in the pro-

Advocate," to make the various creamery and cheese-factory instructors employed by the two Associations, sanitary inspectors as well, giving them legal authority to insist on sanitary conditions of dairies and places of manufacture. A recommendation for a law to this effect is to be made to the Provincial Government.

**Sanitary Inspection.**

The joint committee of the Eastern and Western Ontario Dairymen's Associations are heartily agreed as to the wisdom of the suggestion, first advanced in "The Farmer's Advocate," to make the various creamery and cheese-factory instructors employed by the two Associations, sanitary inspectors as well, giving them legal authority to insist on sanitary conditions of dairies and places of manufacture. A recommendation for a law to this effect is to be made to the Provincial Government.



Farm Colony Yorkshires.

"Does Dairying Pay?"

To prove that dairying pays when properly and systematically conducted, I will relate a simple experiment made last summer. The experiment was mainly to determine whether or not there is any money in the business, and if any, how much. The results show not only that dairying is a profitable branch of farming, but that it may be carried on independently as a separate industry, and yield splendid returns on the capital invested.

The herd consisted of eight ordinary cows. The experiment began May 1st and continued for six months, ending Nov. 1st. During this time no grain was fed, but the herd had the run of an eight-acre pasture. The work connected with the dairy occupied the time of one man about three hours daily. The cost of labor was \$48 for the summer, and the rent for pasture was \$16, the entire cost of producing the dairy products being, therefore, about \$64. The average amount realized out of the sale of the dairy products was \$22 per month, or \$192 for the entire summer of six months. Subtracting \$64 from \$192, leaves \$128 as the net profit of the business. The cows were worth about \$30 each, making \$240 as the capital invested. Figuring this in a businesslike way, the profits in the business were in the neighborhood of 50 per cent. Minnesota. A. C. SCHULZ, Jr.

Cow-testing Associations.

The results of the seventh test at North Oxford, Ont., are most encouraging. Attention is drawn to the record of Herd No. 14, namely, an average of 24.7 pounds of fat for 16 cows. The cow that gave 1,256 pounds milk calved in May; two others in this herd calved in March, and gave in this test 1,180 and 1,120 pounds milk. Herd No. 10 contains a cow that gave 1,650 pounds milk, testing 4.5, or 47.2 pounds of fat. The owner writes: "We are careful to milk the same time daily, as near as possible; we feed oat chop all through the season; we divide the pasture so that we have good clover and timothy all the summer; we are generally the last to turn out in the spring, and the first to stable in the fall. We find feed and good care go a long way with cows." Number of cows tested, 258; average yield of milk, 638 pounds; average fat test, 3.7; average yield of fat, 23.6.

The Dairy Commissioner writes: "All members are particularly requested to continue the weighing and sampling right through to the end of the season. Although the flow of milk is not so abundant now, never mind how small the yield, continue the weighing regularly, so as to secure records for the full period."

Fool Resolutions.

Despatches in the daily press report that at the annual meeting of the State Veterinary Association, of California, held at Los Angeles, in October, resolutions were adopted demanding that the California Legislature enact a law requiring dairymen to shave off their beards and moustaches and keep their faces smooth-shaven, and also have their hair trimmed once a week. The veterinarians defend this resolution on the theory that germs of different diseases have been carried in the beards. Immediately on learning of the resolution passed by the veterinarians, the executive committee of the Barbers' Association called a meeting, and passed similar resolutions. This is the limit.

Forms Used in Official Grading of N. Z. Dairy Products.

CHEESE GRADE NOTE. Department of Agriculture - Dairying Service. Your Cheese, Registered No. 32, branded Little Ahaloo, has been inspected and graded as follows: 1st Grade - 140, 2nd Grade - 140, 3rd Grade - 138. Total 418. LYTTELTON. W. G. Grant, Government Grader.

CREAMERY BUTTER GRADE-NOTE. Department of Agriculture - Dairying Division. 50 packages Butter, Registered No. 737, branded Papanui, have been graded as follows: 1st Grade - 36, 2nd Grade - 14. Total 50. MOTUROA. J. Johnston, Dairy produce Grader.

GRADE-NOTE FOR "MILLED" BUTTER. Department of Agriculture, Dairy Division. 2 packages of "Milled" Butter have been graded as follows: 1st Grade - 2, 2nd Grade - 2. Total 4. WELLINGTON. D. Buddie, Dairy produce Grader.

In view of some current press discussion on the subject of compulsory grading of Canadian export dairy products, in which discussion frequent reference is made to the system in vogue in New Zealand, the accompanying forms, used in that country for official grading, will be of inter-

est. The copies were kindly sent us by a friend in New Zealand. It will be noticed that there is one form for cheese, one for creamery butter, and another for "milled" butter.

Cow Paths that Lead Far Apart.

Prof. Wilber J. Fraser, Chief in Dairy Husbandry, University of Illinois, has been furnishing the American agricultural press with some articles on dairy husbandry calculated to make readers sit up and think. In the August 16th number of "The Farmer's Advocate" we published one of these letters, being a recital of the achievements of two cows in the College herd, one of which was purchased as a four-year-old for \$50, and has produced an annual average of \$96 worth of butter for ten years. Beside her was a cow with a six years' average record of only \$38 worth of butter, being \$58 a year less than that of the good cow.

Similar differences occur between the best and the poorest cows in all herds, and the most expert judge cannot detect the difference, except by daily weighing and periodical testing of the milk.

In a recent number of the Jersey Bulletin, Prof. Fraser returns to the subject, expressing his arguments with a graphic pictorial representation, in connection with which he writes as follows:

Illinois has a million dairy cows. Like men, they do not all travel the same path nor reach the same destination. Whither are they going, and how far, in their service for the dairyman? Who has stopped to ask, much less to answer the question? What difference is there in their efficiency? The dairyman has been in the dark as to the paths his cows take. But under the arc-light of the scales and the Babcock test the parting of the ways is made plain. Half of all the cows in Illinois take the one or the other of the paths shown in the accompanying illustration.

Extensive investigations by the Illinois Experiment Station indicate that a fourth of all the cows in the State follow the left-hand path. That is, they produce no more than an average of 133 1/2 pounds butter-fat per year. That is the average of the lowest fourth of 554 cows in 36 Illinois herds tested a full year by this Station. This path is not the "milky way"; it lacks the upward arch, the starry brightness—and the milk.

At 23 cents a pound for butter-fat, these 139 cows make a return of \$30.77 to the dairyman. At \$30 per year for feed (and who would figure it less?), their profit is 77 cents per cow per year. It takes one of these cows 4 1/2 days to earn one cent profit.

THE RIGHT-HAND PATH.

But the highest fourth of the 554 cows produce 301 pounds butter-fat, which means an income of \$69.32, and a clear profit of \$31.32 per cow (after taking out \$38 for feed). These are the cows taking the right-hand path above. These are certainly the right cows, and the path they take leads right on to the right things for the dairyman—profit, progress, plenty, an attractive home, wider usefulness, higher education for his children, and real enjoyment of country life for all the family. And the right dairyman will take great pains to add this kind of cows to his herd.

The average cow in that right-hand path is worth as much in actual profit to the dairyman as 40 2-3 cows in the left-hand path; and 25 cows of this better sort return as much profit as 1,021 cows that turn to the left.

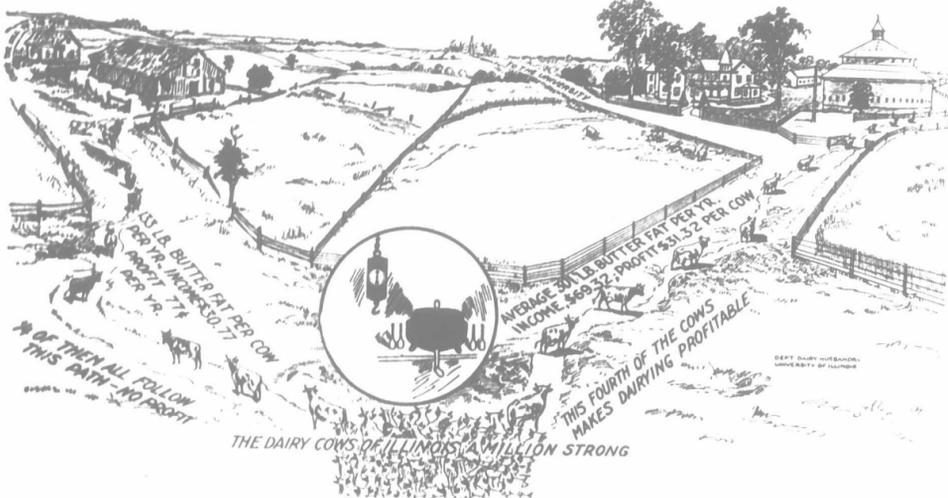
As seen above, the poor cows naturally find their way to a poor barn, a poor home, a poorly-kept farm and poor dairyman; and in the end, the dairyman will do well, after slaving hard for years, if he does not find his way "over the hill to the poorhouse." If all these things are not met with on that cow path, it will be no fault of the great bovine procession travelling that way.

ENTIRE HERDS TAKE WRONG PATH.

Not only individual cows, but large portions of herds, and even whole herds, take the wrong path at the parting of the ways. Of these 36 herds, all the cows of the poorest herd averaged a profit of but \$1.74 per cow per year. The average cow of the best herd is worth more than 24 cows of the kind that form the poorest three herds.

The writer knows three other dairy herds whose milk returns show a profit of but 62 cents per cow for the year, while in the same neighborhood are three herds whose milk averaged a profit of \$60.94 per cow. One cow of this last kind equals 96 cows of the other three herds. And in another locality the same kind of a contrast came to the writer's attention.

A little pondering of these divergent cow paths may help the dairyman to make a good turn for himself—turn on the light of the scales and test—turn off the poor cows to the butcher—and turn all his attention to the high-producing cows that make a specialty of turning feed into milk and money. It all depends on which path the cows take and which cows the dairyman takes.



The average cow in that right-hand path is worth as much in actual profit to the dairyman as 40 2-3 cows in the left-hand path; and 25 cows of this better sort return as much profit as 1,021 cows that turn to the left.—Prof. W. J. Fraser.

**Still on Trial.**

The American Dairyman, in quoting the recent editorial of "The Farmer's Advocate," in which it was pointed out that the milking machine is not yet a practical success, makes the following comment: "It is always well to hear both sides of any question. The American Dairyman has given space to those who advocate the use of milking machines, and, while we have never editorially endorsed it, we have approached the matter in a receptive mind, anxious to see some machine do the work as satisfactorily as it can be done by hand, and with a belief that if all has not yet been perfected, some day it will be. We believe that a good milking machine will do better work than a poor milker; but whether it will do as good work, year in and year out, as a good milker, that remains to be found."

"The Farmer's Advocate" is the paper for the dairyman, because it informs him not only about cows and milk, but in all the manifold branches of dairy husbandry. A good dairyman must be a good farmer.

**POULTRY.**

**Construction of Poultry Houses.**

In a bulletin recently to hand from the pen of Prof. W. R. Graham, O. A. C., Guelph, we find the following valuable information on the above subject, with details of the results of an experiment with poultry houses:

We find poultry thriving and yielding good returns in so many different styles of houses, that it is very difficult to lay down any hard-and-fast rules. The tendency at present is towards cheaper houses, with better ventilation. The hothouse style of housing poultry during the winter has not been satisfactory, many of the houses being damp, and the air in them anything but agreeable. Disease has been quite common, and the results in many cases have been disappointing.

Every poultry house should be light; at least one-third of the south side of it should be opened to the sun. It should face the south-east or south. The sun's rays are very beneficial to fowl, especially during the winter months.

During a number of years we have been trying different styles of poultry houses. The first houses, constructed some ten or more years ago, were built very warm and tight, and were so arranged that they could be heated artificially. After a few years' trial, the stoves, etc., used for heating purposes were removed, and later the double windows. Gradually we began opening the doors and windows daily, and not closing them in the fall of the year until the water would freeze in the drink tin. The fresh-air treatment gave us healthier and more vigorous birds, and, as far as I can tell from records, equally as many eggs, which were better eggs for incubating purposes.

We tried a few fowl in a small colony house constructed of single-ply boards, the cracks of which were battened. This house gave fairly good results as regards egg-production and hatchable eggs.

Two years ago four houses, representing different styles of popular poultry houses, were constructed. These houses were stocked with birds representing, as nearly as possible, the same strains of the breed. The breeds used were White Wyandottes and Buff Orpingtons, the one a rose-comb breed, the other a single-combed breed.

The houses are of equal size as regards floor space. Each house is 24 feet long and 12 feet wide. The house is divided by a wire and board partition, making two pens each 12 feet square. The pens will accommodate 20 to 25 birds each, or about 50 to the house. The roosting quarters of each house are very similar in construction. A drop-board is used which is constructed of matched dressed lumber. The board is placed at the back of the building, and is about three feet above the floor level. The drop-board is three feet wide. The roosts are made of dressed 3x3 scantling, and are placed about six inches above the drop-board. A curtain is arranged to be let down during cold nights in No. 1 and No. 2 houses. There is no curtain used in No. 3 or No. 4 houses.

House No. 1 is made of matched boards which are dressed on one side. The front and ends of the house are single ply. The back is sheeted on the inside, building paper being used under the boards so as to make the wall tight or free from draughts. The windows in this house slide back and forth, so that the ventilation can be adjusted to the weather conditions. The roosting quarters in this house have curtains, which can be dropped on very cold nights.

Trap-nests are used in all the houses, and are on the ground level. These take up some floor-space that might be used for exercising the fowls were we using other styles of nests.

The second house is what is known as the "Main State" house. This house is practically

open to the weather on the front or south side. There are canvas curtains, which can be dropped as a protection against wind and snow on stormy days. On the other days these canvas curtains are to be kept rolled up, and the fowls allowed to exercise in the fresh air. The ends of the house are single-ply matched lumber; the back wall of the house is matched lumber lined with paper, and is sheeted again on the inside. This is done in order to make a warm roosting coop, which is protected at night in front by canvas curtains.

six inches apart. These boards are placed on a level with the roof or ceiling. The straw absorbs the moisture, and keeps the house dry.

The fourth house is one of the extremely airy ones, being made of boards that are dressed on one side and the cracks battened; about half of the front is open to the weather, but may be closed in on stormy days by large doors. There is not any special protection for the roost, the chickens roosting in this house in exactly the same temperature as they worked in during the day. This house, needless to mention, is much cheaper than the other styles.

**NOTES ON EXPERIMENTAL HOUSES.**

During the period of 1905, the cold house, or No. 4, gave much the best results, and for the months of January and February, of 1906, it leads, but does not do as well in March, probably owing to more hens being broody.

The warm house, or No. 3, gave the poorest results in each year.

The average temperature in 1905 was lower than in 1906.

The average egg production was lower in 1905 than in 1906.

The food consumed during the winter of 1905 was greater than during the same season of 1906.

The fowls in the houses during the season of 1905 were not as good birds as those in the 1906 test, there being more old hens and late-hatched pullets. These may be the cause of less eggs in 1905, although House No. 4 gave better results during the cold season.

Great pains were taken to have the birds as nearly alike as possible in each pen; but each individual is different, and it is practically impossible to have the birds exactly alike in every respect.

From the figures, hens appear to eat more grain during a cold season than during a warm season. There was a difference of 18 degrees in temperature between the coldest temperature in House No. 4 and House No. 3, their respective minimum temperatures being 7 below zero and 11 above zero.

In both years the cold house is better than the third.

Houses No. 1 and 2 were about 4 degrees warmer than House No. 4. The curtain-front house (No. 2) was usually 1 degree warmer than the house with movable windows (No. 1).

The houses with straw lofts are cooler in summer.

The birds in House No. 3 were not as healthy as those in the other houses. This applies particularly to the Wyandottes.

Were I building a house for my own use, I would prefer a house like No. 4, with a front similar to No. 2.

The curtain in front of the roost is useful in zero weather. It saves the combs of the male birds.

**Avian Tuberculosis.**

Editor "The Farmer's Advocate":

During my five years of poultry-raising in Alberta, I have continually lost hens during their second summer, with some unknown disease. Upon inquiry, I found that my neighbors, many of them, at least, had the same trouble among their hens. Two of them told me that, upon opening the dead birds, they found their livers greatly enlarged. The symptoms were generally about the same—varying somewhat in different hens. Various reasons were given for it; one woman thought it was caused by their feeding barley, etc., but, as others fed no barley, and other conditions were different, I still looked, but in vain, for the cause and remedy.

For a long time many of us thought our hens were dying from lice, which are plentiful here, and we waged war upon the lice, but with no restraining effect upon the disease.

One day recently, while looking over a pile of old bulletins, I came upon one from the Oregon Experiment Station, dated Dec., 1900, upon diseases in poultry. I opened it, and the first plate, a photo of a diseased hen, stuck me as being a perfect picture of my sick hens, and even before reading about the disease I felt sure I had found a solution to the trouble.

Avian tuberculosis, or bird consumption. I believe it to be very prevalent in this part of Alberta. I write this warning that, if possible, the disease may be stamped out by knowledge. It is a very contagious disease, and the above-mentioned report says: "We are as far from solving the problem of a remedy for this disease as we are from curing consumption in man, therefore nothing can be said yet, except to urge the necessity of sanitary precautions, and the early removal and destruction of sick fowls from the flock, as well as thorough disinfection of the premises."

The disease is usually seated somewhere along the intestinal tract, and often in the liver, but seldom attacks the lungs, and cases have been known where a hen had a tuberculous leg—probably inoculated with the tubercle bacilli by picking

EGGS LAID AND FOOD CONSUMED DURING JANUARY, FEBRUARY AND MARCH, 1906.

House.	Breed.	Jan.	Feb.	Mar.	Total.	Total eggs for the House.	Grain Consumed. Lbs.	Beef Scrap. Lbs.
No. 1—Movable windows	Orpingtons	151	148	228	527	527	348.5	28
	Wyandottes	117	135	256	508	11,035	362.5	21.5
No. 2—Cloth front	Orpingtons	196	161	222	579	579	350.75	26.5
	Wyandottes	99	141	273	513	11,092	340.25	27.
No. 3—Warm....	Orpingtons	184	123	201	508	508	373.5	23.
	Wyandottes	94	126	218	438	438	329.	27.
No. 4—Cold.....	Orpingtons	121	163	*150	434	434	352.25	34.
	Wyandottes	188	169	230	587	11,021	361.	40.

† Total number of eggs laid—both breeds.  
\* A number of hens in this pen were broody.

EGGS LAID AND FOOD CONSUMED DURING JANUARY, FEBRUARY AND MARCH, 1905.

House.	Breed.	Jan.	Feb.	Mar.	Total.	Total eggs for the House.	Grain Consumed. Lbs.	Refuse Meat. Lbs.
No. 1—Movable windows	Orpingtons	79	152	233	464	464	391.75	71.
	Wyandottes	36	103	216	355	† 819	340.5	70.5
No. 2—Cloth front	Orpingtons	99	108	230	437	437	420.25	71.5
	Wyandottes	38	26	217	281	† 718	340.	68.75
No. 3—Warm....	Orpingtons	128	99	226	453	453	406.25	71.5
	Wyandottes	62	42	40	144	† 607	333.	64.
No. 4—Cold.....	Orpingtons	136	187	244	567	567	406.	71.75
	Wyandottes	123	120	266	509	† 1,074	378.	72.

† Total number of eggs laid—both breeds.

The third house is the warmest of the four, and is built of matched lumber and lined with paper. There is a dead-air space between the inside and outside walls. The building is made as tight as possible, the windows, doors, etc., all being made to fit tightly.

Many houses on this plan are moist inside. To do away with the moisture, we have a straw loft. The straw is placed on boards which are four to

it with an infected beak at that point, or from an injury.

I think I lost one hen affected with it externally in the breast—the only one that carried any flesh at death. I have opened some of my hens, and, while not a bacteriologist, have found what I concluded to be a similar condition to that described in the report.

Like consumption in man, the disease is usually slow. To quote again from the report:

"The first noticeable symptom is generally lameness; the bird becomes more or less mopy, and gradually loses flesh, until, at the time of death, it is a mere framework with feathers. The appetite is good throughout its sickness; at times it even becomes ravenous for food, and although it eats heartily, this does not seem to appease the hunger. Toward the latter stages of the disease there is nearly always a persistent diarrhoea, and the evacuations are accompanied by a discharge of a white or yellowish viscid matter. In all the specimens received this matter was carefully examined, and in each case the tubercle bacilli were found in countless numbers. When the tubercle on the intestine reaches a certain period of its growth, there is a breaking down of the intestinal wall, and the germs are passed out with the faeces, thus accounting for the rapid transmission of the germs from fowl to fowl, for in nine cases out of ten the chickens' food is contaminated with their excrement.

"There appears to be no record of the transmission of these germs from fowl to man, with fatal results, although the possibility may exist. The flesh of a fowl in an advanced stage of avian tuberculosis cannot be wholesome as an article of food, and should not be eaten."

(MRS.) A. I. B.

[Note.—Prof. Graham, of the Ontario Agricultural College, thinks the trouble is very prevalent in Ontario, as he finds many affected flocks in travelling through the country. The remedy is change of range, where possible, together with careful selection of vigorous breeding stock, good feeding, and more rational treatment in the way of ventilation, exercise, and use of more dry grains instead of so much mash as has been fed in some cases by over-ardent poultrymen.—Editor.]

## THE FARM BULLETIN.

### Common Terms in Market Parlance.

[By our Montreal Market Correspondent.]

To facilitate the transaction of business of all sorts, a number of terms have come to be used which are almost unintelligible to those not acquainted with them, and which are yet almost indispensable to those carrying on large transactions in the large markets of the country.

The following glossary of general terms will be of benefit to many readers:

**Bulls and Bears.**—A "bull" is one who wants the market to go higher; a "bear" wants it to go lower.

**Longs and Shorts.**—One is "long" of stock when he holds stock; he is usually a bull. A "short" is one who is short of stock; he wants the market to go down in order to buy. If you contract with a wholesale grocer to supply you with sugar for a certain length of time, at a certain price, and he has not yet bought the sugar, he is short the amount he has sold you. He wants the price to decline so that he may buy your supply at a lower figure; you want the market to advance so that you may sell at a higher. He is short and you long; he a bear and you a bull.

**To Arrive.**—When one sells "to arrive," he sells goods not yet received; one buys to arrive, fearing the market may go up before the goods are "on spot," or laid down. "For future delivery" is a synonymous term.

**F. O. B., "Free on Board."**—This means that the goods purchased have to be placed on board the car at seller's expense, for the price stated.

**On Track and in Store.**—If the goods are bought "on track," the seller's responsibility as to charges ceases when the goods have been taken into the car, or when the car has been delivered at the point mentioned. "In store" cannot well be misunderstood, it being stated, when necessary, whether it is the buyer's or the seller's store which is meant.

Certain trade terms are also used to describe different produce. These will be found under the headings of articles, as follows:

**Eggs.**—A "case" is frequently 30 dozen. "Candled" means the process of passing an egg between the eye and the light, in order to find if it is rotten. After this process, the eggs may be divided into Selects, No. 1, and No. 2 candled, but these, as well as eggs described as "fresh laid," etc., are indefinite terms, and mean one thing with some and another with others. Lined or pickled eggs are those put into vats containing a preserving solution and kept there till wanted. Cold-storage are those simply placed in a cool position to protect them against warm weather. When eggs are described as fifteen-pound or sixteen-pound eggs, etc., it means that the weight is for ten dozen. "Straight receipts" means just as the eggs are received—no candling or picking over to be done.

**Grain.**—Grain is referred to as of certain grades, known generally by numbers. These, to some extent, are self-descriptive, but, for more light, application had better be made to the nearest grain inspector. Grain is bought and sold mostly under these grades, and the Government inspector decides how any particular grain grades. In America, grain is quoted by the bushel; other countries have other methods. In the case of Manitoba wheat, official quotations on the Winnipeg exchange have reference to No. 1 Northern, basis Fort William—meaning that the seller delivers the grain to Fort William, further freights to be paid by buyer.

**Flour and Feed.**—"In wood," means in barrels. Bags weigh 98 pounds, and a barrel is two bags, sometimes in bags and sometimes in wood. Feed is quoted by the ton, whether in bags of 100 pounds or in bulk is specified.

**Live Stock.**—Terms describing quality vary considerably. "Feeders" are cattle bought usually to be fed in the stall over winter. "Ranchers," usually applies to Western range cattle only; and "stall-fed" to those fed in the stall. Grass calves, or "grassers," are those put to pasture after weaning; others are fed and fattened on various feeds, and are superior.

**Butter and Cheese.**—In cheese, the term "townships" refers to cheese made in what are known as the Eastern Townships—a fine cheese and probably the finest butter section in Canada. Cowansville, Huntingdon and Farnham are principal boards there. "Quebec" applies to butter and cheese made outside the Townships, yet within the Province of Quebec. "Ontarios" are those made in Ontario, though frequently cheese made in the Ottawa River district and the eastern extremity of the Province is not included.

**Wool.**—"Pulled Lambs" wool is the wool pulled from the lamb skins. The farmer sells the lamb or sheep skin, it is shipped to the city, and the pulling is done by machinery and other methods. Sometimes

is a good deal of excuse for farmers who have got into the old ruts, preferring to follow them. However, this is only one year, and it is our place to make better preparations for a larger and better harvest next year.

Prices of nearly all kinds of farm products are high: Beef by quarters, 6 to 9 cents; pork, dressed, 8 cents; butter, 22 to 25 cents; chickens, 15 cents; turkeys and geese, in demand; mutton and wool, the highest we ever knew at this season of the year. Comparatively little really good mutton or lamb is marketed here, owing to poor fall pastures, and very few of us have learned the value of rape as a feed for sheep.

Cumberland Co., Nova Scotia.

C. H. BLACK.

### East Prince, P. E. I.

We have had an unusually fine fall; most of the days were as fine and warm as midsummer. This gave our farmers a good chance to get the late harvest gathered and the potatoes dug. Turnips are not usually housed until the first part of November. This may seem pretty late, but it is wonderful how much turnips will grow when the weather becomes cool, and many farmers think that turnips keep better after one night's frost, and it also prevents them smelling so strong in the cellars; but a repeated freezing and thawing of turnips certainly reduces their feeding value. Turnips are not quite an average crop in this section. They promised excellent the first part of the summer, but they suffered much on account of the dry weather all fall; but they will have lots of moisture now, for just at present (Nov. 2nd), we are having the worst rain-and-wind storm from the north-east that we have had for a long time. We also had two or three heavy rainstorms some days ago, but it was welcomed, as the ground, previous to it, was very hard and dry. The

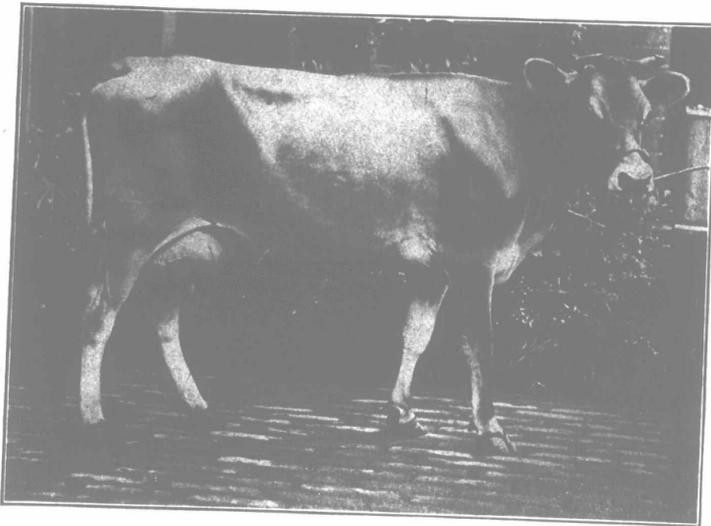
fall work is well advanced. The plowing is about all done, and, judging by the large number of newly-plowed fields through the country, a very large crop will be sown next spring.

Potatoes are quite a failure through the Island in general, although some sections have an excellent yield, and many have a good average crop; but some writers claim that it will take every salable potato on P. E. I. to supply our home market until next year's crop is fit for use. But I do not think the case is that bad, for potatoes are being shipped away now, although they are moving very, very slow. They are only worth 25 cents at present, and farmers who have any to sell, and can hold them, are looking for a high figure next spring. Oats are also moving very slowly. Buyers complain that the oats are not in the country, and this is, indeed, too true. Those who have threshed their grain find that both straw and oats go into a

very small space. The price, however, is good, which will make up for the shortage in the crop. The price started at a cent a pound, and now is 42 cents per bushel. Wheat is worth 80 cents per bushel, and flour about \$2.00 per hundred. The roller mills are doing good work, and a lot of it. Pork is worth having this fall; 8½ cents is being paid for certain weights, but 8¼ is the usual price, with heavy hams 4 cent less; and still the farmer has to use a little brains and understand his business to make pork pay, when oats are 42 cents a bushel and potatoes 25 cents, and the prospect of twice that figure next spring.

Prince County has suffered severely by a disastrous fire, which burned some 150 buildings in the town of Summerside on October 10th. The loss is about \$225,000, with \$90,000 insurance. Many are homeless, and have lost everything. Funds are coming in from all quarters, but much more is still needed. Winter is now not far distant, and little or no rebuilding can be done until spring. It is now understood that we are to have a Provincial Experimental Farm here. This will certainly meet with the approval of all. The experimental farms of the other Provinces are of little value to us here, for the reason that our soil, and even our climate, is so different that some kinds of grain or grasses, or field or garden vegetables, which by experiment would prove a success on other experimental farms, would prove quite a failure here. The same also applies to fruit. An instance of this kind came under my notice at the recent fair at Charlottetown. The judge of fruit was asked his opinion as to the name of a certain plate of apples, known here as the Nonpareil. At first he said it was not that apple, or, at least, it was not the same as the Nova Scotia Nonpareil; but, after some talk about it by fruit growers both here and in Nova Scotia, they decided that it was the same apple, grown on a different soil, with a somewhat different climate.

C. C. C.



Post Orbit.

Jersey heifer, winner of first at London Dairy Show, 1906.

this is well "brushed" and cleaned and sometimes not, and is valued accordingly. "Fleece" is shorn from the back of the sheep. Sometimes this is washed and cleaned in tubs before being sold. This makes it "tub-washed." Other times it is left in its dirty condition, or, "in the grease," and is less valuable.

### Cumberland Co., N. S., Crops and Prices.

Our long-wished-for rain has come. It rained most of the time for a week, and part of the time heavily. Turnips were not more than one-quarter pulled by Nov. 5th, and wet work ahead. Threshing is pretty well through, and the yield is very disappointing, as the grain is not well filled, and the yield is not much more than half of a good crop. October was a most pleasant month, being dry and warm, but, unfortunately, too dry for turnips to make satisfactory growth, and they are panning out about two-thirds of an average crop. This year's small-grain crop is a hard blow to the farmers in this county, as it will necessitate the importation of more grain and mill feed from the West, which, even in a favorable season, is entirely too much depended on here; for, while we do not profess to have a great grain-growing county, still we have as good a grass county as can be found in this Dominion, and it seems to me, if the proper attention were given to grain-growing, the amount of money sent out of this county for feed might be cut in two. Too many farmers leave even rather poor uplands in grass for several years at a time, until the yield is small and the crop scarcely anything but daisies and brown-top. If half, or even a quarter, of this land was in grain every year, a systematic rotation followed, and a clover sod turned down every third year, more and better hay would be cut on less land, and a vastly greater amount of grain could be raised. Years like this are discouraging, and, with the scarcity of labor and grass—the only one that is an average one—there

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**Plowing Match at Saintfield.**

The Ontario County Plowing Match was held on Tuesday, Nov. 6th, at the farm of Mr. James Baker, Saintfield. President T. Stocks and Secretary R. B. Smith, of Columbus, and the Directors in charge, deserve great credit for their untiring efforts to make the match a success. They were disappointed by the small number of entries in the stubble classes, while the boys' class was nil. A number of veteran plowmen were present, and they claim the soil was the best they ever saw in a stubble field. The sod field was a trifle stony and a little rough for first-class work. Over three hundred and fifty spectators were present, a large number of them ladies. The judges in sod class were: J. Fice, Raglan; George Marquis, Victoria Corners; John Campbell, Woodville. In stubble class: George Real; John Lee, Greenbank; Wm. Graham, Port Perry.

The rules and regulations were as follows:

1. Plows to commence precisely at 9 a. m. Time allowed will be made known by the secretary when lots are drawn.
2. Entrance fee, \$2.00 in classes for men. Boys, \$1.
3. Furrows not to be less than 6 inches deep; feering not less than 4 inches deep. All lands to be plowed and judged.
4. That men who have taken a prize in First Class Men, or first prize in Second Class Men, are barred in Second Class Men in Stubble.
5. That men who have taken a first prize in First Class Men, or first prize in Second Class Men, are barred in Second Class Men in Sod.
6. All parties interfering with or abusing Judge or Directors to be expelled from the Club for three years, and names published.
7. As the contract for refreshments has been let, no stands for gambling will be allowed on the grounds or highways.
8. Entries to be made on the grounds before 9 o'clock on the day of the match.
9. Any plowman being delayed by his neighbor plowman, must immediately notify one of the officers of the club.
10. Every plowman to perform his work without any assistance further than setting stakes.
11. All teams entering for Groomed Team or Outfit must be plowing at this match.
12. Plowmen prohibited from handling furrows.

The following are the chief executive officers elected for 1907: Hon. Pres., Thos. Manderson, Myrtle; President, John M. Real, Greenbank; 1st Vice-Pres., Walter McLean, Columbus; 2nd Vice-Pres., D. W. Luke, Greenbank; Secretary, R. B. Smith, Columbus; Treasurer, Arthur Howden, Columbus. C. M. H.

**East York Plowing Match.**

The East York plowing match was held at Agincourt, November 7th, on the farms of Mr. L. Kennedy and J. Elliott, the best of weather prevailing. The land, in sod and stubble, was the best they have had for several years, and in first-class condition. Thirty-seven plowmen competed, and about seven or eight hundred spectators were present. In classes 1, 2 and 3, iron plows were used, with two exceptions; in jointer class, wide-bottom plows, with not less than 9-in. share, and in stubble, No. 1 plows.

There were nine classes, and a large number of special prizes were contributed, from four to six prizes being awarded in all classes except those for boys, in which entries were few, a feature that seems to have occurred in most of the matches held this fall, indicating a lack of interest in the art of good plowing on the part of our young men, which is regrettable. Lack of space forbids the publication of the prize-list, which is lengthy and varied.

**Three of a Kind.**

"People should get rid of the ridiculous habit of using alcohol as a beverage. It is useful neither pathologically nor physiologically."

"The author of nature never intended inebriating fluids as a beverage."

"Japan beat Russia largely because the Japanese soldiers and sailors were more sober."

These were three of the many striking things said at the opening meeting of the jubilee celebrations of the British National Temperance League. The authors of the statements were, respectively, Sir Victor Horsley, M. D., one of the very foremost surgeons of the day; Sir W. H. White, former director of naval construction, and Surgeon-General Evatt, of the British Army.

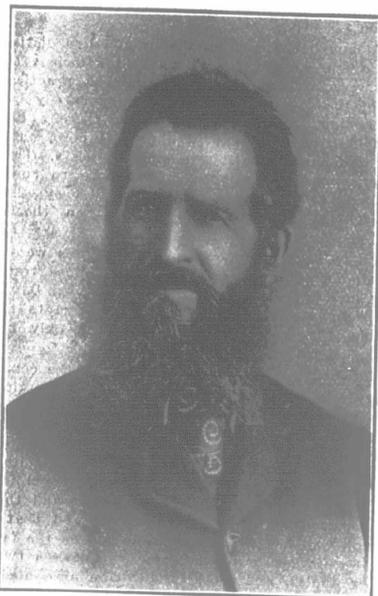
**Immigration to Ontario.**

During the season which is drawing to a close, some 30,000 immigrants arrived in Toronto. They were received and largely disposed of through the Ontario Immigration Bureau at the Union Station. It is estimated that 8,000 of the new arrivals were sent out to the farmers of the Province. The wives and families of a number of the immigrants of 1905 arrived during the summer, indicating that the advance guard had done well.

Mr. D. D. Gray, farmer, of Point Fortune, Que., has been appointed as Farm Foreman to the Central Experimental Farm, in succession to Mr. John Fixter, who recently resigned. Mr. Gray has entered upon his duties.

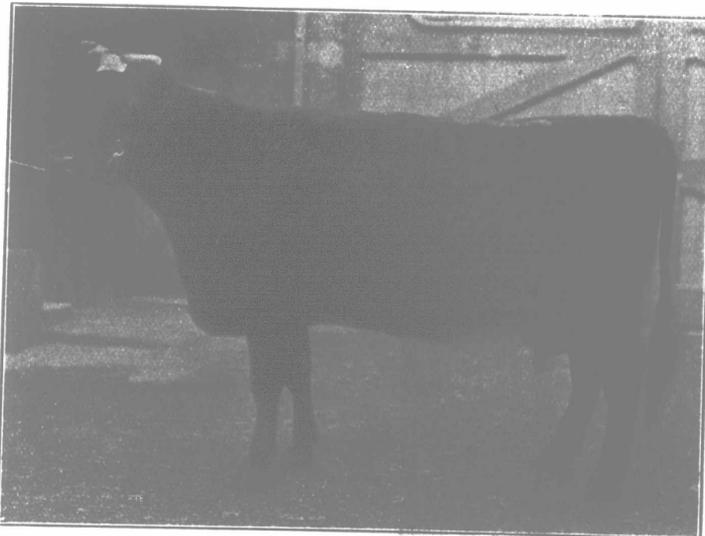
**Death of Mr. Robert Tufts.**

The death, on October 6th last, of Mr. Robert Tufts, of Tweed, Hastings County, Ontario, senior member of the firm of Robert Tufts & Son, breeders of Jersey cattle, removed from the scene of this life, in the seventy-sixth year of his age, a man of sterling character and enterprising spirit. Born in Norfolk, England, in 1831, the early years of his life were spent principally in Old London. Emigrating to Canada in 1861, he first rented and afterwards purchased a farm



The Late Robert Tufts, Tweed, Ont.

in Hastings County, on the management of which his motto was, "hoe your own row and hoe it well," and his ambition to "make two blades of grass grow where one had grown," was signally realized. In 1891 a herd of pure-bred Jersey cattle was founded, which, under intelligent management, has developed into one of the best in the country, proving exceedingly satisfactory from the point of productiveness. Mr. Tufts had been for over twenty years a constant subscriber to "The Farmer's Advocate," and was a devoted reader of the best class of literature. A widow, four sons and three daughters survive him.



Red Rose

Winner of first prize, Barham cup and Lord Mayor's cup for Shorthorns, and reserve for Spencer cup in milking trials, London Dairy Show, 1906.

**A Reflection on Civilization.**

It is estimated that 7,000 licenses were issued for Ontario's 1906 deer-shooting season, which opened Nov. 1st. Besides, there were, up to the end of that week, 40 moose-hunting licenses issued by the game wardens. A fine commentary, indeed, on our modern civilization, that over 7,000 people should have so far retained their animal instincts as to revel in the "sport" of shedding innocent blood. The school-book fable of the boy and the frogs has evidently appealed in vain to many steeled hearts.

**Dairy Instruction and Sanitary Inspection Combined.**

As a result of a conference between representatives of the Eastern and Western Dairymen's Associations, the two chief instructors, the two Provincial sanitary inspectors, and Mr. G. A. Putnam, Director of Dairy Instruction, the following recommendations have been placed before the Ontario Minister of Agriculture as to the methods of work to be adopted in the future:—

That the whole Province be divided into such subdivisions as would give each inspector from 35 to 36 factories or creameries. This will require a staff of 38 instructor-inspectors, with the power of sanitary inspectors, and it is considered by those who have had the work in charge that the man appointed to the work would be able to render more effective service than in past years. Many of the better factories are really not in need of regular instruction, and in the majority of cases a call of an hour or two from the instructor will be just as effective as to spend a whole day with the maker in manufacturing a lot of cheese. This will give the instructor-inspectors an opportunity to visit many of the farms, and to advise with the producers as to the best method of producing the desired quality of milk. In the opinion of the chief instructors, the chief essential in producing a first-class article is that the raw material receive proper attention by the producer and milk hauler. Chief Instructors Barr and Publow stated that "90 per cent. of the rejections can be traced to inferior raw material."

