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Vol. XLIV.

LONDON, ONTARIO, JULY 15, 1909.

No. 877

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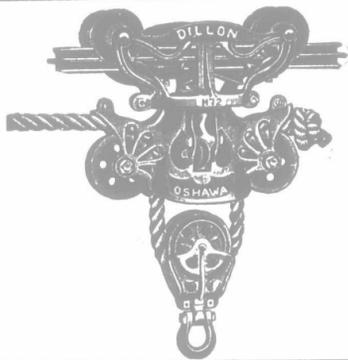
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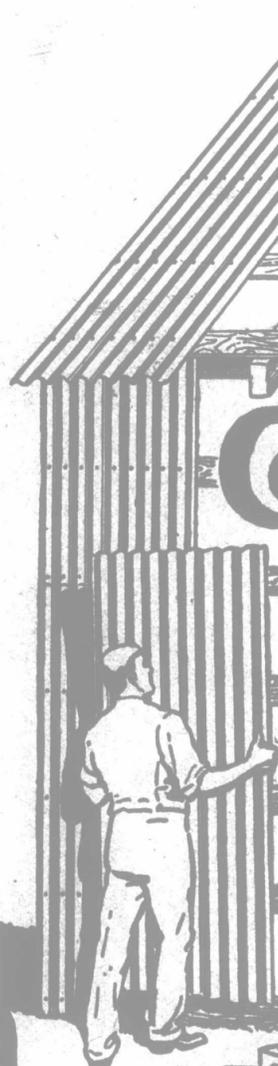
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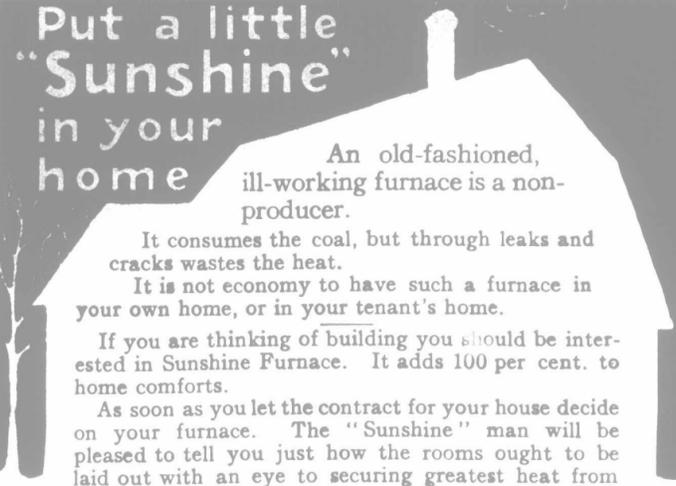
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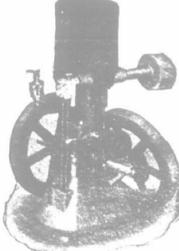
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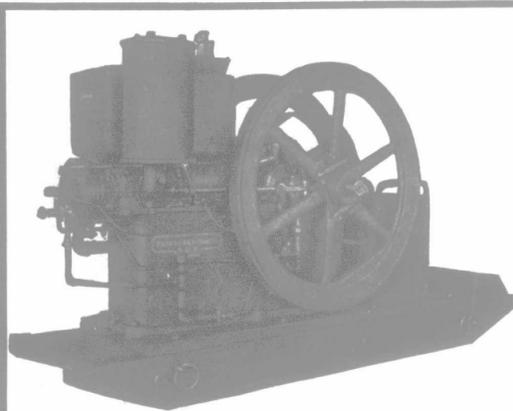
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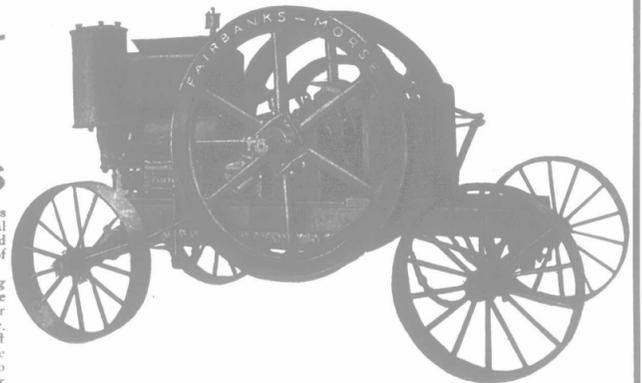
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The Farmer's Advocate

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"Persevere and Succeed."

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Vol. XLIV.

LONDON, ONTARIO, JULY 15, 1909

No. 877

EDITORIAL

Men learn wisdom through folly. He is a wise student who learns from the folly of others, and not always from his own.

Lean kine mean thin pocketbooks. It is the extra feed that tells. See that the cows' paunches are well padded out twice a day with nutritious feed.

Volunteer enlistment has been tried, and failed, in Britain, we are told. This is about the most hopeful statement issued from the Tress conference. It indicates, let us hope, that the Englishman is becoming too civilized to participate, except under stress of dire emergency, in the pagan game of war.

We never hoe a thistle from a hill of corn. We go through at the last cultivation with a pair of leather gloves and pull them out, remarked a thrifty Oxford County farmer the other day. Thistles cut off with the hoe grow up again. Those pulled out will not show above the surface till fall, at any rate.

A New Brunswick subscriber, in the course of a very interesting letter, submitting a year's dairy-herd record, in referring to the fact that the few silos built in their district have all gone out of use, puts the question, "Is it a case of the survival of the fittest, or a warp in the gumption of our farmers?" We are not prepared to say. The great ensilage crop is corn, and corn is not as sure a crop in New Brunswick as farther west. Still, we know that in King's County, New Brunswick, a few dairymen have, until recently, at all events, used silos with considerable satisfaction, and we are not fully convinced but that many others might do so by growing early varieties on well-manured, well-cultivated, fall-plowed sod, not being in any hurry to get it into the silo, but taking chance of a frost, rather than ensiling in immature condition. And if corn cannot be successfully grown in certain districts, the question is open to earnest consideration whether it would not pay to ensile clover or alfalfa, either of which, if cut at the right stage and packed into a tight silo, will cure into an appetizing, succulent winter feed.

Much, but not too much, is being said in favor of tile-draining the fields. Let us not forget that the roads are equally benefited by the subsoil watercourses which tile afford. Wherever properly put in on wet roads, tile have effected a marvellous improvement. Scoffers may laugh, and declare that you can't drain puddled clay, but their opinions are based on a misconception. In the first place, it is not the puddled clay we try to drain, but the earth beneath the puddled surface. Secondly, a road-drain ditch may and should be filled nearly to the surface with gravel, stone, or other loose foreign material. In the third place, even the hardest, waxiest clay will soon yield to the ameliorating influence of under-drainage. The Ontario County of Middlesex is laying a considerable mileage of tile drains on its roads, and various other municipalities have tried it to a greater or less extent. Tile drainage is the first and most important step to take in the further development of our public highways. Gravelling can wait. Drain the foundation. Metal surfacing has to be replaced every little while. Drainage is permanent, and its benefits become more marked with passing years.

Agricultural Training of Teachers.

The primary purpose of the agricultural college is to train young men who intend to farm, and also those others who wish to fit themselves to serve the industry in some expert or professional capacity. A very important secondary function is the training of rural-school teachers in elementary agriculture and horticulture, that they may relate the farm boys' and girls' education to their environment, and educate them towards, not from the land. A class of one hundred and thirty-two Normal-trained teachers have just completed a special ten-weeks' course at the Ontario Agricultural College, ninety-two having received instruction in elementary agriculture and horticulture, the remainder in industrial arts. It is the former section of the class, tutored by Prof. S. B. McCready, B. A., who look forward to teaching in rural schools. A similar line of work is being carried on at the Nova Scotia Agricultural College, in Truro, N. S., where a rural-science school is being held this month, especially for teachers, though others may attend. Last year there was a small but interested class of thirty. This year, Principal Cumming informed us that formal application had been received from one hundred and twenty-four before the end of June. In Quebec, the Macdonald College has a special department for the training of rural-school children. And so the effort is to take the influence and inspiration of the agricultural college through the teacher to the child.

The Silo and the Corn Crib.

On many farms, when the silo comes in, the corn crib goes out. Drilling in seed at the rate of half a bushel per acre, takes the place of hill planting in check rows. With early corn, grown in hills or drills, rigidly thinned, and properly cultivated, well-earred stalks will enrich the silo content. Ideal silage is supposed to combine the high nutritive value with succulence. But we are not so sure that we can afford, without losing more than variety in diet, to discard roots and corn in the ear. Once a man gets the silo habit, he does seem to grow averse to dry-curing fodder, and husking corn, and caring for both. The labor problem worries him, and after the grain harvest he appears to become busier than before; so the surplus corn remaining after the silo is filled is slashed down, shocked up, and all fed to the cattle unhusked. But then, after all, for feeding hogs, horses, cattle and poultry, what better adjunct have we than a long, airy crib, packed with well-hardened ears of corn? It has made savings-bank deposits grow, and helped to pay for countless farms. Canadian farmers who throw a few ears of corn in the feed box, with about half or two-thirds the usual quantity of oats, generally have sleek-looking horses, that stand a heavy day's work without flinching. And there is reason for it. The Ohio Experiment Station made a comparative study of the value of oats and corn for work horses, and the conclusions of the investigation, given elsewhere, are worth study, and suggest the question, Is it not worth while to continue or revive the corn crib in silo districts? What say our readers: (1) What has been their experience in feeding corn to horses? (2) What is to be said about good silage as a horse food? (3) Is it not practicable to utilize the corn crib and the silo on the same farm?

Education for efficiency, as well as for culture, is the motto of the times.

Cheap Alcohol Not Yet.

The plan of using denatured alcohol from waste products, as a cheap fuel to furnish power on the farm—one of the objects of the United States law permitting its manufacture—is pronounced a failure by the chemists of the American Department of Agriculture, after experiments covering almost a year. Prof. Harris L. Sawyer, Chief of the Bureau of Chemistry, says it is impossible, because of the fuel cost to operate the still, to say nothing about the original cost of the plant, which is approximately \$10,000 for a still to do good work.

"Mountaineers make moonshine whiskey in small stills, and realize a good profit, until they get caught," says the Chief of the Bureau; "but, while moonshine whiskey, which costs 50 cents a gallon to manufacture, is cheap for whiskey, alcohol at 50 cents a gallon would never compete with gasoline. So far, in a good-sized still, it has been impossible to produce alcohol at as low a price as gasoline is produced."

The Department of Agriculture secured an appropriation of \$10,000 to demonstrate the process of manufacture. A first-class still, of small capacity, was placed in the Government exhibit at the National Corn Exposition, held in Omaha last December. It proved a good attraction, and was seen by some hundred thousand farmers, but with the raw material almost free, and little or no fuel outlay, the lowest cost at which the alcohol could be produced was about 17 cents a gallon, and a gallon of alcohol will produce scarcely more power than a gallon of kerosene. The travelling still is now in Washington. A similar still is being used in the attempt to make alcohol from cactus in Texas, while another is working in Mississippi trying to make alcohol from sawdust.

As a commercial product, denatured alcohol may some day compete with gasoline, but, as for the dream of each farmer having a small still, and making from cornstalks, straw, waste apples and other refuse, cheap fuel with which to thresh, shell corn, grind feed, churn, and light his farm, that day is not in sight. It is now stated in the American press that, if farmers ever get the benefit of denatured alcohol, it will be by organizing co-operative companies in regions where coal can be secured at low cost.

Thus another vision fades, though not altogether unexpectedly, we must say. "The Farmer's Advocate," while hopeful of benefit from tax-free alcohol, never shared the sanguine anticipations of its contemporaries. It is easy to build up false hopes, and just as rude to have them swept suddenly away. Impartial facts are what the public want, and what legislators and editors should seek to put forth. With a view to getting at the facts regarding the possibilities of alcohol for fuel, we requested Professor Harcourt, while in Germany last summer, to inquire into the manufacture of denatured alcohol there. In "The Farmer's Advocate" of December 17th, page 1954, he published the result of his observations in Germany, where he found the retail price of the article 28 to 30 cents a gallon (ninety-five per cent. volume). His conclusions then were that, if alcohol were to be profitably manufactured by our farmers, it would have to be by co-operative effort, as a high-proof article could be made only by a continuous still, expensive to purchase and requiring expert attention. Developments indicate that his view was not unduly conservative.

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.

1. THE FARMER'S ADVOCATE AND HOME MAGAZINE is published every Thursday.
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, dairymen, gardeners, stockmen and home-makers, of any publication in Canada.
2. TERMS OF SUBSCRIPTION.—In Canada, England, Ireland, Scotland, Newfoundland and New Zealand, \$1.50 per year, in advance; \$2.00 per year when not paid in advance. United States, \$2.50 per year; all other countries 12s.; in advance.
3. ADVERTISING RATES.—Single insertion, 25 cents per line, agate. Contract rates furnished on application.
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13. ALL COMMUNICATIONS in reference to any matter connected with this paper should be addressed as below, and not to any individual connected with the paper.

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LONDON, CANADA.

Ripened Wheat for Seed.

Many of our readers will remember that an agitation in favor of cutting grain early was carried on in the agricultural journals of a quarter of a century ago. The advice was strongly given never to let grain get really ripe, and many good reasons were put forward in support of this view. There was less loss from shelling, a fact of which we were all well aware, and it was pointed out that the straw was more valuable for feed, which is especially true in the case of oats. One of the chief reasons advanced was that, with wheat in particular, the sample was brighter and clearer, and, therefore, would sell for more money. The agitation was possibly carried to an extreme, however, when it was argued that wheat cut in the late-milk stage not only made a finer-looking sample, but that the yield was just as good as if left to become more mature. Many of our best farmers were so much influenced by the arguments advanced as to change their practice somewhat, and early cutting has been in favor with them ever since. Probably the best time at which to cut wheat for market purposes is when the grain has passed the milk stage altogether, and has become doughy and rather firm.

But in regard to the value of wheat for seed purposes, experiments conducted by Professor Zavitz, at the O. A. C., for fourteen years, show that it is better if left until fully ripe. Seed taken from wheat cut when very ripe produced a greater yield of both grain and straw, and a heavier weight per measured bushel than that produced from wheat which was cut at any one of four earlier stages of maturity. Why should not our farmers make use of this knowledge? It could be done in many cases with very little extra trouble. As a rule, if there is much difference in the crop, the best portions will be found to be the earliest, and will probably be fully ripe when the field is cut, and it would be easy, when hauling in, to leave enough of such portions until the last, and stow away and thresh separately, using the product for seed. If the grain is of nearly equal ripeness, a strip of sufficient size, selected

from the part where the crop is best, might be left for a few days after the rest of the field is cut, and, when fully ripe, cut and kept separate, and threshed specially for seed, as before suggested. This may seem to be more trouble than it is worth, but a very slight increase in yield, and more than that might be expected, would be more than sufficient to pay well for the extra time and labor involved. It is, after all, more a question of taking thought, than of taking time.

HORSES.

Comparison of Corn and Oats for Work Horses.

From Ohio Agricultural Experiment Station, Bulletin No. 195, by B. E. Carmichael.

Problems connected with the feeding of work horses are doubtless of as wide interest as any problems in live-stock management. Practically all farmers, whatever particular branch of farming they may be engaged in, have occasion to feed work horses. Besides farmers, commercial firms of various classes keep horses in large numbers for work purposes, and they, too, have a deep interest in methods of feeding that will lessen the cost of maintaining work horses, without decreasing their efficiency.

Whether feeds are high or low in price, it is well worth while for feeders to exercise great care in the selection of rations, so as to use the ones that are most efficient and economical. With the present exceedingly high market prices for all kinds of grain feeds, it is especially important that a judicious selection of feeds be made, for much waste may result if attention is not given to this phase of stable management.

Of all grain feeds used in this country, none is in higher repute with horsemen than oats. Many horsemen believe oats to be the best single grain feed for horses, whether kept for draft or for road purposes. It has been stated time and again by practical horsemen and others, that horses fed upon oats display more life, keep in condition and endure work, especially during hot weather, better than do horses which receive a grain ration made up largely or exclusively of corn. And this belief in the efficiency of oats as a grain feed for horses is so strong with some horsemen that they are willing to pay exorbitant prices for oats rather than feed corn.

A study of the chemical composition of corn and of oats fails to show any good reason for the exceedingly high favor in which oats are held, or for corn being considered so totally unfit for the use of horses, especially when at hard work. It has been claimed that oats contain a stimulating principle known as "avenine," which gives great spirit to horses. The existence of this stimulating principle has not been proved, and it is safe to say that its existence is very improbable. Even if it does exist, there is no evidence to indicate that it would have any special bearing upon the practical feeding of work horses.

On account of the widespread prejudice against corn, and in favor of oats, an experiment, from which it is hoped that definite data may be secured in regard to this important subject, has been undertaken at this Station. The plan of this work calls for a long-time experiment—not one of a few days' or weeks' duration, but one that will continue for a number of years.

The work was begun in the spring of 1907, and the results of the experiment up to the present time are so striking that it has been thought best to give them to the public at once, with the understanding that further work is being done along this line, and that there is a possibility of different results being secured later.

SUMMARY.

While the work reported in this bulletin has not been conducted for a sufficient length of time, nor with enough animals to justify any very comprehensive statements, yet it seems that some facts have been pretty well established. The work is being continued, and it is hoped that the cumulative effects, if any result, of the long-continued use of grain rations made up exclusively of corn and of oats may be determined. The following statements, based upon the work done thus far, seem to be warranted by the data presented heretofore. It must be understood that the horses were mature geldings, and that mixed clover and timothy hay was fed.

The corn-fed horses endured hard work during hot weather as well as did the oats-fed horses. The use of corn, to the exclusion of other grain for a period of forty-eight weeks, was not detrimental to the health of work horses.

The use of corn for work horses did not induce laziness and lack of endurance. Neither did the use of oats induce increased spirit and endurance.

When mixed (clover and timothy) hay was fed

to mature geldings at general farm work, ear corn was practically as efficient, pound for pound, as oats.

On the basis of the results of this experiment and statistical records of farm values of grains, corn has, since 1866, been cheaper than oats as a grain feed for work horses.

The drop in weight of the corn-fed horses, coincident with the beginning of the use of shelled corn, indicates that ear corn is to be preferred above shelled corn for work horses.

Farm animals should be fed according to their needs. Their needs depend, of course, upon the product that they yield. Work horses are kept for applying energy, and should be supplied with feeds that will furnish the required energy at the least possible cost, all things considered.

There is a wide difference in the efficiency of horses in utilizing feed. This is well illustrated by the record of the horse, Tom, used in this experiment. There is an "individuality" in work horses, as well as in other farm animals. Horses that are notably hard to keep in good condition should be replaced by others that may be maintained at less cost.