That every factory and creamery in the Province be charged a uniform fee of \$12, to help defray the expense to the Department of furnishing instructor-inspectors. The total appropriation necessary for the work suggested by the joint committee is \$42,700, and upon the basis of the \$12 tax above mentioned the factories and creameries will contribute \$16,000 towards this expenditure. It was at first thought that a sliding scale would be more equitable, but after discussing the question from all sides it was decided to recommend a uniform fee, chiefly for the reason that the smaller factories and creameries are usually in need of a greater amount of instruction than the larger factories, and really demand as much or more time than the larger concerns.

That the instructor-inspectors be required to test milk and cream for adulteration or tampering, but only in those cases in which application is made, and the maker or some other responsible person furnishes the Department or one of the chief instructors with evidence that adulteration or tampering has been practiced. In some sections the time of the instructor has been almost entirely taken up with the work of testing, and it is considered by the representatives of the associations and the Department that the persons identified with the factory should be qualified to make preliminary

tests and investigations sufficient to furnish evidence that tampering or adulteration has taken place before the services of the inspector be asked for.

It is also recommended that any owner or manager of or assistant in a cheese or butter manufactory, who shall knowingly receive or make into cheese or butter any milk or cream that is tainted, gassy, overripe or delivered in rusty or unclean cans or utensils, or on which a preservative of any description has been used, or which has been drawn from cows suffering from lump jaw or other infectious disease, shall be liable to a fine. We now have a provision under which the producer can be prosecuted, provided he sell or supply to a cheese or butter manufactory any milk that is tainted or badly soured, and it is thought to be distinctly in the interests of the industry to have a provision by which a maker or proprietor can be dealt with, provided he accepts any such milk to be manufactured into a food

product for general use. This will have the effect of practically prohibiting a maker from accepting milk of inferior quality which has been refused at a neighboring factory.

**Fair Dates for 1906.**

- International, Chicago .....Dec. 1-8
- Maritime Winter Fair, Amherst, N. S. ....Dec. 3-4
- Ontario Provincial Winter Fair, Guelph.....Dec. 10-14

## Horticulturists' and Beekeepers' Week at Toronto.

Gatherings of fruit-growers, vegetable-growers and apiarists took place at the Provincial Capital last week, on occasion of the third annual Ontario Horticultural Exhibition, in Massey Hall, Nov. 6th to 10th.

The show is under the management of the Ontario Vegetable-growers' Association, the Ontario Fruit-growers' Association, Ontario Beekeepers' Association, Toronto Horticultural Society, Toronto Gardeners' and Florists' Association, Toronto District Agricultural Society and Ontario Department of Agriculture. Thus the three provincial organizations first named have a direct interest in its success, and co-operate by holding their annual conventions during the show, so as to take advantage of the cheap rates. Whether it is, on the whole, advisable to center everything in the capital city, year after year, is open to question, though, as yet, the plan seems concurred in with little dissent by those who attend. The more thoughtful, however, find objections in the plan, and it is not unlikely that resort may soon be had again to the peripatetic system of holding these important annual conventions at various points over the Province, thus seeking to arouse a little much-needed interest in successive localities, instead of drawing much the same limited crowd to Toronto year after year. While the local attendance at provincial conventions may not be great, even if only a few new men are reached each year, it amounts to considerable in the aggregate.

### THE HORTICULTURAL EXHIBITION.

As was the case last year, the Exhibition was a decided success from the standpoint of display and educational features, and an excellent special attraction was the famous Black Dike Band, of England. The band, probably, was responsible for a greatly increased attendance, especially in the evenings, as compared with last year, but the afternoon attendance was still rather disappointing, in view of the lengthened bill of expense. The most ready explanation for the deficiency of afternoon attendance was insufficient advertising in the provincial and city press. How people in the country may be expected to attend a show which they do not know is coming off, a sufficiently long time ahead, is a conundrum for the management to answer. Of course, the principal patronage was expected from city folk, but even they were invited by inconspicuous reading notices in the daily papers.

Entries in fruit were numerous, and remarkable improvement was shown in the exhibits of commercial packages. This was true, not only of the boxes themselves, which were made of better quality of stuff than formerly, with more uniform dimensions, neater finish, and more substantial sides; but it was equally true of the packing. A great many people have acquired the art of packing boxes properly, and the exhibit in this department as not only large, but exceedingly creditable. Barrels, also, were good, though there has not been the same room for improvement in this section. Some very fine plate exhibits were made, and, taking the fruit as a whole, we are officially informed that entries were about 1,200 ahead of last year, while the coloring was never before so good.

Vegetables were about 25 per cent. ahead of last year, and the flowers about the same as in 1906; some very fine specimens of these were on hand, Chrysanthemums, of course, being the chief feature here.

An attractive apiary exhibit also figured prominently on the first floor, where were also arrayed the flowers and the plate exhibits of fruit.

### The Fruit-growers' Convention.

The annual convention of the Fruit-growers' Association of Ontario met in the City Hall, Toronto, on Wednesday and Thursday of last week. President Jas. S. Scarff, Woodstock, Ont., opened the proceedings with an address, in which he pointed out that 1906 had been a good season, both as to crops and prices, and that there was an excellent prospect for tree and vine fruit in 1907. He reviewed the Dominion fruit conference at Ottawa last spring, and the horticultural exhibition last fall in Toronto, concluding with a mention of the show then being held in Massey Hall.

The appointment of committees was then accomplished, after which the committee on new fruits made their reports.

### CROSS-BREEDING OF SMALL FRUITS AT O. A. C.

Prof. H. L. Hutt said the committee had received fewer new fruits during the past year than usual. He mentioned some of the work they were carrying on at Guelph in originating new varieties of strawberries. They now have 120 seedling strawberries, which are crosses of some of their best varieties, as determined by twelve years' testing on plots. He considers they have some promising new strawberries and raspberries coming on. They are keeping a man in the horticultural department engaged in looking after this work.

He then exhibited a specimen of Cox's Orange, an English apple, with quite a reputation for quality. Some scions had been sent a few years ago to W. H. Dempsey, of Trenton. It is a heavy-bearer of handsome, high-quality fruit, but is subject to spots. In season, it is fall or early winter, coming on about the same time as King. Prof. Hutt also showed an apple called Minkler, though this is one not very highly spoken of.

### THE SPENCER SEEDLESS.

A remark about the Spencer Seedless apple, which is being exploited in this country by a Canadian com-

pany, and which was favorably commented on by Hon. John Dryden, stirred up some discussion, and resulted in the appointment of a special committee to investigate the specimens on exhibition at the fruit show in Massey Hall. The committee consisted of: Chairman H. H. Groff, and Messrs. Morris, Johnson, Dempsey, and Prof. W. T. Macoun, Horticulturist of the Central Experimental Farm. Following is their pronouncement:

"We secured specimens from the exhibit at Massey Hall, which showed the following objectionable characteristics in apparent contradiction to the printed description:

"Although the core is smaller and less distinct than in the average apple, there was still sufficient to make the process of coring a necessity. The practical absence of the calyx-tube leaves an abnormally large and deep opening, reaching to the core, thereby involving loss of flesh nearly equal to a normal core, as well as affording a harbor for injurious insect pests. The specimens examined by us showed this space to contain an objectionable mold-like accumulation. They also gave well-developed seeds, though fewer than the normal apple.

"As to size, the specimens seen by us were about equal to our Fameuse or Snow, and those tested for quality and flavor were about equal to Ben Davis.

"We believe that our inspection warrants the advice that the trees of this apple should only be purchased as a curiosity."

Subsequently, the representative of the company in charge of the exhibit addressed the convention in reply. He regretted that the committee had not made themselves known when inspecting the fruit, as he could have explained some things on which they had based a misapprehension. He claimed that in proof of its frankness, the company was exhibiting its fruit publicly. He contended that out of 100 apples cut, he and the other man in charge had found only 1 seed, and that an odd seed, now and then, was accounted for by the fact that the row of Spencer apples grew in between two rows of other apples, and cross fertilization accounted for an occasional seed. The semblance of a core, he said, was no objection, as it practically disappeared by late winter—the time when the apple was supposed to be in season. The quality, he claimed, was equal to that of Baldwin, and the color excellent. The open calyx tube was an objection that was largely overcome in the later generation of trees.

In reply, Prof. Macoun stated that in two apples examined by the committee, three seeds were discovered. The promoters' theory that the seeds were the result of cross-fertilization carries its own contradiction. We understand the variety is pistillate anyway, and will set no fruit at all unless pollenized by another variety. In any case, it is extremely improbable that such crossing would have any effect on the fruit thus produced, though the effect might be seen in fruit borne by trees grown from apples the blossoms of which had been cross-fertilized. The conclusion, therefore, is that, while the Spencer apple is an interesting novelty, it has not sufficient merit to warrant commercial planting, even though young trees were procurable at ordinary prices.

### NEW FRUITS AT OTTAWA.

After the interruption in the report of the committee on new fruits, it was resumed by the report of Prof. W. T. Macoun, Horticulturist, Central Experimental Farm, Ottawa.

Industry of the northern districts, he said, for a winter apple of high quality and fine appearance must still go up unsatisfied, though he believed they would soon have an apple that would fill the want. One fact brought out by the hard winter of 1903-04 was that the trees of varieties which ripened their wood early, came through in best condition. As such are the trees which ripen their fruit early, most of the hardy varieties prove to be summer and fall sorts, but there are exceptions, and they have found some cases in which the trees mature early, and the fruit is in condition for eating in late fall or early winter; yet the fruit will keep practically all winter. The texture does not soon break down. It is this early-maturing but long-keeping apple, which will give us the tree hardy enough to withstand a test winter. Some winter varieties of this character which withstood the test winter at Ottawa, were Winter Rose, Stone, Calumet, Scott Winter, Milwaukee, La Victoire and Baxter. All these were originated in the north, but none of them is quite what is desired. Winter Rose is of good size, fair appearance and good quality, but has not sufficient acidity for a winter apple. Stone is of much the same character. Calumet is attractive, but not even enough in size nor quite good enough in quality. Scott Winter is too small, and has not enough quality. La Victoire comes nearest being an apple of the desired type, but lacks juiciness. Baxter is large, handsome, but somewhat coarse. Since the winter of 1904, however, when it proved so hardy, they consider it a desirable apple for planting in the north.

At Ottawa, a collection of very promising seedlings are being tested as standard trees, not merely as top-grafts. Out of 84, which have been described, consisting of seedlings of Fameuse, McIntosh Red, Swayzie, Wealthy, Scott Winter, Winter St. Lawrence and Dorkham Russet, 21 have been considered sufficiently promising for further trial. In addition, some promising crosses have fruited, and many Russian seedlings also.

None will be disseminated till thoroughly tried out, as there are already too many varieties on the market. Among the seedlings which have fruited, more or less resemblance may be noted, in most cases, to the female parent and the probable male parent. This is particularly true in the case of seedlings of Wealthy and Swayzie Pomme Grise. Near the original tree of Swayzie is a Baxter. The large size of the Swayzie seedlings, and the large dots on the skin, show the Baxter blood, and, in one case, a large Swayzie seedling looked very much like Baxter, the Wealthy seedlings all have that smooth, symmetrical surface peculiar to the parent, and in some instances the seedlings have been quite crab-like, showing the crab origin of the Wealthy, as claimed by Peter Gideon, its originator.

In grapes, a black seedling of Brighton, almost identical with Brighton in flavor, fruited this year, and is considered promising.

Attention was called to two new apples, Walter and Hoadly, which have been fruiting at Ottawa for some years. Both are about the season of Wealthy, but have proved hardy.

Walter was originated by the late P. C. Dempsey. The fruit is roundish, rather irregular, very large; color greenish-yellow, splashed and streaked with red; dots few, small, white distinct; skin moderately thick; core small; flesh yellow, rather coarse, juicy, melting, sub-acid; flavor pleasant, high; quality good; season October. Has a suggestion of Gravenstein about the flavor.

Hoadly was originated in Wisconsin. Fruit is oblate; size above medium; cavity deep, moderately open; slightly russeted; color yellow, splashed and streaked with carmine; dots few, yellow, indistinct; skin thick, moderately tender; flesh yellowish, with traces of red, juicy, rather tender; brisky sub-acid; pleasant flavor; core medium; quality above medium; season October; tree an upright-grower, hardy and productive; scions obtained from the late J. L. Budd, Ames, Iowa.

### NATURAL VERSUS ARTIFICIAL PLANT-BREEDING.

In the course of his remarks, while reading his report, Prof. Macoun expressed his opinion that in originating new varieties of apples the best results would be secured by letting nature do her own cross-fertilizing, instead of doing it artificially, as she would do it with regard to affinities of parents, hence more vigorous trees would naturally result. This view was challenged by H. H. Groff, of Simcoe, who has attained such wonderful results in breeding Gladioli. Mr. Groff contended that by careful attention to the parent stock from one generation to another, their characteristics could be so thoroughly studied by the breeder as to enable him in time to mate with tolerable degree of certainty as to what he would obtain. Prof. Macoun conceded that this was all right in the case of Gladioli, which are annuals, but he argued that we know very little about the pedigrees of our apple trees, and as it takes twenty years or so to see how a generation will turn out, there is little hope of reducing apple-breeding to such a science as to hold out much hope of benefit to the present generation. The work might be all right to carry on with a view to future benefit, but, meantime, for more immediate results, it were better to depend on nature for cross-fertilizing of apples, if we chose to carry on this work of originating varieties. In this Mr. Groff agreed.

Mr. Morris, of Fonthill, agreed with Prof. Macoun, and cited the over-lauded work of Luther Burbank. He challenged anyone to prove that Burbank had ever produced a fruit equal in merit to the best we already had. Not one of his many Japanese plums were equal to the two which came originally from Japan. In flowers and novelties of various sorts, he, perhaps, had done somewhat better.

Mr. Morris advised a simple kind of plant-breeding.

He believed any young or middle-aged man, who had an odd fruit tree in some out-of-the-way place should graft on it a couple of good varieties, one a good, hardy sort; and plant seeds from the apples produced by this cross. If enough people did this, we might have a chance of originating something very superior.

Mr. Groff replied to the charge that Burbank had produced nothing superior in commercial fruits by saying that he had not specialized; he had attempted too much, and done a great deal of superficial work.

### NURSERY STOCK.

A discussion on the subject of nursery stock was opened by Geo. A. Robertson, of St. Catharines, who contended that much loss and inconvenience had resulted from stock turning out untrue to name; besides which some of it was inferior in various respects. With insect and fungus parts to combat by much expensive spraying, it was hard enough to make a living without loss occasioned through shortcomings of nurserymen. He favored legislation looking to the guaranteeing of nursery stock. In ensuing discussion, opinion was divided, many of the older fruit-growers claiming that they had little fault to find with stock procured from responsible Canadian firms. Others thought that most of the trouble lay at the doors of the unreliable class of firms and of irresponsible agents. Some allowance, too, should be made for accidents.

The "other side," however, was told by one who styled himself a beginner. He thought that, while the experienced fruit-growers, perhaps, got what they wanted from the nursery firms, advantage might sometimes be taken of amateurs. He had of having started absolutely inex-

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perienced, ordering from what he averred to be one of the best nurseries, trees to set out an orchard. When they came, they were younger than supposed to be, and gnarled and twisted at that. They had not come into bearing yet, but he would be disappointed if they turned out true to name.

A committee was finally appointed to look into the matter, consisting of Geo. F. Roberston, St. Catharines; W.M. Orr, Fruitland; Harold Jones, Maitland; J. L. Hilborn, Leamington; W. W. Farley, Smithfield, and D. Johnson, Forest. Following is a copy of the resolution they prepared, though it was not submitted:

1. It is a fact that much of the nursery stock planted in years past has been of inferior quality, and untrue to name, and, as a result, the growers who planted such stock have suffered in many cases severe financial loss as well as great inconvenience.

2. That a considerable quantity of the stock which has proved untrue to name has been purchased from irresponsible agents and unreliable firms, but that the self-styled reliable nurserymen are not all exempt from this practice.

3. That much of the blame and dissatisfaction caused has been shouldered on the nurserymen situated in the United States, but geographical situation is not wholly accountable for this, as there are reliable as well as unreliable nurserymen in the United States, as in Canada.

4. That trees be produced true to name, and sold to these growers who desire such trees under a written guarantee, and that this guarantee mean that the nurserymen be held responsible if trees are not up to the guaranteed standard.

5. That the nurseryman may supply to those who desired them, trees which, on account of their cheapness or first cost, will satisfy the demands of intending purchasers; but that for the quality of which, as now, the nurseryman will not be held responsible.

6. That in the case of a dispute between any grower and nurseryman, if action be taken, the matter be settled in the court nearest the home of the fruit-grower so wronged.

7. That the matter of propagation of nursery stock from the proper rootstock, budded or grafted with buds or scions from healthy trees of good bearing quality, of the true type of the variety, be left at present in abeyance, and that this association procure a competent speaker from the United States, or elsewhere, to give an illustrated lecture on this subject at our next annual convention, and use every effort in the endeavor to inform the fruit-growers of the advisability of such a method of propagating which will in time create a demand that the up-to-date nurseryman will supply.

It is felt that the best of our nurserymen are an honorable body of business men, but for others some law may be needed, and such would, in the end, probably work benefit to the better class, while at the same time protecting unwary purchasers.

COLD-STORAGE FOR FRUIT.

On Wednesday afternoon W. H. Bunting reviewed the immediate results of the Dominion Conference of Fruit-growers at Ottawa. Future possibilities were dealt with by A. W. Peart, of Burlington, who hoped for continued improvement in the cold-storage facilities for sending fruit to the Old Country. For years the growers in his district had been sending pears to Britain, and sometimes they arrived in excellent condition, but sometimes not. They have persevered in the hope of continued improvement of facilities. He believed there was a future in the export tomato trade. He liked the Honor Bright variety, but hoped our experiment stations would address themselves to the origination of a variety similar to this, but two weeks earlier.

FRUIT STATISTICS.

Mr. Peart dwelt at some length on the desirability of having more adequate means of collecting Canadian Fruit Statistics. He read a resolution passed at the Ottawa conference, calling upon the Dominion Department of Agriculture for action, and then submitted a motion of the following text:

"Resolved, that the Government of Ontario be asked to publish yearly, in the report of the Bureau of Industries, further details of the fruit industry of the Province.

Mr. Peart's address dovetailed into that of Prof. C. C. James, Ontario Deputy-Minister of Agriculture, who followed. Prof. James agreed with the previous speaker as to the desirability of having accurate, up-to-date statistics, giving the number of fruit trees of various kinds in the several sections of the Province and the annual crops, with forecasts of probable yield, for information of growers about to dispose of their crops. In 1892 his Department had undertaken to get statistics, but found the task a formidable one, and had been seeking ever since for a satisfactory and not too expensive means. They are averse to putting out estimates, of the accuracy of which they are not confident, and they find it very hard to secure reliable estimates of the yield. The yield per acre of standing farm crops can be estimated easily, but very few farmers can make a reasonably close calculation of the amount of fruit on an orchard, even though they examine it much more carefully than a crop correspondent could be expected to do.

To be of value, the estimates of yield must be compiled before the crop is mature. This fact is the objection to the suggestion to gather figures through the assessors, who, too, would require extra remuneration for services which would probably be none too

satisfactory when rendered. Figures obtained through teachers and school pupils would be unreliable, and, at a fee of \$5.00 per teacher, would amount to \$20,000 for the Province. Then, even though the information were gathered in proper season, it would be of doubtful commercial value, unless we had almost as complete information about the crop in the various States of the Union and in Europe. He had, however, been thinking of a plan to send out men to collect information at first hand, as had been done in the case of the bean industry the past summer. Suggestions were invited.

In discussion, Mr. Bunting thought the first thing to do was to secure accurate information about the number of trees in the various parts of the Province, and with this as a basis, yields might be estimated by careful correspondents.

Prof. P. J. Parrott, of Cornell, being called upon, explained that his Station had undertaken a survey of the fruit industry of parts of three counties in New York State, Wayne, Orleans and Niagara, the primary object being to get information about varieties, profits of sod-culture versus clean tillage, yields for the past five years, etc. Two young College graduates were sent out on bicycles, and paid \$40 a month. It was thus rather expensive, and checking of the returns revealed some grave discrepancies on the part of the farmers canvassed, especially in regard to yields in previous years. On the whole, he thought their men had only approximated the truth. He doubted the commercial value of information about yields, unless equally complete advices were forthcoming from other States, and fairly reliable accounts from abroad.

CHANGES IN THE CONSTITUTION.

The constitution again came in for some doctoring. Last year a homeopathic dose was administered; this time an allopathic prescription was tried, and proved so strong as to threaten, at one time, an emetic effect in the case of some of the members. Some change was deemed necessary to meet the suspicion felt to be abroad in the Province that the Association is a sort of "close corporation," consisting of men who annually meet and re-elect themselves directors so as to get their expenses paid to the next annual meeting. While such is not the case, the officers being simply veteran enthusiasts who meet year after year for the sake of what they can learn and accomplish in the general interest, still, to the outsider, the fact that the directors are repeatedly re-elected seems to bear the above construction, and some action to disprove it, and at the same time introduce new blood, was considered advisable. It was generally accepted that this object would be served by making the Association representative of local affiliated associations throughout the Province. The amendment last year enjoined the officers and directors of the Provincial body to encourage the organization of these, but this year a longer step was taken in the same direction. Provision for annual admission of new blood to the directorate was made by stipulating that in election of directors those four directors who have held office longest shall not be eligible for re-election till one year has elapsed. The Board of Directors must consist of thirteen men, representing the thirteen agricultural divisions of the Province, as heretofore, and elected by ballot at the morning session of the last day of the annual meeting. A notable change, however, was the adoption of December

31st as the end of the Association's financial year, instead of October 31st. This will necessitate an extra business meeting in January, when the newly-elected board of directors shall take office and elect from among themselves a president and vice-president, and, from among themselves or otherwise, a secretary-treasurer. At this meeting the report of the retiring executive and the treasurer shall be received. Thus, what was accomplished on one hand to "loosen up" the organization, has been counteracted by the next move, which makes the Association virtually, if not nominally, a "closer" corporation than before. "The Farmer's Advocate" believes the business meeting should be at the time of the annual convention, so that all proceedings may be open to enquiry and criticism by the rank and file of members and by the press.

We give in full Clause 24 as amended, providing for the formation of local affiliated associations:

Clause 24.—Fruit-growers in any section of Ontario may form a local association, which may become affiliated with the Ontario Association when it has a membership of 10 or over, upon the payment to the treasurer of the Ontario Association of \$5.00 for the first 25 members or fraction thereof above 9, and 25 cents per member for every additional member, which payment shall entitle the members to all the privileges and advantages of membership in the Ontario Association.

Clause 25 says it shall be the duty of the officers and directors of the Provincial Association to encourage such local organization.

Clause 26 rules that the fruit-growers who are members of two or more local associations shall be accepted as members of the Ontario Association from that affiliated association only which is the first to forward their membership fee.

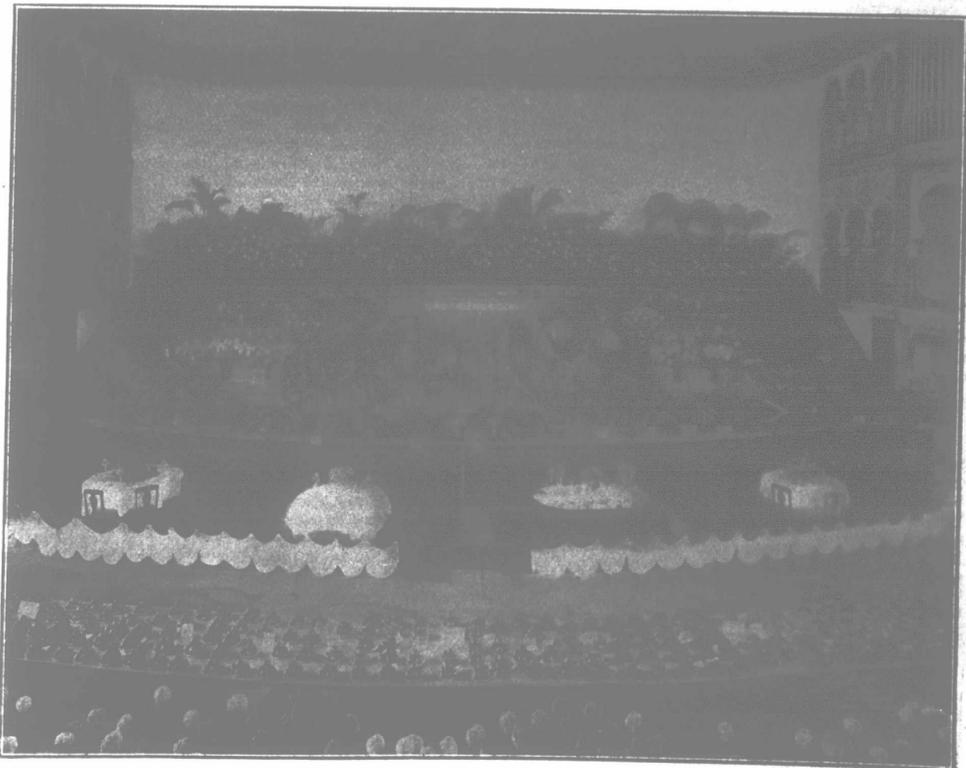
Clause 27 reads: Such affiliated associations may appoint one delegate to the annual meeting of the Ontario Association for the first 25 members or fraction thereof, and an additional delegate for every 25 members or major portion thereof above the first 25. The actual railway fare of such delegates in attending the annual meeting shall be paid by the Ontario Association.

Clause 21 (6).—The actual railway fare only of the directors in attending the annual meeting shall be paid by the Ontario Association.

LOW-HEADING OF PEACH TREES.

We must abridge our report of the remaining sessions, but will present some of the points at dates when they will be more seasonable.

On Wednesday evening, Chas. F. Hale, a peach-grower, of Shelby, Mich., gave an address on low-headed peach trees. As the result of 18 years' experience, he advocated heading young peach trees at a height of not over 18 inches from the ground. He would leave not more than four limbs, anyway, and not all of the same height; 18 inches would be the starting-point of the highest one. He would then keep the trees so pruned that the center was not higher than the outer branches. He wanted them so that a bird's-eye view would show the tops level. The advantages of low-heading are that the trees are stockier and produce more fruit buds. Trees and fruit are less injured by wind, and are bothered very little with borers. While low-headed trees are more awkward to cultivate, he finds a compensating advantage in that



Fruit and Flowers in Massey Hall, Ontario Horticultural Exhibition, 1906.

less grass and weeds grow under a low-headed than under a high-headed tree. He cultivates with plow and harrow, using the latter sometimes zigzag through the rows. His peach trees are set 20 feet apart. He cultivates his orchard as thoroughly as he would a cornfield till August 1st, then sows a cover crop, oats being more used for this purpose in his district than any other one crop. No crop is harvested from the land between the peach trees after the first two years, during which time he generally takes one or two hoe crops. He prunes every spring about half the total growth, leaving the trees so severely thinned that an amateur would think them spoiled. In addition, he goes over all heavy-bearing varieties in summer and thins out the fruits to a space of 6 or 8 inches apart.

Mr. Armstrong, of Queenston, trims off everything to a height of 18 or 24 inches, leaving four or five branches, which, however, are cut back to a single bud, giving, he thinks, a stronger head.

#### OBLITERATE OR IMPROVE THE ORCHARDS.

Hon. Nelson Monteith, in a few effective remarks, made three good points. He had been struck with the decadence of the apple industry in the western region of Ontario, where many of the orchards were in a most neglected state. He thought the Association should do a little good missionary work in either obliterating these orchards or improving them.

He emphasized the opportunity fruit-growing afforded for making farm life more attractive. This fact should be kept in the public mind. Ontario should be the banner Province in fruit-growing, with her large home market and increasing attention to co-operation.

His third point was, that never before did quality count for so much as it does to-day. There have never been so many people willing to pay the price for a good article.

#### SAN JOSE SCALE.

Prof. P. J. Parrott, of Cornell Experiment Station, discussed the San Jose scale, which is spreading in his State, in spite of expensive efforts to control it. The best treatment is the lime-sulphur wash, composed of 20 pounds lime, 30 pounds sulphur, and 50 (wine) gallons water. Thorough application in spring will control the scale on peach, plum, pear and young apple trees; and it is comparatively cheap. On larger apple trees this is not so effective, and if he found the scale getting the start of him, he would go back to oil, either a straight emulsion containing 25 per cent. kerosene, or else crude oil. Scalecide and other compounds which have been boomed have proven ineffective. Thoroughness is the secret of success. "Thorough" spraying means that every particle of the tree must be coated. Many growers spray for San Jose scale as they have been accustomed to spray with Bordeaux, and, as very few know what thorough spraying with Bordeaux is, they leave parts uncovered, with the consequence that the few scales untouched multiply rapidly and reinfest the trees. San Jose scale is not an insect that can be poisoned. Contact sprays are the only ones that can combat it. Any scales that are missed in applying the spray escape Scott-free, to continue devastation.

Salt has been dropped from the lime-sulphur mixture, as it seems to make the spray less effective.

#### HOMES OF HORTICULTURISTS.

The Wednesday evening meeting concluded with some very interesting limelight views of homes and orchards of leading fruit-growers from Queenston and the St. Lawrence Valley to away up in Algoma; also some interesting views about the O. A. C. They were exhibited, with a few appropriate comments, by Prof. H. L. Hutt.

#### DIRECTORS FOR 1907.

Nearly all Thursday forenoon was spent in discussing the amendment to the constitution referred to above. This was succeeded by election of directors for 1907. The following were chosen as a result of the balloting:

Division 1, A. P. Harkness, Irena; Division 2, A. A. Wright, Renfrew; Division 3, Harold Jones, Maitland; Division 4, W. H. Dempsey, Trenton; Division 5, W. Rickard, Newcastle; Division 6, Elmer Lick, Oshawa; Division 7, A. W. Peart, Burlington; Division 8, Geo. Robertson, St. Catharines; Division 9, H. H. Groff, Simcoe; Division 10, A. E. Sherrington, Walkerton; Division 11, A. O. Telfer, Iderton; Division 12, D. Johnston, Forest; Division 13, C. L. Stephens, Orillia.

#### PROSPECTS FOR COLD STORAGE AT ENGLISH DOCKS.

During the balloting, Prof. J. A. Ruddick, Dairy Commissioner, spoke briefly. He thought it would be only a question of time till there were cold-storage warehouses at the docks of all the important cities of England. The future is full of promise for the fruit-growing industry of Ontario. When we have better transportation facilities and more good orchardists growing apples, as in the Annapolis Valley of Nova Scotia, we will make a much greater success of the business.

#### TO PREPARE A CASE FOR THE RAILWAY COMMISSION.

W. H. Bunting, chairman of the Transportation committee, referred to the fact that express rates had been placed under the control of the Railway Commission. The Committee hope to secure data and prepare a case to lay before this tribunal.

#### MARKETS OF THE NORTHWEST.

Robert Thompson, of St. Catharines, reviewed the

work of the St. Catharines Cold-storage and Forwarding Company, whose success in shipping tender fruits to the Northwest was referred to in an illustrated article on the company's work, which appeared in "The Farmer's Advocate" of October 11th. They have concluded the season even more successfully than it began, and Mr. Thompson is optimistic regarding the future of our trade in the Northwest. He is not afraid of British Columbia competition, and advises young men to go East and settle on fruit farms.

#### PROTECTING TREES FROM MICE.

Prof. Macoun read a paper on protecting trees from rabbits and mice. He favors wrapping the trees with ordinary building paper. If it is desired to protect from sun-scald as well, wooden veneer is to be recommended. For this purpose the veneer should be long enough to cover the whole trunk.

Building paper is considered preferable to tar-paper, as the latter sometimes causes sun-scald, though several growers said they had used it for many years, with no sign of injury. The plan of fall pruning, leaving the trimmings on the ground for the mice to eat in lieu of trunk bark, was not favored.

W. F. W. Fisher read a paper on the strawberry, which will be more seasonable next spring. A. McNeill's address on "The Future of the Apple" will be used before long.

#### CO-OPERATIVE SHIPPING A SUCCESS.

Representatives of various co-operative fruit-shipping associations were then heard from briefly.

A. Lawrie, Secretary of the Forest Association, said they had this season consigned principally to the Old Country. Fall Pippins, Maiden's Blush, and such varieties, netted \$2.00 a barrel. They still have considerable stock on hand. They have 30 members this year, and increasing interest is being taken in care and culture of the orchards.

W. H. Gibson is president of the Newcastle Association, which has a membership of 7. They had a fair season, and sold their product for a good price to a dealer who was erecting a cold-storage warehouse. Their stuff netted \$2.25 a barrel; other growers got considerably less. The members sprayed their orchards with a power sprayer, and some had not 2 per cent. of wormy apples, though neighboring orchards yielded fruit of which 50 per cent. was wormy. They expect to form a joint-stock company and build a storehouse. A large number of orchards are being planted in their district.

Elmer Lick reported from Oshawa. One of their members will realize \$1.30 to \$1.70 per barrel net. Another grower alongside, but not in the Association, who has fully as good an assortment of varieties, sold his orchard for 50 cents a barrel. They have received returns from 800 or 900 barrels, and are getting satisfactory prices. They have had a little trouble from growers picking too soon. They have been careful not to pack fruit over 48 hours before being shipped.

Robt. Thompson said the St. Catharines Co., referred to above, shipped 160 carloads, of which 60 were sold f.o.b., netting a little over \$30,000. Many of these cars were sold to commission men, who expressed satisfaction with this system of buying. They bought wholesale their baskets, spraying materials and supplies. They got one car of boxes from British Columbia for peaches and apples. They like these boxes, as the wood holds the nails well, and the boxes look good.

The Simcoe Association has 20 or 21 members. They accepted none who would not undertake to spray four times. The result of spraying is a marked improvement in the orchards and fruit. They intend building a storehouse and evaporator.

W. H. Dempsey, of Trenton, said their organization was new. Nevertheless, 2,000 barrels of early stuff brought good prices, one consignment bringing \$2.55. Their winter fruit is in storage, ready for sale or export. Many growers have got as much for their fall apples through the Association as they formerly realized on their whole crop. One man, who had never got more than \$50 for his orchard, has obtained \$70 for his early fruit, and has 100 barrels of winter varieties in storage.

Arkona was then heard from. They started two years ago with 8 members, and shipped one carload. This year they shipped 7 carloads, and have realized satisfactory returns.

#### REPORT OF RESOLUTION COMMITTEE.

In addition to those resolutions which were made the basis of discussion, the Resolution Committee submitted the following, among others of the usual formal character, such as thanks to the Mayor, etc.:

1. Appreciation of the placing of control of express rates in the hands of the Railway Commission.

2. Opinion that the definition of a No. 2 apple will give Canadian apples a better standing in world markets.

3. Thanks to the Hon. Sydney Fisher for calling a Dominion conference of fruit-growers last March.

4. Thanks to Alex. McNeill, chief of the Ottawa Fruit Division, for the remarkably full and correct reports issued by him during the present growing season, in regard to fruit conditions and prospects—reports which place growers in a measure on a footing of equality with buyers in regard to factors governing market conditions.

5. We would, however, strongly recommend that fuller information than we have now, be given in regard to crop conditions and market prospects in other countries, and that to this end the Department of

Agriculture at Ottawa be asked to secure the co-operation of the Department of Trade and Commerce, in securing the reports from Canadian commercial agents in Great Britain, Australia and South Africa, in regard to probable produce, before crop maturity; also that the co-operation of the Horticultural Associations in the United States be secured, and an exchange of timely information with these be arranged for. We do this because even the fullest reports as to the Canadian conditions are of comparatively small value unless we have information from other countries approaching that of our own in regard to fullness.

6. We would strongly urge that the Department of Agriculture for Ontario, in addition to what is now being done, and in addition to what also has been asked in the resolution adopted on the motion of Mr. Peart, arranging for obtaining special reports after fruit has set, from the most reliable growers from the sections in which fruit is largely grown.

7. We strongly approve of the main point in the Robertson resolution, namely, that legislation be asked for which will provide that nurserymen shall guarantee their stock as true to name, and that where the promise is not fulfilled, a reasonable and just penalty be imposed.

8. We regret that, aside from the action taken at Ottawa, resulting in placing of express rates under the control of the Railway Commission, comparatively little has been done in regard to transportation during the present year. We most strongly urge that action be taken by the transportation committee during the coming year, looking to a material reduction in freight rates on apples, and a sweeping cutting down in express rates.

9. We are delighted to note the extension of the co-operative movement among fruit-growers in the Province, and regret that comparatively little has been done to aid in the extension of this movement by this Association, and strongly urge that an officer be appointed whose duty it will be to give his whole time to the encouraging of organizations now formed, and to creating of new ones.

10. That a deputation visit the Minister of Agriculture for Ontario, before this convention adjourns, to press for the Ontario legislation asked for in this and the Peart resolution. Also that copies of these resolutions, relating to Dominion matters, be forwarded by mail at once to Hon. Sydney Fisher.

11. That we desire to show our unbounded gratification at the splendid public spirit shown by Mr. Rittenhouse, of Chicago, in giving a farm for experimental work in tender fruits, and in the prompt action of the Department of Agriculture in providing equipment for the same.

"That this Association would urge the Minister of Trade and Commerce for the Dominion to amend the act respecting staple commodities (that re fruit baskets), in accordance with the resolution passed by the fruit associations, and that the Government make, and stamp, the forms, and issue them to the basket manufacturers, to insure uniformity of fruit packages."

"That, inasmuch as a large number of fruit-growers are using carbonic-acid gas as a source of power in their spraying operations, and as a great deal of difficulty has been experienced in securing a satisfactory supply in Canada, we would respectfully urge upon the Dominion Government the desirability of some system of registration of the containers, so that these containers might pass freely to and from the United States, duty being levied upon the gas only. By this means a satisfactory supply might be available, and spraying operations greatly facilitated."

#### The Ontario Vegetable-growers' Convention.

The second annual convention of the Ontario Vegetable-growers' Association was held in the City Hall, Toronto, November 8th to 9th.

The president, F. F. Reeves, of Humber Bay, in opening the meeting, dwelt on the increase of the membership. They have now a membership of 509. Affiliated societies have been formed in Toronto, St. Catharines, Brantford, Tecumseh, Kingston, Chatham, Sarnia and Ottawa, and it is hoped next year to start societies in Napanee, Belleville, London, Scotland, and many other places.

#### TOMATO-GROWING.

Geo. A. Robertson, of St. Catharines, spoke on his experiments with tomatoes. The tomato, he said, is usually divided into two classes commercially—early and late. The early, if grown right, entails the more laborious work, in growing the plants properly and at the proper time, but is the more profitable if successfully grown. Late tomatoes are usually of the proper type—large, globular, solid and smooth. The early differ in that they are smaller, flatter, rougher in outline, and are often green at the stem-end when the lower part is mature. These are all defects, and when the fruit on early vines come in competition with the better fruits on the later varieties, they are, if very bad, unmarketable. Hence the necessity of getting a superior variety or strain of early tomatoes. The Earliana has proved very satisfactory, and Mr. Robertson has been making selections yearly by saving seed of the best vines which produce good crops of fruit nearest the desired type, washing out the light seeds with the pulp, and saving only the plump seed. For early crop, seeds are planted in light, sandy soil, enriched with well-rotted manure, in a sunny spot in greenhouse. The time is about first of February for sowing. Care should be given, especially during dull

weather, to not overwater, as it makes the plants grow spindly, and also favors the development of the "damping-off" fungus. Plants should be pricked out as they develop their second leaves, into rows 2 inches apart and 1 to 2 inches in row. As these crowd, they may be again shifted about 3 by 3 inches; and when crowded again they may be shifted further, or put in pots. Four inches are most generally used; some growers again shift to 6 inches apart. When these get well rooted, they may be shifted outside into cold-frames, if the weather permits, remembering at all times not to overwater. The plants may be hardened off this way, and transferred to outside soil when danger of frost is over.