The data presented do not prove that, for use with pure timothy hay, ear corn is as efficient, pound for pound, as oats. Neither is any evidence at hand to indicate that a grain ration made up exclusively of corn is suitable for brood mares with foal or in milk, or for young, growing horses.

When the weights of the horses for the year previous to the experiment are compared with the weights secured during the experiment, it is seen that the exclusive use of either corn or oats has not had any bad effect upon the horses. There is no positive proof, however, that a mixed ration would not be more efficient than one made up exclusively of corn or of oats. This experiment does show, nevertheless, that corn is a valuable feed for work horses, and should be given a large place in their rations, whenever market conditions warrant its use.

It is obvious that feeds for work horses should be palatable, efficient, and economical. As far as palatableness is concerned, corn seems, in the experience of this Station, to have a slight advantage over oats, although this will depend to a considerable extent upon the individual appetite. The results obtained thus far in the experiment reported in this bulletin, indicate that corn is an efficient feed for work horses. The bulk of an amount of ear corn equal in feeding value to the usual amount of oats is small—so small that a casual observation might lead one to believe that too little corn was being used. As regards economy, ear corn is usually cheaper per pound than oats, while this experiment indicates that ear corn and oats are worth approximately the same per pound for feeding under the conditions stated previously.

What the Farm is For.

Editor "The Farmer's Advocate":

The relative cost and profit of raising colts and steers all depends on the dam and sire, and the luck the breeder has. There are not so many unsound steers as there are colts. I have bought three-year-old colts for less than the price of a three-year-old steer.

The feed of the steer and that of the colt do not differ very much up to three years of age. The steer is sure sale, while one colt out of three is sound, and will command a good price. If a man likes horses, and does not care for cattle, he had better stick to horses; if he likes cattle, let him breed cattle. No one can estimate the value of feed of either steer or colt up to three years old. All depends on how you feed them. I have seen them raise good colts and give them no care, while others would spend the price of a horse and have nothing. One thing is sure, the farmer who does not try to raise both, and the very best he can get, both by selection of dam and sire of cattle and horses, had better go out of the farming business, as that is what the farm is for.

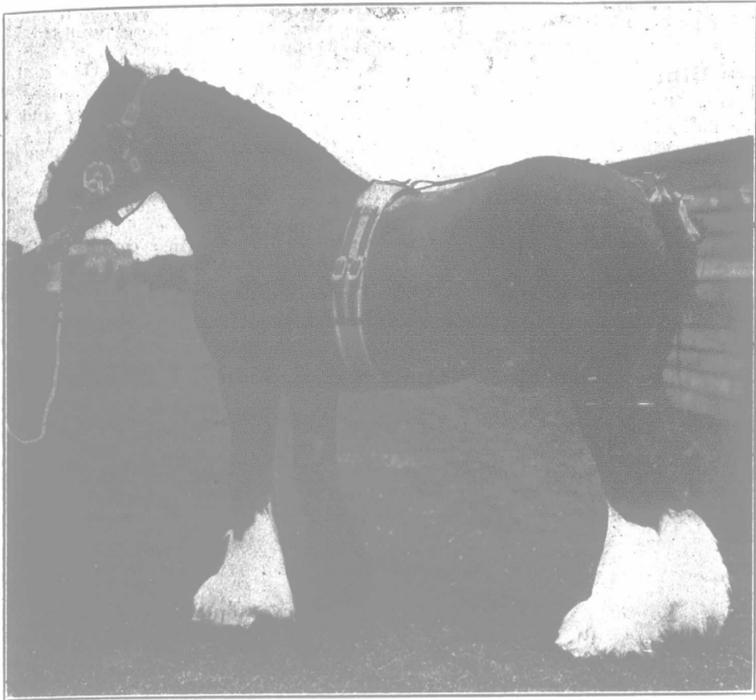
Ontario Co., Ont. J. F. LAVERY.

Why Not Work the Stallions?

Editor "The Farmer's Advocate":

Dr. Hopkins' letter on horse-breeding, in your issue of June 10th, is good advice to breeders and exhibitors of that class of stock. How can you expect to get working stock when the stallion is idle, and cooped up, nearly ten months of the year? Practically none of the stallions are made to work in harness in this country. When on the road, the most of them slouch along, until they are so spoilt that they cannot walk smartly at all. Why not have them in a good strong cart, and make the stallion walk up properly, and save the extra pony? By all means, work the breeding stallion on the plow, and in other places, and show people he can do a day's work or pull a load. You will improve the breed by doing so.

Manitoba, O. KING.



Holker Mars.

Three-year-old Shire stallion. Champion at the Royal Show, 1909.

Winnipeg Horse Show.

The fifth annual show under the auspices of the Winnipeg Horse Show Association, held on June 24th, 25th and 26th, was a decided success. Winnipeg has a reputation for horses that is continental, and His Equine Majesty was displayed with all the splendor which numbers and high quality, glittering trappings, costly vehicles, and a magnificent amphitheatre, ablaze with royal purple and gold, could lend. This is the first year the show has had a building of its own. It has been held out of doors since becoming too large to be accommodated by any building in the city. From the popularity of the function with horse-lovers and society, the show will not be long outgrowing the quarters just provided for it. It has, in fact, occupied them fully already, with no accommodation to spare, either for patrons or judging classes.

The officiating judges were: Captain Kennan, Dublin, Ireland; Colonel Pratt, Little Rock, Arkansas; Senator Beith, Bowmanville, Ont.; Inspector Church, Regina, Saskatchewan, and R. H. Taber, Condie, Saskatchewan—a committee of three working on each class. Most of the animals shown were owned within the city, though a good display was made from outside points, as well. Winnipeg horse fanciers have been purchasing freely during the past few months, in anticipation of this event, so the judges found classes awaiting their decision, some of which could not be duplicated for numbers and high-quality individuals by any show in the Dominion. In all, seventy-seven classes faced the judge.

Colt Raising.

In the issue of "The Farmer's Advocate" for July 8th appears a carefully-worked-out article on the cost of raising a colt until he is three years old. Horse-buyers generally, as is suggested in the article referred to, are inclined to belittle the cost of raising a colt, and to magnify that of raising a steer. There is no doubt that, by letting a colt have a good deal of liberty and exercise, it will thrive and grow well on roughage that does not count for much, receiving but a small amount of expensive grain and hay. Who has not seen colts in winter running around a strawstack, and getting scarcely anything given to them, except a little hay, and, though thin and shaggy, growing fairly well, and certainly active? Such treatment is not calculated to develop heavy, strong drafters, and is not to be recommended for any class. On the other hand, to base reckoning of cost of food required by a colt on the rations recommended for idle horses, in books on the subject, is something that horse-raisers scarcely feel like accepting. For instance, instead of feeding threshed oats, some farmers believe it profitable to feed grain in the sheaf, thus making use of the straw, and lessening the ration of hay required. A small allowance of roots, also, can be fed, so as to lessen the amount of more expensive food needed. In many ways, little economies are practiced, so that the board-bill is kept well under the mark, and yet the colt grows and thrives right along

But grain is needed, and, though not fed by weight and marked up against the animal, it should not be reckoned at less than a fair price. When it is all counted up, it amounts to a tidy sum. A practical farmer, who has had considerable experience in raising young stock, estimates the cost as follows: Value of mare's work lost during season, \$7; feed for colt during first winter, 2 pounds oats and bran per day, at 1 cent per pound, for six months, \$3.60; hay, 7 pounds per day, at \$10 per ton, \$6.30; carrots, 10 bushels, altogether, \$1.00; total for winter, \$10.90. Boiling the oats occasionally, and adding a little flax seed, furnished variety, and is most wholesome, without adding anything to cost. Second summer, pasture only, at \$1 per

month, \$6.00. There is no need of grain while on grass; indeed, the animal is better without it. Second winter, say: 3 1/2 pounds oats and bran per day, \$6.30; hay, 9 pounds, \$8.10; carrots, 10 bushels, \$1.; total for second winter, \$15.40. Third summer, charging \$1.25 per month for pasture, \$7.50. Third winter, allow of grain and bran 5 pounds daily, worth \$9; hay, 11 or 12 pounds, worth, say, \$10; carrots, 20 bushels, \$2; total, \$21. With the ration allowed the third winter, the colt should be in good shape for selling in the spring. According to the estimate, the colt, at three years of age, will have cost \$69.80, not counting in service fee. These estimates will by most be reckoned moderate. Oats, for instance, are now much higher than a cent a pound, which was taken as the average of recent years. Pasture, also, is cheap at the prices allowed, though perhaps not cheaper than it may be hired in many districts. Yet, as "Chronicle" remarks, if a steer cannot be raised for less than seventy dollars, money is being lost by cattle-raisers continually. Another item which is not reckoned in expense account, but which ought to be included in it, is cost of attendance. Whatever value may be placed upon that, it would certainly be greater, in the case of colts than of

steers. Taking it all together, while the raisers of horses are doubtless making money at the business, they are not doing it by selling their stock at the prices of commercial cattle.

LIVE STOCK.

The King's Interest in Agriculture

Farmers and stockmen the world over, whether they believe in royalty or not, commend and admire His Majesty King Edward for the deep and practical interest which he takes in agriculture, and particularly in stock-breeding. Replying lately to a loyal address from the Royal Agricultural College, at Cirencester, he said:

"From my youth I have taken the warmest interest in agriculture. It is a source of livelihood and support to hundreds of thousands of my people, and upon it the prosperity of the country largely depends. In agriculture, as in all other industries, scientific research has effected great improvements. The simple methods which the farmers of bygone times found profitable and efficient, have now given place to systems of cultivation which were then unknown. The success of the farmer of to-day is dependent not merely upon his industry and economical management, but on the possession and application of special knowledge. Such special knowledge can only be obtained by instruction and scientific investigation, and I therefore cordially welcome the enlargement of the scope of the work of the Royal Agricultural College. Under your new organization you will have greater opportunity for the efficient performance of your important duties, and for the continuance and extension of your invaluable work. You may be sure of my warmest good wishes for the increased success of your undertaking."

Skim Milk for Pigs.

An account is given in the Journal of the Irish Department of Agriculture of experiments in pig-feeding carried out in two seasons, which afford fresh evidence of the value of separated milk for pigs. In 1907, three lots of five pigs were fed in three different ways, and in 1908 three lots of six. Lot 1 in each season had one part by weight of mixed meal, made of maize and barley in about equal parts, and a small quantity of pollard, with four parts of potatoes and six of separated milk. Lot 2 received a ration consisting of two parts by weight of meal and six of separated milk. Lot 3 had two parts of meal and four of potatoes. All three lots had as much food as the pigs would eat. The pigs in Lot 1 were finished in 90 1/2 days, those in the second lot in 88 days, and those in the third in 151 1/2 days. The increase in live weight was almost equal, but the average daily gains varied from 1.88 pounds for Lot 1, and 1.95 pounds for Lot 2, to 1.09 pounds for Lot 3. The meal cost 6s. 7d. per cwt.; the potatoes given, as raised from the land, were valued at £2 per ton; and 1d. per gallon (about 20 cents per cwt.) was charged for the milk. On these terms, the cost of producing 1



Royalty at the Royal.

King Edward driving to the big ring at the Royal Show, Gloucester, 1909.

cwt. of dead weight, charging the costs of the animals and food, without attendance, were £1 19s. for Lot 1, £1 18s. 3d. for Lot 2, and £2 10s. 11d. for Lot 3. The results show that four parts, by weight, of potatoes were practically equivalent in feeding value to one part of meal, while four parts of potatoes were not nearly as valuable as six parts of separated milk.

Hogging Down Corn.

Turning hogs into the corn field, to pull down the stalks and fatten on the ears, is a method practiced not infrequently in the corn-belt States, where the crop is grown for grain, the stalks being little thought of. We understand it is occasionally resorted to in Essex County, but were surprised, the other day, to run across a farmer in Middlesex who had tried it, with satisfactory results. Charles Fitzgerald, of East Middlesex, having more corn last year than was needed to fill his silo, fattened his hogs on the balance. His silo, by the way, is a 14 x 30-foot stave structure, built nine years ago, and still keeps the corn fairly well. He grows early-maturing varieties of hill corn to fill it, having, last year, Longfellow, Compton's Early, and White Cap Dent. This year, about a bushel and a half of King Philip was planted. About 15 acres of corn was put into the silo last fall, leaving about four acres for the hogs. This was a well-earned crop, which would probably have husked 100 bushels or more to the acre. The method adopted was to go through and pull off the ears, throwing them on the ground, and hauling the stalks off to feed the cows. Part of the corn, however, was left standing for the hogs to pull down. Twenty-seven or twenty-eight shoats, averaging about a hundred pounds apiece, were turned in, and left there till marketed, at about 200 pounds weight. A little peas and chop was also fed. Accounts were not kept, but, from a calculation suggested by his interviewer, Mr. Fitzgerald figured roughly that a probable 2,700 or 2,800 pounds of live-weight increase, figured at the selling price of 6 cents per pound, realized in the neighborhood of \$160 from the four acres of corn. Against this should be set the chop and peas fed, but, on the other hand, the stalks drawn off should be credited, leaving \$40 an acre as an estimate of the value of the crop marketed as pork. The labor is a small item, and would be more than balanced by the manure. "The Farmer's Advocate" would like to hear from others who have tried this method, keeping accurate account of the proceeds and profit.

A Factory Patron's Thrifty Calves.

How to raise good calves, is one of the most difficult problems the cheese-factory patron has to solve. The pot-bellied runts commonly produced by a diet of grass and sour whey, with such contributory favors as hot sun and flies, are almost enough to discourage a stockman from patronizing a cheese factory, and drive him the length of adding buttermaking to the duties of his hard-working wife. Where the whey is pasteurized and the tanks kept clean, so that each day's whey is pumped into the patrons' cans sweet, and containing its due residuum of fat, it makes fairly good feed for calves that have got a good start on milk. Sour, putrid whey, as too often delivered, should not be fed to young calves at all.

The accompanying illustration shows a bunch of seven thrifty youngsters, of mixed breeding, in a paddock on the farm of Septimus Bourne, Middlesex County. They all came at the end of April or the first of May, and were photographed June 24th. Their feed, in addition to grass, consisted of a pail of whole milk diluted with water, and strengthened with twelve handfuls of oil-cake meal.

The temptation to send every pound of milk to the factory should be resisted. Whole milk may be expensive calf food, if the youngsters are given all they want, but if calves are to be raised at all, a little milk fed to them will realize better returns than if sent to the factory. It means the difference between thrift and stunting, which is usually the difference between profit and loss.

Aloes to Prevent Calf-sucking.

In a recent issue the question was asked how to prevent a yearling from sucking a cow. Mechanical devices had been tried, without avail. Joseph Poole, of Middlesex Co., Ont., tells us he has cured this habit by painting the teats after milking with a solution of aloes. The teats should be washed again before milking, and the solution afterwards re-applied. A very few treatments, he says, will cause the calf to give up the habit in disgust.

THE FARM.

Flax-pulling.

Editor "The Farmer's Advocate":

This is the season for flax-pulling. When the stems grow golden, and their seed-balls rustle, the pullers go into the fields, and pull, bind and shock, the season lasting three or four weeks. Flax-pulling is done by hand, and, in cases of hard, clayey soil, is very difficult work. Sun-baked clay is almost as difficult as concrete to pull anything from, and the poor puller has to twist and tug at his handful so fiercely that occasionally the stems break off at the surface. Of

yield, length of thread being equally as important as toughness of fibre. More than this, the root, which is broken off later on in the machines, becomes valuable for fuel in the mill.

Were our article a general one, we might describe the threshing, spreading, turning and lifting operations (the three last named being called "curing"), the breaking and skutching processes—all of which have to be completed before the fibre is ready for threadmaking. But we set out to tell about flax-pulling, and must stay close to our subject. It should be explained, however, that the ordinary small farmer cannot grow flax (for the fibre) unless he has access to a mill where he can sell his product. There is required too much outlay for various machines for the small

grower to think of manufacturing his own crop into marketable tow: so that, where the industry is carried on, it is in conjunction with mills and flax-workers in towns, who buy the product from neighboring farmers by the ton, or rent land and cultivate it themselves.

When the farmer grows his own flax on speculation, he sometimes pulls it himself, though usually—the pulling being too difficult for the average tiller—he lets out the work at from \$5 to \$7 an acre to a man or group of men and women, who make flax-pulling their summer trade.

Where millmen grow the "stuff" on leased land, they have gangs, consisting of men, women and children, hired at so much a day, to do the work. From 25 cents to \$1.50 a day is paid, according to "pulling capacity." The gang-wagon waits at the appointed place every morning up till the hour for starting; and the gang, carrying dinner-pails, makes this its rendezvous. Thence they are jolted on the sometimes springless, cushionless vehicle to the flaxfield, which may be eight or nine miles distant from town.

They are a jolly, noisy crowd, perhaps, but oh, how they have to work! The heat of a July sun, a fierce, craving tendency of the spinal column to crack where the greatest curvature is, and the natural propensity of thistles for getting into one's fingers—many troubles besides these have to be borne. The only consolation the puller has is that his season is short. The other work connected with flax is by far less difficult. That is the rainbow in the puller's sky.

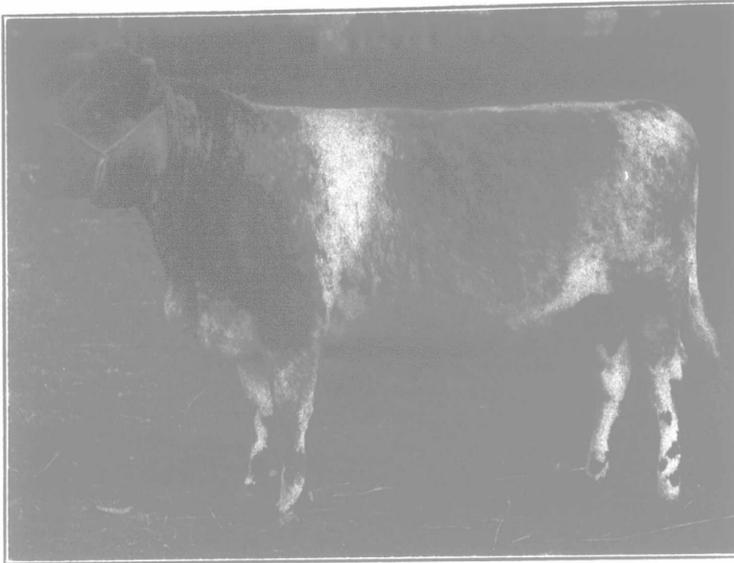
JAS. A. BYRNE.

Ensiling Alfalfa with Corn.

Editor "The Farmer's Advocate":

Your letter of June 25th, inquiring about the ensilage of the third cutting of alfalfa, is to hand. What I suggested to the excursionists was to convert the first and the second cuttings of alfalfa into hay, and use the third cutting for mixing with the corn when filling the silo. In 13 years' experience at the College, alfalfa has produced an average of three cuttings per year. The first and second cuttings can be made into hay to good advantage, and in most instances it would seem unwise to attempt to convert these into silage, as it would be unseasonable to place these in the silo at the time when they are ready for cutting, which would generally be about the 20th of June for the first cutting, and the 1st of August for the second cutting. As the third crop in the one season is generally ready for cutting about the middle of September, it could be cut and run into the silo in the green condition along with the corn. This would be an easy way to handle the alfalfa, and would improve the quality of the corn silage very much indeed, as the alfalfa contains an abundance of the flesh-forming constituents which are lacking, to a large extent, in the corn. This would make a better balanced ration, and should furnish more economical results than the silage made from corn alone. I understand that in one portion of New York State this system is practiced, with excellent satisfaction. As there are this year thirty acres of alfalfa on the College Farm, it is possible that some experimental work may be done along this line by Prof. Day, who has charge of the silos and of the feeding of the farm stock.

C. A. ZAVITZ, Prof. Field Husbandry,
Ontario Agricultural College.



Sherborne Fairy.

Senior yearling Shorthorn heifer. Female champion at the Royal Show, Gloucester, 1909.

course, where the grain is grown in new ground or any light loam, the task of pulling is not difficult.

By reason of the weight of the fresh yield, flax sheaves are usually made small. Wisps of flax itself are used to bind them, and the bands, after threshing, are thrown on the ground with the rest of the sheaf, in spreading. The puller binds as he goes along, some experts in the work being able to pull a whole sheaf at a stretch—that is, without piling it on the ground a handful at a time.

The shocking, however, is frequently left for the close of the day's work, this feature of flax-pulling being considered the lightest form of work connected with it. In fact, where the pulling is done by gangs, as will be explained later, an old man is selected to do the shocking, after a gang of 25 or 30 pullers.



Oil-cake Calves.

It must not be supposed that flax is everywhere garnered by pulling. In the Western States it is cut just as any grain is cut, and, of course, the process is as simple, except for the toughness of the flax-stem, as any work the binder has to do. But in that case it is grown solely for the seed, while in the region where it is pulled the seed is a second consideration, and the fibre is nursed and "cured" for the making of linen.

This latter purpose explains why time is spent in pulling. The binder leaves from four to six inches of stubble, and, as each plant, after curing, furnishes a thread just its own length, the value of the four or six inches—saved by pulling—is much in excess of its proportion to the whole

Roadmaking in New Brunswick.

An instructive address on the subject of roadmaking was given by S. L. Peters, of Queen's Co., N. B., before the New Brunswick Farmers' and Dairymen's Association, last March.

The speaker drew attention, in the first place, to the importance of the subject of road construction and maintenance, as one absolutely necessary to the progress and development of the country, and the contentment of its citizens. Without good transportation facilities, neither the farm, the factory, nor the social life of the people, is capable of full development and enjoyment.

In the early days, transportation was confined to the rivers, lakes and streams, but soon roads became an absolute necessity. The road mileage for the Province, as given in the official yearbook of 1907, is 13,056.

"How to maintain this large mileage of highways, is the important problem that now confronts both the Government and the people." The speaker took occasion to disapprove the abolition of statute labor as working harm, by lessening the interest of farmers in the roads adjoining their farms. He claimed that between 1876 and 1896, when the condition of the highways was specially good, coincided with the period when statute labor prevailed, and hoped for a return to that system. He believed that this change would be hailed with pleasure by four-fifths of the people in rural districts.

Successful highway roads can only be obtained through a system of thorough drainage. A road as level as a platform may be a good piece of road during the dry summer season, or it may be a good piece of road under certain special conditions; but, to be maintained in good condition, it requires a crown. But you may take the best piece of road you please, giving it the necessary slope from the center to either ditch; if the ditches are not kept clear and deep enough to carry off the water, you are out of it during the wet season of the year." An earth road should be 21 feet wide, with a crown of 18 to 20 inches. If a district can afford to put a few inches of broken stone, covered with gravel on top, few repairs will be needed for years.

For swampy places, instead of the old custom of using logs, the speaker recommended spruce or pine brush, from three to six feet long, as much superior. "Put a foot in depth of brush, nicely laid, with the butts of the bushes towards the outside, which will prevent the earthy material from slipping in the ditches, just as it will help to keep the bank of a brook or stream from washing, and you will have solved the question of roadmaking in swampy or clay sections. When you get near the center of the road, then turn the butts inward, making a smooth, firm floor, nicely shaped, and with the desired crown. On top of this place six or eight inches of the best earth you can get; don't go too far to get it. Cheap construction, with the best results, is what we are aiming at. Adapt your methods to the conditions surrounding you, without undue expense."

"A little brook crosses the road where you have time and time again placed an ordinary bridge, but the frosts of winter throw out your work in the springtime, and you have to go again and make repairs. Fourteen years ago I was in charge of the roads in our district, and I said to the men, here we are again, we always have something to do at this spot. It was just such a spot as I have described. I determined we would fix it permanently. We cleaned out the old bridge, making an excavation six feet wide, and the necessary depth. Commenced operations by putting a small spruce tree, about 23 feet long, with the limbs trimmed off on every side but one. We laid that tree in the excavation across the road, as the base of one side of our culvert, and on that we put bushes all the way from four to six feet in length, making the butts come even with the first tree, and, after having them laid compactly and nice, we placed about four inches of earth on top of them; then we got another small tree, trimmed in the same way, and put the butt of one to the tip of the other, to keep the material level. More small bushes were added, and ballasted as before. Layer after layer of brush and earth was used, until the desired height was reached. The opposite side of the culvert was handled in the same manner, and the top securely covered. That bridge had been a serious nuisance to us for many years, but it has never since received one shovelful of earth or any kind of material, and is in good condition now. This country cannot afford to have all roads macadamized throughout its length and breadth, and what we want is something that will answer where large grants of money cannot be had. That is the point I want to make in connection with our rural-road construction."

Stone could be used for ordinary culverts, but cement concrete is better.

After a road is built, maintenance in proper condition is the next problem. Try to inspire each man in a district with a desire that his

shall be the best road there. Mr. Peters referred to correspondence in "The Farmer's Advocate" extolling the merits of the split-log drag, and was glad to know that many districts in New Brunswick were using it. Others present gave a good word for this simple, efficient implement.

In conclusion, Mr. Peters advised all to work like good citizens, giving best service in every line, and they would have the satisfaction of having helped both themselves and the country.



Misuse of the Grader.

Shallow gutters scooped out just inside the sod shoulders, thus retaining instead of draining off the water.

Misuse of the Grader.

It sometimes seems as though there were more distinct and different brands of folly exhibited in roadmaking than in any other phase of rural enterprise. The statute-labor system affords scope for a great variety of individual hobbies, but, as remarked by a New Brunswick farm-



Freshly-graded Road that Needs Dragging.

er, in an address before the New Brunswick Farmers' and Dairymen's Association, it had at least the merit of maintaining a degree of general interest in the practical problems of road management. The commutation system, which has succeeded in many municipalities, lacks this in a measure, and, unfortunately, lacks, also, in too many cases, the expected compensating advantage of greater uniformity and intelligence in methods adopted. Where the supervision of the roads is placed in the hands of a competent commissioner an im-

provement is noticeable, but good commissioners are none too plentiful, and in many a township long stretches of highway may be seen, treated in a manner fitly characterized as asinine. With the commutation of statute labor in whole or in part, came the expensive road-grader, and, while this is a very good and serviceable implement in its place, its misuse has been so common and deplorable that we sometimes think our roads would be in better condition to-day if a grader had never been brought into the country. One of the most general mistakes consists in depending upon it for maintenance, instead of employing for this purpose the cheap, economical and effective leveller, or, better still, the split-log drag. Earth roads which receive no smoothing but an annual grading, can never be really good, except at times when they would be fairly passable, anyway, without any work at all.

But the misuse of the grader is not confined to its employment for wrong purposes. It is often used in such a way as to work more harm than good. The accompanying illustrations, made from photographs taken just after a rain by a member of our staff, on the third concession of Nissouri, Middlesex Co., Ont., indicate one or two common errors, which we have observed elsewhere, as well. The road in question is rather wide, and grown over with grass from the gutter to the edge of the narrow wheel-track. In order to put such a road in shape, the sod shoulder should be shaved off clean, so as to permit unimpeded flow of water to the ditches. Here and there this was attempted, as one of the pictures shows, but for long stretches the grader had apparently been run along with the edge just inside the sod shoulder, making a miniature 2-inch gutter there, to hold the water after every rain! The result is that the water submerges half the driveway in places, finally soaking down into the surface to soften it, and cause it to cut up easily, while in winter the frost will congeal and expand it, the moisture disrupting the bond, and converting the roadbed next spring into a better place to plant oats than to drive. This kind of work may look all right to an untutored eye just after it is done, but it is the wrong way to make roads. If the appropriation does not permit a thorough job, better leave it alone; better still to take a split-log drag and go over it a few times in spring and early summer, keeping it smooth until it can be put into shape properly.

The second illustration shows the results of delay, and the kind of work necessarily done by the grader. In this case, it was not easy to do differently, but the point is that roads should, by frequent dragging, be kept in a smooth, grass-free condition that will not require such operations as here shown. Having become grass-grown, the grader was put to work to shape the road up, and, while it has done this, it left a lot of loose loam and sods in the center of the road, forming a spongy mass, which cut up under the combined influence of water and traffic, making mud and ruts as shown. By disk and rolling the surface, then dragging occasionally, it could have been improved for immediate traffic, and brought more quickly into a firm, compact condition. It will not be so bad, however, if this road is henceforth kept well dragged; otherwise, it will only revert to the sod-bound condition, soon rendering another grading necessary.

It all goes to prove that reliance on the road-grader is an inefficient and objectionable means of road maintenance. One grading should be enough for a lifetime. In fact, the split-log drag, with plow and disk harrow, will grade a flat road without the road machine at all, and do it better, though, if hired done by the township, the expense might be a little greater. The road machine is all right enough for putting an earth road up in the first place; after that, put it away, and use the split-log drag.

Alfalfa is a rather shy maiden, but well worth courting.

The Double Plow.

Editor "The Farmer's Advocate":

I must say I heartily endorse the stand "The Farmer's Advocate" is taking in urging farmers to adopt wide, fast-working machinery. With labor at \$1.50 per day, every day saved means just so much larger a bank account. Having had some experience with double plows, I will give it for what it is worth. The first double plow I purchased was an Imperial Gang—a walking plow. This plow had a twelve-inch cut on each plow, and was not adjustable to a narrower cut. It did very well for skimming, in the spring, land that had been fall-plowed; but when I came to do deep fall-plowing with it, I found it a miserable failure. It was too heavy for three horses, and, moreover, it would not stand up to its work, but would kick out to the left when it struck a hard spot. I think this fault of "slewing" or running crooked is common to most walking double plows. In a short time I consigned this plow to the scrap-iron corner.

This spring I purchased a double riding plow, with rolling coulters. I have just finished plowing in seventeen acres of clover and timothy on a summer-fallow. I must say I never had an easier job in my life. The rolling coulters cut a clean furrow edge, chopping off the clover and grass like a cutting-box. A chain was used to pull down the tall stuff, so that it would cover. The plow turned everything upside down, and kept an even depth. Four inches was the average depth. I used four good horses, and found that they had sufficient load for a hot day. The off

horse walked on the plowed land, and was given an advantage; in fact, I gave the off team an advantage of 2 inches on the long "quad-rupletree." Much of the dislike to double plows arises from the fact that agents almost invariably represent them as being easily handled by three horses. This is a mistake, as the double riding plow, in almost any land, is a four-horse implement. My land is a friable clay loam, not at all stiff, and three horses would be badly overloaded.

I give below two styles of four-horse eveners, with measurements. No. 1 is best suited to a riding plow, while No. 2 is suitable for any implement where it will be carried on the tongue. Any man handy with tools can make them, or they can be purchased for from \$5 to \$5.50.

In style No. 1, one of the doubletrees is placed below, the other above, the long evenner. This prevents "swing" of the evenners. Two large washers are placed between the doubletrees and the long evenner in No. 1, so that the doubletrees may work freely. The clevises are of flat iron. Into the center hole of the long evenner a piece of piping, large enough to admit a clevis bolt, is driven. This prevents the hole in the evenner from wearing. No. 2 style of evenner explains itself, and may be made of any length to suit the implement it is used on.

Dimensions of No. 1.—Long evenner, 5 feet 6 inches; doubletrees, 2 feet 7 inches; whiffletrees, 2 feet 4 inches. The hooks or clips can be obtained for about fifteen cents each. I have used No. 1 style on my double riding plow, with entire satisfaction. I use an evenner similar to No. 2 on the disk and cultivator.

In conclusion, I would say, when buying a double riding plow, by all means have the rolling coulters. I have considerable stone in my land, but the rolling coulters seem to get around them all right, and you are never annoyed by having a stone stuck between the coulter and the share.

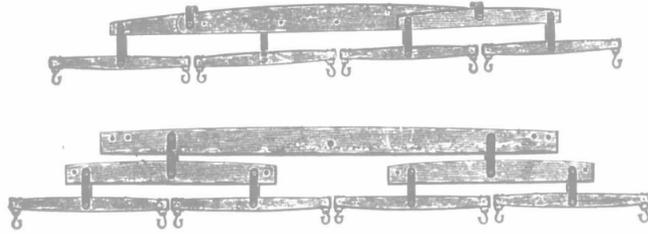
W. E. WILLIAMS.

Middlesex Co., Ont.

Twentieth-century Plowing.

Editor "The Farmer's Advocate":

I have just read your commentary, in July 1st number of "The Farmer's Advocate" regarding the value of the modern two-furrow plow to the Canadian farmer, and, as I have been a user of this implement for five or six seasons, I can



Two Styles of Four-horse Evenners.

heartily endorse your opinion as regards its utility, both as a time and labor saver, and a means of doing a first-class, even job.

Although a good many farmers fail to see it, yet, I believe that the two-furrow plow is one of the greatest mechanical boons ever conferred upon the agriculturist. As I stated above, I have used one a half dozen seasons in succession, and would not return to the old single-furrow method for anything. We use a two-wheeled Cockshutt walking plow, and, by opening it up, and cutting two twelve-inch furrows at a time, and hitching it to a four-horse team, I can plow four acres of the heaviest land in ten hours, providing the field is of fair length, thereby avoiding too much turning.

In your article, you remarked that, in using four horses, one would have to take the plowed ground. Now, while this may be true of some makes of plows, I find it is not so of the Cockshutt, as the plow is furnished with a wide draw device, which allows me to shift the four-horse evenner to the left to such an extent that I am enabled to put the off horse in the furrow, with the remaining three on the land.

Some men, on big farms, use the three-wheeled riding plow, but on a hundred-acre farm, where there are a good many fences, I would prefer the walking plow, as the former is furnished with a

tongue, and consequently requires more time and trouble to turn at the end; besides, I have noticed that, when at work, the off horse takes the plowed ground, because two horses are placed on each side of the tongue.

As to the choice of coulters, we like to have both kinds on hand, because the different kinds are more suitable to different conditions of surface. The rolling coulter works best where green manure or weeds are to be turned under, as they are fast to the ground, and cannot drag with the plow; but, where farmyard manure is put under, we prefer the straight coulter, because, if the ground is not quite hard, the rolling coulter is easily clogged, and the manure will drag until the plow is eventually thrown out of the ground; but, with the straight coulter this difficulty does not exist, as can be seen, except where the manure is unusually long, or contains many corn-stalks. Then, by standing on the plow, and using a stick of the proper strength, the straight coulter, being more easily cleaned, can have the obstructions pushed away from it while the plow is moving.

Another advantage in using the two-furrow plow is that the surface of the field is left perfectly even, providing it is even before being plowed, and that the levers are properly adjusted. This advantage is to be plainly seen when implements of tillage are brought on, as the furrows, being even, all come in for their share of tilling.

Regarding the number of horses needed to run the two-furrow walking plow, would say that four horses are not really necessary. We have plowed a great deal with three, but can cover about an acre more ground in ten hours with the fourth one.

In Essex County, many farmers every year are having their eyes opened to the incontestable value of this modern implement, and we believe it is safe to predict that, inside of ten years, no farmer of enterprise will be found trudging across the field in the old nineteenth-century method, turning a solitary 10-inch furrow.

Essex Co., Ont. SUBSCRIBER'S SON.

Harvesting Alfalfa for Seed.

In harvesting alfalfa for seed, cutting should be done when the greater proportion of the seeds are hard, but not sufficiently ripe to shell. At this stage a majority of the pods are turned a dark-brown color, and the seeds are fully developed. Frequently, the cutting can be raked into windrows after two hours, if the weather is drying, and in two or three hours more put into cocks, and let stand from twenty-four to forty-eight hours, as the weather may justify. It should, however, be well cured and thoroughly dry when put in the stack, or there is danger of heating, and stack-heating seriously injures the vitality of the seed. It is not uncommon, if extremely ripe, to leave the cutting in the swath only an hour, or a half hour, then stack, and let stand for autumn or later threshing. If allowed to stand in the stack for about thirty days, the entire mass goes through a sweating and curing process which makes the threshing easier, while less of the seed is left in the straw than would be if it had not been stack-cured. In Western Kansas many seed-raisers cut their seed crop with a self-binder, put the sheaves in shocks the same day, and thresh in about ten days, or put it into a stack to await a convenient threshing time. They claim to secure 20 per cent. more of the seed in this way than if they cut with the ordinary mower. Others cut with a mower having a dropper attachment, which leaves the alfalfa in small bunches, at the will of the driver, in the center of the swath, and these are "straddled" by the team and the wheels of the mower in the subsequent rounds. These bunches are left for two or three days, and then stacked. There is little, if any, danger from mold or spontaneous combustion in stacks of alfalfa cut for seed, but there is danger of the seed heating in the stack if stacked when damp. If bright, clean seed is expected, the stacks must be well topped with slough grass, covered with tarpaulins or boards, or given other protection. It is better still to put the alfalfa intended for seed into a barn.

One Western Kansas farmer reports that he used a self-binding harvester, shocked the sheaves like those of grain, let them stand ten days, and then put in a mow, with no bad results.—[From Coburn's "The Book of Alfalfa."]

Good feeders appreciate the value of choice, early cut clover hay. Rette Bros., of Oxford County, Ont., began clover haying this year on June 21st. By July 1st they had cut two pieces of clover, and were then haying in three or four acres of alfalfa. The earlier cuttings of clover were coiled. Later, the loader was used. The hay was then raked into small windrows in the evening, tilled in the morning, and hauled in the afternoon.



Saving One Man's Wages. A Two-furrow Plow in Essex County, Ont.

Mustard Killed by Spraying.