The soil should be largely a sandy loam, or gravelly soil, well drained, is the earliest and warmest, manured with good barnyard manure the year previous, and plowed in spring before planting, and worked thoroughly.

Superphosphates, 800 pounds per acre, and muriate of potash, 200 pounds per acre, may be worked into the soil. For early tomatoes, fresh barnyard manure and an excessive use of nitrates may create a too-vigorous leaf growth, at the expense of early maturity. The culture of late tomatoes differs in that often the seed is not planted until April, and the plants are often only once transplanted into cold frames, with a little gentle heat from manure under them (not enough to be classed as a hotbed). They are planted 4 by 4 inches apart, and then a steady growth is kept up. They are planted into suitable soil, manured same as for early tomatoes, or even heavier soils. The use of nitrates will increase the size of plants, and also the subsequent crop; and as earliness is not the object, it is often better to use nitrates, especially on the slow-growing heavier soils. Fungous diseases are numerous. The tomato rot, or blossom-end rot, is about the most destructive. This is often worse on heavy soils and soils manured with fresh barnyard manure. It is sometimes worst in fields where a very rank growth is followed by a dry spell of weather, and an absence of fruit-producing elements in the soil. Remedies are mostly preventive, such as changing of earth in hotbed and cold-frames every year, growing tomatoes on new soil every year, avoidance of use of fresh barnyard manure as much as possible, and other things which predispose the crops to attacks. Varieties differ in locality. It is sometimes advisable, in certain localities, to grow one of the earlier-ripening of the late varieties, such as Success, then we are able to get the crop off before frost.

#### GROWING TOMATOES UNDER GLASS.

C. Gibbard, of Todmorden, said, in his address, for forcing under glass, the early varieties have proved most profitable to grow. He uses Earliana and Earliest of All. There is a marked difference in fruit produced from the different strains of these varieties. It is safer to use your own strain.

He has not had success with bench culture, so has adopted the solid bed, or earth floor, with a passage down center, about a foot deep and a foot wide, dividing the beds. The soil is a sandy loam, well manured with well-rotted manure. He used the house in winter for growing lettuce and radishes.

He starts sowing seeds in plots in greenhouse about the second week in January; second sowing two weeks later; and third sowing still two weeks later. When second leaves show, they are transplanted into flats 3 inches apart each way. When they crowd or draw up, he moves them into pots or berry boxes, then transplanting into the permanent beds the second week in March. The beds are six feet wide, taking 5 plants across, and two feet apart the other way. Between these he plants a double row of lettuce, which matures while plants are developing. When lettuce is off, the plants need attention. They are trained to one stalk, all laterals being removed, and tied to an upright lath. Holding plants back will check their growth at any time and injure the crop. He likes to get the fruit all set well and evenly sized, by a continuous, steady growth, before fruit starts to mature.

The temperature at night should not be below 60 degrees, and varies from 70 to 90 degrees during the day. He commences to ventilate when 75 degrees is reached.

Keep plants dry when fruit is forming. This aids in fertilization of blossom during spring months. He does not artificially fertilize blossoms.

Manure-water is the only fertilizer he then uses; the crop is ready by June 1st, and is all off by July 1st. He often keeps artificial heat in house until the middle of June.

#### FORCING LETTUCE UNDER GLASS.

A paper on this subject, contributed by Eugene Davis, Grand Rapids, Mich., was read by Mr. McMeans, of Guelph. The soil used in his section is fine, light sand, finely manured. It gives good drainage, and never gets hard. They use the best seed obtainable.

Mr. Jones is the originator of the well-known Grand Rapids Forcing, which is a selected and improved strain, produced by 14 years of selection, starting with black-seeded Simpson as the parent strain.

The seed should be water-cleaned, giving a plump, heavy seed and a more uniform crop. Watering should be done with judgment, especially during dull weather; water thoroughly when needed.

For aphid and green fly, fumigate twice a week with tobacco stems, or use tobacco dust, sprinkled on plants and ground after plants are watered, until half-grown. Tobacco dust should be withheld when plants

are about half-grown, and smoking should be withheld when crop is nearly ready to sell. They carry a night temperature of 45 to 50 degrees, and day temperature of 60 to 75 degrees. They use a self-registering thermometer and thermostat, with electric bell attachment, in the dwelling-house. Some firemen are careless about keeping an even temperature at night. They get better results in starting the seed-bed under glass, even in August, when seed is sown for the first crop.

Plants are not so apt to get brown-rooted or rusty—injuries from which there has been very much trouble in the past three years. The rust is known locally as "shot-hole" rust, as the leaves are eaten full of holes. The crop is often completely ruined.

For fertilizers, livery-stable manure, partly rotted, or in a short condition, is used. If run through a manure spreader, it is put in a fine condition to mix with the soil.

His houses are 29 by 280 feet, with double-doors in each end, so that the soil and manure may be drawn in with a team and wagon. In preparing for a crop, two inches of the top soil is shovelled to one side, then four inches of manure evenly spread; then, with a horse and plow, is thoroughly mixed, levelled off, well watered, and the top soil replaced. Eight-inch boards are used for walks, giving practically all the space for lettuce. The manure is all the fertilizer used for the three crops usually grown through the season. It is planted in rows six inches each way, with double-rooted plants six weeks old. The crop is usually ready for market from seven to eight weeks from planting. It is sold by the pound, and packed in sugar barrels and bushel baskets, paper-lined. Competition is keen, and prices vary, usually averaging 8 to 12 cents a pound for the season.

For the last three years, sterilizing the soil has taken the place of the removal of the earth. This is done by injecting live steam into the soil. It is less work, renews the soil, makes the crop grow faster, prevents damping-off, kills weed seeds and insects, and he thinks it will pay any one who has trouble in growing lettuce to try it.

#### FERTILIZERS IN RELATION TO VEGETABLE-GROWING.

An address on the above subject was delivered by Prof. R. Harcourt, O. A. C., Guelph. He prefaced his discussion of fertilizers with a few remarks about plant-physiology. Plants resemble animals in many ways. They feed, they breathe, they take up certain materials; they give off waste materials; they are unlike animals in that they can't go in search of food.

The food of a plant consists of many elements or chemical constituents. Some of these are in the soil in sufficient quantities, but the amounts of lime, phosphoric acid, potash and nitrogen vary in different soils, and are sometimes wholly lacking; if any one is lacking, the plant cannot grow, hence the necessity for using fertilizers.

Then, again, plant food may be in an insoluble form in the soil; while again, plants differ in their ability to dissolve the insoluble forms of plant food in the soil. Of course, cultivation and tillage let in the air into the soil, which helps to disintegrate the insoluble material, hence the necessity of drainage and cultivation.

Plants also differ as to their requirements. A leafy plant, or a plant such as a lettuce plant, needs a food which will tend to vegetable growth, and this is found in the nitrogen of the manure, which gives a quick-growing growth and forms a large, crisp lettuce plant.

Excessive nitrogen on a plant like the tomato, which is grown for its fruit, will give a rather vigorous growth, at the expense of fruit. Tomatoes, therefore, do best with more potash and phosphoric acid in the soil. Hence the necessity for the use of artificial fertilizers in conjunction with barnyard manures for best results. Fertilizers, for profit, must be used intelligently. Fifty years ago artificial fertilizers were very little known. Wood ashes was the principal source of potash; this is also to-day one of the cheapest ways of procuring potash for plant growth, when necessary. But to-day we have the mines in Stassfurt, Germany, the source of kainit, muriate of potash and sulphate of potash, so much used now where ashes are not obtainable.

Phosphoric acid is got from bones in the various forms, also phosphatic rock. These substances are treated with sulphuric acid to form what are termed superphosphates, the action of the acid rendering the phosphates more soluble.

Nitrate of soda—a salt from Chili—blood meal, etc., are forms of artificial fertilizers of the nitrogenous character.

Discussion followed which hinged principally on the treatment of land such as is used by vegetable-growers near the large centers where there is a superabundance of barnyard manure, and the failure of such soils under present conditions to grow paying crops of tomatoes and other kindred crops on account of the superabundance of nitrogen in the soil; how best to remedy this defect by the use of phosphate and potash manures, and also the correcting of the acidity of such soils by the application of lime where necessary.

#### FORCING EARLY VEGETABLES.

E. E. Adams, of Leamington, speaking on the above subject, said the forcing of early vegetables is done in his section by starting the plants in steam-heated houses and bringing plants along well, then transplanting them to the outside when weather will permit. Success depends on season, market, methods, and principally on the man. They use the houses for forcing early to-

matoes, peppers, early cabbage, cucumbers, beans and musk melons. The soil in greenhouses is made of fresh horse manure and sod, layer for layer, then rotted. The soil outside is sandy loam, manured heavily with barnyard manure. For the cabbage and leafy plants, they are aided by nitrate of soda applications, and for fruiting plants they also use phosphoric acid and potash. Sea fowl, guano, with extra potash, gives good results.

#### ONION-GROWING.

E. G. Malcolm, of Scotland, Ont., said the climate and much of the soil in Ontario are such that onions may be brought to a high state of perfection. We should be able to export onions from Ontario, instead of importing them. The favorite soil is a good loam or sandy loam, very rich; this can be made so by successive applications of well-rotted manure. Each grower must experiment for himself what he is to use. He fertilizes with wood ashes and salt; about one-third of the mixture is sometimes salt, and, if possible, 600 to 800 pounds of salt are used to the acre. Salt deters the growth of maggots.

Prepare seed-bed by rolling, harrowing, cultivating and levelling. Spring-plowing has produced best results with him. Variety is determined by the wants of the market. Upon seed depends the crop; good seed is absolutely necessary, poor is dear at any price. Don't sow until the ground is ready for the seed. He plants rows 12 to 16 inches apart. When onions come up, he has a light harrow arrangement made, about 3 by 4 feet, with 4-inch nails driven through for teeth. This is pulled by hand over the patch, just as onions come through; it destroys small weeds. They cultivate mostly with wheel hoes, starting to use them after the second cultivation.

As soon as onions are ripe they commence to harvest, putting six rows in a pile, then sort and weigh up, 76 pounds in a sack. They are shipped in bags of this weight. Yield is from 400 to 600 bushels per acre.

Salt checks maggot worms; cutworms are troublesome Paris green put in soaked bran and buried in the earth, will attract and kill many. Blight has been troublesome, and they have not yet found an effective remedy. Scallions have been more troublesome among onions grown on muck lands; some attribute it to seed produced from immature onions.

#### CELERY-GROWING.

T. Benstead, Strathroy, was down for an address on this subject. Celery grows on any soil, but is most successful on black muck. The soil he uses was formerly a tamarack swamp. The soil is 10 feet deep. He uses 20 to 25 loads of good rotten barnyard manure per acre, spread evenly over the ground in the winter. In spring it is plowed under five inches deep. Let it lie about two days, then harrow it; then sow 75 to 100 bushels of wood ashes and harrow in thoroughly. Then broadcast 1,000 to 1,200 pounds of fine-ground bone, harrow it again, then add 1,000 to 1,500 pounds of common salt, and work that in. All this is done as early in the spring as possible. He sows his first seed 15th to 20th of March, in a cool hotbed, and transplants when two inches high into beds covered with cotton. If checked in growth, the plants will go seedy; if started too early, they also go seedy. He prepares these beds in the fall, manuring more heavily for them than for the other land. These beds are 4½ to 5 feet wide, for convenience in handling the plants. For later plants, he sows in rows six inches apart, and thins out plants, but does not transplant.

About June 20th the main crop is transplanted. Rows are run north and south, so that the sun shines on both sides of each row.

He grades the plants when planting, putting all the larger plants in together, next size together, and so on. He puts a double row 7 inches apart and 3 feet 9 inches to 4 feet apart between the double rows. Uses a wheel 3 feet in diameter, with cleats of wood 7 inches apart on wheel; these are run along the double-marked rows, the strips of wood marking each 7 inches. A boy drops the plants where they should be planted, and the person following can plant 1,000 plants an hour. Care is taken not to expose plants to sun before planting. A week after planting cultivate with a five-tooth cultivator, then twice a week afterwards with an eight-tooth cultivator.

Blight has not affected his crop. Bleach by boards fastened together with a wire hoop at ends, and also by the earth piled up at sides in some cases, which takes two weeks to bleach.

The earth washes off best by a forced stream of water before earth dries on.

He does not store much of the celery. He keeps it by putting six rows in a trench, covering two-thirds depth; as it freezes, increase the earth up sides; then, after it freezes, cover earth over the tops. When the top earth is frozen hard enough to hold a man up, manure is put over for extra protection; but he does not keep much past Christmas time.

He uses Vaughan's White Plume, which is the best strain of White Plume he can get. The Golden Heart celery, selected by Mr. McInnes, of London, Ont., is a very superior celery.

#### MELON-GROWING.

W. G. Horne, Clarkson, spoke on melon-growing. The two kinds of melons grown are water and musk melons. The watermelon is not so profitable, for the Southern stock competes with ours. The musk melons from South are picked before maturity and lack flavor, while ours are allowed to ripen, and we can market in

prime condition. As melons are in need of extreme heat, they ripen rather too late in season when grown in Canada. Earliness is promoted by starting seed in hotbeds. He plants 5 seeds in a piece of sod 4 inches square. Manure broadcast, cultivate well, keep free from weeds as long as possible. Plant musk melons 5 feet apart each way. Keep temperature of hotbeds 75 to 80 degrees, if possible; sometimes harden off before transplanting.

The pests are: Cutworms, trapped by Paris green in shorts, mixed in ground. Cucumber beetle eats leaves and destroys the vines. Squash bugs attack vine above ground; Bordeaux mixture holds these in check.

A few words on other vegetables were offered by A. McMeans, O. A. C., Guelph. His remarks consisted mostly of names of varieties, with some of their distinguishing features.

Ontario Beekeepers' Association.

The Ontario Beekeepers' Association met in York County Council Chambers, Toronto, Nov. 7, 8, 9, 1906. President H. G. Sibbald, Claude, occupied the chair. After the reading of the minutes of the last annual meeting, by Secretary Wm. Couse, Streetsville, the President addressed the convention. He regretted the partial failure of the honey crop for 1906, but congratulated the members on the advance in prices, which would, in a measure, make up for the loss of honey. On account of the greatly-increased population, he considered that there was no reason why the prices should go back to the low pitch they occupied before. He was pleased to announce that the Agricultural Department of Ontario is taking an increased interest in the beekeeping industry. The grant for the suppression of foul brood will likely be doubled this year, and the department has taken over entirely the appointment and control of the inspection of apiaries.

R. H. Smith, St. Thomas, as one of the members of the first meeting of the Ontario Association, twenty-six years ago, said he was pleased to note great advancement among practical bee men, but not very much among those who kept only a few lines. He regretted the lack of interest shown by farmers in the local associations. The executive had been working out some of the suggestions made by Mr. Morley Pettit at the last annual meeting by getting local associations in sort of federation with the provincial body. In spite of the light crop, the exhibit at the Fruit, Flower and Honey Show was one of the best he had seen.

The crop-report committee came in for lengthy discussion. The idea had got out that there is a trust or combine among beekeepers. This was shown quite clearly to be erroneous. The committee appointed by the association merely sends out blank forms to beekeepers for a report of their crop. These are collected, and from the data thus obtained, the committee gets an idea of what prices can be obtained, and advises the members to that effect. The members then proceed to sell at whatever price they think fit. It is the same thing that is done by fruit men, grain men, and others.

The committee for a number of years now has done good work, and has never made any very serious mistakes, and the members expressed themselves as being generally pleased with its work.

PRODUCTION OF COMB HONEY.

A paper on this subject, by U. H. Bowen, Niagara Falls, was read. He considered the main points to be considered were: (1) A good honey flow; (2) strong colonies; (3) a convenient hive; (4) an apiarist who understands handling all these. He would locate where a good flow was most promising; that is, with a view to

clover, basswood, etc. The securing of strong colonies depends on good wintering, and bringing them successfully through the spring. The hive Mr. Bowen uses is an 8-frame Langstroth, and when the brood chambers require more room in spring, he puts on an additional shallow super, with combs 5 inches deep. Section supers and excluders are put on when the time comes, and the shallow super is removed. Mr. Bowen considers swarming a good thing, but to have it under his complete control practices "shook" swarming—shaking the bees on fine sheets of wired foundation, one comb to catch pollen and two dummy combs. If the one comb contains young brood, it will help make the shaken bees contented, so they do not swarm out. The entrance is made one inch deep by full width of hive, and plain sections, with fence separators, are used in the supers. When more room is needed in the supers, fresh supers are added on top of the partly-filled ones to keep work well finished up, and avoid having a lot of unfinished sections if the flow stops unexpectedly.

GASOLINE ENGINE.

Mr. F. J. Miller, of London, reported using a gasoline engine for extracting with a great deal of satisfaction. He uses a two-horse-power engine with all modern attachments to his extractor, and thinks that if he now had a satisfactory uncapping machine, he could almost "sit down."

THE MINISTER OF AGRICULTURE.

The Hon. Nelson Monteith, in his address to the beekeepers, stated that he came with the open mind that would enable him to learn from the discussions of the bee men what can best be done in the way of legislation for this important industry. He believed that the value of honey as a food was not well enough known, and it might well be expected from the bee men that they disseminate information along this line, and that there is also room for improvement in the article put on the market. This Province is growing rapidly in population, and an ever-growing market can be opened up if it is well looked after. With reference to the inspection of apiaries, the Department is anxious to do whatever is for the best interest of the beekeepers, regardless of party influences. We recognize, said Mr. Monteith, that the season for inspection is so short that the work might be furthered by giving more attention to inspection, either by appointing more inspectors or by some other means we are not quite clear on. It might be wise to divide the Province into six districts for inspection, with an inspector resident in each. The Department would like the executive committee of the association to recommend the names of these inspectors, and would suggest that Mr. McEvoy be retained for inspector of his own division, and as referee in case of disputes in the others. Probably \$1,200 will be appropriated next year for the purpose of inspection. It was also suggested that the secretaryship of the association be located in the Department. This had been found to work well in the case of the other associations, and would, no doubt, be beneficial to the beekeepers as well.

WINTER REPOSITORIES.

Wm. Couse, Streetsville, gave a short sketch of his experience in wintering bees. He thought the keynote of successful wintering to be dryness. In wintering out of doors, the same thing holds, only more stores are required.

BEEKEEPING FOR WOMEN.

Miss Trevorrow, Meadowvale, gave a very interesting paper on this subject, showing that women need not shrink from this as a healthful outdoor occupa-

tion, provided they have the strength to do a certain amount of heavy lifting, or can secure the help of an assistant who can relieve them of that part of the work.

MARKETING HONEY.

Mr. Timbers showed how he sells 3,000 lbs. retail at his house annually without soliciting orders, and he lives in the country. Extra quality and uniform satisfaction to buyers is the secret of success in this line.

SPRING MANAGEMENT.

R. F. Holtermann conducted a question drawer on this subject, which brought out the following points: It is better to feed plenty in the fall than to have it to do in the spring. There is danger of feeding too little, but none of feeding too much. They do not waste it.

As to stimulative feeding in spring, it is wise to let it alone; bruising cappings of stores so they uncapp and handle it is safe and beneficial if one looks out for robbers.

When a stock is real weak, it is better to let them pretty much alone. The reports of committees showed a very successful year just past.

The transportation committee had won some excellent concessions from the R. R. companies, especially in having the rating of beeswax lowered, and in lowering the minimum car of honey from 20,000 lbs. to 12,000 lbs.

Mr. Grainger, representative to Toronto Exhibition, reported that splendid accommodations can be expected in the new horticultural building, which is to stand where the old main building was burned.

RESOLUTIONS.

1. Moved by R. F. Holtermann, sec. Mr. Kerby, that where gross weight is put in a package of honey, the label should bear the words "gross weight."

2. Moved by R. F. Holtermann, sec. M. B. Holmes, that the thanks of this association be tendered retiring Secretary Wm. Couse, who has served the association faithfully for over twenty-one years, but is now retiring because he thinks the work can be better done in the Agricultural Department than by any private individual.

3. Moved by R. F. Holtermann that the wish of this convention be conveyed to Hon. J. C. Hanna, Prov. Sec., that the beekeepers be enabled to organize co-operative companies for the sale of their goods along the lines followed by the dairymen and fruit-growers. Carried.

ELECTION OF OFFICERS.

Directors: No. 1, W. J. Brown, Chard; No. 2, A. A. Ferrier, Renfrew; No. 3, M. B. Holmes, Athens; No. 4, R. Lowry, Cherry Valley; No. 5, Jas. Storer, Lindsay; No. 6, Wm. Couse, Streetsville; No. 7, J. F. Switzer, Orangeville; No. 8, Jas. Armstrong, Cheapside; No. 9, R. H. Smith, St. Thomas; No. 10, G. A. Deadman, Brussels; No. 11, J. F. Miller, London; No. 12, Denis Nolan, Newton Robinson; No. 13, Prof. Sherman, O. A. College, Guelph. Auditors, J. S. Byer and E. Grainger. Representative to Toronto Exhibition, E. Grainger, Toronto; representative to Ottawa Exhibition, J. K. Darling, Almonte; representative to London Exhibition, J. B. Hall, Woodstock. Revising Committee, Morley Pettit, H. G. Sibbald, Crop Report Committee, H. G. Sibbald, W. J. Craig, Wm. Couse. Transportation Committee, R. F. Holtermann, Wm. Couse, J. D. Evans. President to be elected by directors.

Next place of meeting, Toronto.

MARKETS.

Toronto.

LIVE STOCK.

Receipts of live stock last week were not as large at either the City or Junction markets. The quality of fat cattle was much the same as has been coming for several weeks, too few of the good, and too many of the half-finished, common classes coming forward. Trade was slow and draggy in all the classes excepting prime butchers' cattle.

Exporters.—Trade in shipping cattle was dull, owing to scarcity of space on boats. Prices were lower, ranging from \$4 to \$4.65 per cwt.; the bulk selling at \$4.25 to \$4.50. Export bulls sold at \$3.50 to \$4.

Butchers.—Best butchers', \$4.25 to \$4.60; loads of fair to good, \$3.90 to \$4.15; medium, \$3.50 to \$3.75; common, \$3 to \$3.40; cows, \$2.25 to \$3.25; canners, \$1 to \$2.

Stockers and Feeders.—Deliveries have been large. Trade good, with prices easier, as some of the buyers have not all they required for the distilleries. Many farmers were buying, some of which bought half-finished exporters, or short-keep, heavy cattle, 1,200 to 1,300 lbs. each, \$3.90, \$4, \$4.12, and one Waterloo County farmer paid \$4.25 for a choice load. Feeders, 1,000 to 1,100 lbs., sold from \$3.40 to \$3.70; steers, 800 to 950 lbs., \$3.25 to \$3.35; good stockers, \$3

to \$3.25; common stockers, \$2 to \$2.50 per cwt.

Milch Cows.—Trade has been good all fall, but never better than now. Many local buyers as well as some from Montreal and Waterloo County, all wanting fresh milkers or forward springers, were on each market. Prices for the bulk ranged from \$45 to \$65 each, and in one or two instances \$70 was reported as being paid.

Veal Calves.—Prices have not been quite as good, or the market as strong, since poultry became plentiful. Prices ranged from \$3 to \$6 per cwt.

Sheep and Lambs.—Receipts have been large, especially of lambs. Prices easier. Lambs sold at \$5.25 to \$6.25; export ewes, \$4.50 to \$5 per cwt.; culls and rams, \$3 to \$3.50 per cwt.

Hogs.—Deliveries have been moderate, with prices lower. Selects, \$5.75; lights and fats, \$5.50 per cwt., fed and watered.

Horses.—The demand for heavy-draft horses, for good class carriage horses, and expressers, is practically unlimited. But common, inferior-class horses are slow of sale at low prices. At the Repository, on Tuesday, there was a good supply, and a fair demand. There were many buyers from outside as well as a large number from the city. D. McGregor, from the Northwest, bought 19 workers, ranging from 1,300 to 1,500 lbs. each. The Canadian Horse Exchange report having had excellent sales at good prices. Burns & Sheppard quote

the following as the prevailing prices: Single roadsters, 15 to 16 hands, \$125 to \$165; single cobs and carriage horses, 15 to 16.1 hands, \$135 to \$180; matched pairs and carriage horses, 15 to 16.1 hands, \$300 to \$450; delivery horses, 1,100 to 1,200 lbs., \$150 to \$185; general-purpose and express horses, 1,200 to 1,350 lbs., \$160 to \$190; draft horses, 1,350 to 1,750 lbs., \$165 to \$250; serviceable second-hand workers, \$50 to \$90; second-hand drivers, \$50 to \$80.

BREADSTUFFS.

Grain.—Wheat, No. 2 white winter, 71c.; No. 2, mixed, 70c.; red, 70 1/2c.; Manitoba No. 1 Hard, 82c.; No. 1 Northern, 80c.; No. 3, 77c.

Corn.—No. 2 yellow American, 54 1/2c. at Toronto.

Oats.—No. 2 white, 35 1/2c. to 36c.

Rye.—73c. bid, on track, at Toronto.

Barley.—No. 2, 51c.; No. 3X, 49c.

Peas.—No. 2, 80c. bid.

Buckwheat.—54 1/2c.

Milfeed.—Bran, \$16 to \$16.50; shorts, \$19 to \$20.

COUNTRY PRODUCE.

Butter.—Receipts light. Prices firm. Creamery prints, 27c. to 29c.; creamery boxes, 25c. to 26c.; dairy pound rolls, 25c. to 26c.; tubs, 23c. to 24c.; bakers' tub, 17c. to 18c.

Eggs.—Strictly new-laid, few offered, and worth 27c. to 30c.; cold-storage, 22c. to 23c.

Cheese.—Large, 13 1/2c. to 13 3/4c.; twins, 14c. to 14 1/2c.

Honey.—Supplies have been light, and prices firm, especially for combs, at \$2 to \$2.50 per dozen; strained, 10c. to 12c. per lb.

Evaporated Apples.—8c. to 9c. per lb.

Potatoes.—J. J. Ryan, wholesale commission merchant, Colborne St., who is one of the largest dealers in potatoes, reports paying from 75c. to 80c. per bag, by the car lot, on track, at Toronto, for New Brunswick Delawares, which seem to have captured the Toronto market, as few Ontarios are being offered.

Poultry.—Prices easier. Turkeys, dressed, 14c. to 15c. per lb.; geese, 9c. to 10c.; ducks, 9c. to 10c.; chickens, 10c. to 11c.; old fowl, 7c. to 8c. per lb.

Hay.—Baled.—The market is very firm, owing to scarcity of cars. No. 1 timothy, \$10 to \$10.50, in car lots, on track; No. 2, \$7.50 to \$8.

Baled Straw.—Market firm at \$6 per ton.

Beans.—Hard packed, \$1.75; prime, \$1.65.

Flour.—Maritima patent, \$3.75, track, Toronto; Ontario, 90 per cent, patents, \$2.70; 441 for export, Manitoba patent, special brand, \$1.70; strong bakers, \$4.

The market for flour remains dull and business is slow. Buyers are not operating in the Canadian market as yet. A. J. Brown, G. S. Brag, Timothy

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# THE CANADIAN BANK OF COMMERCE

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seed is firm for choice samples. Prices are quoted as follows at country points: Fancy lots, per bushel, \$6.30 to \$6.50; No. 1 alsike, \$6 to \$6.20; No. 2, \$5.25 to \$5.40; No. 3, \$4.50 to \$4.80 per bushel; red clover, No. 1, per bushel, \$7.20 to \$7.50; No. 2, \$6.50 to \$6.90. Timothy, No. 1, \$1.50 to \$1.80; No. 2, \$1.20 to \$1.40 per bushel.

### HIDES.

The markets for hides are easier, as will be seen by the following quotations. E. T. Carter & Co., 85 Front St., have been paying as follows: Inspected hides, No. 1 steers, 11c.; inspected hides, No. 2 steers, 10c.; inspected hides, No. 1 cows, 11c.; inspected hides, No. 2 cows, 10c.; country hides, cured, 10c.; calf skins, No. 1, city, 12c.; calf skins, No. 1, country, 11c.; lamb skins, each, 90c.; horse hides, \$3.25 to \$3.60; horse hair, per lb., 28c. to 30c.; tallow, 5c. to 5½c. per lb.

### Montreal.

Live Stock.—Good choice cattle steady at 4½c. to 4¾c.; fine, 4c.; good, 3½c. to 4c.; medium, 3¼c. to 3½c.; common, 2½c. to 3c., and inferior below 2c. Sheep firm at 3¼c. to 4c.; lambs, 5c. to 6c.; grass calves being steady at 2½c. to 4c., and good from 4c. to 5c. Finest milk cows, \$50 to \$60 each. The hog market about steady, notwithstanding the lower cables from England. Prices of finest ranged from about 6c. to 6½c. Demand fair.

Horses.—Heavy-draft horses, 1,500 to 1,700 lbs., \$250 to \$300 each; light-draft or coal-cart horses, 1,400 to 1,500 lbs., \$200 to \$250 each; express horses, 1,100 to 1,300 lbs., \$150 to \$200; common drivers, \$100 to \$150; old, broken-down animals, \$50 to \$100, and choice saddle or driving animals, \$350 to \$500 each.

Provisions.—Dressed hogs are easier in price, and purchases of fresh abattoir-killed stock have been made at 8½c. to 9c., while it would be a matter of no difficulty to get country-dressed at 8½c. to 8¾c., and possibly even less. Bacon, 11c. to 13c. for green and long clear, and up to 15c. for finest smoked. Hams are still 14c. for large, and 15c. for select sizes. Barrelled pork is in fair demand, and steady at \$22 per bbl. to \$23.50. Lard compound being 8½c., and lard, 12c. to 13c.

Hides, Tallow and Wool.—Prices unchanged, at 10½c., 11½c. and 12½c. per lb., f. o. b., Montreal, offered by dealers, for Nos. 3, 2 and 1, respectively, with an advance of ¼c. per lb. selling to tanners. No. 1 calf skins are steady at 13c. per lb., and No. 2, 11c. Sheep skins are 90c. each, and horse hides, \$1.50 for No. 2, and \$2 each for No. 1. Tallow is steady at 1½c. to 3c. per lb. for rough, and 3c. to 5c. for rendered. Wool also is very steady. Prices are quoted as follows: Pulled lambs, brushed, 30c. to 32c. per lb., and unbrushed, 30c.; Canada fleece, tub washed, 26c. to 28c., and in the grease, 18c. to 20c.; Canada, pulled, brushed, 30c., and unbrushed, 27c. to 29c.; N.-W. Merinos, 18c. to 20c. per lb.

Cheese.—Quotations are 12½c. to 12¾c. for Quebecs, 12½c. for Townships, and 12c. to 12½c. for Ontarios. This for October. September Ontarios, 13c.

Butter.—The market for butter is undoubtedly firm, but there is no advance in price to speak of. For small lots of around a dozen packages, of choicest, some holders are demanding 24½c.; but the general run of prices for fine creamery is 23½c. to 24c. Dairies are unusually scarce, and Manitobas are quoted at 19c. to 20c., according to quality and quantity, Ontarios being 20c. to 21c., some quoting even more for choice lots in small quantities.

Eggs.—Really fresh-laid stock might sell at 30c., or thereabouts. The straight receipts, however, are valued around the same as cold-store eggs, these being 19c. to 22c., some being ½c. more in small lots. Selects from the latter bring 27c., and even more, in case lots, prices ranging also down to 24c. Lined eggs are about 20c. per doz.

Potatoes.—Prices hold about steady at 60c. to 68c., cost on track, per 50 lbs., and selling in carlots at 4c., or so, advance, and in a jobbing way, in bags of 90 lbs., delivered into store, 70c. to 80c. Turnips.—Dealers are offering \$8 to \$8.50 per ton for best Quebec whites, and selling at \$10.50 to \$11, or at 65c. to 70c. per bag of 80 lbs.

Grain.—The market for oats continues about steady. Demand is dull, and prices, by carloads, are 38½c. to 39c. for No. 4, 39½c. to 40c. for No. 3, and 40½c. to 41c. for No. 2, store. No. 2 peas were steady at 88½c., store, and buckwheat, 56½c. to 57c., No. 2 yellow American corn being that figure, also, and No. 3, mixed, a cent less. No. 1 Northern Manitoba wheat was quoted at 84c., store, and No. 2 white winter at 78½c.

Hay.—The market for hay has shown unexpected firmness, prices having advanced fully 50c. per ton since a week ago. Deliveries on spot are not large, and demand is fairly active. Prices, on track, for car lots, are \$13 to \$13.50 per ton for No. 1 timothy, \$12 to \$12.50 for No. 2, and clover and clover-mixed, \$11 to \$11.50.

Hay seed.—Considerable alsike has been received, and dealers have been offering \$4 for the poor quality, and \$6.50 for choice, country points. As yet, there has been almost nothing done in timothy, it being very scarce.

### Chicago.

Cattle—Common to prime steers, \$4 to \$7.30; cows, \$2.65 to \$4.75; heifers, \$2.60 to \$5.35; bulls, \$2.40 to \$4.50; calves, \$3 to \$7.50; stockers and feeders, \$2.40 to \$4.50. Hogs—Choice to prime heavy, \$6.35 to \$6.40; medium to good heavy, \$6.20 to \$6.30; butchers' weights, \$6.30 to \$6.45; good to choice, mixed, \$6.15 to \$6.30; packing, \$5.90 to \$6.10; pigs, \$5.50 to \$6.25. Sheep—\$4 to \$5.70; yearlings, \$5.50 to \$6.40; lambs, \$6 to \$7.60.

### Buffalo.

Cattle—Prime steers, \$5.50 to \$6; shipping, \$4.75 to \$5.40; butchers', \$4.25 to \$5.25. Veals—\$4.50 to \$9. Hogs—Heavy and mixed, \$6.50 to \$6.60, a few at \$6.65; Yorkers, \$6.40 to \$6.60; pigs, \$6.55 to \$6.65; dairies, \$6.20 to \$6.40. Sheep and Lambs—12,000 head; active and steady.

### British Cattle Markets.

London.—Canadian cattle, 11c. to 12½c. per lb.; refrigerator beef, 10½c. to 10¾c. per lb.

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#### SOME MODERN (?) HOTEL RULES.

A drummer hailing from a certain Ontario city is carrying about on the back of his business cards the following set of rules, purporting to be in force in the hotels of his native burg:

1. Board, 50c. per square foot; meals extra.
2. Don't worry about paying your bills; this house is supported by its foundation.
3. Guests wishing to do a little driving with find hammer and nails in the closet.
4. Baseballists desiring a little practice will find a pitcher on the washstand.
5. Guests are positively forbidden to speak to the dumb-waiter.
6. This house is not responsible for bicycles or diamonds kept under the pillow; deposit them in the safe.
7. Guests wishing to get up without being called may have self-rising flour for supper.
8. Any guest troubled with nightmare will find the halter on the bed-post.
9. Travellers used to riding nights will find our beds buggy enough for anybody.
10. Single men with their wives not allowed on the premises.
11. Don't leave matches lying around as the guests might light out.
12. If the room gets too warm, open the window and watch the fire-escape.

#### PROFESSIONAL HUMORIST.

Professional humorists are getting to be so common that it is almost impossible to pick up a paper without being saddened by their presence. At one time they were isolated, but of late years they have banded together, and send forth their jokes from a solid phalanx.

Professional humorists, as a rule, live by their wits. That is why they have so little in the bank. They marry easily and are addicted to the habit of having children, this being a seeming necessity for the proper promulgation of their jokes. A common accusation against them is that they take life too seriously, and their professional spirit prevents them from extracting enough humor from it.

Professional humorists are much like other people. They fall into habits. If by any chance one of them originates a new joke, the rest pounce upon him and tear it away.

The motto of the professional humorist is:

"A short life and a sad one."—[Life.



## Life, Literature and Education.



Francis Bacon.

Seldom, perhaps, in one personality has the dual character of Dr. Jekyll and Mr. Hyde been so strongly exemplified as in that of Francis, Lord Bacon.

He was born at York House, The Strand, Jan. 22nd, 1561, coming thus into the world at a time when it was thrilled, as probably it has never since been thrilled, by the passion for learning and discovery. It was not long since Columbus had come upon the New World, and the news of explorations and dreams of possible isles still beyond the sea were yet exciting men's imaginations and firing their ambitions. Moreover, the researches of such investigators as Galileo were opening a new world in Nature and the Universe; while, simultaneously, the power of the Renaissance, the great Revival of Learning, the new light thrown upon the literatures of ancient Greece and Rome, was beckoning to the student with an impelling fascination. In the career of Bacon may be found trace of the influence of all these forces.

From babyhood the lad was precocious. At twelve years of age he was to be found at Trinity College, Cambridge, gravely listening, along with classmates of twice his age, to the lectures in the great University; and two years later he was quite as gravely beginning the study of law at Gray's Inn. At the age of fifteen he went to Europe, where he remained for three years, and so acute were his observations, even at that tender age, that he found it possible at a later date to embody many of them in his essay, "Of the State of Europe."

Almost from the dawning of his manhood Bacon seemed to realize the

enormity of his capabilities, at the same time recognizing, with a keenness that cut deeply, the handicap under which, by reason of poverty and ill-health, he must, unless aided by some exceptional stroke of good fortune, struggle. His father, Sir Nicholas Bacon, had left him nothing. He must perforce work for his bread, and his mind, seized with a passion not only for acquiring knowledge, but for passing it on to all men, chafed at the treadmill in which he was obliged to walk. To obtain a competence by which he would be provided at once with the extravagant living which he craved and with leisure in which to carry out his great plans, became his mania and his curse.

But one avenue to all this seemed open to him. He had influential relatives at Court, the Cecils, chief of whom was Lord Burghley; through them he might achieve his desires. He lost no time, at least, in making the attempt, but it is nowhere evident that he met with any success; evidently these practical men thought him a dreamer of wild dreams. Nevertheless, though cut to the soul, he was by no means abashed. From the Cecils he turned to others whose influence might avail, and it is to his lasting discredit that through long bitter years he revealed himself the importunate beggar, the servile courtier, the least independent of men, fawning on sovereignty, professing love and loyalty where he could little have felt either.

And yet, with a persistence which compels admiration, in spite of rebuff and neglect, during all those years he never for one moment lost sight of his great object, nor relaxed in his preparations for it. He committed every thought, every motive, every plan to "notes," and these notes, which throw a strange light on his methods and working, are still in existence. Among a medley of pages and paragraphs, telling in detail even such trifles as how he cared for his health, and his plans for winning favor with Elizabeth, or Burghley, or Buckingham, or James, appear chance thoughts or phrases which pleased him—a multitudinous array of scraps of knowledge and passing theories or observations, detailed plans for his future works, with here and there a flash of the mission to which he felt himself called. "I have taken all knowledge for my province," he says. "Now, among all the benefits that could be conferred upon mankind, I found none so great as the discovery of new arts, endowments and commodities for the bettering of man's life."

He was, in short, uplifted by the wonders of the physical world which were revealing themselves, though dimly, to him, and he had conceived the idea that by proper observation and experiment he might know all things in Nature, reveal to all men all things, make the minds of all men on a same level, to the everlasting glory of the race. Man should not only understand but command Nature, and Britain should indeed shine as a "gem set in a silver sea." Bacon's plans were thus, it will be seen, far from selfish; and yet, in his endeavors to secure personal advancement, he appears as the most selfish of men, condescending to means

which at the present day seem nothing short of disgusting, to win his ends. However, it must not be forgotten that the position of suppliant to the great was not in his day so unknown a quantity as it is now, nor, perhaps, looked upon as so despicable a one.

Little help, however, he received for long enough. The Cecils, as has been said, evidently did not like him; neither did Queen Elizabeth, nor, at a later date, James, although the latter was eventually brought, for some time, to depend upon him. His first real friend was the Earl of Essex, who fought hard to secure several offices for him. But Essex fell out of favor with Elizabeth, and was accused of treason. To remain his friend was to incur the wrath of the Queen; and Bacon, the politic, to his everlasting dishonor, not satisfied even with remaining neutral, threw his influence against his friend.

Essex was executed, but Bacon's part in the affair did not bring him the favor he expected, and it was not until after the death of Elizabeth that his fortunes improved. Then he became Attorney-General, but lived in such princely splendor that he saved little. As an instance of his extravagant tastes, it is told that, at the marriage of the Earl of Somerset, his contribution was the presenting of a play, "The Masque of Flowers," which cost him £2,000. Even here, however, it may be surmised that his fawning was for a purpose; Somerset might avail in procuring for him the promotions which he craved.

This appears to have been the busiest time of Bacon's life. In addition to his labors as Attorney, he was writing busily, accomplishing a tremendous amount of work, planning and amplifying his "Great Instauration," and attempting to revise the laws of the land. Finally he secured in some sort the favor of the king's pet, Buckingham, who, apparently recognizing his ability, presently secured for him the Lord Chancellorship, and, in fast succession, the titles Lord Verulam and Viscount St. Albans.

As Chancellor, Bacon brought about many reforms. Yet, from a court filled with abuses, he did not purge all, nor did he keep his own skirts clean. He allowed wealthy suitors to give him large presents in money, and it was not long until the charge of accepting bribes was laid upon him. There seems to have been no settled plot against him. Abuses had simply reached a climax when he came to office, and the reaction was inevitable; yet suddenly he found the whole Court of Chancery in the balance before the House of Commons, and, against himself in particular, under the vigorous prosecution of his old enemy, Coke, twenty-eight explicit charges drawn up. Strangely enough, he made no protest. Like a leaf in the scorching sun he wilted, and declined to stand his trial. Appeals for mercy were now of no use. He was fined £40,000, ordered to The Tower, and shorn of all his offices.

He was only kept in The Tower a few days, but his public life was over. Nevertheless, his Bacon's energy was not crushed. He turned

himself again to his writings, and even dared to hope for reinstatement into the king's favor. But this was not to be. In April, 1626, while driving over the snowy roads, he became impressed with the possibility of arresting putrefaction by cold, and, by way of experiment, bought a hen at a farmhouse and stuffed it with snow. Already in precarious health, the chilling was too much for him; he became rapidly worse, and in a few days died.

Lord Bacon's published works are: "Meditationes Sacrae"; his great, unfinished "Instauratio Scientiarum" (consisting of "Of the Advancement of Learning and Novum Organum"); "Of the Wisdom of the Ancients"; "New Atlantis"; "History of King Henry VII."; and his Essays, probably the best known of his works.

To-day Bacon's name stands, as may be judged, almost as a reproach. A man who, while writing and declaiming the noblest of sentiments, could go on, even in his high place as Chancellor, with corruptions which should have been spurned by the lowest magistrate in the land; one who, while expatiating as a Damon or a Pythias on the privileges and obligations of "Friendship," hounded his best friend to the block—meets naturally with the obloquy which he deserves. Even as a scientist, his life-work, according to the ideals of to-day, was a failure. He made many mistakes, taught wrong theories; yet he was the first to insist upon the necessity, in science, of deducing only from observation. He gave the greatest impetus of his time, or any time, to investigation, and has on that account well been called the Father of Science.

As a philosopher on subjects other than scientific, his reasoning—though with a reasoning which reminds us sometimes of Lord Chesterfield's—is, in general, sound, and his works marked with a clearness and conciseness which, after nearly three hundred years, have kept his writings not only in print, but in demand. After Shakespeare, he is still regarded as the most gifted man of his day, and so enthusiastic have been his admirers that, even of late years, attempts have been made to prove that he, and not Shakespeare, wrote several of the immortal dramas. These claims have not, of course, been substantiated; nevertheless, the mere attempt shows the estimation in which posterity, as Bacon himself foretold, has held this wonderful, inexplicable man.

### Our Literary Society.

Owing to the great number of "studies" which have been received, it was impossible to publish the "Three Fishers" answers this week. Next week, however, we shall be able to do this.

Will all contributors to the Literary Society columns kindly keep one name in mind? All names of members, with pen-names, are entered on our List, and any change in the original entry is likely to lead to confusion.

## The Quiet Hour.

### St. Cecilia.

A subscriber has requested us to publish a picture of St. Cecilia, and a sketch of her life. The accompanying picture is from the much-admired painting by Naujok, while the subjoined sketch has been abridged from the Life of St. Cecily, in Rev. A. Butler's Lives of the Saints:

St. Cecily was a native of Rome. In her youth she, by vow, consecrated her virginity to God, but was compelled by her parents to marry a nobleman, Valerian, whom she converted, with his brother, Tiburtius, to the faith. In about the year 230, all three suffered martyrdom, and were buried in what was afterwards known as St. Cecily's cemetery. The church here fell, after a time, into decay, and Pope Paschal I. determined to rebuild it. He was, however, anxious to find the body of the saint, which, report said, had been carried off by the Lombards. In a dream the saint appeared to him and told him that her body still rested in the cemetery, and that he should find it; consequently he began to search diligently, and, presently, found the body clothed in gold tissue, with linen cloths that had been dipped in her blood at her feet. The bodies of St. Cecily, Valerian and Tiburtius were then removed to the church of St. Cecily, which was again rebuilt most magnificently in 1599.

St. Cecily, from her assiduity in singing the divine praises (often joining instrumental with vocal music), is regarded as the patroness of church music.

### The Silence of Love.

The Lord thy God in the midst of thee is mighty; He will save,  
He will rejoice over thee with joy; He will be silent in His love,  
He will joy over thee with singing.  
—Zeph. iii.: 17 (marginal reading).

Strange and often very hard to bear is the silence of Divine Love. Sometimes, like Elijah, we can hear the still small Voice speaking to our souls, but there are dark hours in life when it seems as though God paid no attention to our prayers, when we cannot feel His presence, and there is no outward sign that the promise, "ask and ye shall receive," can be depended on. Of course, this is often our own fault. God has declared over and over again that He will not answer the prayers of those who are not trying to obey His laws. He has also made the answering of our prayers largely dependent on our own faith. But, when a soul is consecrated to God's service, and asks earnestly and faithfully for something which is plainly according to His will, only to be met by deep silence, it is very hard to understand how God can be silent "in His love." Sometimes we try to escape from sorrow or pain, pleading that this cup may pass from us, and yet it is still held steadily to the shrinking lips. But such a silence, though it may be hard to bear, can be accepted as the silence of love; for pain and sorrow, if trustfully endured, are priceless gifts for the refining, beautifying and strengthening of character. But it is hard to accept our Lord's strange words: "It is expedient for you that I go away." It seems as though it must be better for us to be able always to realize His presence, and we can hardly believe that He is silent "in His love" when He hides His face from us and all our prayers for light, and earnest seeking after truth, meet with no response. Though Christ—the Holy One of God—passed sinlessly through that darkness, when He cried out in agony, "My God, My God, why hast Thou forsaken Me?" still it is not easy to understand why—

"It is good now and again for you to be without a taste of God,  
That you be not puffed up in days when all is fair,  
And take some pleasure in yourself that you are what you are not."

Perhaps it may be light for someone else that we are praying for. Surely such prayers are well-pleasing to Him Who is continually making intercession for us all. Why, then, are they often

offered year after year in vain—or apparently in vain? It is mysterious, and yet we may learn to understand something of the mystery, and, for the rest, we can always trust, and grow strong in spirit through continuous trust. In the first place, let us never lose hold of the fact that such loving, faithful prayers are always heard and answered, though we may have to wait a long time before the answer is visible. If you planted a seed deep in the ground, and then prayed that it might take root and grow, the prayer would not be unanswered, even though you might have to wait a long time before the young plant appeared above ground. And the most enduring plants usually grow slowly, sending down their roots deep into the ground—visible only to God—before they break through the crust and show themselves to men. And then there is another thing to be considered, a fact which makes the answering of prayer anything but a simple matter. If God gave us our Promised Land without effort on our part, it would be a worthless gift. If He gave us goodness without struggle, we should be willless

in the struggle. We must work out our own salvation, St. Paul says, with fear and trembling, although it is God alone Who inspires us with the will to be holy, and gives us power to grow steadily more and more like Himself. Surely it is in wisest love that He keeps silence, refusing to change us into perfectly-working machines, incapable of going wrong, even as a father refuses to do all his child's lessons for him. We can only make the gift of patient endurance our own by a real encounter with suffering, and we can only strengthen faith by trusting God in silence and darkness. If we could always see His face, hear His voice and understand His dealings with us, there would be no room for trustful faith. Trust is such a beautiful thing, and surely there is gladness in the thought that God is trusting us to trust Him with a childlike faith that is sweetest when we cannot understand. Christ can rejoice over His Bride, and joy over her with singing, when she trustfully obeys Him in His absence, doing what she knows He would wish her to do, though He may appear to take no notice. Knowing

"I found Him whom my soul loveth:  
I held Him and would not let Him go."

It is our bounden duty, as well as our great privilege, to plead earnestly that God will make Himself known to those who are in darkness, and if our prayers are real we must also try to help their fulfillment. But let us keep up hope and courage, though the answer may be long delayed, remembering that the very silence is a proof of God's love. One who, like Saul of Tarsus, is really though mistakenly seeking God, may have his eyes opened suddenly to the blinding glory of His face, but a real thirst for God must be aroused before it can be satisfied. Only those who hunger and thirst after His infinite holiness can be filled. The wonderful miracle of the resurrection of Lazarus only made some men more wicked, for they hardened themselves and determined to put him again to death in order to stop Christianity's victorious progress.

God loves us and, therefore, instead of blinding us by miracles, He draws us secretly and silently by His marvellous beauty, then we run after Him more eagerly as desire is roused by denial, that so the delight of finding Him may be a true and lasting joy.

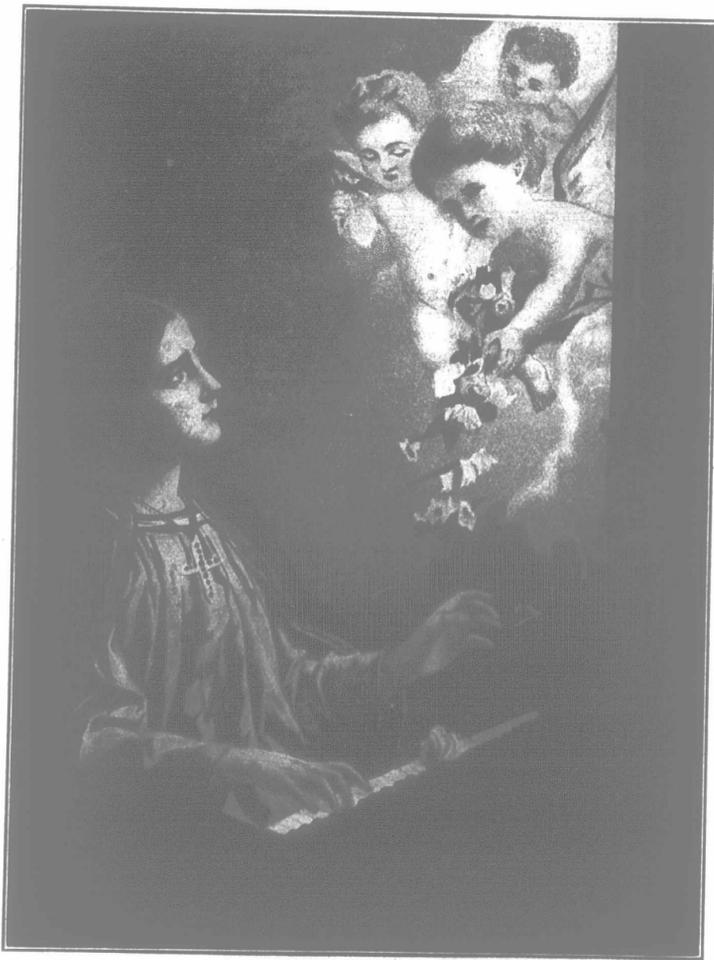
And I think that God's silence makes us listen more carefully for His voice—when we have heard that voice sometimes. If we could always feel the sweetness of His presence, we might not watch or listen so attentively as when we are afraid we may, by a moment's carelessness, miss the revelation He intends for us. It was good for the disciples to see their Master's glory on the mountain, but St. Peter was mistaken in thinking it would be good for them to stay there all the time. We cannot see the shining Vision of our Master's face, nor always hear the Voice from the cloud, which proclaims Him to be Divine, but we can always bear about with us the inspiring memory of such occasional revelations, and—just because they don't come very often—we learn to value them more and watch more eagerly for them.

The revelation of God can only come from Himself, as our Lord says: "No man can come to Me, except the Father which hath sent Me draw him." The Risen Jesus "showed Himself" over and over again, but only when He chose, and only to "the disciples." Even they could not see Him whenever they wished. Though a seeking soul is sure to find Him, it is because God loves first, and delights to manifest Himself as soon as there is room made for Him in the heart. If we open the door, it is because He has long been knocking, saying, "Open to Me." He came down to live with us on earth that we might be drawn by love to live with Him in heaven.

Then what a world of living trust and sympathy is sometimes conveyed by silence. Some people can only understand our thoughts and feelings when we explain them—or try to explain them—in words. And such people never really understand us at all. But there are friends who, because they are perfectly in touch with us, do not need to speak. And it may be possible to walk with God in such a wonderful fellowship that our hearts burn within us, not only while He talks with us by the way, but also when He calls out our strongest trust by His silence. We may know He is beside us when we cannot feel His hand nor see His face. And if the path is often dark and difficult, the view will be all the grander when we climb above the clouds and can lift up our eyes to the glory still to be revealed.

"The more of doubt, the stronger faith,  
I say,  
If faith o'ercomes doubt. How I know  
it does?  
By life and man's free will, God gave  
for that!  
To mould life as we choose it, shows  
our choice:  
That's our one act, the previous work's  
His own."

If you are in the darkness of doubt look at St. Thomas and learn of him. For one terrible week he believed that the Light of the world had been extinguished, but why was he kept in darkness longer than the rest? Was it not his own fault? Study the record, and you will see that when the others were gathered together he stayed away. That first Easter Day, when the Lord appeared to



St. Cecilia, Patron Saint of Music.

machines, not human souls. And it is the same with faith, which, though it is a gift of God, is never forced on us. If our Lord had proved His Divinity—as Satan tempted Him to do—by casting himself down from the pinnacle of the Temple, upheld by angel hands, the crowds whose belief in Him would have been thus forced would have gained nothing by such effortless faith. If you, who are pleading day after day that the eyes of a friend may be opened to see Him who is invisible, were given power to work a miracle, and so to convince him of the truth, would you not gladly take advantage of the opportunity? And yet such a forced belief would be utterly worthless, and would only do harm, making real faith more difficult. If God gave us all the temporal gifts we asked for, without effort on our part, the result of such cruel kindness would be to make us more lazy and selfish and unhappy every day. But to give us spiritual gifts too easily would harm us far more. We ask for holiness, and, though it is a gift freely given by God, yet we must make it ours, not only by daily, constant prayer, but also by throwing all our energy into

that her Lord has proved His love by dying for her, and is the same LOVE yesterday, to-day and forever, she can read love in His silence as certainly as in His treasured messages. And if we look below the surface, we begin to see how the very silence is a proof of His love, strengthening our weak faith more than continual messages would do. It was when the bride—in the Song of Solomon—found that her beloved had "withdrawn himself" that she sought him persistently, reckless of wounds and insult. It was when she could not find him that she told over and over again his manifold perfections, realizing—as perhaps she would not have done if he had never left her—that he is the chiefest among ten thousand, and altogether lovely. When God is silent because He loves us, very often the very pain of the silence drives us to search diligently for Him. Then, having known the desolation of loneliness, the seeking soul at last finds Him whose very Name is fragrant as ointment poured forth. Though the seeking time may seem long and dreary, there is all the more intensity in the joy of finding:

the ten Apostles, he missed the revelation by absenting himself from public worship. The next Sunday he joined the little band of worshippers—doubter though he was—and his doubts were cleared away. If you don't hear the voice of God, it may be because you don't go where you are likely to hear it—you don't go to church, don't study your Bible, never try to pray, never read what others—others who have heard His voice in their souls—can tell you. God loves you too well to force conviction on you. He wants to win your love, and love can never be forced. Our life here is no child's play. Just because the following of Christ is the one thing in this world worth living for, it is, as Browning says, very hard for you and me to be a Christian.

"With even the moderate success  
Which commonly repays our strife  
To carry out the aims of life.

'Then, what if it be God's intent  
That labor to this one result  
Shall seem unduly difficult?'  
Ah, that's a question in the dark;  
And the sole thing that I remark  
Upon the difficulty, this:  
We do not see it where it is,  
At the beginning of the race;  
As we proceed, it shifts its place,  
And where we looked for palms to fall,  
We find the tug's to come,—that's all."

If you want an easy, comfortable  
existence—Don't choose Christ's service.  
HOPE.

## Current Events.

A severe famine is threatening 10,000,000 people in Central China.

A new silver field has been reported from the Temagami Forest Reserves.

The Right Rev. Jas. Carmichael was enthroned on Nov. 4th as Lord Bishop of Montreal.

An important discovery of iron ore has been discovered in Snowdon Township, in the Haliburton, Ont., district.

The promised elections of members for the second Russian Parliament, or Douma, have been fixed for Jan. 29th, 1907.

Mr. Keir Hardy, M. P., on Nov. 8th introduced a bill into the British House of Commons to confer a Parliamentary vote on women.

Charles McGill, late manager of the Bank of Ontario, has been released on \$100,000 bail, \$50,000 of which was furnished by himself.

Charles E. Hughes, Republican can-

didate for New York State, defeated the Democratic candidate, Wm. R. Hearst, by a majority of 40,000.

The Duke of Connaught, Inspector-General of the forces of the British Army, the Duchess, and Princess Patricia, will visit Canada immediately after their tour to the Far East, which will begin next month.

The Government of Ontario has decided to introduce legislation by which the Province will secure a direct revenue from the mines. This revenue will probably be devoted to developing the mining industry of Ontario.

The investigation into the betting practices carried on in booths at the Woodbine has resulted in a decision by three out of the five judges of the Court of Appeal that betting must not again be carried on in booths at any race-track in the Province.

Commander Peary, who left New York in the Roosevelt, July 16th, 1905, on a search for the North Pole, is now returning. He has reported reaching a point only 205 miles from the Pole—the most northerly point yet reached by an Arctic explorer.

In the Ministerial declaration of policy read by Premier Clemenceau at the opening of the French Parliament on Nov. 5th, the clause relating to the separation of Church and State, distinctly announced that the law will insure full liberty of conscience to all.

## An' I But Tent Thy Faither's Flocks.

In summer-time the wee lambs broose,  
The loch lies blue in shadow.  
An' little breezes tell thy name  
To a' the ferny meadow.

Whan mither left me, pur lone lad,  
An' a' the warl was dreary,  
Sae kind thou cam'st to comfort me,  
Wi' blue eyes, soft an' cheery.

It is no wise to love sae weel,  
An' thou sae grave an' tender,  
But whan thy blue eyes pitied me  
'Twas a' ane holy splendor!

An' I but tent thy faither's flocks,  
Auld Angus Donald's laddie,  
Sae meanly clad the bitter wind  
Sweeps thro' my scanty plaidie.

I maun's weel try to gain a star  
As thy sweet lips, my dearie,  
I maun's weel try to clasp the cross  
Of gold on Kirk o' Mary.

—Garnet Noel Wiley, in the Bohemian.

## Children's Corner.

### The Little Brown Frog.

II.

It was on that fine morning that we began with, that two little boys came down to the pool.

"Hullo, Tom!" said one, softly.  
"This is a fine place for frogs' legs."  
"Hush!" whispered the other. "Lie down in the grass. You've frightened them all into the water!"

And so he had. Even the Little Brown Frog took a tremendous dive straight to the bottom. After a while, though, she put up her head, and looked about with her bright eyes, but there were no boys to be seen, so she stole out upon the bank again, and sat down to be miserable. The boys took no notice of her. They didn't want brown frogs' legs, you see, only pink and green ones. Presently up came more frogs to the surface, and when they saw our little friend quite safe and sound on shore, out they all jumped, chattering away like the foolish things they were. For the boys only waited till they had forgotten their fright, before they stole up, and catching six or more, knocked their heads on a stone, and cut off the legs which a moment before had been kicking so merrily in the sun. And then they went on to the next pool, leaving terror behind them.

But, in their hurry, they had left something else behind. Hours afterwards, when the Little Brown Frog came out of her hiding-place, she heard dreadful groans, and creeping up on shore she found one of her poor little playmates stretched on the bank, with one leg safe and sound, and the other half cut off. The sight made her shudder, but she was so sorry for her little friend, that at last she crept up beside him.

"O! Johnny," she whispered, with tears in her eyes. "How did you escape?"

Johnny could hardly speak for pain, but at last she made out that the boys had only stunned him, and, when he felt the knife, he had given a great jerk, and jumped from their hands into some long grass. They could not have bothered to look very far, for the poor frog had been too much hurt to get away. Indeed he had only just now come out of a long fainting fit, and managed, with great difficulty, to drag himself to the bank.

By this time the Little Brown Frog had forgotten all about her looks, and the unhappy life that lay before her, and her head was full of longing to help poor, wounded Johnny. First she began to pull him gently towards a log, which lay up against a big stone, and made a nice, dry sort of house, where they would be out of sight of boys and other enemies. But she could not drag him very far, be-

cause he groaned so. So she went to the bottom of the pond to ask advice of an old frog, who was very wise, but too lazy to be useful.

"Hum-m-m," said he. "Better leave him alone. I never heard of such a case before. Of course, a leg couldn't join on again. It's against reason."

"But, please! can't you tell me anything to make the pain any better?" said the Little Brown Frog, almost ready to cry.

"Well, well, my dear, don't be im-

patient," croaked the impatient old frog. "All in good time, all in good time." At last, after a great deal of rummaging about, he gave her the root of a water weed, which was to send the patient to sleep, and a kind of leaf, which was good for wounds. The Little Brown Frog was soon at the side of Johnny, who had begun to think she had gone away for ever. As soon as she made him take a good bite of the root, he went off into a round sleep, and even snored a little. Then his nurse washed the mud gently off his leg, and laid a

piece of the leaf against it, tying it on with some long marsh grass wound round and round. He was still snoring away, so the Little Brown Frog called softly over the edge of the pool to two strong friends of hers. They were rather afraid to come up, but when they saw that the sun was gone down, and it was almost dark, they jumped out, and asked in a whisper what she wanted.

"Don't be so cowardly," said the Little Brown Frog. "Here is poor Johnny escaped from the cruel monsters,

that night, keeping the mosquitoes off Johnny, and putting fresh leaf on his leg. The next day she had to keep giving drinks, and she found out that it was a good plan to tie a stiff twig to his leg, for when he tossed about, it got all out of shape. She would not believe the wise old frog, and meant to do her best to make the leg grow together again.

The rest of the frogs got very much interested in the case. There was generally a ring of them sitting round Johnny, never saying a word, but watching his little brown nurse attending to him. Some of them were much pleased to be allowed to sit beside him, whenever she needed a nap.

The Little Brown Frog grew happier and happier as Johnny's leg grew better and better. At last a fine day came, when all the frogs crowded to the banks of the pool, to see Johnny take his first dive. Many frogs from other pools were there, and it was like a public holiday, everybody was looking so jolly, and talking so fast. It would have been a great chance for frog-hunting boys, but fortunately the holidays were over, and they were safely shut up in school.

Presently the two strong frogs (who were sort of policemen) began to shove the crowd back, and to call out, "Make way, make way!"

Then through the opening came Johnny and the Little Brown Frog. And Johnny held up his mended leg for everybody to see how strong it was. The crowd gave a great croak of joy, and at that moment Johnny made a dive into the pool, and turned a somersault, and they all saw he was as good a swimmer as ever. The frogs seemed to have lost their heads with joy, and there was a great feast, and a grand concert, which lasted all night. And the Little Brown Frog was the happiest of them all.

After this great cure, there were always wounded creatures coming to the Hospital under the log,—birds, and toads, and beetles, and water-rats, and all sorts of things. The Little Brown Frog grew more and more clever about medicines, and she taught a few others to help her, when she had several patients at a time.

Now, one day a water rat with a wise, kind face came to see her. He looked at her nice soft grass beds, at her clean floor, and the carefully-labelled medicines on the corner shelf, and then he nodded his head, and sat down.

"Miss Frog," said he, "I am Dr. Water-rat from the River. I have come to ask you to help me with a new plan. Over by the River there are a great many fish of all sizes. Boys come every day to catch them with nasty little instruments called 'hooks'."

"Yes," said the Little Brown



Company for Dinner.

Frog. "I know what cruel monsters boys are."

"Yes, yes," said Dr. Water-rat, "but the fish ought to know enough to let the hooks alone. Well, if a boy catches a very small fish, he wrenches the hook out of its mouth, and throws it back into the River. I have always tried to do all I could for these wounded fish, but many of them die for want of care. Now, I am going to start a hospital in the River bank, and I want you for head nurse."

Dr. Water-rat looked eagerly at the Little Brown Frog, who did not seem able to make up her mind, and asked for a few hours to think about it. So he went out, and while she was thinking about it, he was talking with a great many frogs, who told him so much of the little nurse's goodness and cleverness, that he began to think he could not start his hospital without her.

What a sad frog-pool it was, when at last the Little Brown Frog said she would go! The one who missed her most was Johnny. After she had gone, he stopped playing games in the pool, and spent his time sitting in the old hospital. He got very thin, and at last on day he disappeared. The wise old frogs nodded their heads, and said, "He is gone to the River!"

Well, one day Johnny came back, and with him the Little Brown Frog, who had taught someone else to be head nurse of Dr. Water-rat's hospital, and come back to marry Johnny. So there was a joyful wedding, and all the other frogs in the pool were almost as pleased as Johnny was. And there is very little

doubt that the Little Brown Frog lived happy ever after.

So now you must see that it is as pleasant to be useful as handsome, and even the ugliest people need not be miserable.

COUSIN DOROTHY,  
52 Victor Ave., Toronto.

### The Letter Box.

Dear Cousin Dorothy,—I have enjoyed reading the letters sent to you by your many cousins, so I thought I would write one too. I go to school regularly. I am in the Fourth class. I am ten years old. We have about 50 hens and chickens. I have four sisters and one brother; their names are Maudie, Minnie, Lily, Evalina, and Burtey. I like my teacher very well. We have one horse; her name is Polly. We have two cows, and two canaries, and one pet cat, and his name is Peter.

Canard, N. S. MINNIE GIPSON.

Dear Cousin Dorothy,—I have never written to the Children's Corner before. Papa has been taking "The Farmer's Advocate" for twenty years. I have two sisters and a little brother; their names are Hildred, Audrey, and Roy. We have a dog named Bounce, and a cat named Daisy. I go to school every day. I am in the Fifth Grade. My studies are: Reader, Health Reader and Geography. We have a Band of Hope every Friday after school, where we have reading and recitations on temperance.

FREDA BISHOP (age 10).  
Round Hill, Ont.

Dear Cousin Dorothy,—I am a farmer's daughter. I haven't very far to go to school. I live on a farm of 260 acres of land. We milk 80 cows. I have three brothers; their names are: Ralph, Eric and Frank. We have sixty pigs. We have four houses, counting the house we live in. We have six horses; their names are: Rose, Bess, Tom, and Dick. We had a good garden this year. For pets, I have a little kitten named Daisy. I think I will close, wishing my letter will escape the waste-basket.

MARION N. CASSELMAN (age 8).  
Chesterville.

Dear Cousin Dorothy,—This is my first letter to "The Farmer's Advocate." For not quite a year we have taken your paper. We have 5 pigs, 2 cows, about 50 hens and 26 ducks, 1 pigeon, and 1 cat; his name is Peter. So, goodbye.

EVEALENA EDNA GIPSON (age 9).  
Canard, N. S.

Dear Cousin Dorothy,—This is my first letter to your Corner. My father has taken "The Farmer's Advocate" for some years. We have one hundred acres of land. We have one hundred acres names are: Jim, Mag, and Topsy; eight milch cows, four young cattle, five calves, eighteen pigs, and sixty hens and chickens. We have a dog; his name is Bob; and two cats. I go to school. I am in the Junior Fourth class. I live about three miles from school. I like to read the Children's Corner.

FRANK W. BURTON (age 13).  
Kintore, Ont.

### Post-card Exchange.

Most of the collectors must have their albums pretty nearly filled by this time, and some are finding the amusement a little too expensive, so perhaps we had better call "Time!" After Dec. 1st no more names will be printed, and after the first of January the exchange will be closed. That is, no one must exchange cards with anyone whose name has been printed in this column, after the New Year, unless he first writes privately to the collector, and finds whether he is willing to go on exchanging. I hope you will all think this is a good arrangement. Here are the names of some more collectors:

Myrtle Taylor, Lefroy P. O., Ont.  
Alison Elder, 4201 Sherbrooke St.,  
Westmount, Montreal.  
Blanche Thornton, Elliott, Ont.  
Etta Kelly, Hagersville, Ont. (burnt-leather cards only).

### From a Collector.

Thanks for all the lovely postal cards I have received. I am answering them as fast as possible. Hope you are not getting impatient, as I see some are complaining that they have not received theirs. I do not wish to exchange any more. A cousin,—

LILLIAN M. MOTT.

### Post-card Collectors.

Gertrude Moore, Mt. Albert, Ont.  
Alta French, Mt. Albert, Ont.

## The Ingle Nook.

### Our "Miss Darlington" Discussion.

I am glad to see that our Chatterers are turning out in full force to do justice to the Miss Darlington discussion. Will any others, who have thoughts on the subject, please write as soon as possible so that we may close this topic and begin another? It's very interesting, but we mustn't keep on it too long. D. D.

### Sunglint Heard From.

Dear Dame Durden,—I always want to write on your topics. Sometimes I can resist, but at other times I have to give in and set down my say—not that I always send you my words of wisdom, far from it, but it gives me relief just to write down what I think, then I lay away my little effort to look at it again only when there is a new subject for thought. There were no less than three very clever (?) letters to be destroyed before I could feel as if I had a right to trouble you with this. Are you not glad I did not send them to you?

But, I must talk a little bit on the October 4th subject. It is my opinion that never in the world's history was there so little of the "love blind to all deficiencies of its idol" as to-day, or so much good comradeship between man and wife. The sensible wife sees the faults in her good man, of course she does, often more clearly than she sees her own; but she forgives and loves him in spite of everything, as we used to say after our old child-quarrels with our chosen chum, just as she expects him to love her when she has been "naughty" and shown her own feet of clay.

I am glad you gave us a chance to say something on the passage you quoted in the October 25th issue from Miss Darlington's remarks on the position of the Canadian farmer's wife. It set me taking a little mental trip up and down the concessions and sidelines of our own township, and holding a review of all the farmers' wives known to me, and, for various reasons, I either know personally, or know of, the majority of them. After a careful scrutiny, I cannot find one specimen of the "wife treated as a thing to be used hard till it is done." Of course, there are many hard workers among them, but it is because it is in their own natures to work hard. They would have their "noses to the grindstone" no matter what position they occupied. We do not raise that kind of farmer in this part of Canada; here, they help in milking, turn the separator, and do a great many other things that in

the old days used to be accounted "woman's work." I know more than one farmer in this neighborhood who has helped with the washing, when his wife has been not strong, and no help could be got. I think that is an evidence of sprouting wings!

There is no question but most farmers' wives have more work than their town sisters of equal wealth. There are no bakers' shops in the country to fall back on when one takes a lazy streak. It is less easy to get hired help; but there are compensations—many of them, and not the least is the sympathy of the good farmer husband. Who so faithful as he? Where there is one unfaithful, there are fifty in the same class in towns, whose wives carry bitter broken hearts. "Them's my sentiments," and I was brought up in town, and should know a little whereof I speak.

I hope I have not exceeded the limit of space. If I have, do, please, use your scissors, dear Dame, and cut out my "redundancy." SUNGLINT.  
Simcoe Co., Ont.

### Another Aspect of the Case.

Dear Dame Durden,—I am sorry to come so soon again and take up so much of your valuable space. But the subject on which Miss Darlington has written has always interested me. While to some extent it is true, the part that impresses me is why such conditions exist? Why a prominent farmer's wife has to do, besides doing all her housework, laundry work, with the additional work of harvest and threshing time, and often with few labor-saving conveniences? Why farmers' wives must also engage in the work of the poultry and dairy, and in some cases are compelled to make money, and are, in part, breadwinners, for many women keep the house and themselves on the money they make? While the wife of a prominent man in the city, who has started out with equal, or it may be not equal, advantage, has her servants or help of some kind (and these servants work just one-quarter as hard as a farmer's wife), and has time to enjoy life and do her duty to everyone, and knows what it is to live in the fullest sense of the word. For what tired, over-worked and irritable woman can do justice to herself, her home, and her children? It is the right of every child to be well born and well reared, and a mother who trains her children well, not only confers an inestimable boon upon them, but at the same time benefits the world in general. If men in the city honor and respect their wives, and make companions of them, why can't farmers, to some extent, at least, relieve their wives of so much hard work? As people become more civilized and enlightened, woman's

position is more exalted and elevated. Surely, with the wealth of the fields, better conditions ought to be, if brains were used—and brains count, especially in this progressive age. Or, if it is true that the men, for years, have expected their wives to act in the capacity of wife, servant, dairy woman, and the many other things required of them, till it has become second nature to them, it is time the wives went on strike and revolutionized affairs. If the farmers could see themselves as others see them, it would doubtless cause a complete reformation. Or, it may be there is some other solution to the problem. Now, I am not referring to women who have taken up farming, poultry-raising, etc., to make some extra money for themselves, or for a livelihood, or those who have met with misfortune and find it necessary to make money some way; but to farmers' wives in general. I was raised on a farm, but all my relatives live in the different large cities, and I have spent months in the cities, and have studied the conditions of both, so speak from experience. A CANADIAN.  
Middlesex Co., Ont.

### What Forget-me-not Thinks About It.

Dear Dame Durden and Chatterers,—It was my firm resolve to indefinitely absent myself from the Ingle Nook, lest I might merit your censure for being somewhat garrulous. However, in the face of that disparaging article concerning Canadian farmers' wives, I cannot refrain from voicing my indignation.

We have been taught to expect nothing from the position of wife, but to be drudges of the money-earners and raisers of large families! Oh! Oh! Oh! To all our noble Canadian women I appeal: Is it not exasperating? Yes, and presumptuous? It would be interesting to learn from what source the writer derives her evidence which occasioned such a strong declaration. I should like to enquire, too, how the English farmer treats his wife, or why countless young men and women emigrate to Canada, and present to our mental vision glorious pictures of "the days that were," in which immense farms, a retinue of servants, gorgeous display, etc., figure conspicuously. Where is all that grandeur now? Vanished into oblivion, I presume. I shall not enter into a discussion of the proverbial extravagance of English farmers, as the inevitable result tells its own tale.

"Drudges of the money-earners and raisers of large families," should those two accusations be placed upon a level? Dear Chatterers, is there not an unchristian taunt implied in the latter epithet? Why should the rearing of large families devolve solely upon farm-

ers' wives? Or, I might ask, "Do they raise larger families than the wives of our townsmen?" If so, I think the number of farmers' wives in heaven will be greatly in the majority. To my mind, the raising of large or small families depends upon a higher power, and should not be mentioned on a par with the "drudgery" of the farm.

Now, wherein does this so-called "drudgery" exist? 'Tis true we must wash and bake and churn, etc., but what would occupy our time had we not those tasks to perform? Are not stenographers, bookkeepers, milliners, editors, and all the rest of them, occupied from morning until night, and have not even the privilege of pure, fresh air, which a farmer's wife may have at any of her various occupations?

I have lived in the city, in town and in a village, and, since I became a farmer's wife, I have been happier and healthier than in any other position. I am intimately acquainted with hundreds of Canadian farmers, and I have yet to meet one who "treats his wife as a thing to be used hard until it is done." I know of exceptional cases where the farmers have been blessed with unusually large families, and where it is impossible to secure assistance, and I have seen the husbands do everything in their power to lessen the work of the house. In my opinion, very few Canadian farmers' wives are obliged to work nearly so hard as the farmers themselves.

I sincerely hope that this important controversy may be thoroughly discussed, for we would not be loyal Canadians to allow such an unjust accusation to pass without retaliating.

Busy Bee, allow me to thank you for your splendid notes. The spice cake is lovely.

Hillside Daisy, I fear I cannot conscientiously accept your pretty compliment. My poor efforts would surely pale into insignificance before the brilliance of some of our Chatterers, to say nothing of our presiding genius, Dame D.

By the way, was there not a striking contrast between the views which Darling and Canadian presented regarding "the affection of a wife"? They should launch upon the sea of matrimony, and then give us the benefit of their experience.

I cannot but agree with Pansy in challenging Jack's Wife about that butter-and-egg money. What do the other Chatterers think?

Dame Durden, let me tell you how I enjoyed your Thanksgiving talk; I heartily endorse every word of it. I thank you, too, for the practical hints; for the home-made butter-worker. My husband has completed it, and, oh! buttermaking has

no terrors whatever now. Let us all breathe a sigh of relief, for I've had my say.  
FORGET-ME-NOT.  
Perth Co., Ont.

#### From One of Our Invalid Friends.

Dear Dame Durden,—I have enjoyed reading "The Farmer's Advocate" so much. How the Quiet Hour helps us, and how interesting the chats in the Nook have been of late. I will try to draw into the cozy corner too, or you will think me very ungrateful when I do not acknowledge your kindness to me, and tell you how your kind wishes cheered me along.

I often wonder now what have I done that you should all be so kind to me. Had I been able at all, I certainly would have written before to thank you. How a kind word helps us, and I have been so very ill since I wrote last; but young and old are so kind, and I do thank the Lord for that. How nice to see all come and see us so kindly, when we are always at home. Some have to stay at home, and do not enjoy life as others. Still we know that all cannot be on the mountain top. Some have to be in the valley, but there are rays of sunshine there too, although sometimes there are clouds. If we wait we will see the sun come out again, and how much brighter it seems to shine after being hidden for a while, and the mists are cleared away, and what a comfort to know Jesus cares for us through it all.

We can trust Him though the path be dreary,  
Brightness glows within His smile;  
And He knows if we are weary,  
We can still trust on and wait a while.

Well, dear Dame Durden and all kind Chatterers, I thank you one and all for your cheering words and your recipes I asked for. They were such a help to me. It is hard for me to write, and more so in winter, as our house is very cold, and it is a little more lonely when storming, as friends cannot come so often. I have no girls of my own now, since my daughter went to heaven, How I miss her! She would have been company now for me; but she is looking this way for me, and is safe now on the other shore. So, I have only one, a good, kind son, and I am thankful for him each day. I often think what a comfort it is to parents who have good children. How they brighten our life by their singing and music! What company it is to listen and enjoy it at home. I certainly do, and have much to be thankful for, even if I only have one left. How lonely I would be without him! He is so kind, and he is very fond of "The Farmer's Advocate" too. I hope he may never be without it again. We have taken it almost two years now, and like it better all the time.

If my letter isn't too long, I'd like to try and send some recipes. I often wondered how the New Brunswick girl got along with the dumplings she asked recipe for. Try my way once, and see if they aren't nice. They never fail to be white and light, like puffballs. To 1 quart of flour add 2 teaspoons of baking powder, a pinch of salt, and water to mix not too stiff, and drop pieces off a knife into your boiling-hot soup, but do not stir at all. Boil no longer than 10 minutes, with a lid on kettle. Add a wee pinch of fine sage, and serve at once. I hope they get light, as ours do. We made them for the threshers' dinner once, and they ate three large dishes of them at the first table. They are so nice with potatoes and meat. Someone asked for a recipe for good pancakes. Well, here is a simple way, and they are always lovely and light: To a quart of flour add a large teaspoon soda and very sour milk to make a batter not too stiff. Don't forget a little salt, and fry in fat.

If anyone wishes to know how to make lovely grape pie or grape preserves, ask for it, and I'll gladly tell them; also will tell them a splendid way to make syrup almost like maple any day of the year on short notice, easy and cheap; and it's grand with those pancakes this cool weather. I am too tired now, and this is so long already, I fear.

I wonder how Jack's Wife would like Ravenswood for a name for her home. I know a lovely place called that.