Notwithstanding conclusive demonstrations of the efficacy of copper-sulphate spray to destroy charlock or mustard (*Brassica sinapistrum*), this method seems to be practiced by very few farmers. There is reason to believe this is due, not to any fault in the idea, but to the conservatism and inertia that delays the adoption of so many other advantageous and profitable practices—the spraying of fruit trees, for example. This may be inferred from the fact that here and there mustard-spraying has been tried, with decided success, and at comparatively small expense per acre for material and labor. It should perhaps be explained that the success of the spraying treatment depends upon the fact that mustard, having a rough, pubescent leaf, retains sufficient of a copper-sulphate solution to kill it, whereas the leaves of the grain in which the mustard grows have mostly smooth, linear leaves, which do not hold enough of the solution used to do them any serious harm. Indeed, it is believed by some to have a fungicidal value which really benefits the grain after the slight scorching has passed off.

Eight or ten years ago, S. J. Mason, of Oxford County, Ont., near Norwich, began spraying for mustard, and has continued every year since. The mustard has been particularly bad on one piece of land that was purchased, though the home farm is also infested. The formula used is 10 pounds bluestone to 40 gallons of water, which is sufficient to cover an acre. A Spramotor hand-pump outfit is used, there being a special mustard-spraying attachment, with a horizontal pipe 14 feet long, having jets 18 inches apart. With this outfit, 15 acres a day can be sprayed. Usually, each field is sprayed just once, and preferably when in full bloom. At an earlier stage of growth the plants are perhaps more tender, but if the spraying is done then, others will come on, necessitating a second operation. Last year, part was sprayed when the weed was coming into bloom, and this was not so effectual as spraying in full bloom. As a rule, only the spring grain has to be gone over, but last year the wheat, also, was sprayed.

“Does the spraying kill practically all the mustard?” “About all,” was the reply; “a small percentage is missed.” “Are you getting the weed out of your land?” “Well, it is thinner than it used to be. Last year I was quite encouraged. I thought we were getting rid of it, but this year there is a good deal of it again. It seems to be worst where sheaves have been carried and dropped from the bundle carrier. One needs to spray every year to make headway. One year's seeding, ten years' weeding. I would spray, though, even if I never had any hope of getting rid of it, for the sake of the benefit to each year's crop. It does the grain good. It turns yellow at first, but soon recovers, and after that seems to grow all the faster for spraying, and, of course, the crop has the extra space, moisture and plant food that the mustard would otherwise take.

“Bluestone can be bought in quantity as low as \$4.80 a cwt., though I have paid eight or nine cents a pound at stores, and the store-keeper then claim he was doing me a favor by supplying it at cost.”

Three Benefits of Alfalfa.

1. Alfalfa, through its tubercles, absorbs from the air valuable plant food, which it in turn imparts to the soil.
2. It penetrates and brings up for use the plant food stored below, and beyond the reach of the growing crops.
3. When plowed under, the plants and roots resolve themselves into a valuable humus, which the soil absorbs.—[John Powers, before the Kansas State Board of Agriculture.

Alfalfa, like corn, demands certain conditions of the soil, and certain constituents in that soil. Every crop demands certain foods. All crops, except alfalfa and the other legumes, obtain practically all their food, including nitrogen, from the soil. The latter crops use nitrogen, but get it from the air. Alfalfa takes nitrogen from the soil only during the first few months of its growth, and thereafter not only takes its own necessary supply from the air, but a large surplus which it stores in the soil, available for whatever crop may follow. Other crops take much nitrogen from the soil, but contribute nothing to its enrichment.—[From Coburn's "The Book on Alfalfa"

THE DAIRY.

Summer Feeding of Dairy Cows.

Prof. C. H. Eckles, of the Missouri State Agricultural College, introduced a timely discussion at the annual meeting of the Kansas State Board of Agriculture, on feeding the dairy cow in summer. As reported in the proceedings, he said:

There is some difference of opinion on this question, from the standpoint of economy. There is no question but that a cow will produce more milk if fed grain while on pasture, and if a large yield is of more importance than economy of production, grain certainly should be fed. The cow that gives a small average quantity of milk will produce but very little more if fed grain while on pasture. However, with the heavy-producing cow the case is quite different, and it is necessary that she be fed grain, or she will not continue on the high level of production for a very long time. The necessity for feeding grain to the high-producing cow arises from the fact that she cannot secure a sufficient amount of nutrients from the grass alone, and must have some concentrated feed, in the form of grain, in order to continue to produce large quantities of milk.

Experiments made by the Cornell Experiment Station, covering four years, showed that, while an increase of milk was secured from grain feeding, it was not economical to produce it in this way. They secured only about an additional pound of milk for each pound of grain fed. In these experiments the pastures produced an abundance of nutritious grasses. They observed, however, that the cows fed grain during the summer gave better results after the grazing period was over than those that did not receive grain. This is also a matter of common observation, and should be taken into account in considering the advisability of feeding grain. The point is that the cows fed grain stored a considerable quantity of surplus nutrients in the body, which was afterwards available for production of milk. Where a small amount of grain is fed, corn is as well adapted as anything else where it is cheaper than other feeds, since, on account of the comparatively narrow nutritive ratio of the grass, the corn does not unbalance the ration. However, in case of feeding large quantities of grain, as would be necessary in the case of cows producing from one and one-half to two pounds of fat per day, or more, other feed, containing more protein, should be used in part, such as bran, gluten meal, oats, or cottonseed meal.

Where the farmer can grow alfalfa and corn, there is no reason for allowing the cows to suffer for feed during the period of short pasture. Green alfalfa is the best summer soiling crop that can be grown. The only thing that is better might be a combination with green corn. These two fit together especially well. Under most conditions, the most difficult season of the year to get green crops available for feeding supplementary to pastures is in the earlier part of the summer, before corn is mature. Alfalfa is at its best during this season, and serves the purpose remarkably well. In the latter part of the summer, when corn is more mature, there is nothing better than green corn. No plant now known to us equals corn in its adaptability to the soiling system. Corn has the advantage of yielding larger quantities of digestible nutrients per acre, at less cost, than any other crop suited to soiling. Where alfalfa is not grown, the use of the corn silage for summer feeding is bound to be practiced extensively in the future. We are coming to depend more and more upon silage as supplementary to pastures throughout the season. The use of silage for this purpose allows the corn to be matured to the proper stage before being harvested, giving a maximum yield of nutrients per acre, and is more economical of labor, as compared with hauling green corn from the field, since the cutting and hauling corn for the silo is all done at once. In planning silos, it is well to build one designed especially for winter feeding, and a second one small enough so that it can be fed from in the summer, without danger of too much silage being spoiled.

Next to corn and alfalfa should probably be placed sorghum, as a soiling crop. The yield per acre of green sorghum is very large, and it serves much the same purpose as green corn.

DISCUSSION.

H. W. McFee.—Doesn't it pay a farmer who is making a practice of dairying, to feed grain the year round? I feed my cattle alfalfa morning and evening, and grain morning and evening. Then, when they go out well filled up, they don't have to stand and fight flies, and eat. I believe it is economy. I average about seventy-four gallons of milk a day from thirty cows. I feed a good deal of oil meal the year round. I feed about four quarts of grain at a meal. In the summer I give them three quarts of bran and one of oil meal a day.

Professor Eckles.—I find we get more milk where we feed more grain. I think the idea is something like this: If you have an inferior milker,

or an ordinary milker, it doesn't pay to feed her any grain when she is on grass. She will give as much milk on pasture as she will on grain. But, as you go up the scale, it pays to feed her grain. No cow can possibly do her best on grass alone. She can't possibly eat and digest enough grass to do her best. The better the cow, the more you need grain. The cow that only gives a little milk won't give you much return if you do feed her grain. I would treat them as individuals while they are on grass.

A Member.—Do you increase the quality of milk by feeding?

Professor Eckles.—That question has been discussed a great deal in recent years, and, while there has been considerable new information brought out recently, the fact remains good that, for all practical purposes you cannot increase the amount of fat in a very considerable way. Under certain conditions it can be increased a little bit, but for all practical purpose you can't do it. Of course, the quantity of milk responds very quickly and very strongly to the amount of feed, but the quality, very little.

J. T. Tredway.—What per cent. of oil meal is most profitable?

Professor Eckles.—We don't feed oil meal in very large quantities. Perhaps about two pounds a day. With clover and timothy hay and grain, I would make it two pounds of grain, four pounds of bran, and two of oil meal.

R. B. Ward.—I see that the things supplying the elements for milk, and for the production of milk, are cottonseed meal and alfalfa. Now, as a beef-producer, should I feed my cattle cottonseed meal, grain and alfalfa?

Professor Eckles.—Yes; I would recommend it for both classes.

Creditable New Brunswick Herd Record.

Editor "The Farmer's Advocate":

Some two or three years ago you invited results of cow-testing from farmers, and, as far as I remember, you received no response from this Province.

We have just finished a fairly successful year with a small herd, and enclose you particulars. We have no up-to-date farm or equipment. Our cows roam over a square mile of woods and old fields for pasturage in summer, and go to the brook in all weathers for water in winter. We have no system of ventilation, but must depend on opening doors, shutters, etc., when stable begins to smell "close."

As to system followed in feeding, we have in our mind a certain condition of flesh and appearance in which to keep our cows, and guide our feeding thereby. If a cow in apparent health begins to shrink in flesh on average feed, we increase accordingly, until an equilibrium is reached, always having a care to do so carefully and judiciously, having an eye out for mammitis and other ills. We have never yet exceeded eight pounds of grain feed per day, and that only to certain individuals for a short time after freshening. Our regular feed this spring, after freshening, was six pounds per day, two individuals, Nos. 1 and 7, getting a pound more. On the other hand, No. 2, by an accident, early in March, lost the use of a quarter, went down in milk accordingly, increased in flesh, and we dropped her grain feed one-half. So, instead of forcing them, we allow them to prompt us in amount of concentrates fed. We feed largely wheat bran, costing this year from \$27 to \$29 per ton, varied with an occasional bag of middlings, oil cake, buckwheat bran, corn meal, etc., but the bulk of our grain feed is bran. We strive to make our roughage as succulent as possible, but have never succeeded to our or the cows' satisfaction, as yet. Peas and oats they revel in; corn they accept with an emphatic protest, when peas and oats are no more. They dote on turnips in the winter, but never get enough.

We have no silo. What few were built in this vicinity have, as far as my knowledge goes, all gone out of use. Is it a case of the survival of the fittest, or a warp in the gumption of our farmers? If we ever build one, it will be to bridge over the gap between June grass and peas and oats. Just now we are experimenting with alfalfa.

As to the herd of which I enclose record and account, Nos. 1, 2 and 7 are pure-bred Jerseys; No. 3 is a high-grade Ayrshire; the rest are grade Jerseys. Nos. 1 and 7 are calves of No. 2; No. 3 is the mother of No. 4. If No. 2 had not suffered the accident before referred to, she would have been up among the leaders, if not head of all. The figures, as they stand, show No. 4 to be superior to No. 7 in milking ability, which is not so. She freshened early, and had three months in her three-year-old form, while No. 7 only had twenty days. Let your dual-purpose editor note where the Jerseys stand in this herd. Nos. 3 and 4 are the only ones a dual-purpose man would look at the second time, and they are distinctly "not in it."

In regard to the account, we did not keep expenses exactly, but have close knowledge of our feeding, and I have taken pains to put the doubt against the cows, instead of in their favor. Hay in this county (Albert) last winter went begging at the price I have charged, with the possible exception of choice timothy, and a lot of ours is ox-eyes and wire-grass. The one-quarter acre corn was a very poor crop, less than ten per cent. germinating. Our pasture costs us practically nothing, but we share it with the young cattle of the whole parish.

There is a discrepancy of somewhere near 200 pounds between butter churned and what the amount of fat indicated, which is largely explained by milk and cream used in family, whole milk fed to calves, some little sold and given to neighbors, etc. Also, we missed two or three tests in the press of the summer's work, when the milk was not so good as in fall and winter. We aim to test in middle of each month, sampling night and morning mess. It is too much muss and fuss taking composite sample continually.

HILLGROVE FARM—J. H. COLPITTS & SON.

June 1st, 1908, to May 31st, 1909.

Cow.	Age.	Total		Lbs. Butter-fat.
		Lbs. Milk.	Per Cent.	
No. 1.....	4 yrs.	6,178.5	5.65	349
No. 2.....	6 yrs.	5,314.4	5.98	318
No. 3.....	8 yrs.	8,298.2	3.74	310
No. 4.....	2 yrs.	6,027.1	4.5	271
No. 5.....	6 yrs.	7,425.8	4.7	349
No. 6.....	3 yrs.	6,583.1	5.12	337
No. 7.....	2 yrs.	5,128.7	5.7	292
Total.....		44,955.8		2,226

BUTTER CHURNED.

June, 1908.....	290½ lbs.
July.....	255½ lbs.
August.....	250 lbs.
September.....	228 lbs.
October.....	185 lbs.
November.....	130½ lbs.
December.....	102½ lbs.
January, 1909.....	71½ lbs.
February.....	131 lbs.
March.....	232½ lbs.
April.....	234½ lbs.
May.....	293½ lbs.
Total.....	2,407½ lbs.

EXPENSE ACCOUNT.

Dr.		
15 tons of hay.....		\$ 90.00
5 tons grain fed.....		150.00
1 acre peas and oats.....		20.00
¼ acre corn.....		5.00
165 barrels turnips.....		50.00
Pasture, turnip-tops, etc.....		20.00
Total.....		\$335.00
Cr.		
Butter.....		\$550.00
Milk and cream used in house.....		22.00
Whole milk fed to calves.....		4.00
Skin milk and buttermilk at 20c. cwt.....		80.00
Total.....		\$656.00
Expenditure.....		\$335.00
Profit balance.....		\$321.00

Average price of butter through year, a small fraction under 23 cents.

No account taken of colostrum, or any milk not fit to manufacture.

We keep a few pigs, and they yield us a small profit. We keep a few sheep, and they pay their way. We keep a few hens, and, by very careful handling of the fowls, we can make the accounts balance. But the cows pay all their expenses, find grease for all creaking axles, and keep the pot boiling. Long live the cow!

We highly prize "The Farmer's Advocate." It is excellent in all its departments; not one but is read with interest, pleasure and profit. I often feel a wish to take a hand in the discussions which from time to time arise, but the days are full of work, and the nights bring weariness. I was especially pleased with the editorial answer to a "Moderate Man," in the local-option discussion. It is a matter for hearty congratulation to the farmers of Canada, that at the head of their greatest journal are men of such sentiments and principles. This county de-legalized the traffic sixty years ago. The Scott Act has been the law for more than half that time. It is sufficient tribute to its working that, in all that time, no one has even tried to start a petition for its repeal. I heartily agree with your article on agricultural education, in the issue of June 21th. I earnestly hope our Government will not waste money on any such lines as marked out by your New Brunswick correspondent.

Albert Co., N. B. J. H. COLPITTS.

GARDEN & ORCHARD

Bordeaux Mixture for Potato Blight.

Nearly every potato-grower now has to spray to kill bugs, but few adopt any precautions to guard against the attacks of blight and that form of rot which is associated with and developed from the same spores as the late blight; consequently, blight exacts heavy toll from our potato fields, not only reducing the quality and yield by causing premature dying of the tops, but endangering heavy loss from rotting of the tubers, depending considerably upon the season. There are two forms of blight which attack potatoes, known as the early and the late blight, though the so-called early blight which usually makes its appearance early in July may appear late as well as early. It appears in spots having concentric rings irregularly over the leaf. The late blight is not so prevalent as the early blight, but spreads much more rapidly, and the spores produced by it, finding their way to the tubers in the hill, infect them, causing them to rot. In Ontario and Quebec the late blight usually appears between the middle of July and the first of August, though sometimes later.

Both forms of blight are spread by spores. Neither can be cured, but both may be prevented from doing any noticeable injury by keeping the vines coated from the middle of July on with a simple spray, called Bordeaux mixture. This destroys the spores of the blight, falling upon the leaves before they can gain entrance to the tissues of the leaf. With the first, or first and second sprayings, some poison, such as Paris green or arsenate of lead, may be combined with Bordeaux to kill the potato bug, and the less conspicuous but more or less troublesome cucumber flea beetle, which does considerable damage in hot weather by eating small holes through the leaves. The Bordeaux will cause the poison to adhere better than it otherwise would do, thus increasing its value as an insecticide. At the same time, the lime in the Bordeaux lessens the danger of injury to the leaves by an excess of soluble arsenious acid, which occurs most abundantly in the poorer samples of Paris green.

For potato-spraying, Bordeaux mixture may and should be made with a larger amount of bluestone and lime than for spraying fruit trees. Likewise, the amount of poison used should be greater.

For potato spraying, when insects as well as blight are being combated, the following formula is recommended:

Copper sulphate (bluestone).....	6 lbs.
Lime.....	5 lbs.
Paris green.....	8 ozs.
Water, one barrel.....	40 gals.

Arsenate of lead, at the rate of 3 pounds to the barrel, may be used instead of Paris green. At the quantity required it comes a little higher, but adheres better (at least when each is used alone), and may be applied in almost any strength, either with or without lime, without danger of injuring the foliage. It comes in the form of a paste, which should be worked up into a thin, milky consistency with water before being applied. If Paris green is used it should be reduced to a thin paste with water before being poured into the barrel.

Once more we reprint directions for preparing Bordeaux mixture. Follow them carefully if results are expected:

Dissolve the copper sulphate (by suspending it in a wooden or earthen vessel, containing 4 or 5 gallons of water). Slake the lime in another vessel. If the lime, when slaked, is lumpy or granular, it should be strained through coarse sacking or a fine sieve. Pour the copper-sulphate solution into a barrel, or it may be dissolved in this in the first place; half fill the barrel with water; dilute the slaked lime to half a barrel of water, and pour into the diluted copper-sulphate solution, then stir thoroughly. It is then ready for use. (Never mix concentrated milk of lime and copper solution.)

Stock solutions of copper sulphate and of milk of lime may be prepared, and kept in separate covered barrels throughout the spraying season, but Bordeaux mixture deteriorates with age, and should be used as soon as made. The quantities of copper sulphate, lime and water should be carefully noted.

The cost of spraying potatoes is not large. With a modern spray pump, having potato-spraying attachment, a large area can be covered in a day. With proper appliances the total cost for the four sprayings usually necessary would range from four to six, or, perhaps, seven dollars per acre, including wages for two men and a horse. At least one of these four sprayings is necessary for bugs, and the extra cost of material for the Bordeaux mixture would be slight. The average of three years' experiments at Ottawa resulted in a gain of 94½ bushels per acre from spraying for blight. At 40 cents a bushel this would represent \$37.80, or at a net profit of \$32.28 per acre. Ac-

ording to this the benefit from one acre in an average year would more than buy a spray pump. Co-operative experiments by farmers in New York State have been quite as convincing.

Blight is not equally troublesome every year, but is usually far more prevalent than most of us have any idea of. It would richly pay Canadian potato-growers to adopt spraying for blight as a settled policy. Try it this year.

Orchard Cover Crops.

It is now about time to sow a winter cover crop on the orchard which has been given clean cultivation up to date, as most orchards should receive, but too few do. The objects of a cover crop are:

1. To secure a growth to hold the snow and provide a protection for the roots of the trees during winter.

2. To check the late growth of wood and induce the earlier maturity of that which has been produced.

3. To take up soluble fertility in the late part of the season that would otherwise leach or wash away. This being converted into plant tissue, along with the nitrogen which a leguminous cover crop will obtain from the atmosphere, forms a material to be plowed down the next spring and converted into humus and plant food. Sowing leguminous cover crops is a cheap way of enriching an orchard.

4. Land on which a cover crop has been sown will dry out more quickly in spring, owing to transpiration of moisture by the leaves of the cover crop. It may then be plowed more early, which is often a decided advantage.

About the middle to the twentieth of July is the best season to sow an orchard cover crop, taking advantage of a time when the soil is moist and in fine tilth. A great variety of crops may be chosen, and the same one should not be used each year. Preference should, as a rule, be given, however, to crops which survive the winter, and especially to the legumes, as these gather nitrogen from the air. Hairy vetch, alfalfa, red or mammoth clover, rape, rye, oats and crimson clover are among the best, mentioned in order of merit.

Hairy vetch or sand vetch, sown at the rate of 35 pounds seed per acre, forms a very close mat over the ground. It is a nitrogen-gatherer, lies close to the ground, causing little inconvenience to pickers, stands the winter well, and furnishes a fine growth to plow under in early spring. Alfalfa is one of the best leguminous cover crops for well-drained soil, especially soil well supplied with lime. Twenty-five pounds of seed per acre, sown in July, will give a good growth the first season, and on suitable soil will stand the winter well. It is very important that it be plowed up in spring and not allowed to grow, else it will injure the trees by robbing them of plant food and moisture. Merely as a cover crop it will not do them any harm in this way. It, too, is a nitrogen gatherer, as is clover.

Red or mammoth clover, at the rate of twenty pounds per acre, is also excellent. It makes a fair growth, is low-growing, and winters well on drained soil. Rape makes a heavy growth of stiff stems, which, although most of them kill in winter, stand up enough to hold the snows. It is inconvenient in fruiting orchards, as it remains wet most of the day, making picking unpleasant.

Rye is a favorite crop with many growers. It is hardy, gives a fair growth, and furnishes a top on soil that is unsuitable for the growth of clover. It is not a nitrogen-gatherer, and does not leave the soil in such friable condition as do the legumes.

Oats have been highly recommended by the Chief of the Fruit Division, Ottawa, but except in orchards making excessive wood growth, the legumes are preferable because of the enrichment which they add to the soil.

Crimson clover has been favored by some, but does not make as good a growth as the other clovers, and does not stand the winter so well, which is a serious disadvantage.

Clean Cultivation with Cover Crop.

In Bulletin 314 of the New York Experiment Station, a fundamental orchard problem is attacked—the proper management of orchard soil. A careful perusal of the data presented should convince every orchardist that, unless his conditions are very peculiar, he should regularly cultivate the soil beneath his trees, supplying humus by means of late summer cover crops. A five-years' comparison of tillage and sod mulch proved tillage superior in every point but one. The apples from trees in sod were slightly brighter-colored, but were inferior in quantity, size and quality.

Shade trees in different parts of Manitoba are being defoliated by cankerworms.

Cankerworm Injurious in Un-sprayed Orchards.

One month without rain, but July 1st we were blessed with a good downpour. From present indications the hay crop will be light, for the dry weather lasted too long to allow of a normal growth. Pastures have suffered, also, and dairy-men have been feeding meal to their cows to supplement the pasture.

Cultivated and well-cared-for orchards have not been seriously affected by the drouth, and apples are generally setting well, with little fungous growth.

The cankerworm has made greater havoc this year than last, having spread over a wider territory. It is strange that so many orchards are wholly or partially stripped by this pest, when vigorous and thorough spraying will keep it in check. It is safe to say that 90 per cent. of the orchards in this section of Annapolis County have been more or less injured by this worm this season—some of them as bare as in winter.

Outside of the injury done by the cankerworm, the orchards promise a good crop again. Last year we had a banner crop of splendid fruit, and if we can judge from the full bloom, dry weather during pollination, and the dry weather of June, we can predict a full crop of clean apples for 1909. More than this, apples have set well, and nothing but a prolonged drouth can materially affect the yield. R. J. MESSENGER.
Annapolis Co., N. S.

POULTRY

Good Pointers on Hatching and Rearing, from a Farmer's Daughter.

Editor "The Farmer's Advocate":

I am weary of reading the many different ways recommended for caring for hens and chickens. As one of your correspondents said, "No man can entirely adopt another one's plan and make a success of it. Let everyone work out his own method" (which may mean that you must get your own experience, which is sometimes very costly).

I have attended a short poultry course at an agricultural college. I think the course is far too short. The student gets a surfeit of the business. You actually do not know anything certain on any point at conclusion of the course; in fact, you feel as if you had received a cold-water ducking, and came up gasping for breath. You have, as it were, after recovering your breath, to take time to think it all out before concluding what is and what is not worth adopting.

SIMPLE WAY THE BEST FOR HATCHING AND REARING CHICKS.

I have hatched and reared chickens for a great many years by the natural way. I find the "simple life" the proper way by which to secure health and vitality. The old hen, in my opinion, surpasses the incubator as a hatcher, especially so when only a small number of chickens are required. Eggs for hatching should be laid by two- and three-year-old hens, not pullets. Old hens of the ages named, if in proper condition, are more likely to lay eggs in springtime with strong germs than pullets.

The dry-feeding method seems to me to be the most natural one by which to raise the chicks. I recommend the following system: For the first two weeks dry oatmeal, wheat screenings or groats. In the second let the chicks have earth-worms or hard-boiled egg in addition. If the chicks are strong and robust at time of hatching, as they should be, you will have no ailing little ones when so fed.

A CAUSE OF WHITE DIARRHEA.

White diarrhea can be induced by keeping the chicks in the hot atmosphere of the incubator and with their droppings. I have proved this, among other things.

The incubator should be kept scrupulously clean. The chickens should never be left in it after they are dry. After the hatch is finished the interior of the incubator—trays and all—should be scrubbed with soap and water, and left in the sun for some little time to dry, and be thoroughly aired.

PROVING THEORIES.

I have been proving each year some theory. This year I got pullets or year-old hens' eggs. I set six hens on 78 eggs, and put the remaining 200 in an incubator. I hatched with the hens 85% with the machine, 40%; although last year the incubator, under similar treatment, with two-

and three-year-old hen eggs, hatched 85%—good, strong chicks.

Am raising chickens this year by hens, and then placing the chicks in brooder houses without doors, but with wire runs attached to them. I gave to three hens the work of looking after 120 chickens. With such treatment, and the food as I have already described, I have not lost a chick, and they are now three weeks of age. [Note.—This is certainly good work.]

FREEDOM FROM LICE.

Vermin I have not only kept free from, but I have exterminated, by the cautious use of black oil or crude petroleum. I put a little on the back of the hens at night while on the roost. I do this every few weeks, and so keep the hens free from vermin with comparative little trouble. I also spray the house at times with coal oil. Before giving the hens the chicks to hover, I smear them very lightly with the black oil, under their wings and fluff. I do this every few days very lightly. It is not much trouble, and perfectly safe. I oil the heads of the chicks around the ear with vaseline before giving them to the hens. I have spent the night to the "wee sma' hours," many times, powdering the chicks, which I now do in a minute by the mother. J. R. H.

Profit from Egg Production.

Editor "The Farmer's Advocate":

In looking up our list of poultry-producers, we find two instances of success from egg-production alone.

The first is on a small dairy farm, where 12 or 14 milch cows are kept, and 50 laying hens. The hens are under the entire charge of the farmer's wife and two daughters. Our books show that they have brought their eggs to us continuously for the past five years, and, in taking the year 1908 as an example, that their delivery was from 5 to 15 dozen per week. They were paid for these eggs from 17 to 35 cents per dozen, and received in cash \$114.40 for eggs alone during the year. An accurate account of cost of feed for the hens was not kept, but we find that, where a flock of from 25 to 50 hens are kept on free range on a farm, the outlay seldom exceeds \$1.00 per hen.

This leaves a profit of \$64.40 from eggs alone, over and above keeping the home in eggs, and 12 or 15 dozen for hatching chickens, as they aim to rear 50 or 60 chickens each year, that they may have 25 pullets to replace all but yearling hens in their flock.

This leaves them with the revenue from the disposal of the 25 hens, and surplus cockerels.

In questioning them with regard to farm poultry paying, they say that it is far the most profitable branch on their farm, and that if they could only get their cows, hogs, etc., to pay them the same percentage of profit, they would be more than satisfied.

• •

The second is rather a peculiar case, where the farmer and his wife attribute their success entirely to breed. It is quite true that they were not very successful until the last two years, when they made the change and established the breed which they at present have, which is a straight cross-bred Rhode Island Red and Brown Leghorn. This was done by breeding a pure-bred Red cock on a flock of Brown Leghorns, and keeping the pullets for layers. This gave them such wonderful results that they will not keep any others, only straight cross-bred birds, going to the trouble each year of breeding a pure Red cock on pure Brown Leghorn females to get their laying stock.

I must say that they have a very fine flock of hens, beautiful in appearance and plumage, laying a considerably larger-sized egg than either of the breeds does as a pure-bred. We have been able to grade all the eggs from this flock No. 1, weighing, on an average, several ounces more than 1½ pounds per dozen, which is seldom the case with Leghorns.

This is a large dairy farm, and they also bring their eggs in to us weekly, the net proceeds from this flock, in eggs, being considerable in advance of the first named, per hen.

They also state that the poultry branch is the most profitable branch on their farm, which speaks well for the poultry, as they have an up-to-date, well-managed farm in all lines.

Now, I do not say that a cross from these breeds is the only and best-laying hen to be produced, as I have no doubt that there are other pure breeds and crosses of pure breeds that will give equally good results, but these people have intelligently worked out something that is giving them results, and, rightly or wrongly, give all praise to the ship that carried them over.

Brome Co., Que. A. P. HILLHOUSE.

THE FARM BULLETIN

Ditching Machine Making Good.

Editor "The Farmer's Advocate":

I have just returned from an extended inspection of the work being done by the new traction ditcher that is operating in the Niagara district, and thought possibly a report thereon might be of interest to your readers.

The machine completes the ditch full depth and true to grade in passing once over the course, leaving the ditch bottom ready for the tile. The work is so satisfactory that I think that in a short time these machines will be in use in many parts of the Province. There is work enough to keep quite a number of these machines busy. I know of 10 or 15 miles of ditching in Simcoe County that could be contracted for to-morrow by anyone proposing to get a machine. There is 10 miles of work ready for contract in Wentworth. There are numerous other counties, e.g., Victoria, Huron, York, Lambton, etc., where much draining is being done, and where several miles of work could be secured in advance, sufficient to keep a machine busy for the first month, and that is all that is necessary. The Niagara machine has more work ahead of it now than it had when it started operations in the spring, with more coming all the time, and many who have had work done by it want it back again when the crop is off.

For two days I watched it working in hard, stony clay, and it was surprising to see the stones that it would root out, some of them over a foot in diameter, and in places close enough to form an almost continuous row beside the ditch, but of course it did not dig as fast in such land as in land free from stones.

The cost of machine ditching is somewhat lower than of ditching by hand in most parts of the Province. Besides, there are not enough men to dig by hand one-quarter of the drains needed in Ontario. All these circumstances combined should lead to the speedy adoption of the ditching machine, and the consequent revolutionizing of ditching operations throughout the Province. I am more firmly impressed with the value of the machine than ever. WM. H. DAY.

Central Canada Fair.

There are many things about this year's Central Canada Fair in Ottawa, September 10th to 18th, which will make it particularly attractive to live-stock men and farmers. Over \$18,000 in cash prizes is offered in the cattle, sheep, swine, horse and poultry departments, and, in addition, the gold medals and special prizes offered are worth at least \$1,000 extra. All of the live-stock buildings are being gone over, and many incidental improvements effected, so that the convenience of exhibitors will be fully catered to. In every department which interests the farming or stock-raising community the prizes have been materially increased, and in many instances they exceed those offered by similar exhibitions in other parts of the country. The directors are planning for this year's fair to be the banner one in the association's history. About \$90,000 is being spent on general improvements, including a new fireproof grand-stand, while numerous new and attractive features will be introduced. The extent and value of the prize-list is such as to greatly encourage stock-raisers and farmers to compete. Full information regarding the exhibition may be obtained from E. McMahon, Secretary, at Ottawa, Ont.

Western Fair, London, Sept. 10-18.

The management of the Western Fair, London, Ont., are putting forth extra efforts this year to make the exhibition more popular than ever in all its different branches, but to none of them are they giving more attention than to the live-stock department. A large amount of money has been added to the prize-list. In the horse classes several changes have been made; sections are added in the roadster class for "farmers only"; other sections in the high-steppers for tandems and four-in-hands, while in speed events several hundred dollars have been added to the purses.

In the cattle, \$500 has been added to the Shorthorn class alone, and substantial increases to the other classes, as previously noted in "The Farmer's Advocate." Increases have been made in the sheep classes, and one new class added in the swine. A third prize in cash has been given the entire poultry list, beside a fine lot of specials. The agricultural and fruit departments have been carefully revised and added to where it was thought advisable. Send for prize-lists, entry forms and all information to the Secretary, A. M. Hunt, London, Ontario.

Over one hundred cow-testing associations were in operation in Canada on June 15th; inquiries for organization continue to be received, there being noticeable activity in the Maritime Provinces.

Crop Prospects Still Average Well.

A bulletin on the condition of crops and live stock in Canada, at date of 1st July, was issued by the Census and Statistics Office on July 9th, based on the reports of a large staff of correspondents.

Low temperature and cold rains prevailed over the whole of Canada in May and the early part of June, which delayed seeding and checked vegetation. Then followed a period of drouth throughout the northern and eastern parts of Ontario, the western and southern sections of Quebec, and nearly the whole of the Maritime Provinces. Grain, hay and root crops were, consequently, in poor condition in all those regions. On both sides of the St. Lawrence, in the lower parts of Quebec and in the south-western counties of Ontario, there were copious showers in June, and all crops were looking well at the end of the month; fall wheat would be ready for reapers in the second week of July. A feature of the season, however, has been a series of showers over local areas, and the condition of crops is irregular. But there is a note of hope in the reports of many correspondents, encouraged by the widely-extended rains of 28th and 29th June; and in the Maritime Provinces, where the drouth was most severely felt, there were heavy rains on 7th July. British Columbia has had a like experience of dry weather in June, with rains at the end of the month, and fall wheat is the only good crop there. In the Northwest Provinces fine growing weather followed the seeding of spring wheat, oats and barley, and correspondents throughout Manitoba, Saskatchewan and Alberta are jubilant at the prospects. Rainfall was ample to the end of June, except in a few localities, and although seeding operations were delayed, cereals and grasses are nearly as well advanced as in any previous year. "Ideal" is the favorite word of many correspondents, and it was generally expected that spring wheat would be out in ear by 10th July. In Alberta fall wheat was badly winter-killed, and much of the land has been resown with spring wheat, oats and barley. Spring wheat was heading out at the end of June in the southern parts of Alberta.

For all parts of Canada the per cent. condition of principal crops at 1st July, compared with the condition at the same date last year, was 77.2 to 89 for fall wheat, 86.77 to 80 for spring wheat, 93.81 to 90 for oats, 85.60 to 83 for barley, 81.47 to 82 for rye, 84.40 to 82 for peas, 86.58 to 84 for mixed grains, 76 to 87 for hay and clover, and 82.74 to 99 for pasture. In the case of all the grains, except fall wheat, the per cent. condition is higher this year than it was last year; hay and clover and pasture are lower. In the three Northwest Provinces the average condition of spring wheat at the first of July was 95.53, and of oats, 96.56.

The condition of live stock for the same periods is in every case higher this year. Horses are 95.80 to 94; milch cows, 95.20 to 94; other horned cattle, 93.77 to 87; sheep, 93 to 83, and swine, 93.30 to 85.

Iced Cars for Cheese.

Commencing July 5th, the usual iced-car service for cheese was provided on the same plan as in former seasons. Under the arrangement made with the railway companies by the Dairy and Cold-storage Commissioner's Branch of the Dominion Department of Agriculture, the Government agrees to pay icing charges up to \$5.00 per car on a certain number of cars per week. The cars are supplied by the railway companies on demand of shippers for shipments of cheese in carload lots at the regular tariff rate without extra charge for the icing. The ten-weeks period referred to commenced on July 5th and ends on September 11th. Last year between eleven and twelve hundred iced cars were furnished to shippers in the cheese-producing districts of Ontario and Quebec without any charge for the ice supplied. In case of hot weather before the 5th of July, shippers are expected to order refrigerator cars and have them iced at their own expense. Except for long hauls, one ton of ice will maintain a reasonably satisfactory temperature in a car loaded with cheese, and as this only entails an expenditure of \$2.50 per car, it is cheap insurance against the risk of grave injury to the cheese from the effects of heat.

\$14,000 in Prizes for the Winter Fair.

At a meeting of the Executive Committee of the Ontario Winter Fair, held in Guelph, July 7th, the price list for next December was decided upon, and the recommendations of the horse committee, as to judges for this department, were ratified. The list of these appeared last week on page 1110. The total amount of prize money for all departments this year, including both the regular and special prizes, will reach about \$14,000. Increases amounting to three or four hundred dollars have been provided in the beef-cattle department, in which department a number of changes in the classification were made. In the horse department provision is made for exhibits of Clydes-

dales, Shires, Hackneys, Standard-breds, Thoroughbreds, ponies and heavy-draft horses. The total amount of prize money offered for horses is \$3,275.00.

United States Crops, July 1st.

The Crop Reporting Board of the Bureau of Statistics of the United States Department of Agriculture from the reports of the correspondents and agents of the Bureau, submits a preliminary estimate of the area of corn planted as 109,006,000 acres, an increase of 7,218,000 acres (7.1%) as compared with the final estimate of last year's acreage. The average condition of the corn crop on July 1st was 89.3, as compared with 82.8 on July 1st, 1908; 80.2 on July 1st, 1907; and 84.8, the ten-year average on July 1st.

The average condition of winter wheat on July 1st, or when harvested, was 82.4, as compared with 80.7 last month; 80.6 at harvest, 1908; 78.3 in 1907; and 79.6, the average at time of harvest for the past ten years.