I thank Ruby for her thoughtfulness in offering nice reading. We miss the Weekly Magnet and Young People's Weekly very much since the Sunday school ceased taking it. We are so thankful for good reading. We get Sabbath Reading: it's splendid, and, Ruby, I've nothing to return you for any, if you are so kind to send them. Leave your address on them for me. I was so grateful to Edna for that salt-rising recipe. A friend made me a loaf and sent it to me, and she, too, was glad to get the recipe. We liked it very much. Also was glad to help Forget-Me-Not with pudding sauce. Did you ever let it get cold, and eat it with cream for dessert? I like it cold for tea on a hot evening. I wish I could help you some more. You have given me so much to thank you for that my letter is very long, but you were so kind I could hardly write a shorter one this time; so pardon me, and may you still have much success in your good work.

A LANKSHIRE LASS.

Wellington Co., Ont.

I must thank you very much, dear friend, for your kind private letter—such a brave, cherry letter—I almost felt that it belonged to the Chatterers too, but then you had marked it "private." I almost think now that I can look into your home, and see you and your kind son. What a mere lad he is to have so much responsibility! We are glad to know that he likes our Advocate. . . . And, now, I must thank you for your efforts to help our Ingle Nook along, and for the verses, which I hope to have room for some day. You may be sure that our Chatterers are all interested in you, and pleased to hear from you.

Will you forgive me if I quote just one little bit from your private letter? It is so good that it seems a pity not to give it to the Chatterers. "I think if mothers can keep a cheerful face and cozy home, it keeps a family more at home away from evil." This is a bit of Lankshire Lass' philosophy. "A cheerful face and cozy home," after years of pain and weakness. What a lesson for those who have not been called upon to suffer! Now, you aren't vexed with me for putting this little bit in, are you?

Several most interesting letters have been held over, but will appear as soon as possible.

#### Some Questions—Maple Cream.

Dear Dame Durden,—No, really I can't take off my things and sit down, I'm in such a hurry, though your cozy corner is inviting, but, never mind, I'll come again, when I am not so busy. Can you give me the address of the Perry Picture Co.? I want to do some good copies of old paintings in passepartout binding for boys' rooms. How can stovepipes be varnished that it won't burn off? When should Polyanthus Narcissus be brought into the light to be in bloom by Christmas?

This is a splendid recipe for maple cream, try it: Two cups of brown sugar, with milk to make a soft batter; boil till it hairs, without stirring, then add ¼ cup of good butter; boil one minute longer, then take off, cool a little, and add vanilla to taste. Stir till nearly thick, then pour on buttered tins. Nuts will make it all the better; add while stirring.  
SUSAN VAN DUSAN.  
Frontenac Co., Ont.

The Perry Picture Co.'s address is Malden, Mass. Haven't had time to look up the stovepipe question yet, but will soon. Your Narcissus question has been referred to the "Flower" corner.

#### Recipes.

Gems.—Two cups milk, 3 eggs, 1 large spoonful sugar, 1 of butter, 1 teaspoon cream tartar, ½ teaspoon soda. Make into a rather thin batter with "Five Roses" flour, and bake in buttered pans.

Dark Cake.—One and a half cups sugar, 2 tablespoons molasses, 1 cup butter, ½ cup sour milk, 1 teaspoon soda, 2 eggs, 2½ cups "Five Roses" flour, a little of all kinds of spice, currants and raisins.

## About the House.

### Christmas Gifts.

1. Traveller's Comfort Bag.—Get some pretty-flowered sateen and make into a long pad (24 inches in length and about 10 in breadth), putting some sachet powder in with the wadding. Upon the inner side of the pad fasten a second strip, loose at one edge, and stitch into pockets: one for handkerchiefs, one for veils, one for gloves, etc. The bag is to be rolled up and tied with ribbon when put into the suit-case, and will be found a great convenience.

2. Anyone knows what a nuisance it is sometimes to be obliged to look for a holder with which to lift a hot dish. A set of holders, neatly made, padded thinly with wadding, "quilted," and furnished with loops to hang them up by, would often make a much-appreciated Christmas gift.

3. Any woman would appreciate as a gift a shirt-waist front worked in raised or eyelet embroidery, all ready for making up into a waist. These fronts, stamped ready for working, may be procured in either linen or silk, at any good dry goods store.

4. For the friend who suffers from cold feet at nights, nothing can be better than a dainty pair of slumber stockings, knitted with soft white, pink or blue yarn. The stockings should be made rather loose, ribbed or in some fancy stitch, and ornamented by a bow of ribbon.

5. A Bunch of Ideas.—(1) A small birch-bark canoe filled with spoons, strung to the canoe with baby ribbon. (2) A cheap print dress made with a long skirt and much befrilled, for the little girl who likes to play "grown-up." (3) Half-dozen handkerchiefs in a dainty case. (4) A set of music cases made of stiff pasteboard and sateen; one labelled "Songs," another "Sacred Solos," another "Instrumental Music." (5) A writing-board to be used for writing letters on one's knee—invaluable for taking out of doors in summer. Cover the board neatly with sateen, and bind all around with braid, put on with brass tacks. On one half of the board place a pocket for the writing paper, loops to hold the pen, and a small calendar block. The other half is left plain to serve as a desk.

### CHRISTMAS CAKE AND PUDDING.

As many prefer to make these several weeks before Christmas, the following hints may be seasonable:

To Wash Currants.—Do not attempt to wash more than a pound at a time. Place the currants in a colander, and place in a pan of warm water; break up the lumps with the fingers, and wash thoroughly. Change the water until it is no longer soiled, only reddish from the fruit. Then lift the colander out of the water; press the currants in a clean, dry cloth, and dry on a sieve or on a pan in a warm place near the stove. When dry, rub again in a cloth to remove any stems that may be left. The water used should be warm, not hot, else too much flavor will be drawn away.

To Seed Raisins.—Buy plump, moist raisins. Have a bowl of tepid water by you to dip your fingers in from time to time as you work; and remove the seeds with a small, sharp knife. There are patented raisin seeders, but they do not always work satisfactorily. Sultana raisins should be cleaned like currants.

To Blanch Almonds.—Put the almonds in a bowl, pour boiling water over them, take out, rub the skin off each with a coarse cloth and drop into cold water immediately to keep them from becoming discolored. When all are done, dry in a cloth, then in a cool oven.

To Keep Fruit from Sinking to the Bottom of a Cake.—Warm the fruit, flour it, and do not stir too much after it is added to the cake. The pans for fruit cake should be lined with buttered paper, two thicknesses at the bottom, and the oven should be kept steady and not too hot. It is usually best to cover the cake for the first half hour or more after it goes into the oven with cardboard.

Plain Christmas Cake.—One lb. flour, ¼ lb. Sultana raisins, 1 lb. currants, 4 ozs. citron, grated rind of 2 oranges, ¼ cup strong sweet cider, ½ lb. butter, and the same of lard, 4 eggs, 2 teaspoons baking powder, 2 of ground cinnamon, 1 of cloves, 2 of ginger, ¼ a nutmeg. Beat sugar, lard and butter to a cream; add the eggs one by one; sift in the flour, warmed, and use only milk enough to make a very stiff batter—almost a dough. Begin with a small cupful, add the cider, and then, if too stiff to pour slowly, a little more milk. Stir in the fruit last. Bake in two tins 1½ hours. The baking powder should, of course, be sifted with the flour, just before adding.

A Cheap Plum Cake.—Dissolve a level teaspoon soda in 2 tablespoons warm water. Add to it half a pint of very thick sour cream. Stir a moment, and add half a cup New Orleans molasses. Mix thoroughly, then add half a pint brown sugar, 1 tablespoon allspice, 1 of cinnamon, and 3½ cups sifted flour. Add to the batter 1 lb. raisins, stoned and cut, and as many chopped almonds as you prefer. Bake in a moderate oven 1½ hours, or steam for 1 hour, and bake for the remaining ½ hour. Ice, if preferred.

Fruit Cake Will Keep for Years.—One lb. brown sugar, 1 lb. browned flour, 3 lbs. raisins, 2 lbs. currants, ¼ lb. butter, 1 cup molasses, 2 teaspoons cinnamon, 1 of cloves, 1 of nutmeg, 1 of soda, a little black pepper, 10 eggs, ½ cup currant jelly, ½ cup hot water.

White Fruit Cake.—Cream together 1 cup sugar and ½ cup butter. Add beaten white of 1 egg, 1 cup milk, and 2 cups flour, sifted with 2 teaspoons baking powder. Add 1 cup raisins and shredded citron, mixed and floured, and 1 teaspoon sherry.

Carrot Pudding. Almost as Good as Plum Pudding.—One cup sugar, 1 cup chopped suet, 1 cup raisins, currants and nuts (chopped) may be added, if preferred, 1 cup grated carrots, 1 cup grated potatoes, 1½ cups flour, 1 teaspoon soda, a pinch of salt. Steam or boil 3 hours, and serve with liquid sauce. This pudding may be made the day before using.

English Plum Pudding.—One lb. finely-chopped suet, 1 lb. stoned and halved raisins, 1 lb. currants, 1 lb. sultana raisins, 1 lb. chopped mixed peel, ½ lb. flour, ½ lb. bread crumbs, 1 full teaspoonful mixed spices, 1 lb. brown sugar, 8 eggs (well beaten), 1 wineglass brandy (if liked). Flour the fruit before using. Mix all together, adding the eggs and brandy last. Stir very thoroughly, and put in several small pudding cloths. Boil 7 hours. When putting in the bags, first wring them out of hot water, then flour well inside, and fill just 2-3 full of batter. Keep the water boiling constantly. When ready to serve, remove the pudding from the water, and plunge the bag for an instant in cold water, then turn immediately from the bag. By doing this, the pudding will not stick to the cloth.

Note.—Chopped nuts may be added to this, or any of the above recipes.

### MINCE MEAT.

Two lbs. lean fresh beef (boiled and minced when cold), ¼ lb. beef suet (minced), 5 lbs. apples (chopped), 2 lbs. seedless raisins, 1 lb. seeded raisins, 2 lbs. currants, 1 tablespoon cinnamon, 1 ground nutmeg, 1 teaspoon ground cloves, 1 level tablespoon fine salt, 2½ lbs. brown sugar, 1 pint vinegar or boiled cider, 1 pint water. This will keep all winter in a crock in a cool place. If it should dry out, add a little more liquid when making up the pies. Let the mixture stand at least 24 hours after it is made before using.

### A Natural Mistake.

Oliver Herford once entered a doubtful-looking restaurant in a small New York town and ordered a lamb chop. After a long delay, the waiter returned, bearing a plate on which reposed a dab of mashed potatoes and a much-overdone chop of microscopical proportions with a remarkably long and slender rib attached. This the waiter set down before him and then hurried away.

"See here," called Herford. "I ordered a chop."

"Yes sir," replied the man, "there it is."

"Ah, so it is," replied Herford, peering at it closely. "I thought it was a stack in the plate."

## Health in the Home

### Diabetes.

**Symptoms.**—Generally a capricious appetite; great thirst; loss in weight; tongue becomes sticky and moist at first, afterwards dry; saliva is acid; feebleness of vision; sugar in the urine; emaciation.

**Some of the Causes.**—Indirectly—Cold; blow on the diabetic center; overuse of starchy food; overwork. Actual Cause—Liver has failed to store up energy; proteid is all changed into sugar.

Among the medicines, nothing has as yet been found which can be relied on to cure or arrest the disease. The treatment of diabetes consists chiefly in regulations of the diet to avoid all starch and sugar.

**Treatment.**—Restrictions of starch and sugar; substitutions of fatty foods—eggs, cream and butter; among the vegetables—lettuce, cabbage, celery, onion and spinach, all contain very little starch. Give plenty of water in small quantities; milk only in small quantities. Substitute saccharin for sugar. The greatest difficulty is the bread, but the grain can be subjected to such a process that the starch is rejected and gluten retained. Gluten can be used in making of bread, cakes, sauces, etc.

#### DIETIC RECEIPTS FOR DIABETES.

**Gluten Cheese Cake.**—Half cup gluten flour, 3 tablespoons grated cheese, 1 egg yolk, tablespoon cream, salt and grated nutmeg. Mix well; roll thin, and bake like cookies.

**Gluten Bread.**—One cup milk, 2 teaspoons butter,  $\frac{1}{2}$  yeast cake, gluten flour to make thick batter. Mix, and beat thoroughly. Set to rise in warm place.

When sufficiently light, add flour to make soft dough; knead lightly. Place in buttered pans, and allow it to rise to double size. Bake one hour.

**Almond-meal Cakes.**—Add to well-beaten whites of 2 eggs 1 tablespoon lemon juice, 10 scant tablespoons almond meal. Beat thoroughly. Drop in slightly-heated tins. Bake from 10 to 15 minutes in moderate oven.

**Gluten Muffins.**—One and a half cups gluten flour, 1 cup milk, 1 egg, salt. Beat eggs; add milk; sift in flour and salt. Cook in hot oven.

**Gluten Cream Wafer.**—One tablespoon cream, salt, gluten flour to make a stiff dough. Roll thin, and cut. Bake till light straw color.

**Gluten Souffle.**—One-quarter cup gluten flour, 2 tablespoons grated cheese, 1 egg, 3 tablespoons cream, 2 tablespoons milk. Mix flour, cream, beaten yolk and cheese well together. Beat in white, stiff. Bake as pudding. Serve at once.

**Chicken Croquettes.**—Make thick white sauce of butter, milk and gluten flour. Season. Take equal parts of sauce and chicken, cool, shape, roll in gluten flour, egg, roll in gluten again. Fry in deep fat, or bake in a quick oven.

**Creamed Fish.**—One cup milk, 2 tablespoons flour and butter, salt, pepper, 2 teaspoons lemon juice. Make into white sauce. Boil, and flake,  $\frac{1}{2}$  lb. whitefish. Place in alternate layers in baking-dish, buttered. Sprinkle with flour, and brown in oven.

**Fish Pudding.**—Make a thick sauce of butter, egg yolk and milk. Season highly with tomato sauce, or onions. Pour over flaked fish. Bake in oven.

**Scrambled Eggs, Asparagus Tips.**—Heat asparagus in salted water, cut off tips. Pour over them 2 tablespoons melted butter. Scramble eggs; add asparagus to eggs. Serve on gluten toast.

**Orange Sponge.**—One tablespoon gelatine, 2 tablespoons cold water,  $\frac{1}{2}$  cup boiling water, 2 saccharin tablets (1 gr.), 1 tablespoon lemon juice,  $\frac{1}{2}$  cup orange juice. Dissolve gelatine with cold water; add boiling water and saccharin. Add fruit juice. Set in a cool place. When partly stiff, beat to a froth. Mould, and serve with whipped cream.

**Chicken Custard.**—One cup chicken soup, 1 cup cream, yolks of 3 eggs well beaten. Mix yolks and cream; add to warm stock. Cook until custard coats the spoon. Season with salt and pepper. Serve in cups.

Apples can be substituted for potatoes. Peel, cut into sections, and fry in deep fat.

MARION DALLAS.

### Birth Stones.

#### January.

By her who in this month is born,  
No gems, save Garnets, should be worn.  
They will insure her constancy,  
True friendship and fidelity.

#### February.

The February-born shall find  
Sincerity and peace of mind,  
Freedom from passion and from care,  
If they the Amethyst will wear.

#### March.

Who on this world of ours, their eyes  
In March first open, shall be wise,  
In days of peril, firm and brave,  
And wear a Bloodstone to their grave.

#### April.

She who from April dates her years,  
Diamonds should wear, lest bitter tears  
For vain repentance flow. This stone  
Emblem of innocence is known.

#### May.

Who first beholds the light of day  
In Spring's sweet, flowery month of May  
And wears an Emerald all her life,  
Shall be a loved and happy wife.

#### June.

Who comes with summer to this earth,  
And owes to June her hour of birth,  
With ring of Agate on her hand  
Can health, wealth, and long life command.

#### July.

The glowing Ruby shall adorn  
Those who in July are born;  
Then they'll be exempt and free  
From love's doubts, anxiety.

#### August.

Wear a Sardonyx, or for thee  
No conjugal felicity;  
The August-horn, without this stone,  
'Tis said must live unloved and alone.

#### September.

A maiden born when Autumn leaves  
Are rustling in September's breeze,  
A Sapphire on her brow should bind,  
'Twill cure diseases of the mind.

#### October.

October's child is born for woe,  
And life's vicissitudes must know;  
But lay an Opal on her breast,  
And hope will lull those woes to rest.

#### November.

Who first comes to this world below,  
With drear November's fog and snow,  
Should prize the Topaz's amber hue,  
Emblem of friends and lovers true.

#### December.

If cold December gave you birth,  
The month of snow and ice and mirth—  
Place in your hand a Turquoise blue,  
Success will bless whate'er you do.

### If You are Well Bred.

You will try to make others happy.  
You will not be sky or self-conscious.  
You will never indulge in ill-natured gossip.

You will never forget the respect due to age.

You will think of others before you think of yourself.

You will not swagger or boast of your achievements.

You will not measure your civility by people's bank accounts.

You will be scrupulous in your regard for the rights of others.

In conversation you will not be argumentative or contradictory.

You will not forget engagements, promises or obligations of any kind.

You will not make fun of the peculiarities or idiosyncrasies of others.

You will not bore people by constantly talking of yourself and your affairs.

You will never under any circumstances cause another pain if you can help it.

You will not think that "good intentions" compensate for rude or gruff manners.

Do unto others as if you were the others.

## THE REAL VALUE

of a flour depends upon the amount of nourishment the body can derive from it. Two flours may look alike, and yet be very different as regards real value.

"FIVE ROSES" Flour is made from the richest, strongest Manitoba Hard Wheat by processes especially designed to remove all valueless, innutritious matter, and to retain all the gluten and phosphates. There is no more nourishing or more wholesome flour made. Ask your grocer for it to-day.

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FOR A LONGER PERIOD THAN ANY OTHER ORGAN ON THE MARKET.

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A full and competent staff of instructors.

Tuition Free.

For calendar, giving full particulars regarding the different courses, etc., write:

J. W. MITCHELL, SUPT.

THE only medium which conveys weekly to the farmers of Canada the advertiser's place of business is the Farmer's Advocate and Home Magazine.

### In Our Father's Care.

By Margaret E. Sangster.

The ships glide in at the harbor's mouth,

And the ships sail out to sea,  
And the wind that sweeps from the sunny South

Is as sweet as sweet can be.  
There's a world of toil and a world of pains,

There's a world of trouble and care,  
But oh, in a world where our Father reigns,  
There is gladness everywhere.

The earth is fair in the breezy morn,  
And the toilers sow and reap,  
And the fulness comes to the tasseled corn,

Whether we wake or sleep.  
And far on the hills by feet untrod,  
There are blossoms that scent the air,  
For oh, in this world of our Father,  
God,  
There is beauty everywhere.

The babe lies soft on the mother's breast,  
And the tide of joy flows in,  
He giveth, he taketh, he knoweth best,  
The Lord to whose home we win.

And oh, when the soul is with trials tossed,  
There is help in the lifted prayer,  
For never a soul that he loves is lost,  
And our Father is everywhere.

The ships sail over the harbor bar  
Away and away to sea.  
The ships sail in with the evening star  
To the port where no tempests be.  
The harvest waves on the summer hills,  
And the hands go forth to reap.  
And all is right, as our Father wills,  
Whether we wake or sleep.

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IS NO LONGER AN EXPERIMENT—it is reliable, endorsed by physicians, and skillfully and scientifically applied has proved itself a positive method for permanently and harmlessly removing these troubles.

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**Bob, Son of Battle.**

By ALFRED OLLIVANT.  
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CHAPTER XI.  
Oor Bob.

M'Adam's pride in the great Cup that now graced his kitchen was supreme. It stood alone in the very centre of the mantelpiece, just below the old bell-mouthed blunderbuss that hung upon the wall. The only ornament in the bare room, it shone out in its silvery chastity like the moon in a gloomy sky.

For once the little man was content. Since his mother's death David had never known such peace. It was not that his father became actively kind; rather that he forgot to be actively unkind.

"Not as I care a brazen button one way or t'ither," the boy informed Maggie.

"Then yo' should," that proper little person replied.

M'Adam was, indeed, a changed being. He forgot to curse James Moore; he forgot to sneer at Owd Bob; he rarely visited the Sylvester Arms, to the detriment of Jem Buton's pocket and temper; and he was never drunk.

"Soaks 'isselt at home, instead," suggested Tammass, the prejudiced. But the accusation was untrue.

"Too drunk to git so far," said Long Kirby, kindly man.

"I reck'n the Cup is kind o' company to him," said Jim Mason. "Happen it's lonesomeness as drives him here so much." And happen you were right, charitable Jim.

"Best mak' maist on it while he has it, 'cos he'll not have it for long," Tammass remarked amid applause.

Even Parson Leggy allowed—rather reluctantly, indeed, for he was but human—that the little man was changed wonderfully for the better.

"But I am afraid it may not last," he said. "We shall see what happens when Owd Bob beats him for the Cup, as he certainly will. That'll be the critical moment."

As things were, the little man spent all his spare moments with the Cup between his knees, burnishing it and crooning to Wullie:

"I never saw a fairer,  
I never lo'ed a dearer,  
And neist my heart I'll wear her,  
For fear my jewel tine."

There, Wullie! look at her! is she no bonnie? She shines like a twinkle—twinkle in the sky." And he would hold it out at arm's length, his head cocked sideways the better to scan its bright beauties.

The little man was very jealous for his treasure. David might not touch it; might not smoke in the kitchen lest the fumes should tarnish its glory; while if he approached too closely he was ordered abruptly away.

"As if I wanted to touch his nasty Cup!" he complained to Maggie. "I'd sooner any day—"

"Hands aff, Mr. David, immediate!" she cried indignantly. "Pertinence, indeed!" as she tossed her head clear of the big fingers that were fondling her pretty hair.

So it was that M'Adam, on coming quietly into the kitchen one day, was consumed with angry resentment to find David actually handling the object of his reverence; and the manner of his doing it added a thousandfold to the offence.

The boy was lolling indolently against the mantelpiece, his fair head shoved right into the Cup, his breath dimming its lustre, and his two hands, big and dirty, slowly revolving it before his eyes.

Bursting with indignation, the little man crept up behind the boy. David was reading through the long list of winners.

"Theer's the first on 'em," he muttered, shooting out his tongue to indicate the locality: "'Andrew Moore's Rough, 178—' And theer agin—'James Moore's Pinch, 179—' And agin—'Beck, 182—' Ah, and theer's 'im Tammass tells on 'Rex, 183—' and 'Rex, 183—' Ay, but he was a rare un by all tellin's! If he'd nob-but won but onst agin! Ah,

and theer's none like the Gray Dogs—they all says that, and I say so masel'; none like the Gray Dogs o' Kenmuir, bless 'em! And we'll win agin too—" he broke off short; his eye had travelled down to the last name on the list.

"M'Adam's Wull'!" he read with unspeakable contempt, and put his great thumb across the name as though to wipe it out. "M'Adam's Wull'! Goo gracious sakes! P-h-g-h-r-r!"—and he made a motion as though to spit upon the ground.

But a little shoulder was into his side, two small fists were beating at his chest, and a shrill voice was yelling: "Devil! devil! stan' awa'!"—and he was tumbled precipitately away from the mantelpiece, and brought up abruptly against the side-wall.

The precious Cup swayed on its ebony stand, the boy's hands, rudely withdrawn, almost overthrowing it. But the little man's first impulse, cursing and screaming though he was, was to steady it.

"M'Adam's Wull'! I wish he was here to teach ye, ye snod-faced, ox-limbed profliegit!" he cried, standing in front of the Cup, his eyes blazing.

"Ay, 'M'Adam's Wull'! And why not 'M'Adam's Wull'? Ha' ye ony objection to the name?"

"I didn't know yo' was theer," said David, a thought sheepishly.

"Na; or ye'd not ha' said it."

"I'd ha' thought it, though," muttered the boy.

Luckily, however, his father did not hear. He stretched his hands up tenderly for the Cup, lifted it down, and began reverently to polish the dimmed sides with his handkerchief.

"Ye're thinkin', nae doot," he cried, casting up a vicious glance at David, "that Wullie's no gude enough to ha' his name alongside o' theer's cursed Gray Dogs. Are ye no? Let's ha' the truth for aince—for a diversion."

"Reck'n he's good enough if there's none better," David replied dispassionately.

"And wha should there be better? Tell me that, ye muckle gowk."

David smiled.

"Eh, but that'd be long tellin'," he said.

"And what wad ye mean by that?" his father cried.

"Nay; I was but thinkin' that Mr. Moore's Bob'll look gradely writ under yo'." He pointed to the vacant space below Red Wull's name.

The little man put the Cup back on its pedestal with hurried hands. The handkerchief dropped unconsidered to the floor; he turned and sprang furiously at the boy, who stood against the wall, still smiling; and, seizing him by the collar of his coat, shook him to and fro with fiery energy.

"So ye're hopin', prayin', nae doot, that James Moore—curse him!—will win ma Cup awa' from me, yer ain dad. I wonder ye're no 'shamed to cross ma door! Ye live on me; ye suck ma blood, ye foul-mouthed leech. Wullie and me brak' oorsels to keep ye in hoose and name—and what's yer gratitude? Ye plot to rob us of oor rights!"

He dropped the boy's coat and stood back.

"No rights about it," said David, still keeping his temper.

"If I win is it no ma right as muckle as ony Englishman's?"

Red Wull, who had heard the rising voices, came trotting in, scowled at David, and took his stand beside his master.

"Ay, if yo' win it," said David, with significant emphasis on the conjunction.

"And wha's to beat us?"

David looked at his father in well-affected surprise.

"I tell yo' Owd Bob's rinnin'," he answered.

"And what if he is?" the other cried.

"Why, even yo' should know so much," the boy sneered.

The little man could not fail to understand.

"So that's it!" he said. Then, in a scream, with one finger pointing to the great dog:

"And what o' him? What'll ma Wullie be doin' the while? Tell me that, and ha' a care! Mind ye, he stan's here hearkenin'!" And, indeed, the Tailless Tyke was bristling for battle.

David did not like the look of things, and edged away toward the door.

"What'll Wullie be doin', ye chicken-hearted brock?" his father cried.

"'Im?" said the boy, now close on the door. "'Im?" he said, with a slow contempt that made the red bristles quiver on the dog's neck. "Lookin' on, I should think—lookin' on. What else is he fit for? I tell yo' oor Bob—"

"Oor Bob!" screamed the little man, darting forward. "'Oor Bob! Hark to him! I'll 'oor—' At him, Wullie! at him!"

But the Tailless Tyke needed no encouragement. With a harsh roar he sprang through the air, only to crash against the closing door.

The outer door banged, and in another second a mocking finger tapped on the window-pane.

"Better luck to the two on yo' next time!" laughed a scornful voice; and David ran down the hill toward Kenmuir.

CHAPTER XII.

How Red Wull Held the Bridge.

From that hour the fire of M'Adam's jealousy blazed into a mighty flame. The winning of the Dale Cup had become a mania with him. He had won it once, and would again despite all the Moores, all the Gray Dogs, all the undutiful sons in existence: on that point he was resolved. The fact of his having tasted the joys of victory served to whet his desire. And now he felt he could never be happy till the Cup was his own—won outright.

At home David might barely enter the room where the trophy stood.

"I'll not ha' ye touch me Cup, ye dirty-fingered, ill-begotten wastrel. Wullie and me won it—ye'd naught to do wi' it. Go you to James Moore and James Moore's dog."

"Ay, and shall I tak' Cup wi' me? er will ye bide till it's took from ye?"

So the two went on; and every day the tension approached nearer breaking-point.

In the Dale the little man met with no sympathy. The hearts of the Dalesmen were to a man with Owd Bob and his master.

Whereas once at the Sylvester Arms his shrill, ill tongue had been rarely still, now he maintained a sullen silence; Jem Burton, at least, had no cause of complaint. Crouched away in a corner, with Red Wull beside him, the little man would sit watching and listening as the Dalesmen talked of Owd Bob's doings, his staunchness, sagacity, and coming victory.

Sometimes he could restrain himself no longer. Then he would spring to his feet, and stand, a little swaying figure, and denounce them passionately in almost pathetic eloquence. These orations always concluded in set fashion.

"Ye're all agin us!" the little man would cry in quivering voice.

"We are that," Tammass would answer complacently.

"Fair means or foul, ye're content sae lang as Wullie and me are beat. I wonder ye dinna poison him—a little arsenic, and the way's clear for your Bob."

"The way is clear enough wi'oot that," from Tammass caustically. Then a lengthy silence, only broken by that exceeding bitter cry: "Eh, Wullie, Wullie, they're all agin us!"

And always the rivals—red and gray—went about seeking their opportunity. But the Master, with his commanding presence and stern eyes, was ever ready for them. Toward the end, M'Adam, silent and sneering, would secretly urge on Red Wull to the attack; until, one day in Grammoche-town, James Moore turned on him, his blue eyes glittering. "D'yo' think, yo' little fule," he cried in that hard voice of his, "that onst they got set we should iver git either of them off alive?" It seemed to strike the little man as a novel idea; for, from that moment, he was ever the first in his feverish endeavors to oppose his small form, buffer-like, between the would-be combatants.

Curse as M'Adam might, threaten as he might, when the time came Owd Bob won.

The styles of the rivals were well contrasted: the patience, the insinuating eloquence, combined with the splendid dash of the one; and the fierce, driving fury of the other.

The issue was never in doubt. It may have been that the temper of the Tailless

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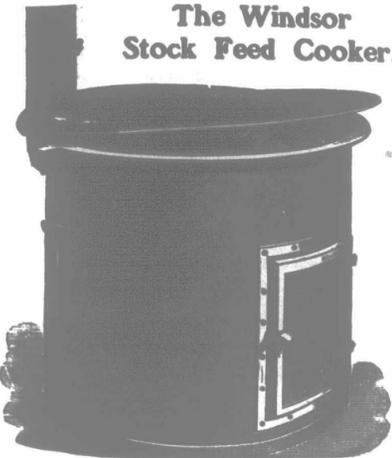
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Tyke gave in the time of trial; it may have been that his sheep were wild, as M'Adam declared; certainly not, as the little man alleged in choking voice, that they had been chosen and purposely set aside to ruin his chance. Certain it is that his tactics scared them hopelessly; and he never had them in hand.

As for Owd Bob, his drooping, his driving, his penning, aroused the loud-tongued admiration of crowd and competitors alike. He was patient yet persistent, quiet, yet firm, and seemed to coax his charges in the right way in that inimitable manner of his own.

When, at length, the verdict was given, and it was known that, after an interval of half a century, the Shepherds' Trophy was won again by a Gray Dog of Kenmuir, there was such a scene as has been rarely witnessed on the slope behind the Dalesman's Daughter.

Great fists were slapped on mighty backs; great feet were stamped on the sun-dried banks of the Silver Lea; stalwart lungs were strained to their uttermost capacity; and roars of "Moore!" "Owd Bob o' Kenmuir!" "The Gray Dogs!" thundered up the hillside, and were flung, thundering, back.

Even James Moore was visibly moved as he worked his way through the cheering mob; and Owd Bob, trotting alongside him in quiet dignity, seemed to wave his silvery brush in acknowledgment.

Master Jacky Sylvester alternately turned cart-wheels and felled the Hon. Launcelot Bilks to the ground. Lady Eleanor, her cheeks flushed with pleasure, waved her parasol, and attempted to restrain her son's exuberance. Parson Leggy danced an unclerical jig, and shook hands with the squire till both those fine old gentlemen were purple in the face. Long Kirby selected a small man in the crowd, and bashed his hat down over his eyes. While Tammas, Rob Saunderson, Tupper, Hopkin, Londeley, and the rest joined hands and went raving round like so many giddy girls.

Of them all, however, none was so uproarious in the mad heat of his enthusiasm as David M'Adam. He stood in the Kenmuir wagon beside Maggie, a conspicuous figure above the crowd, as he roared in hoarse ecstasy:

"Weel done, oor Bob! Weel done, Mr. Moore! Yo've knocked him! Knock him agin! Owd Bob o' Kenmuir! Moore! Moore o' Kenmuir! Hip! Hip!" until the noisy young giant attracted such attention in his boisterous delight that Maggie had to lay a hand upon his arm to restrain his violence.

Alone, on the far bank of the stream, stood the vanquished pair.

The little man was trembling slightly; his face was still hot from his exertions; and as he listened to the ovation accorded to his conqueror, there was a piteous set grin upon his face. In front stood the defeated dog, his lips wrinkling and hackles rising, as he, too, saw and heard and understood.

"It's a gran' thing to ha' a dutiful son, Wullie," the little man whispered, watching David's waving figure. "He's happy—and so are they a'—not sae much that James Moore has won, as that you and I are beat."

Then, breaking down for a moment: "Eh, Wullie, Wullie! they're all agin us. It's you and I alane, lad."

Again, seeing the squire followed by Parson Leggy, Viscount Birdsaye, and others of the gentry, forcing their way through the press to shake hands with the victor, he continued:

"It's good to be in wi' the quality, Wullie. Niver mak' a friend of a man beneath ye in rank, nor an enemy of a man aboon ye: that's a soond principle, Wullie, if ye'd get on in honest England."

He stood there, alone with his dog, watching the crowd on the far slope as it surged upward in the direction of the committee tent. Only when the black mass had packed itself in solid phalanges about that ring, inside which, just a year ago, he had stood in very different circumstances, and was at length still, a wintry smile played for a moment about his lips. He laughed a mirthless laugh.

"Bide a wee, Wullie—he! he! Bide a wee. 'The best-laid schemes o' mice and men Gang aft agley.'"

As he spoke, there came down to him, above the tumult, a faint cry of mingled surprise and anger. The cheering ceased abruptly. There was silence; then there

burst on the stillness a hurricane of indignation.

The crowd surged forward, then turned. Every eye was directed across the stream. A hundred damning fingers pointed at the solitary figure there. There were hoarse yells of: "There he be! Yon's him! What's he done wi' it? Thief! Throttle him!"

The mob came lumbering down the slope like one man, thundering their imprecations on a thousand throats. They looked dangerous, and their wrath was stimulated by the knot of angry Dalesmen who led the van. There was more than one white face among the women at the top of the slope as they watched the crowd blundering blindly down the hill. There were more men than Parson Leggy, the squire, James Moore, and the local constables in the thick of it all, striving frantically with voice and gesture, ay, and stick too, to stem the advance.

It was useless; on the dark wave rolled, irresistible.

On the far bank stood the little man, motionless, awaiting them with a grin upon his face. And a little farther in front was the Tailless Tyke, his back and neck like a new-shorn wheat-field, as he rumbled a vast challenge.

"Come on, gentlemen!" the little man cried. "Come on! I'll bide for ye, never fear. Ye're a thousand to one and a dog. It's the odds ye like, Englishmen a'."

And the mob, with murder in its throat, accepted the invitation and came on.

At the moment, however, from the slope above, clear above the tramp of the multitude, a great voice bellowed: "Way! Way! Way for Mr. Trotter!" The advancing host checked and opened out; and the secretary of the meeting bundled through.

He was a small, fat man, fussy at any time, and perpetually perspiring. Now his face was crimson with rage and running; he gesticulated wildly; vague words bubbled forth, as his short legs twinkled down the slope.

The crowd paused to admire. Some one shouted a witticism, and the crowd laughed. For the moment the situation was saved.

The fat secretary hurried on down the slope, unheeding of any insult but the one. He bounced over the plank-bridge; and as he came closer, M'Adam saw that in each hand he brandished a brick.

"Hoots, man! dinna throw!" he cried, making a feint as though to turn in sudden terror.

"What's this? What's this?" gasped the secretary, waving his arms.

"Bricks, 'twad seem," the other answered, staying his flight.

The secretary puffed up like a pudding in a hurry.

"Where's the Cup? Champion, Challenge, etc.," he jerked out. "Mind, sir, you're responsible! Wholly responsible! Dents, damages, delays! What's it all mean, sir? These—these monstrous creations"—he brandished the bricks, and M'Adam started back—"wrapped, as I live, in straw, sir, in the Cup case, sir? the Cup case! No Cup! Infamous! Disgraceful! Insult me—meeting—committee—every one! What's it mean, sir?" He paused to pant, his body filling and emptying like a bladder.

M'Adam approached him with one eye on the crowd, which was heaving forward again, threatening still, but sullen and silent.

"I pit 'em there," he whispered; and drew back to watch the effect of his disclosure.

The secretary gasped. "You—you not only do this—amazing thing—these monstrosities"—he hurled the bricks furiously on the offending ground—"but you dare to tell me so!"

The little man smiled. "'Do wrang and conceal it, do right and confess it,' that's Englishmen's motto, and mine, as a rule; but this time I had ma reasons."

"Reasons, sir! No reasons can justify such an extraordinary breach of all the—decencies. Reasons? the reasons of a maniac. Not to say more, sir. Fraudulent detention—fraudulent, I say, sir! What were your precious reasons?"

The mob with Tammas and Long Kirby at their head had now wellnigh reached the plank-bridge. They still looked dangerous, and there were isolated cries of:

"Duck him!" "Chuck him in!" "An' the dog!" "Wi' one o' they bricks about their necks!"

"There are my reasons!" said M'Adam, pointing to the forest of menacing faces. "Ye see I'm no beloved amang yonder gentlemen, and"—in a stage whisper in the other's ear—"I thoct maybe I'd be 'tacked on the road."

Tammas, foremost of the crowd, had now his foot upon the first plank.

"Ye robber! ye thief! Wait till we set hands on ye, you and yer gorilla!" M'Adam half turned.

"Wullie," he said quietly, "keep the bridge."

At the order the Tailless Tyke shot gladly forward, and the leaders on the bridge as hastily back. The dog galloped on to the rattling plank, took his post fair and square in the centre of the narrow way, and stood facing the hostile crew like Cerberus guarding the gates of hell: his bull-head was thrust forward, hackles up, teeth glinting, and a distant rumbling in his throat, as though daring them to come on.

"Yo' first, old lad!" said Tammas, hopping agilely behind Long Kirby.

"Nay; the old uns lead!" cried the big smith, his face gray-white. He wrenched round, pinned the old man by the arms, and held him forcibly before him as a covering shield. There ensued an unseemly struggle betwixt the two vallants, Tammas bellowing and kicking in the throes of mortal fear.

"Jim Mason'll show us," he suggested at last.

"Nay," said honest Jim; "I'm fear'd." He could say it with impunity; for the pluck of Postie Jim was a matter long past dispute.

Then Jem Burton'd go first? Nay; Jem had a lovin' wife and dear little kids at 'ome.

Then Big Bell? Big Bell'd see 'isself further first.

A tall figure came forcing through the crowd, his face a little paler than its wont, and a formidable knob-berry in his hand.

"I'm gorn!" said David.

"But yo're not," answered burly Sam'l, gripping the boy from behind with arms like the roots of an oak. "Your time'll coom soon enough by the look on yo' wi' niver no hurry." And the sense of the Dalesmen with the big man; for, as old Rob Saunderson said:

"I reck'n he'd liefer claw on to your throat, lad, ner ony o' ours."

As there was no one forthcoming to claim the honor of the lead, Tammas came forward with cunning counsel.

"Tell yo' what, lads, we'd best let 'em as don't know nowt at all about him go first. And onst they're on, mind, we winna let 'em off; but keep a-shovin' and a-bovin' 'on 'em forra'd. Then us'll foller."

By this time there was a little naked space of green round the bridge-head, like a fairy circle, into which the uninitiated might not penetrate. Round this the mob hedged: the Dalesmen in front, striving knavishly back and bawling to those behind to leggo that shovin'; and these latter urging valourously forward, yelling jeers and contemptually at the front rank.

"Come on! O's afraid? Larras through to 'em, then, ye Royal Stag-backs!"—for well they knew the impossibility of their demand.

And as they wedged and jostled thus, there stole out from their midst as gallant a champion as ever trod the grass. He trotted out into the ring, the gaunt figure on the bridge. The sun lit the sprinkling of snow on the dome of his head; one forepaw was off the ground; and he stood there, royally alert, scanning his antagonist.

"Th' Owd Un!" went up in a roar fit to split the air as the hero of the day was recognized. And the Dalesmen gave a pace forward spontaneously as the gray knight-errant stole across the green.

"Oor Bob'll fetch him!" they roared, their blood leaping to fever heat, and gripped their sticks, determined in stern reality to follow now.