The average condition of spring wheat on July 1st was 92.7, as compared with 95.2 last month; 89.4 on July 1st, 1908; 87.2 on July 1st, 1907; and 87.0, the ten-year average on July 1st.

The average condition on July 1st of spring and winter wheat combined was 86.5, against 86.5 last month; 83.9 on July 1st, 1908; 81.6 on July 1st, 1907; and 82.5, the ten-year average.

The amount of wheat remaining on farms is estimated at 2.3% of last year's crop, or about 15,062,000 bushels, as compared with 33,797,000 on July 1st, 1908; and 43,608,000, the average amount on farms on July 1st for the past ten years.

The average condition of the oat crop on July 1st was 88.3, as compared with 88.7 last month; 85.7 July 1st, 1908; 81.0 July 1st, 1907; and 86.8, the ten-year average on July 1st.

The average condition of barley on July 1st was 90.2, as compared with 90.6 last month; 86.2 on July 1st, 1908; 84.4 on July 1st, 1907; and 88.3, the ten-year average on July 1st.

The average condition of rye on July 1st was 91.4, as compared with 89.6 last month; 91.2 on July 1st, 1908; 89.7 on July 1st, 1907, and 89.8, the ten-year average on July 1st.

The acreage of white potatoes is estimated at 3,452,000 acres, or 195,000 acres (6%) more than last year. The condition of the crop on July 1st was 93.0, as compared with 89.6 on July 1st, 1908; 90.2 on July 1st, 1907; and 91.0, the ten-year average on July 1st.

The acreage of tobacco is estimated at 1,108,336 acres, or 232,911 acres (26.6%) more than last year. The condition of the crop on July 1st was 89.8, as compared with 86.6 on July 1st, 1908; 81.3 on July 1st, 1907; and 85.7, the ten-year average on July 1st.

The acreage of flax is estimated at 2,741,000 acres, or 62,000 acres (2.3%) more than last year. The condition of the crop on July 1st was 95.1, as compared with 92.5 on July 1st, 1908; 91.2 on July 1st, 1907; 93.2 on July 1st, 1906; and 90.4, the average on July 1st for six years.

The average condition of the hay crop on July 1st was 87.8, as compared with 87.6 last month; 92.6 on July 1st, 1908, and, approximately, 82.0 on July 1st, 1907. The condition of timothy on July 1st was 87.1, as compared with 90.2 on July 1st, 1908; 82.2 on July 1st, 1907; and 85.1, the ten-year average on July 1st. The condition of clover on July 1st was 83.8, as compared with 95.5 on July 1st, 1908; 76.4 on July 1st, 1907; and 83.8, the ten-year average on July 1st.

The condition of the apple crop on July 1st was 54.6, as compared with 61.4 last month; 57.6 on July 1st, 1908; and 62.3, the ten-year average on July 1st.

Re Express Rates on Fruit.

The Dominion Railway Commission last week gave judgment upon an application for an order compelling the Canadian and Dominion express companies to reduce the present rate of forty cents per cwt. on fruit sent from the Queenston district to Toronto. The Commission has had under consideration the entire matter of the rates charged by the express companies. No decision had been arrived at, and it was supposed that, until the matter was settled, no higher than the existing rates would be charged. The fruit-growers, in their application to the Commission, alleged that the 30c. rate from Queenston to Toronto had been cancelled, and a 40c. rate had been substituted, and that the acceptance of shipments were made conditional upon all the business being done by the companies.

The Commission heard the representatives of the fruit-growers and of the express companies, and immediately disallowed the increase of rates from 30c. to 40c. a hundredweight. The Chairman of the Board, in announcing this judgment, said it could not compel the companies to accept freight, but the fruit-growers could tender the shipments to them as common carriers, and if they did not get the service to which they were entitled, they could sue for damages sustained. The general question of rates remains to be settled.

Farmers' Telephones.

Editor "The Farmer's Advocate":

There is nothing a farmer can do that will pay as much in added conveniences as to have a telephone in his house. In helping out in cases of emergency, and in pure satisfaction in the knowledge that he has a means of instant communication not only with his neighbors, but with every part of the country, it is invaluable. Our company was started by a gentleman here who got a notion that a telephone would be a good thing, and canvassed until he got a few subscribers; then, a meeting was called, and a few simple rules were adopted (no long constitution); then more subscribers, and an application was made to the Government of Ontario for a charter. This can be got through the department of the Provincial Secretary, who will furnish all forms required.

If there are ten or twelve who have the money, and will put it into an enterprise of that kind, it will ultimately pay a fair profit, and is more easily handled than a large company. We have seven directors, though I think five would be enough. Officers are Secretary and Treasurer, and the President, who is chosen by the Board of Directors from among themselves; these form the executive head of the company.

The total cost of each telephone installed would depend very largely on the nature of the country, the cost of poles, labor, etc. We have only 19 telephones installed, and for that we have in lines and branches 35 miles of wire (metallic circuit), about 23 miles of poles, and one switch-board, costing about \$2,200, besides the telephones, say \$125 per phone. We expect to put in several more phones on the same lines, but you will understand that, in a more thickly-populated part of the country, and when men get more awake to the advantages of telephone connection, the initial cost per phone would be much less. We have hardly had enough experience to enable me to give cost of maintenance.

Shareholders paying cost of their own phones are charged six dollars per year, payable quarterly in advance. Phones are rented for twelve dollars per year; casual messages, 15 cents for conversations of three minutes, if transferred to the Bell Telephone Company's lines; if on our own lines, only 10 cents for each conversation. These charges are to be collected by the person whose phone is used by the "caller," and paid over to the Secretary monthly.

The most we have now on one circuit or party line is nine, but we could accommodate twenty-five on ten or twelve miles of wire. I don't think it would be wise to put more than twenty-five on one circuit, on account of so much ringing, but, with good instruments, such as we have made by the Canadian Independent Telephone Company, of Toronto, I have no doubt the service would be all right with thirty or more.

Our business is increasing, though not exceedingly fast, but still it is satisfactory.

We have connection with the Bell Telephone at Fenelon Falls. We have good service, and most courteous and gentlemanly treatment by the employees and officials of the company; but, you know, the company won't have the worst side of the bargain. In fact, the sooner the Government takes up the long-distance telephone business, the better.

The advantages to farmers of having telephone privileges seems to me so obvious, and so many, that I don't know where to begin. I could fill a page with instances that have actually occurred where money has been saved and suffering avoided, and in some cases life saved, by having a telephone, and it surprise me that more do not take advantage of the opportunity of getting a telephone, when it can be had for \$12 per year.

I said that we give shareholders who pay for their telephones the use of the line for six dollars per year. This is a mistake, and if we had to commence again, we would make no distinction; we would put in all phones at a rate per year, and make the rate such as would pay expenses. On party lines, I think \$12 would be sufficient, especially if telephones were equipped with push-buttons, so that subscribers on any line could call any on that line without the aid of the "central." If you had individual lines, so that someone must attend to every call, the rental would have to be greater.

SAM. SUDDARY.

Victoria and Haliburton Co., Ont.

Rules of entry of the Canadian Hackney Horse Society and of the Canadian Aberdeen-Angus Association, as amended at the last general meetings and recently incorporated under the Pedigree Act, may now be had upon application to the Accountant, National Live-stock Records, Ottawa, Canada.

Decision of the United Counties of Leeds and Grenville to install a county roads system, brings the total number of counties to avail themselves of the Ontario Provincial Good Roads Act up to fourteen out of the forty eligible.

Central Canada Prize List for Seed Grain.

Anyone who examines the Central Canada Exhibition prize-list for seed grain this year, must be struck with the splendid money prizes offered in the different sections. It sets a good pace for other exhibitions to follow. In the past the prizes offered in the seed-grain classes have not been large enough to call out many entries.

The tendency of some exhibitors to show exceptionally plump seed grown during previous years is unfair to honest exhibitors, and should be discouraged in every possible way. One way to accomplish this is to require that a small sheaf of the unthreshed grain accompany the threshed lot. By comparing the grain in the head with the grain in the receptacle, it can be decided whether it is this year's growth or not.

It will be observed, that in the above-mentioned prize-list, Section 6, of Class 67, on page 55, offers special inducements. This important section has been added through the efforts of the Seed Branch, Department of Agriculture.

One of the principal Canadian crops is oats, and in Eastern Ontario and Quebec, this crop is generally selected for the field-crop competitions. This year, those competitors who win prizes have every encouragement to show their grain at other points. The Canadian National Exhibition at Toronto, with its prizes for sheaves; the Central Exhibition at Ottawa, and the winter fairs at Guelph and Ottawa, are all inviting fields for exploitation.

At the Central Canada Exhibition, prizes for different sections run \$4, \$3, \$2 and \$1, and they are much larger in Sec. 6, which reads, "White oats, 2 bushels threshed grain, together with sheaf, to be approximately 10 inches in diameter, taken from prizewinning fields in field-crop competition, conducted under the auspices of any recognized agricultural society in Canada, during the season of 1909, \$25, \$20, \$15, \$10, \$5." It will be observed that this section is open to prizewinners in field-crop competitions throughout Canada.

Exhibitors in this section will notice, on page 14, that all exhibits, if sent by freight and prepaid, will be returned free, on securing a certificate from the exhibition secretary. Field-crop competitors should plan for this exhibition now. The oats should be well cleaned with a fanning mill.

If you are sending oats, why not put in some other exhibits in grain, field-roots, etc.? You will stand a chance to win, along with others.

T. G. RAYNOR, Ont. Rep. of Seed Branch.

TRADE TOPIC.

A MANURE LOADER.—Manure spreader, hay fork, rack lifter and slings, have largely solved the unloading problem on the farm, doing away with much heavy lifting; but invention has been slower in devising mechanical means of loading. At last, however, serious attempt is being made to solve this phase of the labor problem. The hay loader works in the meadow, and a manure filler operated by horse power has been invented to load the manure on to the spreader. McKinley & Aitken, of Alliston, Ont., patentees and manufacturers of this welcome appliance, will be pleased to send an illustrated leaflet on request. Write, mentioning this paper.

GOSSIP.

W. H. Jackson of the Brock Road, sowed some alfalfa seed about six weeks ago. Last week, says the Markham Economist of July 8th, he pulled a stalk which measured 26 inches in length. A marvellous growth for that length of time.

To be herd of Hon. W. C. Edwards, Rockland, Ont., has been shipped the champion red yearling Shorthorn bull, Governor (imp.), by Golden Mascot (imp.), out of a Missie cow, sold at the Wholesale dispersion sale, in the Old Market, last year.

QUESTIONS AND ANSWERS.

1st.—Questions asked by bona-fide subscribers to "The Farmer's Advocate" are answered in this department free.

2nd.—Questions should be clearly stated and plainly written, on one side of the paper only, and must be accompanied by the full name and address of the writer.

3rd.—In Veterinary questions the symptoms especially must be fully and clearly stated, otherwise satisfactory replies cannot be given.

4th.—When a reply by mail is required to urgent veterinary or legal enquiries, \$1.00 must be enclosed.

Veterinary.

CHRONIC COUGH.

Three-year-old filly has had a cough for some months. Her throat is swollen, and she has a slight discharge from her nostrils. H. W. B.

Ans.—This has become chronic, and will be hard to treat. Make a liniment of three parts each oil of turpentine and raw linseed oil and one part liquor ammonia fortier. Rub her throat twice daily with this until it is blistered, then apply sweet oil daily. Take 6 ozs. chlorate of potassium, 2 ozs. sulphate of quinine, 2 ozs. digitalis, and 4 ozs. camphor. Mix, and make into 48 powders. Give a powder three times daily. If necessary, repeat the last prescription. V.

FATALITY IN COW.

Jersey cow calved at night; calf nursed her. She was turned out on good grass next morning. We put her into the stable about 7 o'clock in the evening, and she was well and chewing her cud. Next morning we found her dead. Did she die from milk fever, or what killed her? C. F. K.

Ans.—She did not die of milk fever. This disease does not kill so quickly. It is probable she died of impaction of the rumen, or some other form of acute indigestion. It would have required a careful post-mortem examination by a veterinarian to ascertain the cause of death. It is quite possible she died of internal hemorrhage. V.

INVERSION OF THE RECTUM.

Pig, three months old, has had his rectum inverted about three inches for three weeks, and is getting worse. L. C.

Ans.—As this condition has become chronic, and, no doubt, the intestine inflamed, and probably gangrenous, a recovery is not likely to take place. In the early stages of this trouble, the administration of a laxative of 2 to 4 ozs. raw linseed oil, the administration of rectal injections to remove the feces, dressing the exposed intestine with a strong astringent, as a 10-per-cent. solution of formaline in water, returning it, and applying a truss to prevent its protrusion, removing the truss occasionally, and removing the feces as explained, will usually effect a cure. Under present conditions, I think it would be wise to destroy him. V.

ECZEMA, ETC.

1. I purchased an imported Clydesdale mare, and I frequently notice her rubbing her legs, chest, neck, root of tail, etc. The parts are covered with pimples. How should I treat her and feed her to fit her for the fall shows?

2. Is Bibby's Cream Equivalent good to feed a sucking colt, in addition to the mother's milk, oats and bran? L. S.

Ans.—1. It is eczema, probably caused by too high feeding. Purge her with 10 drams aloes and 2 drams ginger. Follow up with 1 1/2 ozs. Fowler's Solution of Arsenic, twice daily, every alternate week, for four weeks. Rub a little of the following lotion well into the affected parts twice daily, viz.: Corrosive sublimate 30 grains to a quart of water. Feed her on grass, or first-class hay, rolled oats and bran, with a little linseed meal daily. Give her regular exercise. High feeding must be avoided on account of the skin trouble. In fact, the advisability of fitting her for show purposes is doubtful. Don't feed corn, wheat, or barley.

2. This preparation is claimed to give good results, and if your mare has little milk, is worth a trial. V.

GOSSIP.

JAS. I. DAVIDSON'S SALE OF SHORTHORNS.

Those attending the Jas. I. Davidson sale of Shorthorns at Balsam, Ont., July 1st, were nearly all local breeders and farmers; the cattle were a useful lot, in fair condition, the calves especially good, and the prices were very conservative. They should prove good investments for the purchasers.

Village Fairy 5th; roan; calved April 14th, 1900; Miller Bros., Brougham, Ont. \$ 230

Village Bud; red; calved April 15th, 1898; Robt Duff, Myrtle, Ont. 195

Village Fairy 6th; red; calved June 18th, 1902; Robert Miller, Stouffville 100

Village Fairy 16th; red; calved January 14th, 1908; Alex. Lee, Greenbank 100

Crocus of Pine Grove; red; calved September 16th, 1904; J. J. Williams & Son, Grand View, Iowa. 250

Lovely Matchless; red; calved September 10th, 1907; Alex. Lee. 85

Wimple Daisy 2nd; red; calved April 1st, 1906; Thos. Philip, Brougham, Ont. 60

Lovely Missie; red; calved June 17th, 1904; Robert Duff. 105

Her B. C.; red; calved October 25th, 1908; Wm. Hadden, Wick, Ont. 90

Bonnie Lass; red; calved March 15th, 1907; Alex. Lee. 85

Bessie McKay; red; calved August 1st, 1906; Alex. Lee. 65

Fancy 13th; roan; calved January 6th, 1907; J. F. & G. Auld, Eden Mills 295

Gloster of Ivanhoe; red; calved June 15th, 1905; R. Heron, Ashburn. 85

Her roan C. C.; calved November 2nd, 1908; John Miller, Brougham, Ont. 100

Gloster of Ivanhoe 2nd; red; calved Nov. 10th, 1907; John Miller, Jr., Ashburn 125

Louisa of Ivanhoe; roan; Nov. 18th, 1904; P. A. Stone, Oshawa. 65

Her roan C. C.; calved July 18th, 1908; P. Christie, Manchester. 40

Louisa of Ivanhoe 2nd; red; Dec. 25th, 1906; Jas. Wilkin, Balsam. 70

Mysie of Ivanhoe 2nd; red; calved Jan. 2nd, 1908; Thos. Baker, Solina. 90

Village Pearl; red; calved Nov. 12th, 1907; Alex. Lee. 60

Daffodil; red; calved October 6th, 1902; Jas. Wilkin. 75

Claret Beauty; red; calved March 20th, 1905; Jno. Davidson, Ashburn. 110

Lavender Spot 2nd; red and white; calved Jan. 17th, 1907; Alex. Lee. 60

Lavender Lassie; red; calved Feb. 16th, 1904; A. Fisher, Ashburn. 125

Her roan B. C.; calved July 1st, 1908; John Dryden & Son, Brooklin. 90

Village Lassie 2nd; white; calved Oct. 15th, 1904; R. Heron, Ashburn. 145

Her roan C. C.; calved Nov. 3rd, 1908; John Miller, Jr. 240

Lady Russell 3rd; red; calved Nov. 1st, 1907; Peter Christie, Manchester. 75

Princess of Ivanhoe; red; calved Nov. 15th, 1904; P. A. Stone. 80

Lovely Kessie 3rd; red; calved June 16th, 1905; Alex. Lee. 110

Betha; red; calved April 24th, 1903; Alex. Lee. 60

Her red C. C.; calved Nov. 1st, 1908; J. E. Holtby, Manchester. 55

Jean 4th; red; calved March 2nd, 1908; Jas. Wilson, Balsam. 80

Jean 5th; red; calved May 10th, 1908; Jas. Wilson. 60

Bulls.

Count Victor; red; calved Sept. 28th, 1904; John Davidson. \$ 160

Missie's Prince; red; calved May 2nd, 1908; Wm. Cassie, Ashburn, Ont. 90

Proud Butterfly; white; calved June 1st, 1908; Wm. G. Anderson, Janetville, Ont. 90

Lancaster Lad; red; calved October 27th, 1908; Jos. Stone, Greenbank. 80

Chief Baron; red; calved Dec. 15th, 1907; Jos. Stone. 55

Commander; red; calved March 18th, 1908; Robert Duff. 110

Lavender's Pride; red and white; calved July 2nd, 1908; Innis Grant, Brooklin. 45

Village Duke 2nd; red; calved Sept. 24th, 1907; Wm. Harris, Brooklin. 70

MARKETS.

Toronto.

LIVE STOCK.

At West Toronto, on Monday, July 12th, receipts totalled 98 cars, consisting of 1,981 cattle, 13 hogs, 225 sheep and 11 calves. Quality of cattle good.

Trade was slow; nothing doing in exporters. Butchers' were lower than last week; prime picked lots, \$5.50 to \$5.70; loads of good, \$5.20 to \$5.40; medium, \$4.80 to \$5.15; common, \$4.50 to \$4.75; milk cows, \$25 to \$50; calves, \$3 to \$6 per cwt. Sheep, \$3 to \$4.10 per cwt.; lambs, \$7 to \$8 per cwt. Hogs, \$8.15, fed and watered, and \$7.90, f. o. b. cars at country points.