The gray champion trotted up on to the bridge, and paused again, the long hair about his neck rising like a ruff, and a strange glint in his eyes; and the holder of the bridge never moved. Red

and Gray stood thus, face to face: the one gay yet resolute, the other motionless, his great head slowly sinking between his forelegs, seemingly petrified.

There was no shouting now: it was time for deeds, not words. Only, above the stillness, came a sound from the bridge like the snore of a giant in his sleep, and, blending with it, a low, deep, purring thunder like some monster's cat well pleased.

"Wullie," came a solitary voice from the far side, "keep the bridge!"

One ear went back, one ear was still forward; the great head was low and lower between his forelegs and the glowing eyes rolled upward so that the watchers could see the murderous white. Forward the gray dog stepped.

Then, for the second time that afternoon, a voice, stern and hard, came ringing down from the slope above over the heads of the many.

"Bob, lad, coom back!"

"He! he! I thocht that was comin'."

The gray dog heard, and checked.

"Bob, lad, coom in, I say!"

At that he swung round and marched slowly back, gallant as he had come, dignified still in his mortification.

And Red Wullie threw back his head and bellowed a pean of victory—challenge, triumph, scorn, all blended in that bull-like, blood-chilling blare.

In the mean time, M'Adam and the secretary had concluded their business. It had been settled that the Cup was to be delivered over to James Moore not later than the following Saturday.

"Saturday, see! at the latest!" the secretary cried as he turned and trotted off.

"Mr. Trotter," M'Adam called after him, "I'm sorry, but ye maun bide this side the Lea till I've reached the foot o' the Pass. Gin they gentlemen"—nodding toward the crowd—"should set hands on me, why—" and he shrugged his shoulders significantly.

"For-by, Wullie's keepin' the bridge."

With that the little man strolled off leisurely; now dallying to pick a flower, now to wave a mocking hand at the furious mob, and so slowly on to the foot of the Murk Muir Pass.

There he turned and whistled that shrill, peculiar note.

"Wullie, Wullie, to me!" he called.

At that, with one last threat thrown at the thousand souls he had held at bay for thirty minutes, the Tailless Tyke swung about and galloped after his lord.

(To be continued.)

With the Flowers.

Polyanthus Narcissus.

A correspondent asks when Polyanthus Narcissus should be brought into the light to have it in bloom by Christmas. It is impossible to answer this question with certainty, without knowing when the bulbs were planted or the conditions under which they have been kept while making root-growth.

Winter Protection for Tender Roses and Shrubs.

If very tender, roses and shrubs may be protected by any of the following methods:

- 1. If the shrub is small, bend it over, and cover with 4 inches of soil. Over this place a V-shaped covering of boards to shed the water.
2. Bank up the shrub well with dry leaves and invert over it a box or barrel, perforated to give ventilation.
3. Put old grain sacks over shrubs, tie in place, then bank around with leaves or manure.

Protecting Perennials.

Perennials, especially for the first winter, should be well mulched with straw, manure, clean straw, or oak or hard maple leaves. Put on the mulch a few days after the ground has frozen to the depth of an inch or two.

Health in the Home



Winniepeg Heater

which keeps your feet warm and your head clear, by drawing the cold air from the floor, and establishing a perfect circulation, thereby equalizing the heat, and radiating a mild and invigorating heat like that of sunshine.

It keeps the air moist, and does not vitiate. Write for circular and particulars to Dept. 6.

The '1900' WASHER CO. 355 YONGE ST., TORONTO, ONT.

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

TERMS—Three cents per word each insertion. Each initial counts for one word and figures for two words. Names and addresses are counted. Cash must always accompany the order. No advertisement inserted for less than 50 cents.

ALBERTA FARM LANDS in a banner district. Real bargains. J. S. Pineo, Crossfield.

FOR SALE—One hundred-acre farm, lot 10, concession 3, Nelson, 11 miles east of Hamilton, in garden of Canada. Brick house; basement barn; good stabling; abundance of water and fruit; in good cultivation. Possession at once if desired. W. Clifton, Appleby P. O., Ont.

IMPROVED farms for sale in the Edmonton district. Candy & Co., Edmonton, Alta.

WANTED—Married man. All-round good farm hand and milker. Comfortable house; garden; land for potatoes, and fuel. State wages. W. W. Ballantyne, Stratford Ont.

266 ACRES for sale at Paisley, in Tp. Elderslie, Co. Bruce; lots 16 and 17, con. B.; part lot 17, con. A. Large quantity of timber. Brick clay on property. For particulars write: P. S. Gibson, Willowdale, Ont., or G. W. Gibson, Drew, Ont.

PARTNER WANTED

FOR A DAIRY FARM.

The farm is over 200 acres, clay loam. 37 miles west of Montreal, on the Ottawa River. C. P. R. station and steamboat wharf on the property. Forty head of pure-bred and grade Holsteins, carefully selected for performance. Milk shipped daily to Montreal. Dwelling house, furnace, hot and cold water, barn, silos, dairy, ice-house, wagon shed. Farm fully equipped. Horses, wagons, implements, etc. A man of experience and ability wanted as a partner. He to supply necessary labor and properly run the farm. Profits to be divided. Cottages nearby, and good help available. Alfalfa clover and corn well. The chance of a lifetime for the right man of experience with the necessary help. Apply, stating references.

JAS. J. RILEY, JR.,

P.O. Box 953. Montreal.

POULTRY AND EGGS



Condensed advertisements will be inserted under this heading at two cents per word each insertion. Each initial counts for one word, and figures for two words. Names and addresses are counted. Cash must always accompany the order for any advertisements under this heading. Parties having good pure-bred poultry and eggs for sale will find plenty of customers by using our advertising columns. No advertisement inserted for less than 50 cents.

BRONZE turkeys (Bell's strain). Toms, \$3; hens, \$2.50. Barred Rocks and Buff Orpingtons, \$1 each. Pair, \$1.75. S. L. Anderson, Crossland, Ont.

BARRED Rock cockerels. Large, vigorous birds, barred to the skin. Satisfaction guaranteed or money refunded. W. W. Dods, Alton, Ont.

CHOICE guineas, \$1.50 per pair; also White Wyandotte cockerels, \$1 up. Jas. Burns, Hampton, Ont.

FOR SALE—Mammoth Bronze turkeys, imported and home-bred; Imperial Pekin ducks: White, Silver and Partridge Wyandottes. Barred Rocks—a number of the above mentioned were prizewinners this fall. D. A. Graham, Wanstead, Ont.

FOR SALE—White Leghorns, White Wyandottes. Have a few choice cockerels at dollar each. E. W. Burt, Paris, Ont.

FOR SALE—Twenty young Cornish Indian Game winners, three dollars a pair. Mensell Oliver, St. Mary's, Ont.

HOUDAN cockerels, April hatch, from my imported Perason's stock, \$2 each. Satisfaction guaranteed. Order at once. Verdy Charlton, Ilderton, Ont.

SINGLE-COMB Black Minorca cockerels and pullets for sale, sired by champion St. Louis cock. Great laying strain \$3 to \$5 each. T. A. Faulds, 11 Victor St., London.

TWO Silver-spangled Hamburg cockerels (pure-bred) \$2.50 each John Heise, Victoria Square, Ont.

WHITE WYANDOTTES. Good blocky young birds ready to ship. W. D. Monkman, Rond Head, Ont.

WRITE at once to Jas. McCormack, Brantford, and get prices on White Leghorn cockerels, hens and pullets. Bred from winners at Toronto and London.

HORSE SENSE.

Just how or when the expression, "Horse Sense," originated we do not know, but somehow it seems to express more than "common sense," although it is difficult to define the difference, if there is a difference, in the meaning of the two expressions. If a horse becomes covered with sores, which appear to itch and are irritable, his owner does not show either horse sense or common sense when he attempts to remove the trouble by external applications of lotions, solutions or liniments. Common sense, if he had it, would teach him that the trouble was with the stomach and blood, and that the sores were simply Nature's way of relieving the system of impurities. Horse sense would teach him that the way of cure lay with the first cause, and there are hundreds of practical farmers in all parts of Canada who would tell him that by the regular use of Herbageum the first cause, which is lack of assimilation of food, may be readily overcome.

For instance, Alfred A. Taylor, of Margaree Harbor, C. B., says:

"I have never used the equal of Herbageum with horses. It cleans out worms, drives away lice, cures scratches, keeps the kidneys right, and puts the blood and general condition as you want it, giving a fine, sleek and healthy appearance."

From the Province of Nova Scotia:

"I had a mare covered all over with sores, and I thought I would lose her. I then gave Herbageum, and she came around all right. JAMES DREW. Chesley Corners."

From the Province of New Brunswick:

"I have used Herbageum during eight years for my horses, and would not do without it in the spring of the year. It cleans out worms, improves the blood, and is an excellent remedy for scratches. ALES. OGILVY. South Tilley, Victoria Co., N. B."

From the Province of P. E. I.:

"I received, in a trade, a mare that was in frightfully bad order. At once got 12 pounds of Herbageum, and began its use. Being scarce of hay, I fed her on oat straw, with half a gallon of oats twice a day, to which was added, regularly, a tablespoonful of Herbageum. It put her in fine order, and I am thoroughly satisfied of its value. THOS. WOODS. Kelly's Cross, Lot 29, P. E. I."

From the Province of Quebec:

"I have a horse of good build, which was covered with scabs and in bad order generally—perfectly useless. I questioned if he would live, and would have sold him for \$5, but, getting no offer, I began feeding him Herbageum; after a few months he was in fine order, and better than he had ever been. R. VILLENEUVE. (With T. Owens & Son). Stenfield, Que."

From the Province of Ontario:

"About four years ago, I took from the livery stable a horse that you would not have given five dollars for. I started feeding him Herbageum, and in two months' time was offered \$80 for him. It will cure scratches, clean out lice and bots, and put life in a horse, and give him a fine, glossy coat. HENRY BEDARD. Alexandria, Ont."

From the Province of Manitoba:

"I use Herbageum in my livery stable, and find it satisfactory and of special benefit in cases of indigestion. L. R. REYNOLDS. Oak Lake, Man."

From the Northwest Territories:

"Have used Herbageum in my livery stables for some two or three years. It keeps the kidneys right and builds a horse up in good shape. I like it for regular use. E. JOHNSTON. Qu'Appelle Station, N. W. T."

From Alberta:

"After using Herbageum in my livery stables, my experience is that it is an all-round good thing. It puts a horse in a horse, loosens up the system, gives a clean coat, is especially good for the kidneys, and all the ailments of the horse and bots. As a rule, I give it to all my horses, and plan to see a great sale of sheep."

kidney cleaner, it is the best I have ever seen. ALFRED BROWN.

Edmonton, Alta."

From British Columbia:

"We have used Herbageum with our horses for nearly two years, and results justify us in the continuance of its use. BRITISH COLUMBIA EXPRESS CO. Ashcroft, B. C."

Surely this is "Horse Sense," "Common Sense," and "Canadian Sense," as well as "Dollars and Cents" to owners of the horse.

GOSSIP.

Best-quality lambs brought \$7.65 per cwt. in Chicago last week.

The Bell Telephone Company are now in a position to give connection with Thamesford and Evelyn on the Mills Telephone line, a working arrangement having been entered into between these two telephone companies' systems. A charge of ten cents will be the rate for a three minutes' conversation between the above named points.

Mr. J. B. Hogate, Weston, has lately sold to Mr. Wm. Shields, of Milton, Ont., the yearling Clydesdale stallion, Imp. Royal Torrance, by the champion Royal Chattan, by Clan Chattan, dam Lady Gertrude, by Casablanca, a son of Baron's Pride. This is an exceptionally choice yearling, with great size, smooth, even build, flash underpinning and straight, true action that should develop into a great show horse and sire.

The great sale of 40 imported Clydesdale mares and fillies, advertised by Mr. Dugald Ross, of Streetsville, Ont., to take place at the Repository, Toronto, on Thursday, Nov. 15, should attract buyers from near and far, as they were carefully selected for size, quality and the best of breeding, carrying the blood of the most noted sires of the breed, and many of them were bred to first-class sires in Scotland. See the half-page advertisement in Nov. 8th issue of "The Farmer's Advocate."

Attention is again called to the dispersion sale, on Wednesday, November 21st, of the entire herd of Shorthorns, belonging to Mr. J. W. Ackrow, of Highfield, Ont., five miles from Weston, G. T. R. and C. P. R., eight miles west of Toronto. The herd is headed by the imported Marr Roan Lady bull, Deeside King, bred by Mr. John Young, of Tilhouries, Aberdeenshire, sired by Sittytton Choice, and out of Rosetta 15th, by Scottish Prince. Included is the two-year-old Miss Ramsden heifer, Lady Ramsden, by Imp. Chief Ruler, dam Imp. Miss Howe 9th, and most of the cows are heavy milkers and bred from deep-milking, dual-purpose strains, and the younger heifers are sired by first-class imported Scotch-bred bulls. Conveyances will meet the morning trains at the Eagle House, Weston, to carry visitors to the sale, and the terms, twelve months' credit, are favorable to buyers.

THE ILBERTON SHEEP SALE.

Our readers are reminded of the very important auction sale of 200 registered Lincoln sheep, to take place on Thursday, November 22nd, at Ilderton, Ont., 12 miles north of London, on the G. T. R. This sale includes the entire flocks of Mr. John Geary and Capt. T. E. Robson, who have rented their farms, to gather with selections from the far famed flock of Mr. John T. Gibson, of Denfield, and Mr. R. S. Robson, Ilderton, and comprises 100 breeding ewes, bred to first-class registered rams; 65 ewe lambs, 10 yearling rams, and 25 ram lambs. This is an excellent opportunity to secure good foundation stock of this hardy, strong-constituted, heavy-fleeced breed of sheep, the breed that has been bringing the highest prices in England in recent years, and that is in great demand for grading-up the common sheep of the range country of the West. The outlook for the sheep trade never was better than at the present time. Sheep are scarce all the world over, and lambs are being raised in the market than ever before. Better than any other class of meat-producing stock, while the cost of production is lower than in the case of any other farm stock. See the advertisement in this issue, the date, and the train times, and plan to see a great sale of sheep.

**QUESTIONS AND ANSWERS.**  
**Miscellaneous.**

**CATTLE TRESPASSING.**

A and B own lands adjoining each other, each having lake frontage of 80 rods. A built fences out into the lake about 7 rods. A's cattle never go on B's lot, but B's cattle are continually bothering A. What steps should A take to prevent B's cattle from coming on A's land?  
SUBSCRIBER.

Ontario.

Ans.—He may, after warning B, either have the cattle impounded, or proceed against B as for trespass.

**AVOIDING FLOODS.**

My farm is a low one, and in spring and fall a little creek runs full and spills all around my buildings, and it is almost impossible to do anything on the land till the water goes down, and if the rain comes on again, I have to wait longer till water goes. This summer there has been a road made through, and I lowered both road ditches, and run the water from the road ditches, and I put a little dam on to stop the water flowing on me. I did not flood the road. The water that comes down the ditches on the road for three-quarters of a mile now comes in on me, and adds that much more towards flooding my land. This is all surface water. One of our men on road came and cut my dam out, and turned all the water in creek and ditches above me in on my place, and so, by the road being made, it is a detriment. What I want to find out is if I can put a little dam on my place, clear of the road allowance, and let water go down the road ditches. Can they run the road water as well as creek, or can I send it down the road? It does not flood road, but is a detriment to me.  
Ontario.

Ans.—We think that you are in a position, legally, to do what you propose.

**SURVEYING BOUNDARY LINE.**

A owns the north and B the south half of the same lot. The division is formed by a blind line (a line which is not actually run, i. e., marked—blazed). B thinks of taking off his timber, consequently the blind line has to be run.

1. Is A obliged to help him run the blind line?

2. If B runs the blind line alone, has A got to accept it or not?

3. Has B to give notice to A of his intention to run the blind line?

4. Supposing A is not in the country at the time, or is unable to help to run the blind line, has A got to send a substitute or not?

5. If B runs the blind line alone, can he charge A for expenses?

6. If B runs the blind line alone, and A does not accept it, what can A do?

7. If B cuts timber on A's lot without permission, what can A do?  
Ontario.

Ans.—1, 2, 3, 4 and 5. No.

6. If A will not join B in running the line, and defraying the incidental expenses, B should employ a surveyor to assist him in order that he may be sure of avoiding possible trespass in respect of A's land. The line having been accurately run, there is nothing that A can legally do to B's detriment.

7. He can bring an action of trespass and for damages against B.

**STAINS—PICTURES—WINTER FAIR—TURKEY FEED.**

1. How can I get stains out of cotton caused by brown silk running when washed?

2. Where can I get colored pictures of flowers and animals suitable for scrap album? Do fancy stores sell them for Christmas purposes?

3. Please send me the address of the secretary of the Guelph Winter Fair.

4. (a) Is wet chop good for turkeys? (b) Is barley good feed for turkeys? (c) Will pumpkin seeds do turkeys any harm?  
W. J. S.

Ans.—1. You might try Javelle water for the cotton, provided the latter is white. To make it, place 4 lbs. bicarbonate of soda in a large granite pan, and pour over it four quarts hot water. Stir with a stick until the soda has dissolved; add a pound of chloride of lime, and stir until this also has dissolved. Let the liquid cool; strain through a cloth, and bottle. When using to take out stains, apply one part Javelle water diluted with four parts

soft water. Soak several hours, then wash and rinse thoroughly.

2. You can get the pictures from the Perry Picture Co., Malden, Mass.

3. A. P. Westervelt, Parliament Buildings, Toronto.

4. (a) Most feeders prefer whole grain dry. (b) We have not heard any objections to it, but prefer a mixture containing corn. (c) Do not think so. Will some of our readers, who have made a specialty of turkey feeding, relate their experience on these points.

**PROBABLY CHOLERA.**

Our hens, a flock of over one hundred, are sick. They get blue around the comb and head, get mopey and quite weak. One hen died yesterday, and several are nearly dead. They have diarrhoea also. The yearling hens have been moulting, and the first we noticed, they did not come when called to feed. Now, it seems to be alike among the hens and young chickens. We have been feeding them well—mostly wheat—and they have run over the farm at will. We examined some of them, and can find no signs of lice. One that is very sick, we found to have a very full crop. Another one had a lump underneath the skin near the back part of hen. What has caused this trouble, and can anything be done for them?  
W. S.

Ans.—Kill and burn the affected birds. Disinfect the premises with a five-per cent. solution of sulphuric acid. In the drinking water use from one to two teaspoonfuls of napezol in each two-gallon bucket of drinking water. Allow no particle of the flesh of a diseased bird where others can get it. Give any birds showing suspicious looseness of the bowels a three-drop dose of spirits of camphor, made into a pill with bread crumbs and a little sugar. Administer twice daily for three or four days. Mercury XXX tablets are an effective remedy. Give one tablet three times daily, or dissolve 12 tablets in each pint of drinking water. It might be well to dispose of the entire flock, and not keep poultry for a year or so.

**Veterinary.**

**LAME MARE.**

Last winter my mare sprained her fetlock joint, and has been lame ever since, and the joint is enlarged. I blistered it once, but it did no good. A. G. G.

Ans.—It is possible a long rest and repeated blisterings, say once monthly, will effect a cure, but I would advise you to have your veterinarian fire and blister the joint.  
V.

**HALTER PULLER.**

My two-year-old colt contracted the habit of halter-pulling when a foal, and he continues to pull. M. G. B.

Ans.—This is a habit that is very hard to cure. The best way is to take a long inch rope, double it, and put under the tail as a crouper, pass the ends forward under a surcingle, then through the side rings of the halter, and tie to a strong manger. Allow him to pull on this, and when he ceases to pull, frighten him backwards to make him pull until he refuses to exert tension on it. Keep this attachment on, arranged so that the ropes will not get out of place, and in a short time he should cease to try.  
V.

**PARTIAL PARALYSIS IN CALF.**

When our big calf crosses his legs, he falls. He is poor, and his bones crack when he walks. His knees are bent under him, and he stands hock-jointed, and is cross-looking. We have doctored him, and he does not get any better. C. B.

Ans.—This is evidently a case of partial paralysis, probably due to brain trouble, and it is not probable that treatment will be effective, hence I advise you to destroy him. It is possible the administration of 40 grains nuxvomica three times daily, liberal feeding on easily-digested food, and good care may give good results, but in all probability he will not get better.  
V.

Mr. A. C. Hallman, Breslau, Ont., orders a change in his advertisement, in which he offers, at reduced rates for immediate sale, young Tamworth pigs of both sexes, bred straight from imported stock of the best breeding and type. Note his advertisement, and write him for prices and particulars.

**The Cecilian Piano**

**THE PIANO THAT ANYBODY—EVERYBODY CAN PLAY.**

Is a thoroughly good upright piano, with the mechanism of the Cecilian Piano built inside the case.

This piano can be played with the fingers precisely the same as you would play an ordinary piano, and, in addition to this, you can play it by means of the Cecilian piano-player mechanism, which is built into it. All that is necessary is to slip in a roll of perforated music and operate the pedals with your feet.

We wish to make this fact plain, for many persons have thought that this piano could not be played in the usual manner. It can be played either way, and without making any changes of any sort.

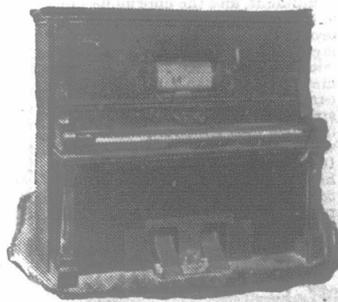
You can play the Cecilian Piano though you don't know one note from another. You can play any music you wish.

The Cecilian Piano will be appreciated and enjoyed continually by your entire household, for every member of your family can play it, play it with absolutely correct technique and with intelligent expression.

The Cecilian Piano occupies no more room and is no different in appearance from any high-class piano.

There are many points in regard to the wonderful tone quality, the superior construction and finish, and the easy operation of the Cecilian which will interest you greatly. We will send you a complete description, with views of the piano, if you will send us your address. Easy payments if desired. Your old piano taken in exchange.

Call at warerooms and see the exhibit we are making of Cecilian Pianos.



**Heintzman & Co., Limited**

115-117 King Street, West, Toronto, Ont.

**A Telephone on the Farm**

Links the farmer and his family with his neighbors, and does away with the isolation of country life.

It keeps the farmer posted on all the latest movements of the market, and this may mean many dollars to him.

With it the doctor or veterinary surgeon can be quickly summoned in case of an emergency.

The FARMER cannot AFFORD to be without a long-distance telephone.

**The Bell Telephone Company of Canada**

**HENS DYING.**

I have lost about forty hens this last six months. They get white in the comb first, then get lame in the back, cannot walk, and in about one week die. Kindly give the cause and a remedy through the columns of your valuable paper.  
A. A.

Ans.—Would like more information before I could reply to this. I would, however, recommend sending two birds that are sick to the Bacteriological Laboratory, O. A. C., Guelph, for examination, and send a note to Prof. Edwards at the time of shipping. Clean the henhouse, and whitewash it. Use lime everywhere the droppings fall at night. My impression is that this trouble is due to the henhouse not being cleaned. The earth, or floor, is

probably old and unclean; the same may be said of the ground just outside. These conditions must be removed before much can be done. Kill and burn the sick. Use a dessertspoonful of salt to each ten birds every four days for about two weeks. This can be given in the drink or in a wet mash.  
W. R. G.

**GOSSIP.**

E. F. Park, Burgessville, Ont., writes: "Have returned home after two months' trip, taking in all the leading fairs, Toronto, Ottawa, Halifax, Charlottetown, P. E. I., winning 37 first prizes, 50 seconds, on Cotswold sheep. The sheep trade is good; have made some good sales. Have forty choice ram lambs, twenty yearling rams, fifty breeding ewes (bred to imported ram) for sale."

**THE  
PEERLESS  
WOVEN  
WIRE  
FENCE**

has achieved such remarkable success in the U. S. that we have acquired the sole right for its sale in the Dominion. The farmers of the States are shrewd judges of farm equipment, and the enormous sales of Peerless Fence is one of the best proofs that it is a fence of unusual merit. But we don't expect to sell you Peerless Fence on the endorsement of American farmers. If we can get you to read how it is constructed, read what kind of material goes into it, see the fence itself, we know you will want none other. It is a practical fence—a durable fence—a common-sense fence. Simple in construction, needs no repairing, because it's made right.



ALL NO 9 WIRE

Peerless Fence is made of big, heavy, Galvanized Hard Steel Wire of perfectly uniform size throughout, which, with the famous Peerless Lock, will turn any kind of stock and give long wear. Note the picture below—how securely, firmly it holds the upright and lateral wires—they can't be rooted up—nor shoved down—nor spread sideways—it's locked to stay locked. That means stability—long wear, almost everything desired in a fence. Suppose you send for our fence book and get all the good points about this really good fence. They mean money, time and pleasure to you. A postal card brings it.

The Banwell Hoxie Wire Fence Co., Ltd., DEPT. B Hamilton, Ont.

**THE FENCE  
WITH THE  
PEERLESS LOCK**

WILL TURN ANY KIND OF STOCK

Wedding Invitations,  
Wedding Announcements,  
Visiting Cards.

Latest styles. Latest type.  
Prompt attention to mail orders.

The London Printing & Litho. Co.  
144 Carling St., London, Ont.

**Spring Brook Holsteins & Tamworths**  
Bargains in Tamworths from now till New Year to quick buyers. Young pigs ready to wean. Boars ready or about for service, and sows that are bred. Come and see, or write for what you want in Tamworths and Holsteins. A. G. Hallman, Breslau, Ont., Waterloo Co.



**BOOKS**  
on Poultry, Pigeons, Pheasants, Birds, Dogs, Cats, Cavies, Ferrets, Mice, Aquaria, Farming, Farm Animals, Farm Crops, Fruit, Vegetables, and Flowers.  
**PRINTING AND CUTS.**  
For Poultrymen, Farmers and Stockmen—Cut Catalog Free.

**GOSSIP.**

**FARNHAM OXFORD DOWNS.**

Farnham Stock Farm, three miles south-east of Guelph, and half a mile from Arkell station, on the C. P. R., the property of Messrs. Henry Arkell & Son, the well-known importer and breeders of Oxford Down sheep, is a farm known from the Atlantic to the Pacific, its notoriety being entirely due to the high-class flock of imported and home-bred Oxford Down sheep always to be seen on its luxuriant pastures and in its comfortable stables, which, for years, have annually been exhibited at the leading shows in Canada and United States. Their phenomenal success this year at Toronto, London, Ottawa and Syracuse, N. Y., when they won practically everything hung up, and that being done mostly on home-bred stuff, is only a sample of their success for years past. High-class show stuff have annually been imported to infuse new blood, and keep the flock to the highest standard of excellence. At the present time, there are about 350 head on hand, including 150 ram lambs, mostly sired by imported rams, and a great many of them out of imported ewes. Among this lot are a number of high-class flock headers, and all these are for sale. In females for sale are 50 one- and two-shear ewes, bred to two imported Royal winners, and 50 ewe lambs, a rare nice lot that have not been culled this fall. Mr. Arkell has retailed as flock headers over 75 head, and is still shipping nearly every day, without a single complaint or a dissatisfied customer, which speaks volumes for straight dealing and honest representation. Write Mr. Arkell, to Arkell P. O., Ont., or see his flock.

Greenoak Stock Farm is one of the most noted in the county of Elgin, Ont. It lies two miles east of Dutton Station, on the M. C. and P. M. R. R., and is the property of genial John McFarlane, a brawny son of the old "Kirk." Mr. McFarlane is one of the most extensive breeders of pure-bred stock in the county, practically everything on the farm is registered—Shorthorn cattle, Clydesdale horses, Oxford Down sheep and Berkshire pigs. The Shorthorns number 50 head of Scotch and Scotch-topped, imported and Canadian-bred animals, representing the Lustre, Tidy, Blossom, Bertha, Lady Bess and Lady Jane strains; among which is Imp. Camelia Blossom, by Lord Lyndoch, dam Crimson Blossom, by Lord Douglas, grandam by Sittyton Fame; Imp. Choice Lustre, by Morella, dam Chief Lustre 17th, by Musgrave, and her daughter, Choice Lustre 2nd (imp.), by Nonpareil Archer (imp.), and another eight-months-old daughter, by Imp. Abbotsford Star; also an eighteen-months-old son, Choice Goods, by the same sire; Tidy Lass (imp.), by Morella, dam by Prince of Fashion, and her daughter, Alexandria (imp.), by Prince of Archers, has a ten-months-old bull calf, by Imp. Abbotsford Star. Also, Tidy Lass is now suckling a seven-months-old heifer calf, by Imp. Royal Prince. Bertha 7th, by Sir James, dam by Murillo, has a heifer calf, by Deeside Chief (imp.); Lady Bess (imp.), by Abbotsford 2nd, dam Bess 4th, by Roan Prince. This is surely a richly-embroidered herd to suit almost anyone. Nearly all the young stuff is by Imp. Royal Prince, a 2,500-lb. Maria-bred bull, by Golden Fame, dam Mattie, by Lovat Chief. The present stock bull is Imp. Protector, of the Cruickshank Emily family, by Bapton Shamrock, a Sittyton Secret, by Silver Plate, dam Prudence, by Merry Harbinger. For sale are 15 young bulls from 5 to 18 months of age, all from imported sires and some from imported dams; also 10 heifers, bred in the purple, and a choice lot, all for sale at live-and-let-live prices. The Oxford Downs are essentially a high-class lot. For sale are 12 ram lambs, big quality fellows, with perfect covering, and a few ewes. In Berkshires are a few of both sexes ready to breed, and a number of younger ones. A pair of really choice imported Clydesdale mares are Rose of Newhouse, by Montrave Sentinel, dam by Prince Romeo, and Sonora, by Up-to-Time, dam by Prince Romeo. The latter has a rare nice filly foal, by Royal Brunstane. When in need of something good and richly bred, don't forget honest John McFarlane, of Dutton P. O., Ont.

**WILLOWBANK SHORTHORNS.**

Established in 1855, the Willowbank herd of Mr. James Douglas, Caledonia, Ont., is one of the oldest herds in Canada, and has been kept to a high standard of excellence, representing such noted strains as Crimson Flowers, Nonpareils, Marr Roan Ladys, etc., and many of the younger ones, the get of the Kinellar Mina bull, Imp. Christopher, and all the youngest, the get of Imp. Rosicrucian of Dalmeny, bred by the Earl of Roseberry, sired by the Village-bred bull, Villager, dam Regina 6th, by the Flora-bred bull, Goldfinder's Heir. He is a bull of great scale and quality, very thick and mellow, and a grand sire. The females are an exceptionally thick-fleshed lot, many of them weighing from 1,600 to 1,800 lbs. each, imported and home-bred. In fact, the herd all through is one of the best in the country. Just now on hand for sale are 15 bulls from 7 to 19 months of age, all sired by Imp. Rosicrucian of Dalmeny, and out of big, thick, choice dams. Many of these youngsters will make high-class herd headers, and will be sold well within their value. Also for sale are females of all ages. The herd now numbers 80 head, so that purchasers have a wide scope to pick from, and no matter what is wanted it can be found here. Willowbank farm, as is also well known, is the home of one of the largest as well as one of the choicest flocks of Leicester sheep in Ontario, but, owing to active demand, practically everything for sale is gone. The owner, Mr. James Douglas, is probably as well known as any Shorthorn breeder in Ontario, a man strictly honorable and highly respected among his wide circle of friends.

What was ranked as the best Canadian-bred Clydesdale stallion at the National Show this year, King Cobalt, owned by Smith & Richardson, Columbus, Ont., has been sold to Mr. Emery Brossard, of La Prairie, Que. He was sired by Imp. King's Cross, a son of Sir Everard, the sire of Baron's Pride, dam Granite Queen, by Granite. He was winner of first and championship at Toronto and Ottawa this fall in the Canadian-bred class. A horse of his superior individuality and breeding should give a good account of himself in his Quebec home.

Messrs. R. A. & J. A. Watt, Salem, Ont., in ordering change of advertisement, write: "The two champion Shorthorn show cows, Gem Ballechin and Olga Stamford, dropped a red heifer and a roan bull calf respectively, sired by Springhurst, considered by Mr. Duthie one of the best bulls he saw in Canada."

**"TRADE TOPIC.**

**PROFIT FOR YOU.**—The little book, "Farm Science," but recently off the press, is justly regarded as the equal in practical suggestions, plain teachings, and unquestioned authority, of anything ever published exclusively for the farmer. Its character will be seen when we say that it was specially prepared for The International Harvester Company of America, Chicago, at an expense of several thousand dollars. The book treats exhaustively such live, present-day farm subjects as fertilizing, preparation of soil, crop-growing, alfalfa, hay, small grains, the dairy and farm powers. Every one of these topics is handled by a specialist—men of large practical experience in addition to being scientifically qualified to speak on matters in their line. The authors are: Jos. E. Wing, Expert Agriculturist, Ohio; Prof. P. G. Holden, the corn culture expert, Iowa; W. F. Brown, Farm Specialist, Ohio; C. G. Hopkins and Prof. Fred D. Crane, of the Illinois College of Agriculture; Prof. Thomas Shaw, late of the Minnesota Experiment Station; Prof. Clinton D. Smith, Director Michigan Experiment Station; Hon. Willett Hays, Assistant Secretary of Agriculture, Washington, D. C. The 128 pages of the book are taken up by these eight specialists on their chosen subjects, so it will be seen with what thoroughness each topic is treated. The book is meeting the demand among farmers which it deserves. A large edition is being rapidly exhausted. It is only necessary to send in the postage for its mailing (three two-cent stamps) to receive a copy. We advise our readers to send for it promptly before the issue is exhausted.

You cannot possibly have a better Cocoa than

**EPPS'S**

A delicious drink and a sustaining food. Fragrant, nutritious and economical. This excellent Cocoa maintains the system in robust health, and enables it to resist winter's extreme cold.

**COCOA**

Sold by Grocers and Storekeepers in 1/2-lb. and 1-lb Tins.



**First Duty of  
A Good  
Housewife**

is to know how to bake good Bread. You can have the very best by using

**PURITY  
FLOUR**

Made entirely from the Finest Western Canada Hard Wheat by the latest improved methods, in the most modern mills in the world.

That's why PURITY FLOUR yields the greatest amount of nutriment at the least cost.

Sold Everywhere in the Great Dominion

WESTERN CANADA FLOUR MILLS CO., LIMITED  
Mills at  
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ADVERTISE IN THE ADVOCATE.

## Not Sick, but Tired and Weak

AND IN NEED OF SUCH RESTORATIVE ASSISTANCE AS IS GIVEN BY

## Dr. Chase's Nerve Food.

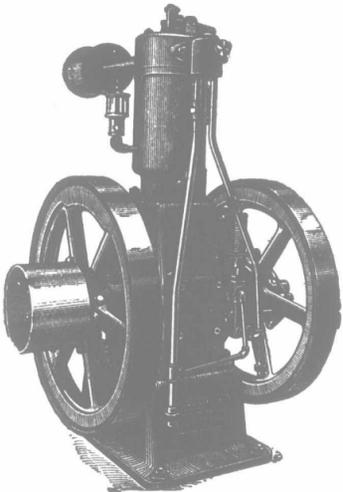
You do not think that you are sick, but you lack the snap and vigor of other times. Not only are you weak bodily, but the vital organs are also slow and uncertain in action. The heart is weak, digestion is imperfect, the liver is torpid, the bowels sluggish, and the system run down in a general way.

What you need to start you on the way to health is a restorative, such as Dr. Chase's Nerve Food, to form new, rich blood, to increase the amount of nerve force, and instil new vigor into the whole body.

It is marvellous what this great food cure will do for a run-down human system, and what it does is not in the way of temporary assistance, but rather of certain and lasting benefit—because it actually builds up the system.

Note your increase in weight while using Dr. Chase's Nerve Food, 50 cents, 6 boxes for \$2.50, at all dealers, or Edmanson, Bates & Co., Toronto.

## Could You Use It?



## If You Had a Little Engine

- That would respond to every call,
- That would give you plenty of power,
- That is simple and absolutely safe,
- That anybody could operate easily,
- That used gas, gasoline or alcohol,
- That was economical in the use of fuel,
- That was adapted to almost every farm duty.

Could you use such an engine to advantage in your shop work and about your farm duties? Hundreds of farmers are answering "yes" to this question, and are buying the

## I. H. C. Gasoline Engines.

They are the engines described above. You can get them either Upright, Horizontal or Portable—in sizes to suit your work, from 2 to 20 horse power.

The people who are buying them know they are getting something dependable. They find their engines make profit for them—help them to do things the easy way.

How about you? Count over your jobs of grinding, pumping, sawing, hoisting, churning, feed cutting, separating cream, etc. Then call on the International local agent or write nearest branch house for catalog.

Canada's Branches: Calgary, London, Montreal, Ottawa, Regina, St. John, Toronto, Winnipeg. The best farmers' book ever published, treating all farm subjects in the most scientific and practical way. Mailed for three 2 cent stamps. Send for it today.

**INTERNATIONAL HARVESTER COMPANY OF AMERICA**  
(Incorporated.)  
**CHICAGO, U. S. A.**

### GOSSIP.

#### PINE RIDGE JERSEYS.

As usual, on our annual visit to Pine Ridge farm, we found the Jerseys in prime condition. The owners, Messrs. Wm. Willis & Son, Newmarket, Ont., certainly know how to handle this great dairy breed to the best advantage. The herd is made up of exceptionally large animals for Jerseys, of ideal, wedge-shaped type, carrying immense, even udders, covered with soft, yellow skin, denoting what they are—a very profitable herd of heavy producers. They belong to the great St. Lambert strain; in fact, in the herd are great-granddaughters of the noted Adelaide of St. Lambert. The stock bull is Earl Denton, a grandson of the champion Flying Fox, and out of Imp. Nunthorpe Susanne, Mrs. W. E. H. Massey's well-known cow. In young bulls for sale is one two-year-old, by Ida's Sonny, a son of Imp. Count Oxford's Ida, record of 20 lbs. 6 ozs. in seven days, dam Dolly of Pine Ridge, winner of first prize as a three-year-old at Toronto, 1904. He is an exceptionally well-put-up bull, and, being so richly bred, should make a very desirable herd header. Another is a yearling, out of Daisy of Pine Ridge, a magnificent cow and a persistent producer, and sired by the stock bull. Another is a six-months-old calf, out of a granddaughter of 100 Per Cent., and by the stock bull. Here are a trio of young bulls unexcelled for type, conformation and rich breeding. Also for sale are a few heifers, all bred from workers that have proved their sterling worth. Mr. Willis reports sales as exceedingly brisk, and the demand as rapidly on the increase. Anyone wanting high-class Jerseys should write the Messrs. Willis, to Newmarket P. O. In Cotswolds, they are offering a few choice shearing rams and ram lambs, a large, well-covered lot, and bred right.

Half a mile west of Highgate Station, on the Michigan Central and Pere Marquette R. R., in the county of Kent, Ont., is the splendid stock farm of Messrs. John Lee & Sons, breeders of Shorthorn cattle and Lincoln sheep. At present there are about 35 head of Shorthorns in the herd, an exceptionally nice, smooth, thick-fleshed and grand-looking lot, representing the Mina, Shepperd Lovely and Syme families, and others, tracing to Imp. Polyanthus. They are a large lot, up to 1,750 lbs., in grand condition, and beef to the heels. The stock bull is Ridgewood Marquis =48995=, bred by W. D. Flatt, sired by the champion Spicy Marquis (imp.), dam Augusta 3rd. He is a bull of more than ordinary quality and merit, a Toronto winner, and a sire of the highest class, his get winning wherever shown; the herd this fall practically winning everything in sight at the leading county shows of Essex, Kent and Elgin, including the championships. Among the younger things in bulls is a roan yearling, by the stock bull, and out of a Mina-bred cow, without doubt one of the best in the country. He was shown six times, won six first prizes and two championships, and will certainly make a high-class herd header, and his stable mate, a red yearling, bred the same, won six seconds at the same shows, being only beaten by his invincible companion. Another is an eight-months-old red, by Imp. Favorite, and out of Lovely of Pine Grove, a Shepperd Lovely that is a rare good one, and the making of a show bull. Still another is a seven-months-old, by the stock bull, and out of a daughter of Aberdeen Hero, that shows a smooth, straight, even type, an extra good one. All these young bulls are for sale, and are an exceptionally choice offering. In heifers, there are a dozen from six months to two years of age, Scotch and Scotch-topped, by the stock bull, several of them prizewinners in strong company, and capable of winning their spurs at the leading exhibitions, reds and roans, a lot that is not found everywhere. All are for sale at prices that should pick them up quick, as they are extra good doers. The Lincoln flock numbers about 50 head, one of the best flocks of field ewes in the country, the demand for which is so great that all the lambs are picked up. Write the Messrs. Lee, to Highgate P. O., Ont.

*We are Manufacturing Jewelers. Buy from the Maker.*

### Examples from Our Catalogue

1.—Solid 14k. Safety Pin, set with 10 first quality Pearls .....	\$3.00
2.—Solid 14k. Stick Pin, set with 11 first quality Pearls .....	2.75
3.—Solid Gold Cross Stick Pin .....	1.25
4.—Solid Gold Wishbone Stick Pin, set with 1 Pearl .....	1.60
5.—Solid Gold Links, heavy weight, per pair .....	4.50
6.—Solid 14k. Ring, set with 5 Opals and 8 Pearls .....	\$7.50
7.—Tiffany Setting Ring, solid gold, Ruby D. or Garnet .....	3.00
8.—Solid Gold Buckle Ring, set with Garnet and Pearl .....	3.25
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OUR LARGE ILLUSTRATED CATALOGUE OF DIAMONDS, JEWELRY, SILVERWARE, WATCHES, ETC., IS FREE FOR THE ASKING

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156 Yonge St. MANUFACTURING JEWELERS TORONTO

## POTASH always PAYS

when judiciously used along with the necessary amount of phosphatic and nitrogenous fertilizer. The three ingredients chiefly considered in fertilizing are **POTASH, PHOSPHORIC ACID and NITROGEN**, and a maximum yield of any crop can only be obtained when all three are present in sufficient quantity for the needs of the particular crop.

**POTASH** in the highly concentrated forms of

**SULPHATE OF POTASH** or **MURIATE OF POTASH** can be procured from leading fertilizer dealers, and may be applied (along with a phosphatic manure) either in the fall or early spring. The fall application of **POTASH** and **PHOSPHATE** in Europe has been carried out with very satisfactory results.

For **TOBACCO, POTATOES** and **SUGAR BEETS** apply **SULPHATE OF POTASH**.

For other farm crops, as well as **IN THE ORCHARD**, **MURIATE OF POTASH** will give admirable results.

Pamphlets treating of the cultivation and fertilization of all crops on the farm will be sent **FREE** on application to **THE DOMINION AGRICULTURAL OFFICES OF THE POTASH SYNDICATE, 3 HOLBROOK CHAMBERS, OTTAWA, ONT.**

## POULTRY!

**Alive**  
or  
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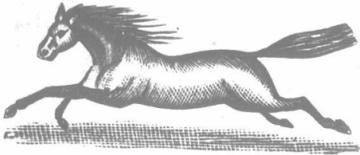


Collecting stations have been established at nearly all points in Western Ontario. If our representatives have not called on you, write for booklet "C" and full particulars. Watch your local paper for name of buyer, and next date of delivery.

**Flavelles**  
LIMITED  
LONDON, ONT.

**AN INFLAMED TENDON NEEDS COOLING.**  
**ABSORBINE**  
 Will do it and restore the circulation, assist nature to repair strained, ruptured ligaments more successfully than Firing. No blister, no hair gone, and you can use the horse. \$2.00 per bottle, delivered. Book 2-C Free.  
**ABSORBINE, JR.**, for mankind, \$1.00 bottle. Cures Strained Torn Ligaments, Varicose Veins, Varicocele, Hydrocele, enlarged Glands and Ulcers. Always pain quickly  
 W. F. Young, P. D. F., 73 Monmouth St., Springfield, Mass.  
 Canadian Agents Lyman, Sons & Co., Montreal.

**The Repository**  
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Cor. Simcoe and Nelson Sts., Toronto

Auction Sales of Horses, Carriages, Buggies, Harness etc., every Tuesday and Friday, at 11 o'clock  
 Special Sales of Thoroughbred Stock conducted  
 Consignments solicited. Correspondence will receive prompt attention.  
 This is the best market in Canada for either buyer or seller. Nearly two hundred horses sold each week.

**Clydesdales and Percherons**

I have two Clyde stallions, by Prince Thomas and Baron's Pride, 3 and 5 years of age, a big flashy quality pair, and seven Percherons, 3 and 3 years of age. Nothing better ever imported in the country. Will be sold on a small profit. Come and see them.

T. D. ELLIOT, Bolton P.O. and Station, C. P. R.

**N. Wagg, Claremont, Ont.**

I have on hand a few choice Clyde Stallions & Mares Imp. and Canadian-bred. Size and quality, with true action. Write me before buying.  
 Claremont P. O. and Stn. C. P. R.

**Clydesdale Stallions**  
 Gallant Roy, imp. [3834] (11044), 7 years old; first-class stock horse. Celtic Clan, imp (12'95), 3 years old; a large, heavy horse and good foal getter.  
 W. O. EDWARDS, Plattsville, Ont. Bright G. T. R. Phone

**DR. McADAM'S HEAVE CURE** for Broken-winded Horses. The only medicine in the world that will stop heaves in three days, but for a permanent cure it requires from one-half to one bottle used according to directions. Price, \$1.50 per bottle. The Dr. McAdams Medicine Co., Montpelier, Ontario.

**No more blind horses—For Specific Ophthalmia, Moon Blindness and other eye troubles.**  
 A farmer who engaged a man for field work, took him to a field and told him to commence plowing. "Start here," he said, "and go on right up to that brindled cow." Then he departed. Some hours afterwards, he returned to the field to find that the fellow had plowed a rambling furrow all over the land. The farmer demanded the meaning of the extraordinary result of the man's labor. "Why," said the new hand, "you told me to plow to the brindled cow, and I've been doing so all the morning, but I can't catch up to her—she's all over the shop!"

**DODD'S KIDNEY PILLS**  
 CURES ALL KIDNEY DISEASES  
 RHEUMATISM BRIGHT'S DISEASE DIABETES BACKACHE  
 Discontinued the use of our pills... The public may rely on our... Sold only in boxes...

**QUESTIONS AND ANSWERS. Veterinary.**

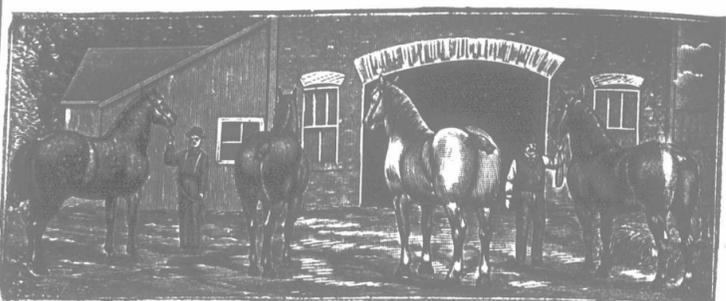
**PREGNANT MARE HAS WHITES.**  
 A driving mare, sixteen years old, in foal, is troubled with whites. A. R.  
 Ans.—It is not advisable to give any more drugs than absolutely necessary during pregnancy. Feed good, nourishing food, and keep her in the best state of health possible, and after she has foaled would advise treatment, if necessary. R.

**DOG WITH WORMS.**  
 Hound, fourteen months old, passes white worms about half an inch long, and he is very thin. F. J. G.  
 Ans.—Fast him for 12 hours, then give 20 grains kaloma. Repeat treatment, if necessary, in a week. If you cannot get kaloma, give 1 dram area nut instead. V.

**ABNORMAL GROWTH FROM WOUND.**  
 Horse had the anterior aspect of the hock torn by barbed wire four years ago. A growth about an inch thick, and resembling the warts on his legs, has appeared at seat of wound. H. C. C.  
 Ans.—Growths of this kind are very hard to remove, but this can be greatly reduced if carefully and patiently treated. Pare the growth off with a sharp knife until you reach the sensitive parts, which will be indicated by the appearance of a little blood. Then apply butter of antimony once daily with a feather. When a dry surface forms, pick or pare it off. Keep this treatment up, and you will at least be able to reduce the enlargement, but there always will be a scar, as you cannot cause the growth of hair. V.

**AFTER-EFFECT OF MILK FEVER.**  
 Have a cow that took milk fever in about twenty-four hours after calving. We got a bicycle pump and milking tube, and, after hunting up an old Farmer's Advocate, treated her as described, and in thirty-two hours she was on her feet again. She has not come to the milk in three teats yet; gives only about a teacupful in the three, while there is the usual amount in the other one. The teats appear perfectly natural, and milk comes easily, only not enough. Can anything be done for her now, and, if not, is there a probability that she will come all right next time of freshening? It is over a month since she calved. SUBSCRIBER.  
 Ans.—While your treatment with a bicycle pump seems to have saved your cow, I think you would have been ahead if you had used pure oxygen. Such results as you describe do not follow the use of oxygen properly administered. You cannot do much, except feed good food, and depend on nature to help you out. Better prepare her for the butcher, as it is not likely she will recover the use of the quarters that have failed. R.

**LAME HORSES.**  
 1. Driving horse goes all right when first taken out, and will road sound for a variable distance, sometimes for ten miles, and then go quite lame, and get worse the further he is driven. The trouble is in the left fore leg.  
 2. Horse is lame in both legs, sometimes in one and sometimes in other. He may start out lame in one, and after a while go lame in both legs. K. C.  
 Ans.—1. The symptoms indicate carpalitis (inflammation of the knee). Give him rest, and blister the whole knee joint with 2 drams biniodide of mercury mixed with 1 ounce vaseline. Clip the hair off, tie so that he cannot bite the part; rub well with the blister daily for two days, and the third day wash off, and apply sweet oil. Let him loose in a box stall now, and oil every day. As soon as the scale comes off, tie up and blister again. Repeat the blister, if necessary, in four weeks, and again, if the lameness is not cured.  
 2. These symptoms indicate navicular disease, which is very hard to cure. Give long rest, and blister all around the coronet repeatedly in the same manner as described in answer to question 1. V.



**30 PERCHERONS**

Also Shires, Hackneys and Clydes and 12 Percheron Mares (3, 2 and 1 year old) have just arrived with our new importation from Scotland, England and France, of high-class stallions and mares. Many of them prizewinners in their native lands. Bred by the best breeders. Percherons, blacks and grays, weighing 1,600 to 2,000 pounds. Shires at two years old weighing 1,700 pounds. Clydes, bays and blacks, 4 and 5 years old, weighing 1,800 to 2,000 pounds, bred by the best in Scotland. Our Hackneys are bays and chestnuts, combining size, quality and breeding that cannot be beaten. These horses can be seen at Toronto and London fairs, and all for sale at reasonable prices.

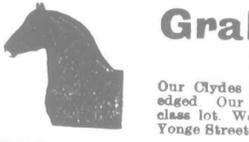
HAMILTON & HAWTHORNE, Simcoe, Ont.  
 82 miles south-west of Toronto on the G. T. R.



**GRAHAM BROS.**

"Calm brogue," CLAREMONT, IMPORTERS OF HACKNEYS and CLYDESDALES

Established 30 years, and winners at all large shows in Canada and United States. Best of stock always on hand for sale. New importation of Royal winners just arrived.



**Graham & Renfrew's**  
 CLYDESDALES and HACKNEYS

Our Clydes now on hand are all prizewinners, their breeding is unexcelled. Our Hackneys, both stallions and mares, are an exceedingly high-class lot. We also have a few high-steppers and carriage horses. Yonge Street cars pass the door every hour. Phone North 4433.

GRAHAM & RENFREW, BEDFORD PARK, ONT.

**DUNROBIN STOCK FARM**

BREEDERS OF CLYDESDALES, SHORTHORNS and YORKSHIRES  
 In Clydesdales we can offer a splendid selection of fillies, including many prizewinners from famous sires. Our brood mares won more prizes than those of any other exhibitor at the Canadian National Exhibition, 1906.

DONALD GUNN & SON, BEAVERTON P. O. & STN.  
 Farm Three-quarters of a Mile from Station.

**SMITH & RICHARDSON,**  
 COLUMBUS, ONT.,

have now on hand a choice selection of Clydesdale Stallions, combining size and quality with straight, true action. Breeding unsurpassed. Individually unexcelled. Scotland prizewinners. Also a few Canadian-bred stallions, and imp. and Canadian bred fillies.  
 Long-distance 'Phone Myrtle Station, C. P. R. Brooklin or Oshawa, G. T. R.

**IMPORTED CLYDESDALE FILLIES & STALLIONS**

Have just landed from Scotland with new importation of Fillies and Stallions, and now offer for sale over 50 Imported Clydesdales. Size and quality have been my aim. Will sell at living prices.

Geo. A. Brodie, Bethesda P. O., Stouffville Sta.  
 Local 'Phone connection.

**WM. COLQUHOUN, Mitchell, Ont.**

I have on hand for sale 10 Clydesdale Stallions  
 Lately imported, from 2 to 8 years of age. Carrying Scotland's richest blood, noted winners, noted sires; weighing a ton and over, with style, quality and true action. Come and see them.

**W. C. KIDD, LISTOWEL, ONT.**

Importer of Clydesdales, Shires, Percherons, Belgians, Hackneys, Standard-breds and Thoroughbreds  
 of highest possible quality and richest breeding. Have sold as many stallions the last year as any man in the business, with complete satisfaction in every case. I have always a large number of high-class horses on hand. My motto: "None but the best, and a straight deal." Will be pleased to hear from any one wanting a rare good one. Terms to suit. Long-distance 'phone LISTOWEL P. O. AND STATION.

**Imported Clydesdale Stallions and Fillies**

My new importation comprises 3 stallions, two 2 years old and one 1 year old, by Everlasting, Baron Buchylvie and Ascott, and 3 fillies, from 1 to 4 years old, by Baron's Pride, Elator, Favorite's Heir and Ascott. They are a high-class lot, as good as ever crossed the water. Come and see them. All are for sale at living prices.  
 A. AITCHISON, Guelph P. O. and Sta.

# Unreserved Auction Sale

ON FRIDAY, DEC. 14, 1906,

At His Farm, Bedford Park, Three Miles North of Toronto, on Yonge St., Where Street Cars Pass the Farm Every Hour, from Newmarket on the North and Toronto on the South,

COL. J. A. MCGILLIVRAY

will sell his entire herd of 40 HEAD of imported and Canadian-bred

## SCOTCH SHORTHORN CATTLE

Including His Stock Bull, Butterfly King, Imp.

The herd represents the Nonpareil, Missie, Crimson Flower, Miss Ramsden, Duchess of Gloster, Butterfly, Marr Beauty and Marr Meadowflower families. Together with

2 Imported Clydesdale Fillies, 3 years old, and 1 Imp. Shire Filly, 1 Registered Canadian-bred Clyde Mare, 25 Imp. and Canadian-bred Horned Dorset Sheep; also a Number of Grade Cattle, Horses, Farm Implements, etc.

Implements, Grade Cattle, Farm Horses, etc., will be sold at 10 a. m.; Pure-breds at 1 p. m.

Terms cash, or 5% on approved notes. Catalogues on application.

FRED. SILVERSIDES, Auctioneer.

Positively no reserve.

## J. B. HOGATE, Weston, Ont.



To the people of Canada I wish to say, I have now on hand for immediate sale, at tempting prices and on terms to suit the purchaser,

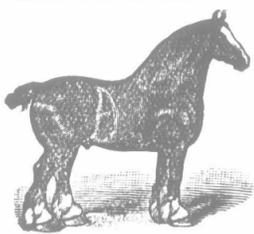
23 CLYDESDALE STALLIONS,  
3 SHIRE STALLIONS and  
4 PERCHERON STALLIONS,

Representing the richest breeding and most fashionable types of the breeds; large, flashy, quality horses.

Also, that, on December 20th, at my stables, Weston, Ont., I will sell by auction 30 of the best CLYDE FILLIES that can be bought in Scotland for cash.

If you want a stallion, come and see me.

Long-distance Telephone.

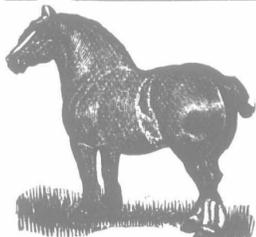


Fresh Importation Just Arrived From Scotland

### CLYDESDALES AND HACKNEYS

DALGETY BROS., Dundee, Scotland, and London, Ont., have on hand just now at their stables, London, Ont., a choice selection of above, including several prizewinners in this country and Scotland. All combining size and quality. Come and see them.

JAMES DALGETY, Glencoe, Ont.



## T. H. HASSARD

Millbrook, Ont.

Has on hand 40 head of Clydesdale, Percheron and Hackney stallions, and 25 Clydesdale fillies, representing Scotland, France and England's richest prizewinning blood and most noted sires. An essentially high-class lot. Will be sold on terms to suit purchaser.

MILLBROOK P. O. AND STATION  
Long-distance Phone.

### QUESTIONS AND ANSWERS. Miscellaneous.

#### FRENCH ROCK.

What was the number, etc., of the registered Canadian-bred Clydesdale horse, French Rock? He was in this district about 30 years ago. G. W. B.

Ans.—We do not find a horse of this name in the Canadian Clydesdale Stud-book.

#### POULTRY-HOUSE BUILDING.

I intend building a henhouse and would like a little advice.

1. Which would be the best, a frame, brick or cement wall?
2. Is a peaked or shed roof best?
3. Would you advise a cement floor in henhouse, and give reasons why, or why not?

Ans.—1 and 2. Useful information on this subject will be found in a lengthy article in our "Poultry" department.

3. A cement floor is not subject to drafts like a wooden one on raised sleepers, and is more easily kept clean than one of clay, which some prefer. What say our poultry readers about cement floors?

#### SERVICES OF BULL-SCHOOL TAX.

1. I have a pure-bred bull that has been running in the woods all summer with my cattle. Some of the neighbors took the use of my bull without my consent for their cows. Can I compel them to pay for the use of him? Will I have to wait until the cows come in next spring before I collect the pay, there being no other bull here in breed or color like mine?

2. We have been divided from the town this summer, and have a council of our own now. We have no school here, but talk of getting one. Can they compel me to pay school tax in our taxes this fall? A SUBSCRIBER, Ontario.

Ans.—1. We think you are in a position to collect, and to do so now, and by suit, if necessary.

2. We cannot tell without knowing the terms of separation. In the event of an attempt being made to levy such taxes, it would be well to consult a solicitor personally.

#### SORE EYES IN SHEEP.

We keep a flock of pure-bred Leicester sheep. There has been in the flock for years a disease of the eyes; water running from the eyes all the time, and they keep shutting and opening them. They have it for a spell, but get over it in a month or so; they never die with it. The lambs have it all summer, and they do not grow well; it seems to keep them back, and it is a great loss to us. Do you know of any cure for it? SUBSCRIBER'S SON.

Ans.—It is difficult to assign a cause for this trouble. It has been charged to stubble in the fields and to certain weeds irritating the eyes. Then there is contagious sore eyes, supposed to be caused by a germ. Some flockmasters claim to have found a satisfactory specific in the coal-tar sheep dips, diluting with water as much as for killing scab. The head should be well wet, and care taken that some of the fluid actually enters the eye. It may be painful for a moment, but can do no harm, as anyone who has dipped lambs and had the solution splashed into his eyes has proven. The cheeks should be saturated also with the dip. In a bad case, a small drop of the undiluted dip may be safely injected into the eye, as the tears quickly dissolve it and carry it to every part of the eye. Another specific for eyes is a solution of 4 grains of sulphate of zinc in an ounce of warm water, and 20 drops of laudanum may be added with good effect.

Jersey and Guernsey bulls from the Lee Farm herds of Mr. E. Phelps Ball, of Rock Island, Que., are advertised for sale in this paper. These herds were successful in winning a good share of the best prizes at the Ottawa and Sherbrooke Exhibitions this fall, and from their rich breeding should serve a good purpose in producing the required dairy cow. The owner writes: "My reason for offering these young bulls is that our herd is growing so fast that we have not room for them, and will sell them at very reasonable prices."

## Bone Spavin

No matter how old the blemish, how lame the horse, or how many doctors have tried and failed, use

Fleming's Spavin and Ringbone Paste Use it under our guarantee—your money refunded if it doesn't make the horse go sound. Most cases cured by a single 45-minute application—occasionally two required. Cures Bone Spavin, Ringbone and Sidebone, new and old cases alike. Write for detailed information and a free copy of Fleming's Vest-Pocket

Veterinary Adviser  
Ninety-six pages, durably bound, indexed and illustrated. Covers over one hundred veterinary subjects. Read this book before you treat any kind of lameness in horses.  
FLEMING BROS., Chemists,  
45 Church Street, Toronto, Ontario

## Ingleside Herefords

Champion herd Toronto Exhibition. Bulls, 10 to 15 months. High quality. Low prices. Easy terms. 70 registered females. Show-yard quality.

H. D. Smith,  
Hamilton, Ont.

## BROXWOOD HEREFORDS.

A few choice bull calves from my imported stock.

R. J. PENHALL, NOBER P. O., ONT.

FOREST VIEW FARM HEREFORDS  
Four bulls from 8 to 12 months old; prizewinners and from prizewinning stock. Several heifers bred on the same lines; choice individuals for sale.  
JOHN A. GOVENLOCK,  
Forest Sta. and P.O.

HEREFORDS—We are now offering a few thick, smooth young bulls and a number of females—a low-down, even, beefy lot. If in want of something extra good, correspond with us. We can please you.  
J. A. LOYBRING, Coldwater P.O. and Sta.

Aberdeen-Angus bull for sale. Black Diamond, No. 226, 3 years old this spring. A good individual and extra stock-getter; has never been beaten in show-ring. Price reasonable. Also one Chester White boar, old enough for service.  
A. G. SPAFFORD, Compton, Que.

If you want ANYTHING in Aberdeen-Angus, at a reasonable price, write: JAMES SHARP, "Tweedhill," Rockside, Ont. Cheltenham Station, C. P. R. and G. T. R.



### SHORTHORNS.

We have for sale a 12-months old Mayflower bull by Derby Imp. He was first-prize winner at O. S. this fall in a strong class. Also several choice heifers of the highest breeding for sale cheap. W. J. SHEAN & SON, Box 256, Owen Sound, Ontario.

JOHN LEE & SONS, Highgate, Ont.



### SHORTHORNS & LINCOLNS

The champion herd of Elgin, Kent and Essex counties. For Sale: 6 choice young bulls, 3 reds and 3 roans, of grand type and quality; also good selection of young cows and heifers. Visitors welcome.

KENWOOD STOCK FARM.

### SHORTHORNS.

Headed by (Imp.) Jilt Victor—4517—10 grand young bulls; also heifers; from imp. and home-bred cows, for sale. Choice Lincoln sheep; Berkshire and Tamworth hogs offered.

MAINING BROS., Highgate, Ont. Kent Co.

### SHORTHORNS, LINCOLNS & OXFORD DOWNS

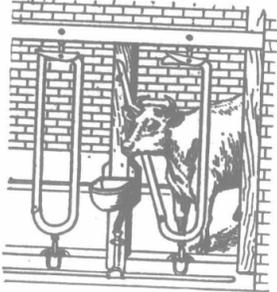
Herds headed by imp. Royal Prince and imp. Abbotford Star. For sale: Nine bulls, six months to one year, three from imp. dams and imp. sires; also females. Oxford Down sheep and Barred Rock cockerels. JOHN MCFARLANE & W. H. FORD, Dutton, Ont., Elgin County

### Shorthorns, Lincolns & Oxford Downs.

Herds headed by Protector, Imp., Vol. 62 E. For sale: Bulls from ten to twenty months—three from imported dams and impo ted sires. Also females in calf. Choice Oxford Downs and Lincolns, both sexes. Also Berkshires, both sexes. All at reasonable prices. JOHN MCFARLANE & W. H. FORD, Dutton, Ont., Elgin Co. M. C. R. and P. M. Railways.

## MODERN Stable Fittings

Endorsed by Leading Stockmen Throughout the Dominion.



### Rush's Rotary U Bar Steel Stanchion

is without a doubt the best cow tie in the world.

Cheaper to install, and gives cows greater freedom than chains. No partitions necessary, therefore the stable is light and airy, consequently more healthful.

### Our Galvanized Steel Water Bowl,

fitted with brass valve, has no equal for strength, durability and general utility.

The water supply is regulated automatically, so that there is a constant supply of fresh water of even temperature before the animals.

They are easily and cheaply installed, and they will increase returns from your stock fully fifteen to twenty per cent.

### Beath's Feed and Litter Carrier

enjoys the reputation of being the best.

This Carrier has solved the problem of removing the manure from your stable at a minimum of expense.

A boy 8 to 10 years old will do as much with our Litter Carrier as two men can do with wheelbarrows. The load can be dumped on wagon or spreader and drawn to the field at once. This saves one handling.

Our Catalogue No. 16 tells all about our complete line of STABLE FITTINGS. Write for it now.

THE METAL SHINGLE & SIDING CO., LIMITED.  
PRESTON, ONTARIO.

## Ontario Provincial Winter Fair

GUELPH, ONT.,

DECEMBER 10th to 14th, 1906

The exhibits and lectures combine to make the Fair most valuable to all farmers. Entries should be sent to the Secretary before Nov. 24. RAILWAY RATES: SINGLE FARE ON ALL LINES EAST OF PORT ARTHUR. For entry forms, programme of lectures, etc., apply to the Secretary.

ARTHUR JOHNSTON, President. A. P. WESTERVELT, Secretary, Parliament Buildings, Toronto, Ontario.

## Shorthorns by Auction

At the farm, 5 miles from Weston, on the G. T. and C. P. R., also street cars from Toronto, on

WEDNESDAY, NOV. 21st, 1906

MR. J. W. ACKROW will sell, without reserve, 12 HEAD OF SCOTCH AND SCOTCH-TOPPED SHORTHORNS, including the stock bull, Imp Deeside King, a Marr Roan Lady. The females are all topped by imp. sires. Also there will be sold 16 HEAD OF GRADE CATTLE, among which are some 2 and 3 year-old steers. Terms: 12 months at 5% on approved paper. Teams will be at Eagle House, Weston, for all morning trains. Sale at 12 o'clock sharp.

COL. J. K. McEWEN and J. SAIGEON, Auctioneers.

### GOSSIP.

High-class Hereford cattle from the Ingleside champion herd of Mr. H. D. Smith, Hamilton, Ont., are advertised in this issue at moderate prices, and on easy terms. The Ingleside herd has a splendid record of show-yard victories, and ranks among the best of the breed in America. Parties interested and de-

siring to found a herd of this grand beef breed, or to strengthen an existing herd, will do well to correspond with Mr. Smith, whose reputation for honorable dealing is of the highest order.

"You think he went to heaven?"  
"Lord knows! The mule kicked him in that direction."

### GOSSIP.

Young Shorthorn bulls and heifers and Yorkshire pigs of pure breeding, at moderate prices, are advertised for sale by Mr. A. Summers, manager of Mr. Hendrie's Valley farm, Aldershot P. O., Ont., near Hamilton. See the advertisement in this paper.

### INTERNATIONAL LIVE-STOCK EXPOSITION, DECEMBER 1 TO 8, CHICAGO.

Prof. Andrew M. Soule, Dean and Director of the Virginia Experiment Station, writes:

"To thousands of stockmen, a visit to the International will be a revelation. It will teach them that many of the fine pictures they have seen in print, and which they have been pleased to feel were the conception of the artist's mind, are in reality but feeble reproductions of the perfection exhibited by many of the animals shown at this great fair. Why not take advantage of an opportunity, therefore, to see more splendid specimens of live stock brought together in one arena than can be viewed elsewhere in the world for so small a cost? Magnificent buildings have been provided by the Exposition company, and all the animals can be seen under cover. One will have plenty of opportunity to examine them at leisure, talk with the men who have bred and fed them, and come in contact with a thousand inspiring influences which have previously been strangers to the heart of the stockman. Rubbing up against one's fellows, learning of their difficulties and how they have overcome them is an invaluable experience. The very bigness of the Exposition, the variety and excellence of the exhibits, and the wonderful fund of information to be obtained by a few days spent there will well repay any stockman for the trip. The writer speaks from experience, and has yet to learn of the man who has visited the International and returned feeling that he was not benefited immensely."

Kenwood Stock Farm, the property of Haining Bros., breeders of Shorthorn cattle, Lincoln sheep and Berkshire hogs, lies in Kent Co., Ont., three and a half miles north of Highgate Station, on the M. C. and P. M. R. R. The Shorthorns, of which there are about 28 head, belong to the Matchless, Miss Ramsden, Mayflower and several others tracing to Imp. Pansy strains, among which are such gilt-edged-bred cows as Pandora (imp.), by Lovat Champion, dam Lenora, by the Lustre-bred bull, Lord North, and a three-year-old daughter of hers, Pandora 2nd, by the Broadhooks bull, Imp. Baron Beaufort. These belong to the Miss Ramsden family. Madge 5th (imp.) is a Bruce Mayflower, by Prince of the Vale, dam Madge, by Golden Sceptre. She has a heifer calf, by Imp. Gold Cup. The others are all home-bred, a number of them the get of the Watt-bred bull, British Sailor =25595=, by Royal Sailor (imp.), dam English Lady 2nd, by Bampton Hero. This bull nicked remarkably well with the herd, the produce being a rare, thick, mellow lot, and wonderful doers, which, topped with the richly-bred, high-class show bull now at the head of the herd, must, and is, producing wonderful results. He is Imp. Jilt Victor, bred by John Young, Tilbouries, sired by the Kiblean Beauty bull, Lord Methuen, dam Scottish Queen, by the Princess Royal bull, Scottish Prince. Among the younger bulls for sale is an eighteen-months-old, by the present stock bull, and out of a Pansy-bred cow, a big, stylish young bull. Another is a yearling, by Blythesome Ruler, a son of Imp. Chief Ruler, and out of a Matchless-bred dam. Another is ten months old, by the same sire, and out of Imp. Pandora. Another is Missie-bred on both sides, ten months old. All these are for sale, together with eight heifers from six to twenty months of age, all by the stock bull, among which are some high-class show stuff, particularly a roan yearling. The Lincolns are essentially a gilt-edged lot, but, owing to the brisk demand, are all sold that are for sale. In Berkshire and Tamworth hogs there are a few on hand, and more coming on of both sexes, of a kind that leaves nothing to be desired in their type and quality. Write Haining Bros., to Highgate P. O., Ont.

## IF WOMEN ONLY KNEW

Thousands of women suffer untold miseries every day with aching backs that really have no business to ache. A woman's back wasn't made so ache. Under ordinary conditions it ought to be strong and ready to help her bear the burdens of life.

It is hard to do housework with an aching back. Hours of misery at leisure or at work. If women only knew the cause. Backache comes from sick kidneys, and what a lot of trouble sick kidneys cause in the world.

But they can't help it. If more work is put on them than they can stand it's not to be wondered that they get out of order. Backache is simply their cry for help.

## DOAN'S KIDNEY PILLS

will help you. They're helping sick, over-worked kidneys—all over the world—making them strong, healthy and vigorous. Mrs. P. Ryan, Douglas, Ont., writes: "For over five months I was troubled with lame back and was unable to move without help. I tried all kinds of plasters and liniments but they were no use. At last I heard tell of Doan's Kidney Pills and after I had used three-quarters of the box my back was as strong and well as ever."

Price 50 cents per box or three boxes for \$1.25, all dealers or The Doan Kidney Pill Co., Toronto, Ont.

### GREENGILL HERD

of high-class

## SHORTHORNS



We offer choice Scotch bulls and females, representing such families as Duchess of Gloster, Village Girl, Rosebud, Orange Blossom, Mysie, Victoria, and other popular families, either imp. or Canadian-bred.

R. MITCHELL & SONS, Nelson P.O., Ont.; Burlington June 2nd

### Glover Lea Stock Farm SHORTHORNS

FOR SALE: Choice bull calves by Golden Cross (imp.). All dark roans. Some from imported sire and dam. Visitors met at Ripley station.

R. H. REID, PINE RIVER, ONT. Ripley Station, G. T. R.

### Queenston Heights SHORTHORNS

One yearling bull, red, straight Scotch, a high-class herd-header. Also a few choice bull calves and heifers, Canadian and American registration.

HUDSON USHER, Queenston, Ont. JOHN GARDHOUSE & SONS, Highfield P.O., Ont.

Breeders of

Scotch and Scotch-topped Shorthorns, Lincolns and Leicester Sheep and Shire Horses.

A good selection of young stock of both sexes always on hand for sale. Scottish Prince (imp.), Vol. 48, at head of herd. Royal Albert (imp.) 2807, at head of stud. Farms 3 1/2 miles from Weston, G. T. R. and C. P. R., and electric cars from Toronto.

### SHORTHORNS AND BERKSHIRES.

Eight grand young bulls of choice breeding. Ten choice young sows being to our imported boar, and thirty younger ones of prolific families and sired by prizewinning boars.

S. J. PEARSON, SON & CO., MEADOWVALE, ONT.

Stations: Streetsville and Meadowvale, C. P. R.

### GEORGE D. FLETCHER, Breeder of Scotch Shorthorn Cattle and Yorkshire Pigs.

Our herd of the most noted Scotch families is headed by the \$2,000 Duthie-bred bull, Joy of Morning (imp.) = 32070 =, winner of 1st prize at Dominion Exhibition, Toronto. A few very choice young bulls from 4 to 9 months old, also females for sale. In Yorkshires are a choice lot of either sex, 7 months old, from imp. sire and dam. Sows bred to imp. hog if desired. BIRKHAM P. O., ONT. ERIN STATION AND TEL.

**SCOTCH SHORTHORNS**

9 heifers, yearlings. 4 bulls, yearlings.  
29 heifers, calves. 27 bulls, calves.

All out of imported sires and dams.  
Prices easy. Catalogue.

**JOHN GLANCY, H. CARGILL & SON,**  
Manager. Cargill, Ont.

**Maple Shade Shropshires AND CRUICKSHANK SHORTHORNS.**

A first-class bunch of yearling ewes, bred to the best imported rams, now ready for shipment. All are for sale at moderate prices.

**JOHN DRYDEN & SON, Brooklin, Ont.**  
Stations: Brooklin, G.T.R. Myrtle, C.P.R. Long-distance telephone.

**WESTSIDE SHORTHORN HERD AND BORDER LEICESTER FLOCK.**

All Registered in the Herd and Flock Books of Great Britain.

We invite all interested to inspect the cattle and sheep on this farm. The Shorthorns are long-tried families, tracing to the pioneer herds of Scotland through channels of repute. The Border Leicester flock is one of the oldest in Scotland, and embraces blood of the highest breeding. Selections for Sale. Visitors from the States and Canada will be cordially welcomed.

**A. Cameron & Sons, Westside Farm, Brechin, Scotland.**

**MAPLE GROVE SHORTHORNS**



My present offering: Several imp. cows with calves at foot; also 4 young bulls. Heifers 6 months to 2 years old. Prices and terms reasonable.

**C. D. WAGER, Enterprise Stn. & P.O., Addington Co.**

**R.A. & J.A. Watt, SALEM, ONT.**

Our list of young bulls for 1206 fall trade contains royally well-bred herd-headers. Among them are to be found show animals. Farm adjoins the town.

Elora is 13 Miles North of Guelph on G.T. & C.P.R.

**Shorthorn Cattle and Lincoln Sheep**

Shorthorn bulls, cows and heifers for sale at greatly reduced prices for the next 60 days.

**J. T. GIBSON, Denfield, Ont.**

**Glenoro Stock Farm SHORTHORNS and LINCOLNS.**

Three grand young Scotch bulls, eleven months old, at prices low enough to sell at sight. Young cows and heifers in calf for sale. Twenty very choice Dudding-bred ram lambs at very reasonable prices. Write at once if you want a flock header. Also a few ewe lambs from imported sires and dams. Long-distance telephone.

**A. D. MCGUGAN, RODNEY, ONTARIO.**

**Pleasant Valley SHORTHORNS**

We are offering several high-class young bulls from first class (imp.) bulls and from imp. and Canadian-bred Scotch cows; also young heifers of various ages, with good Scotch breeding.

**GEO. AMOS & SON, MOFFAT, ONT.**  
Farm 11 miles east of Guelph on G. & G. R. One-half mile from station.

**High-class Shorthorns**

The well-known Duthie-bred bull, Scottish Bess (imp.) (36093), by the great Silver Plate, formerly at head of R. A. & J. A. Watt's herd, now heads my herd. Young stock usually on hand for sale.

**H. S. ROBERTSON, ARMPRIOR, ONT.**

**SCOTCH-TOPPED SHORTHORNS**

Young stock of both sexes for sale, sired by Scottish Baron (Imp.). Prices reasonable.

**H. GOLDING & SONS, Thamesford, Ontario.**

**Brown Lee Shorthorns**

Present offering in 5 young bulls from 9 to 15 months old, a nice straight, good-doing lot, sired by Blenheim Stamp; also females of all ages, daughters of Imp. Sir Christopher and Imp. Beaumont. Prices very reasonable.

**DOUGLAS BROWN, Arr P.O. and Station**

**MAPLE HILL STOCK FARM—Scotch Shorthorns of the best families.**

Young stock for sale of either sex, sired by the grandly-bred bull, Wanderer's Star—5555—.

**Wm. R. Elliott & Sons, Guelph, Ont.**

**PURE SCOTCH SHORTHORNS**

Herd bulls: Imp. Prime Favorite—45214—, a Marr Princess Royal.

Imp. Scottish Pride—26106—, a Marr Ross Lad

Present offering:

2 imported bulls.

15 young bulls.

10 imported cows with heifer calves at foot and bred again.

20 one- and two-year-old heifers.

Visitors welcome. New catalogue just issued

**W. G. PETTIT & SONS, Freeman, Ont.**

Burlington Jct. Sta. Long-distance telephone in residence.

**BEHMER PARK SHORTHORNS**

40 bull calves.

15 heifers under two years.

All of the choicest breeding and practically all of show-yard quality. You can buy anything in the herd at a reasonable figure.

**JOHN DOUGLAS, PETER WHITE, JR., Manager, Pembroke, Ont.**

**SHORTHORNS**

Imp. Keith Baron 36059. Six young bulls from 10 to 18 months old. A lot of 2-year-old heifers in calf and a few young cows. A bunch of heifer calves, cheap.

**CLYDESDALES**

Just now: One pair of matched goldings 5 and 6 years old; show team.

**JAS. McARTHUR, Goble's, Ont.**

**Pine Grove Stock Farm.**

Breeders of High-class Scotch Shorthorns.

Choice Shropshire Sheep, Clydesdale and Hackney Horses.

Herd catalogue on application. Address:

**JAMES SMITH, Supt., Rockland, Ont.**

**W. C. EDWARDS & Co., Limited Prop., on**

**Oak Grove Shorthorns—Present offering:**

Several imp. cows, heifers and young bulls, all sired by Imp. Nonpareil Duke and out of imp. dams; also the stock bull, Imp. Nonpareil Duke, a choice offering.

Prices right. **W. J. ISAAC, Cobourg Station, Harwood P. O.**

**BONNIE BURN SHORTHORNS**

For immediate sale: Two 2-year-old heifers, safe in calf; four bulls, two of them out of imp. dam. All by imp. sire. Shropshires, both sexes—lambs and shearlings. Berkshires, both sexes, by imp. sire and dam. **D. H. RUSSELL, Stouffville P. O. & Sta.**

**Glen Gow Shorthorns—Our present offering**

is 9 bulls, from 6 to 14 months of age, sired by Imp. Ben Loman and Imp. Joy of Morning, and out of imp. and Canadian-bred cows. Also a number of very choice heifers. No fancy prices asked. Long-distance telephones.

**Wm. SMITH, Columbus, P. O. Brooklin and Myrtle Stns.**

**SPRING VALLEY SHORTHORNS.**

Herd headed by Imp. Bapton (Chancellor—40209—) (72328). A choice lot of females, mostly with calves at foot or safe in calf. Also a good six-month-old bull calf. Inspection and correspondence invited.