REVIEW OF LAST WEEK'S MARKET.

Receipts of live stock last week at the Union and City Stock-yards were 494 carloads, 228 at the City yards, and 266 at the Union. The numbers of each class of stock were as follows:

Table with 4 columns: Category, City, Union, Total. Rows include Cattle, Hogs, Sheep, Calves, Horses.

The quality of the cattle was good, especially at the Union yards, where on Monday and Tuesday there were 4,900 cattle, the bulk of which were exporters, the finest, and the largest number ever placed on sale on any market in Canada at one time.

Trade, considering the number of cattle on sale, was good, although there was a slight decline of 15c. to 20c. per cwt. for stall-fed butchers' and exporters. Common grassers sold from 20c. to 40c. per cwt. lower.

The following is a list of the leading buyers: Alex. McIntosh, who bought 375 exporters for Gordon & Ironsides, at an average of \$8.10 per cwt.; C. W. Campbell, of the S. & S. Company, of New York and Chicago, bought 200 exporters at \$6 to \$6.25; Geo. Campbell bought 570 exporters for Nelson Morris, of Chicago, at \$5.60 to \$6.10 for steers, and \$5.35 to \$5.85 for heifers. Isaac Brown, of Armour & Co., Chicago, bought 200 exporters, at \$6 to \$6.25.

E. L. Woodward, bought for Swift & Co., Chicago, 40 carloads—steers—at \$5.85 to \$6.20, and heifers, at \$5.75 to \$6.00.

Shamburg & Co., of New York, bought 15 carloads of exporters—steers—at \$6 to \$6.15; heifers, \$5.75 to \$5.90.

Jesse Dunn, of the firm of Dunn & Levack, bought 4 carloads of exporters, at \$6 to \$6.05 per cwt.

M. Vincent, of Montreal, bought 1 load of butchers' steers, 1,100 lbs. each, at \$5.37 1/2.

The Harris Abattoir Co. bought about 15 carloads of butchers' cattle, from \$4.70 to \$5.90 per cwt. for steers and heifers, and cows at \$3 to \$4.70 per cwt.

The D. B. Martin Co. bought for their Abattoir Co., West Toronto, about 300 cattle, at \$4.75 to \$5.50 per cwt.

Gunn's Limited, West Toronto, bought 200 cattle, at \$4.75 to \$5.15; cows, \$3.75 to \$4.50.

Many other dealers bought smaller numbers. These sales were all at the Union yards, which has lately become the center of attraction for the cattle dealers.

Incorporated 1885
THE
**TRADERS BANK
OF CANADA**

Capital and Surplus, \$ 6,350,000.
Total Assets, 34,000,000.

Have your Sales Note made payable at the nearest Branch of the Traders Bank. We collect them promptly when due, and advance money on them if you require it.

We are always ready to make loans to responsible farmers at reasonable rates.

Open a Savings Account. A deposit of \$1.00 or upwards does it.

**THE BANK
FOR THE
PEOPLE.**

There are 85 Branches of the Traders Bank in Canada—74 in Ontario. The Manager of the nearest would welcome your account. 68

of Canada, as well as many from the States.

The reason of the large runs at the Union yards, is that other years the American buyers mentioned above, as well as Gordon & Ironsides, were in the habit of buying thousands of export cattle at local points in Western Ontario that never were shipped to either the City or Union yards. This has all been changed, and the buyers have arranged to buy all these cattle at the Union yards, which has the prospect of becoming the Chicago of Canada as regards a cattle-market center.

Exporters.—Export steers sold from \$5.85 to \$6.25, and two extra-quality loads at \$6.40. The bulk of the export steers brought from \$6 to \$6.20; bulls, \$4.75 to \$5.25; heifers, \$5.60 to \$5.90.

Butchers.—A few prime picked lots brought \$5.60 to \$5.90; loads of good, \$5.30 to \$5.55; medium, \$5 to \$5.25; common, \$4.50 to \$4.80; cows, \$3 to \$4.50, and a few at \$4.70; canners, \$2 to \$2.50 per cwt.

Feeders and Stockers.—The stocker and feeder business continues light, at unchanged prices. Steers, 900 to 1,000 lbs., sell from \$4.25 to \$4.75; stockers sell from \$3 to \$4 per cwt.

Milkers and Springers.—The market is weak, at unchanged prices. Prices ranged from \$30 to \$55, with \$60 and \$72 each being paid for three very choice Holstein cows.

Veal Calves.—Receipts were liberal, at unchanged prices, at \$3 to \$6 per cwt., with a few selling at \$6.50 per cwt.

Sheep and Lambs.—Receipts are becoming larger. Export ewes sold at \$3.50 to \$4 per cwt.; rams, \$3 to \$3.25 per cwt.; yearling ewes and wethers, \$4.75 to \$5 per cwt.; spring lambs sold at \$6 to \$6.50 per cwt.

Hogs.—Packers tried to get prices down, but the market closed strong, at \$7.75 to \$7.85, for car lots, f. o. b. at country points, and \$8 to \$8.15 per cwt. was paid on the Toronto market, fed and watered. The prevailing price, as far as could be learned, was \$7.75 per cwt. to farmers.

Horses.—At the regular Monday and Wednesday auction sales last week, about

110 horses were offered, out of which probably 75 or 80 were sold. The demand for horses was not nearly as good as it has been. The quality of many of the horses in each class was of the best, and several of them brought fancy prices, both by private and auction sale. Drafters sold at \$170 to \$220, and some top-notchers brought more; general-purpose horses, \$140 to \$170; expressers and wagon horses, \$150 to \$210; drivers, \$100 to \$175, and horses with speed, \$200; high-class carriage horses brought \$275 each, and serviceably sound, \$30 to \$75 each.

BREADSTUFFS.

Wheat.—No. 2 white, red, or mixed, \$1.30 to \$1.32, outside. Manitoba—No. 1 northern, \$1.36½; No. 2 northern, \$1.34½; No. 3, \$1.32½. Rye—No. 2, 75c., outside. Peas—No. 2, 92c. Oats—No. 2 white, 57c.; No. 3, 56½c., track, Toronto. Barley—No. 3 extra, 62c. to 63c.; No. 3, 61c. Corn—No. 2 yellow, 79½c. to 80c.; No. 3 yellow, 79c., track, Toronto. Flour—Ninety per cent. patents, \$5.50, in buyers' sacks, on track, Toronto; Manitoba first patents, \$6.20 to \$6.40; second patents, \$5.70 to \$6; strong bakers', \$5.50.

HAY AND MILFEED.

Hay—Baled, in car lots, on track, Toronto, \$12 to \$13. Straw—Baled, in car lots, \$7 to \$7.75. Bran—\$23, in bags. Shorts—\$24, track, Toronto.

HIDES AND WOOL.

E. T. Carter & Co., 85 Front street East, Toronto, have been paying as follows: No. 1 inspected steers, 60 lbs. up, 12½c.; No. 2 inspected steers, 60 lbs. up, 11½c.; No. 1 inspected cows, 12c.; No. 2 inspected cows, 11c.; No. 3 inspected cows and bulls, 10c.; country hides, cured, 10½c. to 11½c.; calf skins, 14c. to 16c.; horse hides, No. 1, \$2.75; horse hair, per lb., 31c.; lamb skins, 20c. to 30c.; wool, unwashed, per lb., 12c. to 13c.; wool, washed, 19c. to 31c.; wool, rejects, per lb., 14c.

COUNTRY PRODUCE.

Butter.—Receipts large; prices firmer. Creamery pound rolls, 25c.; creamery solids, 23c.; separator dairy, 19c. to 21c.; store lots, 21c.

Eggs.—Receipts moderate, prices firmer, at 20c. to 21c.

Cheese.—Receipts of new, large, 12½c. to 13c. Old is scarce, and is quoted at 14c. to 14½c.

Beans.—Dealers report supplies as being light, and prices are higher. Primes, \$2.20 to \$2.30; hand picked, \$2.35 to \$2.45.

Potatoes.—Car lots of old potatoes, on track, Toronto, are quoted at 65c. to 70c. per bag.

Poultry.—Receipts light; prices easier. Turkeys, 17c. to 20c. per lb.; spring ducks, 20c. to 25c. per lb.; spring chickens, 25c. to 30c. per lb.; fowl, 10c. to 12c. per lb.

TORONTO FRUIT MARKET.

Receipts of fruit have been large, especially from California and Southern States. Canadian strawberries and cherries have been plentiful and cheap. Strawberries sold at 6c. to 7c. per quart, and some inferior quality at 5c.; red cherries, 75c. to \$1 per basket; black cherries, at \$1 to \$1.25 per basket; green peas, 40c. to 60c. per basket; beans, 75c. per basket. Gooseberries are commencing to come on the market, selling at \$1 to \$1.25 per basket.

Chicago.

Cattle.—Beeves, \$1.80 to \$7.40. Texas steers, \$1.60 to \$6.10. Western steers, \$1.75 to \$6.15; stockers and feeders, \$3.10 to \$5.10; cows and heifers, \$2.50 to \$6.15; calves, \$6.30 to \$7.20.

Hogs.—Light, \$7.25 to \$7.90; mixed, \$7.45 to \$8.10; heavy, \$7.50 to \$8.15; rough, \$7.50 to \$7.70; good to choice, heavy, \$7.70 to \$8.15; pigs, \$6.30 to \$7.20; bulk of sales, \$7.75 to \$8.

Sheep and Lambs.—Natives, \$2.75 to \$4.90. Western, \$2.75 to \$4.80; yearlings, \$4.50 to \$6; lambs, native, \$4.75 to \$8.75. Western, \$5 to \$8.60.

British Cattle Markets.

London cables for cattle 14c. to 14½c. per lb. for Canadian steers, dressed weight, refrigerator beef, 11½c. per lb.

Montreal.

Live Stock.—Shipments from the port of Montreal for the week ending July 3rd, amounted to 2,313 cattle, as against 2,715 the previous week, those for the month of June being 10,243 cattle, 452 sheep and 17 horses; those from the beginning of the season till the end of June being 24,416 cattle, 452 sheep and 39 horses, as against 18,778 cattle, 1,783 sheep and 42 horses, the same period of 1908.

Offerings of cattle on the local market last week were more plentiful in the more common grades, while those of choice cattle were rather lighter. The weather was favorable, as were also advices from England, and, the demand being good, prices scored a slight advance. Choice steers sold at 6c. to 6½c. per lb., fine at 5½c. to 6c., good at 5c. to 5½c., medium at 4c. to 4½c., and common at 3c. to 3½c. per lb. Inferior sold as low as 2½c. Trade in sheep and calves shows little change, supplies and demand being moderate. Sheep sold at 3½c. per lb., for local trade, and there was a demand for export at 3½c. Lambs ranged from \$3 to \$6 each, according to size, and common calves brought \$2 to \$4, and good to fine \$5 to \$9 each. Hogs showed as much change as anything else, being almost ¼c. more than the week previous. Selects sold at 8½c., although some brought a fraction more.

Horses.—Heavy-draft horses, 1,500 to 1,700 lbs., \$225 to \$300 each; light draft, 1,400 to 1,500 lbs., \$180 to \$240 each; small animals, weighing 1,000 to 1,100 lbs., \$100 to \$150; inferior and broken-down animals, \$75 to \$100 each; and choice saddle or carriage animals, \$300 to \$500 each.

Dressed Hogs and Provisions.—Select, fresh-killed, abattoir-dressed hogs sold at 12c. per lb.

Potatoes.—Green Mountains were hardly obtainable, and \$1.10 would have been paid for them, per 90 lbs., on track, in carloads. Quebec whites and Ontarios were in good demand, changing hands between dealers at \$1.05, while P. E. I.'s were about 5c. less.

Eggs.—Dealers are apparently not meeting much success in their efforts to get prices lower in the country, and it would seem as though they were still compelled to pay in the vicinity of 17c. to 17½c. per dozen at country points. These sold here at, probably, 18½c. to 19c., while No. 1 candled brought 19c. to 19½c., and selects 21c. to 22c. per dozen.

Butter.—The market for butter last week was rather firmer, on the whole. Round lots seemed to be changing hands at 22c. to 22½c., according to quality, with a fraction better for the fancy. In a smaller way, the price was 23c. to a fraction more. Dairy tubs were still quoted at 18c. to 20c., according to quality and quantity. On Monday, 12th, creamery sold here at 21½c. to 22½c.

Cheese.—Shipments were 73,000 boxes for the week ending July 3rd, against 94,000 for the corresponding period of last year, while the total shipments since the opening of navigation amounted to 348,000, against 376,000 for the corresponding period of last year. Prices were firmer last week. Ontario cheese could not be had at less than 11½c. or 11½c. to 12c., while Townships brought 11½c. to 11½c., and Quebecs 11½c. to 11½c. A decline in values left prices on Monday, 12th, at 11c. to 11½c. for Quebecs; Townships, 11½c. to 11½c.; Ontarios, 11½c. to 11½c.

Grain.—No. 2 Canadian Western oats were available at 59c. per bushel, No. 1 extra feed being 58½c., No. 1 feed 58½c. and No. 3 Canadian Western 58c. No. 2 barley sells at 72½c. to 71c., Manitoba feed barley at 67½c. to 68c., and buckwheat at 69½c. to 70c. per bushel, carloads, store.

Food.—Supplies are as light as ever, and prices were almost unchanged. Manitoba bran, \$22 to \$23 per ton, in bags, and shorts at \$24 to \$25, while pure meal was \$33 to \$35, and mixed \$28 to \$30.

Flour.—Tone of market firm. Manitoba spring wheat patents sold at \$6.30 per barrel for firsts, and \$5.80 for seconds; strong bakers being \$5.60. Ontarios are very firm, patents being \$6.75, and straight rollers being \$6.50 to \$6.60.

Hay.—No. 1 hay, \$14 to \$14.50 per ton, carloads, Montreal. No. 2 extra, \$13 to \$13.50, and No. 2, \$11.50 to \$12.

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while clover mixed was \$10 to \$10.50, and clover, \$8.50 to \$9.

Hides.—Market was firm in tone, but demand a little on the light side. Lambskins advanced 5c. more, selling at 25c. each. Dealers were still quoting previous prices on all other lines.

Cheese Markets.

Madoc, Ont., 11½c. Woodstock, Ont., 11 9-16c. Brockville, Ont., 11½c. Kingston, Ont., 11½c. to 11½c. Belleville, Ont., 11 7-16c. and 11½c. Vankleek Hill, Ont., white, 11 7-16c.; colored, 11½c. Winchester, 11½c. bid. Huntingdon, P. Q., white, 11½c. and 11 5-16c.; colored, 11½c.; butter, 20½c. Napanee, Ont., colored, 11 9-16c.; white, 11½c. Picton, Ont., 11 9-16c. Brantford, Ont., 11 5-16c., 11½c. and 11 7-16c.; twins, 11 9-16c. Cornwall, Ont., white, 11½c.; colored, 11½c. Iroquois, Ont., 11½c. Napanee, Ont., colored, 11 9-16c.; white, 11½c. Kemptville, Ont., 11½c. London, Ont., 11½c. to 11½c. Cowansville, P. Q., butter, 21½c., 21½c. and 22c.; cheese, 11½c., 11 5-16c., 11 7-16c., 11½c., 11½c. St. Hyacinthe, P. Q., butter, 21½c. bid; cheese, 11½c. Chicago, Ill., cheese, dairies, 14½c. to 14½c.; twins, 14c. to 14½c.; Young Americans, 14½c. to 14½c.; longhorns, 14c. to 14½c.

Buffalo.

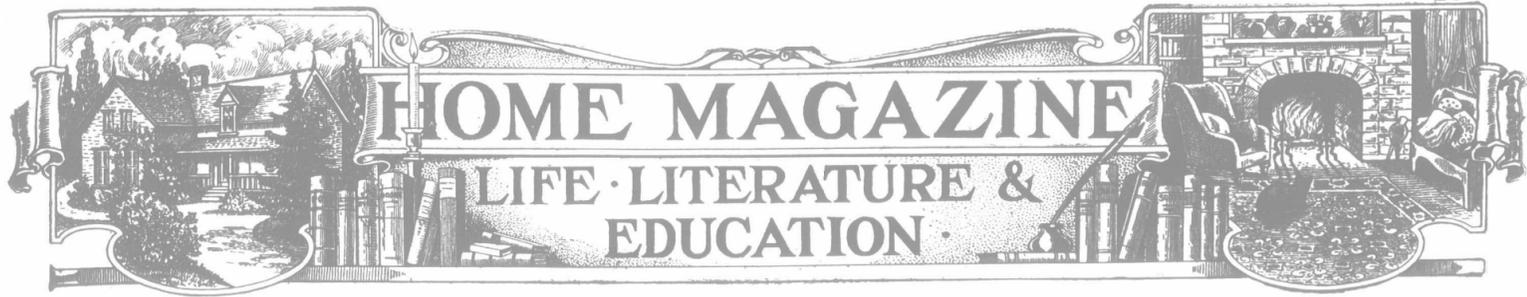
Cattle.—Prime steers, \$6.50 to \$7.
Veals.—\$6 to \$9.50.
Hogs.—Heavy, \$8.35 to \$8.45; mixed, \$8.25 to \$8.40; Yorkers, \$7.90 to \$8.10; pigs, \$7.70 to \$7.75; roughs, \$7 to \$7.20; dairies, \$7.90 to \$8.20.
Sheep and Lambs.—Lambs, \$4.50 to \$9; yearlings, \$6.25 to \$6.50; wethers, \$4.75 to \$5; ewes, \$4 to \$4.50; sheep, mixed, \$2 to \$4.75.

MEET THEMSELVES GOING TO BED

As one approaches the poles the days become long in summer and short in winter. At any point within the Arctic and Antarctic Circles there is at least one night in summer when the sun does not set, and one day that it does not rise above the horizon. At the poles, there would be daylight six continuous months, and darkness modified only by twilight, for the remaining six months of the year. In all the northern portion of Western Canada, while over most of it the sun sets each night, long summer days, with correspondingly short nights, are the rule. This largely explains the phenomenally rapid growth and early maturity of plants in that region. To a visitor from the South to the Arctic region, it seems strange to watch the sun circling completely around the horizon without dipping below. In less degree, but still interesting, is the novelty of reading without lamplight as late as 11 o'clock at night, as it is possible to do in the Peace River region in June. Sunset, between 9 and 10 o'clock, and sunrise between 2 and 3, makes a short sleeping period. As the war in a party of colonists who left Eastern Canada for the Peace River district graphically put it: "We are up so late at night, and get up so early in the morning, that we meet ourselves going to bed."

"One half the world does not know how the other half lives."