**KYLE BROS., Arr P.O. Arr. C.P.E., Paris, G.T.R.**

**For Sale—The stock bull, Queenston Archer—45606—, by Derby (Imp.) dam Veronica (Imp.) by Brave Archer (Imp.); also a number of choice Shropshire ram lambs at reasonable prices.**

**BELL BROS., Bradford, Ont.**

**GOSSIP.**

Mr. John Boyes, Jr., Churchill Ont., in ordering a change of advertisement, writes: "Since your representative was here, I have added to my Berkshire herd, Ashgrove Lass, Maple Lodge Lizzie 10th, Concord Pride (second-prize sow, under a year, at Canadian National), and Castle Premier (first-prize boar, under six months old, Canadian National Exhibition). With what I had before and the above mentioned, my herd stands second to none. My herd never lost a red ribbon at the fairs this fall."

**GOOD JERSEY MILK YIELDS.**

In a recent review of the Tring Park herd of Jerseys belonging to Lord Rothschild, published in the London Live-stock Journal, is a statement that Joyful, one of his cows, had given an average of 9028 lbs. per year for six years, and now comes the statement of Mr. J. H. Smith-Barry, in the same paper, that his Jersey cow, Nellie Beresford, by Golden Lad, has yielded an average of 9039 lbs. in the last six years, her best record being made in 1902, when her yield for the year was 12,582 lbs.

Mr. J. A. Lattimer writes as follows regarding the Shorthorn part of the late sale, at Woodstock, held by Messrs. Innes & Lattimer, on Oct. 25th: "Of thirty animals catalogued, seventeen were sold; a few were not offered. Balance were withdrawn on unsatisfactory bids, but none of these had been priced at \$1,000 previously. The seventeen sold for \$1,425, an average of nearly \$84 per head, many of them being under twelve months old, and the best of our cattle not being catalogued, prices must be considered satisfactory. The cattle were bred by the proprietors, and offered in field condition, with no special fitting; but, notwithstanding this, they would commend themselves to anyone looking for good, clean stuff, not a reacted or frail-looking one in the lot. We note, with satisfaction, that breeders are careful what they buy, and that nice breeding coupled with an animal which is neither fish, flesh nor fowl from a Shorthorn point of view is not wanted at all."

**AT THIS YEAR'S INTERNATIONAL LIVE-STOCK EXPOSITION, DECEMBER 1 TO 8, CHICAGO.**

In addition to the practical demonstrations of the breeders' and feeders' art in cattle, horses, swine and sheep on exhibition in single groups and carload displays, we are to have this year meetings of breed associations, where the foremost breeders and feeders of our day are to discuss their work. Papers of practical value to the agriculturist and live-stock men of America, on subjects of immediate interest that now confront our people, will be read and discussed.

On Monday night, December 3rd, the annual meeting of the International Exposition Association is to be held.

On Tuesday night, the following breed associations meet:

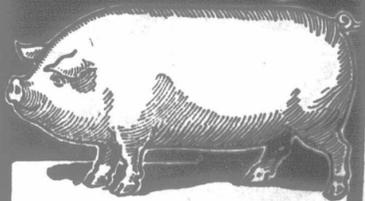
Percheron Society of America; American Shire Horse Association; American Cotswold Sheep Society; American Oxford Down Association; American Suffolk Flock Registry; American Clydesdale Horse Association; American Southdown Breeders' Association.

On Wednesday evening: The American Shorthorn Breeders' Association; The American Aberdeen-Angus Association; The American Galloway Breeders' Association; The American Berkshire Association; and The Hampshire Down Breeders' Association, will hold their annual meetings.

On Thursday Afternoon the American Red Polled Cattle Club meets, and in the evening The American Poland-China Breeders' Association and the Yorkshire Swine Association meet.

The hour, room and other particulars concerning each of these meetings will be posted on the bulletin boards of the show grounds during the week. Everyone interested in live stock of any kind should make an effort to attend these meetings.

**Making Weight**



The greatest weight at the least cost is the aim of the business farmer. It is a fact that the organs of digestion are accountable for every pound of weight and every ounce of milk produced. The question of increasing digestion was the aim of Dr. Hess when he formulated this famous prescription. From his experience, and such medical authorities as Professors Winslow, Quitman and Finlay Dun, he learned that bitter tonics improve digestion, that iron was the greatest blood and tissue builder, that the nitrates were essential to heavily fed animals in throwing off the poisonous material from the system.

**DR HESS STOCK FOOD**

the prescription of Dr. Hess (M. D., D. V. S.) contains the above ingredients, and will prepare animals for market in sufficiently less time to pay for itself many times over, besides curing minor stock ailments. Sold on a written guarantee.

100 lbs. \$7.00 25 lb. pail, \$2.00  
Smaller quantities at a slight advance. Duty paid.

Where Dr. Hess Stock Food differs in particular is in the dose—it's small and fed but twice a day, which proves it has the most digestive strength to the pound. Our Government recognizes Dr. Hess Stock Food as a medicinal tonic, and this paper is back of the guarantee.

If your dealer cannot supply you, we will.

**DR. HESS & CLARK, Ashland, Ohio, U.S.A.**

Also manufacturers of Dr. Hess Foultry Pan-a-c-e-a and Instant Louse Killer.

**Shorthorns ARTHUR JOHNSTON Greenwood, Ont.,**

- Offers for sale, at moderate prices,
- 7 Imported Cows and Heifers (calves at foot).
  - 11 Yearling Heifers (all Scotch).
  - 2 Yearling bulls, including a Marr Clara.
  - 1 Crimson Flower, and One Daisy.

**HOLLYMOUNT SHORTHORNS**



Pure Scotch, imported, and the get of imp. stock.

**25 HEAD**

Anything for sale, 3 young bulls. Breeding gilt-edged and unsurpassed. A few heifers. Prices right.

**W. J. Thompson, Mitchell P. O. & Sta.**

**A. EDWARD MEYER, Box 378, Guelph, Ont. Scotch Shorthorns.**

The Sunny Slope herd comprises Cruickshank Bellona, Mysie, Villages, Bravith Buds, Broadhook, Bruce Augustus, Mayflowers, Campbell Bessie, Urry, Minna, Claret, Elbena Beauty. Herd bulls: Scottish Hero (Imp.) (20058), a Shethin Rosemary, and Chief Ramsden—62549—, a Miss Ramsden. Correspondence solicited. Visitors welcome. Long-distance phone in house.

**Maple Lodge Stock Farm, 1854-1906.**

**SHORTHORN BULLS**—good ones. Several from heavy-milking cows. Choice heifers also. **LEICESTER EWES**, and a lot of extra good rams.

**A. W. SMITH, MAPLE LODGE, ONT.**



**SMITH'S OVARY TONIC  
MAKES HENS LAY**

Your hens will lay all the year round, if you will give them Smith's Ovary Tonic once a week.

One teaspoonful to four fowls keeps hens healthy—strengthens and invigorates the egg-producing organs—and renews wasted tissue due to prolific laying.

Only 25c. and 50c. a bottle. Sold by druggists, grocers, etc.

NATIONAL DRUG & CHEMICAL CO., LIMITED, MONTREAL.



**Burnside Ayrshires**

Imported and Canadian-bred. Prizewinners at all the leading shows. I hold the award of merit given by the Bd. of Dir. of World's Fair, St. Louis, to the breeder of largest number of prizewinning Ayrshires at said Exposition. Females of all ages for sale, imported and Canadian-bred.

R. R. NESS, JR., HOWICK, QUE., P.O. AND STATION.

**SUNNYSIDE STOCK FARM**

**FOR SALE:** A number of young **SHORTHORN BULLS**, red and roan, from imported sire and dams; good enough to head pure-bred herds. Apply: **JAMES GIBB, Brookdale, Ont.**

5 one-year-old bulls \$60 to \$100 Canadian  
5 one-year-old heifers, \$100 to \$125 Shorthorn  
4 six-months pigs, pure Yorks. \$15 per pair.  
10 six-months sows, pure Yorks.  
50 six-months pigs, \$14 per pair.  
100 fall pigs, \$6 per pair.  
Purchasers must make own selection. Apply: **A. SUMMERS, Valley Farm, Aldershot P. O., Ont.**

**Wm. Grainger & Son**

Hawthorn herd of deep-milking **Shorthorns**. Aberdeen Hero (imp.) at head of herd. Three grand young bulls, also females, all ages. Prices reasonable.  
**Londesboro Station and P. O.**

**For Sale: Two Young Shorthorn Bulls**

Also Cows and Heifers, and one good Imp. York. Sow, also a good Yorkshire Boar one year old. Good breeding and good animals

**DAVID MILNE, ETHEL, ONT.**

**ELM GROVE SHORTHORNS**

We have for sale some good young cows and heifers, of the Fashion and Belle Forest families, in calf to Scottish Rex (imp.) or Village Earl (imp.), our present herd bull. For prices and particulars address

**W. G. SANDERS & SON, Box 1133, St. Thomas, Ont.**

**ROSEDALE SHORTHORNS**

Do you want a profitable cow with calf at foot and bred again; also heifers bred and heifer calves from imported stock. Choice milk strains. Write: **A. M. SHAVER, Ancaster, Ont., Hamilton station**

**High-class Shorthorns**—We are now offering 5 young bulls and 3 heifers, two, three and four years of age. Marigolds, the eldest, a daughter of Imp. Royal Member, has a calf at foot by Sailor Champion. This is an extra good lot.  
**THOS. REDMOND, Millbrook P.O. and Stn.**

**DURHAM CATTLE FOR SALE**

I have for sale two young bulls, 8 months old, sired by Imp. Rustic Chief—4419—(796777); also a few females, among them a young cow fit for any showing.

**HUGH THOMSON, Box 556, St. Mary's, Ont.**

**Sheep and Cattle Labels** Will enable you to properly take care of your stock. Write to day for circular and sample. Address **F. G. James, Bowmanville, Ont.**

**HIGHGROVE JERSEY HERD.**

Our present offering is: a few choice heifer calves from 2 to 8 months old, which, considering quality, will be sold reasonable.  
**ROBT. TUFTS & SON, Tweed P.O. & Stn.**

**Brampton Jersey Herd** For sale: 10 bulls from 6 to 18 mths old, descended from St. Lambert or imported stock; also females of all ages. For full particulars address: **B. H. BULL & SON, Phone 68, Brampton, Ont.**

When Writing Please Mention this Paper

**FOR SALE AT FARMERS' PRICES Registered Jersey & Guernsey Bulls**

all ages, including a pure St Lambert bull, 4 years, and one Guernsey bull, 2 years, out of imported dam. Others equally bred and good individuals. All were exhibited at Ottawa and Sherbrooke, 1906, and won in their respective classes. A rare chance to get a dairy bull, also a few females. Address: **E. PHELPS BALL, Lee Farm, Rock Island, P. Q.**

**Pine Ridge Jerseys** For sale very cheap some choice young bulls, bred in the purple, of ideal type; also a few heifers and heifer calves, and some Cotswold shearing rams and ram lambs. **Wm. Willis & Son, Newmarket P. O. & Sta.**

**Ayrshires and Yorkshires** We always have on hand choice animals of above breeds, of any desired age. Prices reasonable & rise us before buying. Intending purchasers meet at Hoard's. **Alex. Hume & Co., Menie P. O.**

**Ayrshire Bulls**—A select pair (13 months old) by a son of the champions **Douglasdale (imp.)** and **Minnie of Lessnessock (imp.)**, and out of daughters of imp. cows; also two March calves and one May (all select).  
**W. W. BALLANTYNE, Long-distance phone, Stratford, Ont.**

**Wardend Ayrshires** We are offering young bulls from 1 to 3 years old; also a choice lot of spring calves from deep milking dams. Sired by **White Prince of Menie No 1825**; bred by **A. Hume, Menie, F. W. TAYLOR, Wellman's Corners, Hoard's Stn., G. T. R.**

**HIGH-CLASS AYRSHIRE CATTLE** Bulls and heifer calves, two to nine months old, cows and heifers all ages. Prizewinners from this herd include **Tom Brown** and **White Floss** sweepstakes at Chicago. **DAVID BENNING & SON, "Glenhurst," Williamstown, Ont.**

**SPRINGBURN STOCK FARM, North Williamsburg, Ont., H. J. Whitteker & Sons, Props.,** breeders of pure-bred Ayrshire cattle, Oxford Down sheep, Berkshire pigs, and Buff Orpington fowls. Young stock for sale. Visitors welcome.

**RIVERSIDE HOLSTEINS**

**THE RIVERSIDE HERD** of Advanced Registry Holsteins has for immediate sale a dozen young bulls from 3 to 11 months of age, sired by **Johanna Rue 4th's Lad**, whose five nearest dams have butter records averaging 22.86 pounds of butter in seven days, and out of **A. R.** dams and their daughters.

**M. RICHARDSON & SON, Caledonia, Ont.**

**CENTRE AND HILLVIEW HOLSTEINS** Bulls 1 year and under for sale, from Great-testing dams and sires, all in A. R. O. Records. Our prizes in milk test in America's A. R. O. Records is, 1st prize in 30-day; 5th in 7-day; 5th in 7-day, over 8 months milking.

**P. D. EDE, Oxford Centre P.O., Woodstock, C.P.R. or G.T.R.**

**MAPLE GROVE HOLSTEIN HERD** is made up of Record of Merit cows and heifers with large records and headed by **Lord Wayne Mechtildie Calamity**. Young bulls fit for service at reasonable prices. **Walburn Rivers Fold-n's, Ont.**

**Glenwood Stock Farm—Holsteins and Yorkshires.** Holsteins all sold out. Have a few young Yorkshires sows, about 2 months old, for sale cheap. True to type and first-class. Bred from imported stock. **THOS. B. CARLAW & SON, Warkworth P.O., Campbellford Stn.**

**HILTON STOCK FARM—Holsteins, Cotswolds and Tamworths—** Present offering: Some young cows; a nice lot of young pigs; few boars six months old, and sows in pig. **R. O. MORROW & SON, Hilton P. O., Brighton Tel. and Stn.**

**QUESTIONS AND ANSWERS. Miscellaneous.**

**FEED TO PURCHASE—SORGHUM.**

I have clover hay, wheat straw by itself, oat and barley straw mixed (all straw cut when threshed); sugar cane, and of grain, oats and barley as it grew.

1. What food would be the most economical to buy to complete ration for cows and steers?
2. What are the constituents and nutritive ratio of sugar cane?
3. How does sugar cane compare with ensilage in food constituents and value?

Ans.—1. A balanced ration could be made from the above materials alone, but it would not include much of the sugar cane and straw. Unquestionably, the proper materials to buy would be oil-cake meal, cottonseed meal, gluten meal, or bran, named in order of preference. For the sake of calculation, we supposed a daily ration made up of: Clover hay, 10 lbs.; oat and barley straw, 3 lbs.; sugar cane, 5 lbs.; oat and barley chop, 5 lbs. This would be hardly sufficient for either cow or steer, but gives us a working basis. The ration named would contain about 1.324 pounds protein, 8.927 pounds of carbohydrates, and .367 pounds fat. As it well known, fat and carbohydrates serve similar purposes in the animal economy, though a pound of fat is worth 2.3 pounds of carbohydrates. Expressed in terms of carbohydrates, our ration would have 8.927+.8541=9.771 pounds of carbohydrates and fat. This gives us a nutritive ratio of 1.324: 9.771 or 1:7.4, which is rather too "wide" for steers, and entirely too wide for milch cows.

Addition of 1 1/2 lbs. oil-cake meal to the above would give us 1.684 lbs. protein, 9.395 lbs. carbohydrates, and .520 lbs. fat (nutritive ratio of about 1:6.3). Just what is the ideal nutritive ratio is impossible to state dogmatically, but 1:6.3 would not be far astray for steers. For milking cows, such a ration would be further improved by adding a little more clover hay and a little bran, gluten or cottonseed meal. A little bran is always a good thing to feed, though at present prices, oil cake is a more economical stuff for balancing the ration. Of course, individual requirements of animals vary greatly, but the above, we trust, will serve as a working guide. Two or three pounds of wheat straw may be substituted for an equal amount of oat or barley straw without seriously altering the nutritive value.

2. In Jordan's "Feeding of Animals," we find the following comparison of sorghum with dent and flint corn fodder, all being analyzed in the green state:

Per cent. water.	Per cent. protein.	Per cent. carbohydrates.	Per cent. fat.
79.4	1.3	11.6	.5
79.8	2.	12.1	.7
79.	1.7	12.	.5

Sorghum fodder (green)	Flint-corn fodder (green)	Dent-corn fodder (green)
1.3	1.3	1.3
11.6	12.1	12.
.5	.7	.5

According to the above, sorghum is poorer in protein than is ordinary corn fodder (corn fodder in these analyses being rather thickly planted corn that has not been husked). On a basis of the above figures, the nutritive ratio of green sorghum would be 1.3: 11.6+.5 or 2.3: 13.1 or 1:5.7. The nutritive ratio of the dent corn,

**Lump Jaw**

The first remedy to cure Lump Jaw was **Fleming's Lump Jaw Cure** and it remains today the standard treatment, with years of success back of it, known to be a cure and guaranteed to cure. Don't experiment with substitutes or imitations. Use it, no matter how old or bad the case or what else you may have tried—your money back if Fleming's Lump Jaw Cure ever fails. Our fair plan of selling, together with exhaustive information on Lump Jaw and its treatment, is given in **Fleming's Vest-Pocket Veterinary Adviser**. Most complete veterinary book ever printed to be given away. Durably bound, indexed and illustrated. Write us for a free copy. **FLEMING BROS., Chemists, 45 Church Street, Toronto, Ontario**

**HOLSTEINS FOR SALE**

Four imported and one home-bred bulls, from 8 to 19 months old; also our entire crop of spring bull calves, from week old up, sired by the grandly-bred imp. bull, **Sir Howitz B. Pieterie**, whose dam record is over 80 lbs. milk in one day, and from great-producing cows of the most fashionable strains. Can spare a few cows and heifers, from one year up; 75 head to select from. Cheese 13c. Don't delay if you want one from this herd.

**H. E. GEORGE, Crampton, Ont.**

**Cows from the ANNANDALE HOLSTEIN HERD**

Have won during the past show season at Ottawa first and sweepstakes on cow, first on 3-year-old, first on 2-year-old class. At Guelph (dairy test) first and second sweepstakes on cow, first and second in heifers. At Chicago (National) first and sweepstakes on cow, also second-prize cow second and third on 2-year-olds, second on 1-year-old heifers, and a host of other prizes (different cows at different shows)

Bull calves, 4 months and under only, for sale from great dams and greatest of sires. Buy young if you want them from Annandale Stock Farm.

**GEO. RICE, Tillsonburg, Ont.**

**WOODBINE HOLSTEINS**

Herd headed by **Sir Mechtildie Posch**, absolutely the best official-backed sire in Canada. Dam **Isabelle Jewel Mechtildie**, 35.8 pounds butter in seven days. Champion cow of Canada over all breeds. Sire's dam, **Alma Posch 4th**, holds the world's largest two-day public test record—8.6 pounds butter. Young bulls of the choicest quality for sale.

**A. KENNEDY, Agr. Ont., Ayr, C.P.R.; Paris, G.T.R.**

**HOLSTEINS AND YORKSHIRES**

**R. HONEY, Brickley,** offers for sale a choice lot of young boars fit for service; also sows ready to mate.

**Greenwood Holsteins and Yorkshires**

For sale: A few richly bred bulls from one to eighteen months old. Also a few choice females of all ages. Yorkshires of either sex.

**D. Jones, Jr., Caledonia P. O. and Sta.**

**A FEW HOLSTEIN BULLS**

fit for service, for sale at reasonable prices. Choice females, all ages. If you are willing to pay good prices for good stuff, write me.

**G. W. CLEMENS, St. George, Ont.**

**Lyndale Holsteins.**

**For Sale** A number of bull calves from one to four months old, out of Record of Merit cows, and sired by **Beryl Wayne Paul Concordia**, whose four nearest dams have official butter records averaging 23 lbs. 11 oz. each. **BROWN BROS., LYN, ONT.**

**"GLENARCHY" HOLSTEINS**

43 head of big, deep flanked, heavy-producing Holsteins, many of them milking from 50 to 60 lbs. a day on grass. Young stock of both sexes for sale. A straight, smooth lot. **G. MACINTYRE, Renfrew P. O. and Stn.**

**GROVE HILL HOLSTEINS**—We now offer for sale our stock bull, **Verhelle 4th's Count Calamity** Born December, 1902. Only two of his daughters have been tested, and both are in Record of Merit. He is a show animal, and a persistent stock getter. If you want a bargain write: **F. R. MALLORY, Frankford P. O. and Stn., C. O. R. Trenton Stn., G. T. R.**

**MAPLE PARK HOLSTEINS**

Home of the great **De Kol Pieterie** and **Posch** families. **Schulling Sir Posch**, son of **Annie Schulling**, testing over 4% butter-fat officially, and grandson of **Alta Posch**, stock bull.

**S. MACKLIN, PROP., STREETSVILLE.**

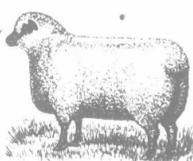
# Red Rose Tea

## "is good tea"

It has that "Rich Fruity Flavor" which belongs to Red Rose Tea alone.

Prices—25, 30, 35, 40, 50 and 60 cts. per lb. in lead packets

T. H. ESTABROOKS, ST. JOHN, N. B. WINNIPEG.  
TORONTO, 3 WELLINGTON ST., E.



### The Langton Stock Farm Co., Ltd.

BRANTFORD, ONT.,

Special offer of 56 imported Shropshire sheep, 20 shearing rams and 36 shearling ewes. All Minton and Harding bred. Also Clydesdale and Hackney horses and Berkshire pigs.

T. A. COX, Manager, Brantford, Ont.

**FAIRVIEW SHROPSHIRE EWES.**  
Rams at Service Proved Getters of Extra Good Stock.  
**BELVOIR SIRDAR**, champion at St. Louis World's Fair, where he was a winner of \$510.  
**HARDING'S BEST**, champion at the International, winning over Belvoir Sirdar.  
**FAIR STAR ROSE**, Mansell-bred, the greatest-siring producer of International winners.  
**ALTIMONT**, sired by a Mansell ram and out of a Butter ewe.  
Only a limited number of ewes to offer. Do you need a few good ones? If so, write: JOHN CAMPBELL, Woodville, Ont., Canada.

**Canadian Agents for the Original McDougall's Sheep Dip & Cattle Dressing**  
Imported direct. Price: Imperial pints, 35c.; imperial half gallon, \$1.25; imperial gallon, \$2.25. Sold by druggists, or charges prepaid on one gallon tins. **THE WORTHINGTON DRUG CO., Toronto, Ontario.**

**SHEEP DIP**  
SPECIAL PRICE | 1 gallon, \$ 1 00  
                          | 2 gallons, 2 00  
FREIGHT PAID | 5 gallons, 5 00  
                          | 10 gallons, 10 00  
**The West Chemical Co., Toronto, Ont.**

**18 DORSET SHEEP**  
For sale, selected from flock of Col. J. A. McGillivray.  
**Morris & Wellington, Fonthill, Ont.**

**Dorsets.** Can supply Dorset sheep of the various ages, of either sex, in pairs not akin, at very reasonable prices, quality considered. **Gilead's Spring Farm, E. DYMENT, Copetown P. O. Wentworth Co.**

**Dorset Sheep, Shorthorn Cattle**  
Specialties.  
Choice young stock for sale.  
**R. H. HARDING, "Mapleview Farm," Thorndale, Ont.**

**SHROPSHIRE**  
Good young rams and ewes **FOR SALE.**  
**W. D. MONKMAN, Bond Head, Ont.**

**Leicesters!**  
A grand lot of one and two-shear rams and ram lambs, also ewes of various ages.  
**Mac. Campbell, Harwich P. O., Ont.**

**Leicesters For Sale**  
Of good size and quality. Various ages.  
**C. & E. WOOD, Freeman P. O., Ont.**

**GOTSWOLDS**  
Some good shearing ewes and ewe lambs, and a few choice ram lambs, right type, for sale. Prices moderate.  
**E. F. PARK, Burgessville, Ont.**

News Editor.—Here's a cable from Constantinople, saying the Sultan's principal amusement is scaring his wives into fits.  
Managing Editor.—Well, head it, "A Harem-Scarem Fellow," and run it in the joke column.

### My Shropshires Won the Flock Prize at Toronto.

And I have imported and home-bred **RAMS and EWES** for sale that are of the same stamp. All kinds of good

**GOTSWOLDS and SHORTHORNS** as well. Prices always reasonable.

**ROBERT MILLER, Stouffville, Ontario.**  
**W. W. CHAPMAN,**

Secretary of the National Sheep Breeders' Association.  
Secretary of the Kent or Romney Marsh Sheep Breeders' Association.  
and late Secretary of the Southdown Sheep Society.

**Pedigree Live Stock Agent, Exporter and Shipper.** All kinds of registered stock personally selected and exported on commission; quotations given, and all enquiries answered.  
Address: **MOWBRAY HOUSE, Norfolk St. LONDON, W. C., ENGLAND.**  
Cables—Sheepcote, London.

**E. T. CARTER & CO., Toronto**  
**DEERSKINS**  
HIDES, SKINS, etc.

### FARNHAM FARM OXFORDS

We are offering for sale 100 strong, vigorous good-quality ram lambs, a number from best imported sires. We also have for sale 50 yearling and two-shear ewes, and a number of ewe lambs. **Telegraph Guelph.**  
**HENRY ARKELL & SON, ARKELL, ONT. Guelph, G. T. R. Arkell, C. P. R.**

**Shropshires and Gotswolds**  
I am offering for sale 100 shearing ewes, home-bred and imported; also an extra good lot of yearling rams and ram lambs of both breeds, some of each fitted for showing.  
**JOHN MILLER, Brougham, Ontario.**

fodder would be 1:6.85. The ratio of the dent corn fodder would be 1:7.7.

3. Jordan gives as the average of 99 analyses of corn silage the following figures: Protein, 1.4 per cent.; carbohydrates, 11 per cent.; fat, .8 per cent. His analysis of sorghum silage is: Protein, .8 per cent.; carbohydrates, 15.3 per cent.; fat, .3 per cent. The composition of green sorghum fodder as given in answer to question 2 is: Protein, 1.3 per cent.; carbohydrates, 11.6 per cent., and fat, .5 per cent.

According to the above, corn silage would have a nutritive ratio of 1:9.1; sorghum silage a ratio of 1:20, and green sorghum fodder a ratio of 1:9.8. We find no table giving the composition of cured sorghum fodder, but a comparison with corn is furnished by the above. It will be seen that sorghum compares well in carbohydrates, but is somewhat deficient in the allied substance, fat, and in protein is markedly deficient, hence its nutritive ratio is very wide.

### QUESTIONS AND ANSWERS. Miscellaneous.

#### VENDOR OF FARM REMOVING MANURE, ETC.

Two months ago I bought a farm, and there was nothing said about what he was to take away with him. Can he take the water trough, the manure, which was there at the time I bought the farm, and the hay fork, rope and car? Or, do they belong to the farm?

Ontario. **OLD SUBSCRIBER.**

Ans.—He is probably entitled, legally, to remove the trough and hay fork, etc., provided he does so before the time for delivery of possession of the farm to you, but he has no right to take the manure away.

#### BROKEN HORN.

Is it more painful for a beast to get the outside of the horn knocked off than it is to dehorn them, as they seem to go back much more? Do you think it would pay to take both off close up as soon as one gets knocked off? G. H. L.

Ans.—To have merely the outer shell knocked off is no great injury, if the member is promptly wrapped with tarred bandages, but having the horn knocked off at the base must cause more pain than a clean stroke of the dehorning clippers. If one were knocked off, we should be inclined to have both cut off.

#### BUILDING A HENHOUSE.

I think I have seen in one of your issues of "The Farmer's Advocate," a good plan of a chicken house; have looked for it, but am unable to find it. Describe the best kind of a henhouse for a farmer to build, one that is easily constructed, cheap and warm, to hold about 30 hens. What material is best, cement or lumber? If cement, how deep a foundation, kind of floor, perches, windows, also position of same, nest boxes, how high and what kind of roof and roofing; also thickness of walls. Kindly state cost, as near as possible, whether of cement or lumber.

A **SUBSCRIBER.**

Ans.—Make it simple. Useful suggestions will be found in the Nov. 8th and Nov. 15th issues of "The Farmer's Advocate." Earth floor; straw loft (protected by shingled roof); walls consisting of one ply of boards, batted, with, perhaps, a lining of paper and boards on the north side, where the hens roost; have the south side open, but provided with raised canvas curtains (stretched on a frame), and arranged so they may be dropped at night; plain dropping board, two feet from ground, with perches a few inches above it; these are the modern ideas in poultry housing. Of course, glass may be used, if desired, but the curtain front seems to give better ventilation, and maintains a slightly more even temperature in experiments. Do not build of cement, except, perhaps, to provide a six-inch foundation. Such a poultry house is inexpensive. You can figure the cost for yourself from the description given. You will need a house at least 12 x 15 feet, which will give 6 square feet per hen; better, perhaps, to make it 12 x 18 feet.

## MILBURN'S LAXA-LIVER PILLS

are mild, sure and safe, and are a perfect regulator of the system.

They gently unlock the secretions, clear away all effete and waste matter from the system, and give tone and vitality to the whole intestinal tract, curing Constipation, Sick Headache, Biliousness, Dyspepsia, Coated Tongue, Foul Breath, Jaundice, Heartburn, and Water Brash. Mrs. R. S. Ogden, Woodstock, N.B., writes: "My husband and myself have used Milburn's Laxa-Liver Pills for a number of years. We think we cannot do without them. They are the only pills we ever take."

Price 25 cents or five bottles for \$1.00, at all dealers or direct on receipt of price. The T. Milburn Co., Limited, Toronto, Ont.

## Southdowns

New importation of rams and ewes on offer; also home-breds by Royal prizewinning imported rams **COLLIES**—Puppies by imported Holyrood Clinker.

**Robt. McEwen, Byron, Ont.**  
Long-Distance Phone.

**NEWCASTLE HERD OF TAMWORTHES and Shorthorns.**—We have for immediate sale several choice boars ready for service, and sows bred and ready to breed, together with a lot of beautiful pigs from two to four months old. Also a few choice heifers in calf to Donald of Hillhurst No. 4460, and a few nice bull calves and heifer calves. All correspondence answered promptly. Daily mail at our door, and prices right. **Colwill Bros., Newcastle.**

**Mount Pleasant Herd of Tamworthes and Meiteins.** A large herd of choice pigs of all ages on hand. Mount Pleasant type of hogs are profitable breeders and ideal bacon hogs. Pairs not akin. Herd headed by Colwill's Choice No. 1241. Won sweepstakes and silver medal at Toronto, 1901-2-3. Also a few bulls.  
**Bertram Heskin, The Gully**

## MONKLAND YORKSHIRES

Imported and Canadian-bred.

We keep 35 brood sows, and have constantly on hand between 100 and 200 to choose from. Can supply pairs and trios not akin. Quality and type unsurpassed. Prices right.

**JAS. WILSON & SONS, FERGUS, ONT.**  
G. T. R. and C. P. R. Long-Distance Phone

## Oakdale Berkshires

Of the largest strains. Imported fresh from England. The produce of these and other noted winners for sale reasonable. Let me hear your offer for a pair or trio not akin.  
**L. E. MORRAN, Milliken Stn. and P. O.**

## LARGE ENGLISH YORKSHIRES

We have a limited number of choice young pigs for sale, bred from our choicest sows, and got by the imported boars, Dalmeny Joe 12577 and Broomhouse Beau 14514. Pigs from the latter won all the first prizes at the Ottawa Fat Stock Show last March for the best dressed carcasses and sweepstakes over all breeds or grades. We guarantee satisfaction in all mail orders. **Joseph Featherston & Son, Streetsville.**

## Cherry Lane Berkshires

Are strictly high-class. Toronto winners. Of all ages. Young stock of both sexes for sale. Pairs supplied notakin.  
**Sam Dolson, Alloo P. O., Norval Stn. COUNTY PEEL.**

## Ohio Improved Chester Whites

100 Pigs to Offer of the long, deep, heavy sort. Breeding stock selected from the most noted families, with a view to size and quality. Booking orders for choice spring pigs; also a few fall pigs for sale. Pairs furnished not akin. Express charges prepaid. Pedigrees and safe arrival guaranteed.  
**H. E. GEORGE, Orampton, Ont.**

## IMPROVED YORKSHIRES. LARGE

Choice young stock from imported prizewinning stock for sale.  
**Geo. M. Smith, Haysville, Ont.**

# ARE YOU A MAN?



**With Back Pains,  
Whose Power is Wasted,  
Weak and Nervous,  
And Ambition Lost?**

You can have freedom from pain and again be given life energy and the vigor of youth if you wear Dr. McLaughlin's Electric Belt with suspensory for weak men.

What use has the world for a man who has not the courage to face the battles of life? Such courage comes from system greatly endowed with the vital force of electricity. You cannot afford to let weakness stifle your ambition and mar your future. If you are not the man you should be at your age; if you have wasted your strength; if you feel you are losing your youthful vigor, do not hesitate.

**What a Difference** between this class of men and the strong, manly young fellow who has not abused nature's gift, who is in full possession of the gift of health that nature bestowed upon him, full of life, vim and vigor that should be characteristic of every young man. He is the envy of his fellow men. His superiority is evident in his every action, because he feels the confidence and strength of his vitality. Do you wonder why some young men yearn for the power that they have wasted through their early indiscretions. "To err is human," and that is why nature has provided a remedy for the evils that come to the young fellow who has disobeyed the laws of nature. There is a lack of electrical force in the nerves, and this can be destroyed by supplying electricity to the system. To do this, and do it thoroughly, is what is given to

## DR. McLAUGHLIN'S ELECTRIC BELT

It has a world-wide reputation with its cures of men and women (as good for women as men), Rheumatic, Dyspeptics, and sufferers from pain and debility. **Such Reports Come from Everywhere.**

"I am pleased to say that your Belt has done me a world of good. I have only had a very slight touch of asthma since, and before using it I had it all the time. I am quite a different young man, and can do a day's work without any trouble.—F. J. Horn, Bowmanville, Ont."

"I believe your Belt is all you claim for it, for it has done me a lot of good. I sleep well and feel well in every way, and rest good. I feel that I can recommend your Belt to anybody.—Geo. Ruddy, 501 St. James St., London, Ont."

was before. My stomach is stronger; my head and intellect seems clear, and I am able to take a fresh start in life, a clearer view of things, and am far more able to do a day's work.—Leonard A. Spooner, P. O. Box 69, Palmerston, Ont."

send to anybody in need of it. It will cure anything as regards Physical Weakness, and is far ahead of drugs. Anything I can do in the way of recommending your Belt I will do to the best of my ability. You can refer anybody to me that may be in doubt about your Belt.—Thomas Murray, 148 Gladstone Ave., Winnipeg, Man."

"I am feeling better than ever I

I want you to call at my office and examine this new Belt. I think you will agree with me when I say it is a wonderful device. You can feel the glowing current of life that flows into the weakened nerves. I will show you letters from your own neighbors telling how I cured them. **Consultation Free.**

The reason so many men neglect to use my Belt is that they fear it will fail like other things they have tried. Now, the security I offer to a doubtful man is that he need not pay for my Belt until it does for him what I say it will do, if he will in return give me reasonable security that he will pay me when cured. Isn't that fair? Now, if you are sick or in pain, or a weak man or woman, and if tired of drugging your system, paying out money without result, try my Belt. You have nothing to lose and everything to gain by accepting my liberal offer. If it fails to cure it costs you nothing. Remember you can **PAY WHEN CURED.**

**FREE BOOK**—If you cannot call, write for my beautiful descriptive book, showing how my belt is used. It explains how my Belt cures weakness in men and women, and gives prices. Send for it to-day. **I have a book especially for women.**

**ADDRESS: DR. M. S. McLAUGHLIN, 112 Yonge St., Toronto, Canada.**

**OFFICE HOURS: 9 a. m. to 6 p. m. Wednesday and Saturday evenings till 9.**

### HILLCREST HERD OF ENGLISH BERKSHIRES

Instead of exhibiting, we advertise and do a mail-order business. Vine Station, G.T.R. **JOHN LAHMER, Vine, Ont.**

### Large White YORKSHIRES.



Present offering: Some choice boars ready for service. Sows ready to breed, and a choice lot of Imp. pigs of various ages, and young pigs direct from imported stock, not akin. Write

**H. J. DAVIS, Woodstock, Ont.**

### Fairview Berkshires

Bred from imported and Canadian-bred sires and dams, and bred on prize-winning lines. My brood sows are large, choice animals. Young stock of both sexes. Some sows bred to imp. boars. **HENRY MASON, SCARBORO P. O.** Street cars pass the door.

**For Sale**—Ohio Improved Chester Whites, the largest strain, oldest established registered herd in Canada; young sows in farrow; choice young pigs, six weeks to six months old; pairs not akin; express charges prepaid; pedigree and safe delivery guaranteed. Address: **H. D. GEORGE, Putnam, Ont.**

When Writing Mention this Paper.

### BERKSHIRES

Imported and Canadian-bred **H. M. VANDERLIP, Cainsville, Ont.** on T. H. & B. and B. & G. division of Grand Trunk. Telephone and telegraph, Cainsville, Ont.



**Rosebank Berkshires.**—Present offering: Boars fit for service. Sows ready to breed. Choice young stock ready to wean, sired by Maple Lodge Doctor and Sallie's Sambo (Imp.), a Toronto winner. **Lefroy, G.T.R. JOHN BOYES, JR., Churchill, Ont** Long-distance Phone

### SUNNYMOUNT BERKSHIRES.

Sunny Mount Berkshires are unsurpassed for ideal bacon type and superior breeding. For immediate sale: 3 sows 11 months old, in pig; several sows from 5 to 7 months old; 3 boars 11 months old, and several 5 to 7 months old, and younger ones of both sexes. Imp. sires and dams. **JOHN McLEOD, Milton P. O. and Sta., C. P. R. and G. T. R.**



**ELMFIELD YORKSHIRES** Have a few young sows from 4 to 7 months, bred and ready to breed; also some young pigs weaned and ready to wean, from imp dam and sire. **G. B. Mums, Ayr, Ont**

### Yorkshires!

Have some grand spring litters farrowed in Feb., Mar., April, May from A1 stock. Will sell at living prices. **L. HOOEY, Peoria's Queens P. O., Fenslon Falls Station.**

### GLENBURN HERD OF YORKSHIRES

Winner of gold medal three years in succession. Offers for sale: 12 young boars, 4 months old; a large number of sows, same age also 30 suckling pigs, both sexes. Also a grand good Shorthorn bull (roan), 10 months old.

**David Barr, Jr., Box 3, Renfrew, Ont.**

### Glenhodson Yorkshires.

Sows bred or ready to breed. Young pigs from three to six months old. Pairs not akin. Satisfaction guaranteed.

**GLENHODSON COMPANY, Myrtle Station, Ont.** Long-distance phone at farm. **Lorne Foster, Mgr**

### GOSSIP.

"SMELL THE WHOLE FAMILY." Mr. Boulder.—"Uncle Cy has changed his brand of smoking tobacco!" Mrs. Boulder.—"Indeed! You haven't seen Uncle Cyrus in three months!" "This Aunt Mandy's butter?" "Yes." "Keep the cream on the pantry shelf, don't they?" "Yes." "Door's always open, isn't it?" "Yes." "Uncle Cy sits there smoking, Aunt Mandy rocks and sniffs her camphor bottle—don't they?" "Yes." "Well," taking a whiff at the butter, "can't you smell the whole family?"—[Stolen.]

Mr. Walburn Rivers, Falden's, Ont., writes: "Our advertisement in 'The Farmer's Advocate' has brought us lots of enquiry for Holsteins. Our recent sales are: One very fine young bull to G. Wilson, Peebles, Ont.; to Mr. William Neff, Bayham, Ont., a young son of Tolena Fairmont Iosco, record at two years nearly 12 lbs. butter in 7 days, and 48 lbs. milk in one day, a very persistent milker, giving 40 lbs. milk per day, on grass alone, six months after calving. Mr. Charles Smith, Latimer, Ont., took Prince Calamity Wayne, a son of Princess Calamity Clay, with a record of 20 lbs butter in 7 days, 80 per cent. fat, and 70 lbs. milk in one day at four years."