"Well, it is gratifying to think that one half of the world attends to its own business."



of conferences relating to the future of the British Empire there is no end, but none more pregnant than the meeting of Journalists, in London, England, which concluded early this month. The editors assembled from Canada, Australia, New Zealand and elsewhere, with those of great Britain, were not of the narrow, counting-house breed, devoid of due sense of their duty to state and humanity. They met the guiding statesmen of Britain, but the business of the congress was not to pass resolutions and frame policies, but to become informed of the needs and problems of this world-encircling empire, from the "restless West to the turbulent East." It was to get vision. On one point they did properly define themselves, asking for more efficient and cheaper cable facilities, and secured the pledge of Premier Asquith to take up this problem. Better means of communication between the states of the Greater Britain is all-important. Cheap postage on letters and periodicals across the Atlantic has done more, in shorter time, to strengthen imperial sympathies and interests than any other one agency. The electric messages above and below the water will promote unity and trade. The members of the congress were feted by King and people with lavish graciousness. They got a close-range view of the greatest commercial centers of the world; saw something of the matchless home-life and educational institutions of learning; witnessed army manoeuvres at Aldershot, and a mighty naval pageant at Portsmouth—all of which must have vivified in their minds that John Bull is neither asleep nor living in a fool's paradise. Naturally, following the address of welcome by Lord Rosebery, and almost continuous allusions by others, questions of military and naval defence bulked largely before the conference, but a resolution favoring compulsory drill throughout the Empire was withdrawn. Mr. J. A. Macdonald, of Toronto, in a powerful speech, declaring in favor of freedom of action, each of the self-governing dominions settling such questions in its own way. "Imperial unity, with local autonomy," therefore, expressed the mind of the conference as the watchword of the Empire. Lord Roberts, in closing that particular discussion, said that in Britain they had been trying the voluntary system for fifty years, and had failed to get either the men or the military training, owing to the engrossments of labor and other pursuits. This is a most welcome utterance. There is hope of relief to humanity in it from the burdens of militarism and the atrocities of war; hope that the growing day of light and peace will yet make impossible spectacles of war as monstrous as the Russian-Japanese conflict, when two millions of peasants were set at work to butcher each other because imperial speculators were rivals for the exploitation of Korean forest wealth. The delegates from the press conference return to their homes with a fuller knowledge of the Empire, and a deepened sense of the power and peril of journalism in its relation to world-wide British citizenship.

Before the close of the congress, it was decided to form an Empire Press Association, with headquarters in London, to consider all matters relating to the interests of the press of the Empire as a whole, and to arrange other conferences. It is probable the next conference will be held in Canada, if the invitation is sent in the name of the whole press of the Dominion.

played before her at the Court of Madrid.

A tablet in honor of the memory of John Richard Green, the historian, was recently placed over the door leading to his old college-rooms at Oxford. His most famous work, "A Short History of the English People," of which "John o' London" has said that, "Not to have read it is an intellectual disaster," was published in the autumn of 1874. It was followed by a longer history which, as its predecessor, was written during a time of bodily suffering, often intense. It was said of Green that he "worked until he dropped," but consumption at last overcame him, and on the 7th of March, 1883, he died at Mentone, whither he had gone to seek for health.

Burial in Westminster Abbey is rightly guarded jealously in these days, although in past times, as anybody who inspects the monuments can discover, the test of worthiness was not a very high one. It is remarkable that the Dukes of Northumberland are the only persons who can claim burial there as a right, and, naturally, the privilege is used. The exacting test that is now applied to claim for burial is wholly a modern growth. Even in the early part of the nineteenth century the idea of a national Valhalla had not taken firm root. As Westminster Abbey is the burial place of the statesmen and the writers, so St. Paul's gains distinction from the soldiers, sailors and painters who sleep there the long sleep. Burial in St. Paul's in these days is almost as difficult a thing as burial at Westminster. The obstacle, however, is not so much overcrowding as the fact that St. Paul's stands on a thick bed of concrete, which has to be broken through for each interment, and in days when the stability of the whole structure has been in question, interference with the foundations is naturally a matter of jealous scrutiny.

The story of Coleridge and Wordsworth and "Spy Nozy" has often had doubt cast upon it, but Mr. A. J. Eagleston, in Nineteenth Century, produces confirmation of it from Home Office records for 1797. The poets, it seems, were in the habit of wandering about the country with a portfolio, in which they entered observations, and had been heard to say that they were "almost finished." This was enough to spread a report that they were French spies, and that a plan for a French invasion of England was afoot. The Duke of Portland heard the story, and employed one Walsh to keep watch on the two. His old reports, which have been found, are very interesting. In one of them he says: "Charles Mogg says that he was at Alfoxden last Saturday was a week, that he there saw Thomas Jones who lives in the Farm House at Alfoxden, who informed Mogg that some French people had got possession of Mansion Houses, and that they were washing and mending their cloaths all Sunday, that He Jones would not continue their as he did not like it." Also, they had taken a plan of the house and asked whether near at hand was navigable to the sea!

People, Books and Doings.

A violin, made by the Italian king of fiddle-makers, Antonius Stradivarius, of Cremona, was sold the other day in Old London for £925. Twice, at least, as much as £2,000 has been paid for one of these instruments, and once the sum of £1,100 was realized by a music-seller named Betts, who secure a genuine "Strad" from a stranger who entered his shop, for a guinea. There are, however, a few violins by this maker which are practically priceless. M. Ysaye values the one that he owns—but which he would not sell, even at the price he puts upon it—at £6,000. Another which could not be purchased is owned by Senor Sarasate, of Spain, to whom the violin was presented by Queen Isabella, when, as a boy of ten, he

ported that the suspected persons are not French, but, according to a Mr. Woodhouse and the landlord, "they are people that will do as much harm as All the French can do." Later he wrote to his principal:

"The inhabitants of Alfoxton House are a Sett of violent Democrats. The House was taken for a Person of the name of Wordsworth, who came to It from a Village near Honiton in Devonshire, about five Weeks since. The Kent of the House is secured to the Landlord by a Mr. Thomas Poole of this Town. Mr. Poole is a Tanner and a Man of some property. He is a most violent Member of the Corresponding Society and a strenuous supporter of Its Friends. He has with him at this time a Mr. Coldridge and his wife, both of whom he has supported since Christmas last. This Coldridge came last from Bristol, and is reckoned a Man of superior Ability." No further correspondence remains, but what Mr. Eagleston has unearthed proves that the detective was no myth, and that Wordsworth and Coleridge were actually suspected of being French spies.

The last week of the Quinquennial meetings was on a different plan to the Council work. In the latter the ladies met in one large hall, and all discussions were held there. During the Congress week, the nine sections, in Art, Education, Health, Industrial Arts, Laws Concerning Women and Children, Literature, Philanthropy, Professions for Women, Moral Reform, were held simultaneously in different halls; so the most-felt want at this time was nine pairs of ears! Every section was well attended—some to overflowing—and excellent speakers, women who knew their subjects, could be heard at any hour, in every branch of work undertaken for the amelioration of standing conditions, and for the bettering of the race.

Quinquennial Congress.

Two very bright papers were read by Miss Edwards, of the Coaley Poultry Farm, England; and Miss Wilkinson, of the Horticultural College, Swanley, Kent. Miss Edwards is President of the Ladies' Poultry Club, and testifies to having made hens pay. She was left at an early age with little means, and took up poultry-keeping as a life-work. She bought a small cottage, with a cabbage-patch behind, and commenced on a small scale. To-day, this Model Poultry Farm is a successful business enterprise. She has added to it, and made many improvements out of her profits. Miss Edwards pointed out that there was room in every small town and village for such an undertaking, but that the best kind of fowl suitable to the locality's demands be kept, and that all birds and eggs be marketed in first-class condition. Slipshod work was sure death to success.

After the address, some discussion arose as to the best dress for such work, some ladies suggesting that skirts were an encumbrance. Miss Edwards' reply was: "I have always worn a tunic—a skirt shortened to just below the knee. I dare not do anything more advanced, because I have an old servant, devoted to me, but she says, 'The day Missus puts on bloomers, I leave.'"

Miss Wilkinson's paper was also very instructive. The horticultural work she has been connected with is also a comparatively recent undertaking. The Swanley College seems to be run on such lines as our Macdonald Institute, though on a much smaller scale. They have turned their attention very particularly to tomato and bulb culture, and bee-keeping. They also accept a limited number of students who wish to prepare themselves for life in the Colonies.

Another able paper, given in this section was, "The Social Value of the Professional Woman," by Rev. Lydia K. Commander. Mrs. Commander's personality—for she is a young, fine-looking woman—as well as her experience as author, preacher and lecturer, lent added weight to her helpful words. She gave instances of many women who had made experiments in self-supporting occupations, and by their success had wholly altered public opinion as to the ability and efficiency of women's work. She holds that every woman, no matter what her station in life, should know how to support herself. Philanthropic work of every description was ably dealt with, and women's work in the home, in the state, and public life generally, not forgetting the press, was weighed, and not found wanting; while Rev. Anna Shaw, Jane Addams, Dr. Rosalie Morton, Mrs. Ogilvie Gordon, Mrs. May Wright Sewall, and many, many others, in that galaxy of history-making women of the grandest kind, pointed the way to further advancement and development.

But it was not all work for this great gathering. A day at Niagara, a trip to Lake Simcoe, garden parties galore, and other delights, were sandwiched in between sessions, and one day that was very much enjoyed was spent at Guelph.

Hon. Jas. Duff and Dr. Bruce Smith accompanied the party. Private cars were provided, one animated little delegate remarking, "I shall look so surprised when I am asked to pay for anything, after the lavish treatment we have received in Canada."

Those from over the seas were loud in their praise of our Agricultural College. Everything was shown them, explanatory little addresses were given in the different departments, and all eager questions answered, and unfeigned delight expressed at every turn.

One could not help but feel that it was of distinct value to Canada that women of such prominence in their own land should see for themselves what the Dominion stands for among the nations, and should carry back such a picture of thoroughness in practicability, in equipment, and of efficient management.

A bountiful tea was served on the campus by the students—"Looking like living corn flowers," as Froken Gad, of Denmark, poetically put it—and a happy afternoon was brought to a close by complimentary speeches and songs.

The actual meetings of the Quinquennial Congress are a thing of the past, but the inspiration remains, and without doubt will be productive of much forward thought and work.

L. M. PARSONS (for H. A. B.)

Teachers' Normal Classes at the Ontario Agricultural College, Guelph.

Professor S. B. McCready, B.A.

On Tuesday last (June 29th) one hundred and thirty-two Normal teachers completed a special ten weeks' course at the Ontario Agricultural College, qualifying



Teachers' Normal Class in Industrial Arts.

them for special services in the Public Schools of Ontario. Ninety-two of these had received instruction in elementary agriculture and horticulture, and the remaining forty had been trained in industrial arts. The former look forward to teaching in rural schools; the latter have been equipped for a special service in graded urban schools.

This graduation marks a fixed place for the agricultural college in the cause of primary education in Ontario. These teachers have been trained by the College under the direct auspices of the Provincial Department of Education, for the distinct purpose of bringing something of industrial training to the boys and girls who will probably have their schooling end in the public schools, and go from them onto the farm and into the workshops to make their livings.

This is one of the great problems in education to-day. How can the schools do their best for the people at large? What is the best they can bring to that

very large majority of the children who do not go on to the high schools or colleges, but pass out from our public schools into a work-a-day world? If, as it is generally agreed, education is a preparation for life—and this including the idea of making a living—then it must be agreed that our schools should, in fairness, give some industrial training to the future workmen in shop and field. If it can be done!

If it can be done! There is the question! Granted it is desirable, but how can it be accomplished? The solution is being sought in this special work of training teachers at Guelph. If there is a work to be done, then there must be workers prepared to undertake the work. The workers must be prepared before the work can be commenced. These workers are the teachers. Given trained teachers, any line of advancement can be undertaken in education; without these teachers no advance can be made. The trained teacher is the crux of the matter.

ELEMENTARY AGRICULTURE AND HORTICULTURE.

The object of this course, as defined in the syllabus, is "to train teachers in the scientific principles and practices of modern farming, so that the country or village school may adequately sympathize with and direct the life interests of country boys and girls."

There are about five thousand rural schools in the Province, attended by about two hundred and fifty thousand children. By far the greater number of these finish their schooling in these schools and follow farming as their life work. If country teachers can be equipped to arouse the interests and direct the activities of those who come under their charge much good may result to the greatest of our industries, agriculture, as well as to the individual worker. By this method, agricultural education will proceed naturally with the child, and not, as too often it proceeds, unnaturally with the grown-up. This is the pedagogic basis for the effort.

How this plan is to work out, is still more or less of an experiment. But from the success which has attended isolated attempts in a few schools, much is to be expected. In other Provinces or States where the problem is being grappled with, Ontario's plan is the one followed, and the agricultural colleges are supplementing the work of the Normal Schools. It must be realized, however, that the whole field is not being covered by furnishing ninety-two teachers each year for the five thousand schools. The work is only at its beginning, and the future will necessarily see larger developments. In the meantime the way is being cleared.

Success in this new departure rests largely with the teacher. Trustees and inspectors may do much by encouraging and directing, but on the teacher will fall the chief task of bringing agriculture into the work of the school. How will she do it?—for there are practically no male teachers for country schools forthcoming from the training schools now. How will she do it? It will not be by any academic method, such as might be followed with a text-book. That method has been tried and largely discarded. It will rather be along the lines of the observational, the practical and the experimental. The children's observations will be directed to the manifold things that lie about them at their homes or in the neighborhood. Interests will be aroused in the trees, the insects, the birds, the weeds, the cattle, the crops, the farm machinery, the farm operations. Lessons will be given on identifying the weeds and weed seeds, on recognizing soils, on testing seeds, on propagation of plants. Experiments will be carried out in garden plots on the value of manuring, the growing of seedling forest trees, the value of mulching, etc. There is no end to the things that may enter daily into the interests and work of the school. But apart from the school work, the teacher will wield an influence out of school of immeasurable benefit. Her visits in the home, her talks with the boys and girls



Teachers' Normal Class in Elementary Agriculture and Horticulture.

JULY 15, 1909

on the way to and from school, will bring many a happy suggestion and many a new revelation to those with whom she walks. She will be a country teacher in a country school for country people. The country teacher for the country school is the first requisite for the uplift that is to come to the schools in the country.

How has the Agricultural College prepared this country teacher? In the first place they were fortunate in having a class composed almost entirely of young women who had been brought up on farms. Those who came from towns had lived and taught in country places. All knew by actual living experience of the work and interests of farming people. To this intelligence they have added a ten weeks' actual living experience at the College: living together in the residence, working together in garden and laboratory, studying together in orchard, field, and woods. Every department of College work has been revealed to them in demonstrations or practical talks. They have secured a good equivalent to at least the regular first year's course given to our male students. They have met with many workers in the cause of rural education; they have got new ideas of the possibilities in their service; they have received new inspirations regarding the value of the life of a country boy or a country girl; they have received instructions as to how to teach, when to teach, and what to teach.

Many of these teachers have already taken positions. A number of our inspectors have recognized the advantages of their special training and secured good schools for them. Moreover, some progressive trustees in different parts of the Province have sought their services. It is to be hoped that the people for whose service the teachers have prepared themselves, will respond and show by liberal encouragement that they appreciate the Department of Education's efforts to provide the very best kind of teacher for them. If the people at large will support the cause, means will be found to prepare the teachers. One of the class has engaged at \$660.00; most of them are receiving \$500.00 or \$525.00; very few, indeed, are taking less than \$500.00. Good wages for good service is a good working principle in education as in everything else. There is no such thing as a cheap teacher.

INDUSTRIAL ARTS.

What the course in agriculture is for country teachers, the course in industrial arts is for town and city teachers. As defined in the syllabus, "the object of the course is to prepare a body of teachers for organizing and carrying out elementary industrial training in the schools of the Province, in centers which are unable to provide well-equipped manual-training departments." It is an attempt to realize in a practical way that the public schools, being the finishing schools of the great body of our industrial workers, should prepare them to some extent "to live a better life and make a better living." Industrial training is again the keynote in this new educational tune.

Everybody in Ontario does not live in the country. Forty-five per cent of the population is urban. About two hundred thousand children in attendance at our public and separate schools are from village, town or city homes. While many of these will have an indirect interest in agriculture, most of them will go into shops, factories and offices after they leave the public schools. What can the schools do to help them for this? Part of the attempt of the answer is in this special class of teachers' training in industrial arts. The boy who is to take his place as a workman, is to be given such instruction as will the better enable him to use his hand, head and imagination (or creative faculty) in his daily work. He will be trained in drawing and designing; he will be practiced in turning the drawing or design into a thing of wood, paper, metal or cloth. The pedagogic basis for the training is expressed in this: "EVERY WORKMAN SHOULD FOR THE MOST PART BE ABLE TO CONCEIVE CLEARLY AND ACCURATELY IN HIS OWN MIND THE SHAPE OF EVERYTHING HE MAY HAVE TO MAKE OR TO WORK WITH. THIS MAKES IT THE FIRST CONDITION OF SKILL, THAT HE SHOULD MASTER SHAPE IN HIS OWN MIND, AND THAT MASTERY RE-

QUIRES HIM TO BE A GEOMETER."

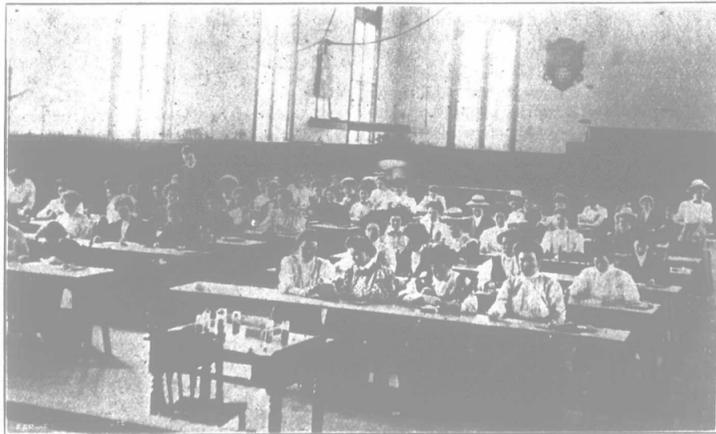
It is generally conceded that the Province of Ontario is destined to great industrial developments. With the opening up of the northern and western lands, the development of electrical power, the larger development of our agricultural possibilities, etc., many more workers will be needed in our mills and factories. Should our schools make a practical recognition of the fact and adjust their courses of study and methods of instruction to suit it? They should. Other countries have done it or are doing it. Our national welfare will more and more demand that we should do it too. We are doing it. Here is a body of teachers prepared for the new service. They are our first teachers for the "schools of the future."

Hope's Quiet Hour.

"The Best is Yet to Be."

Say not thou, "What is the cause that the former days were better than these?" for thou dost not inquire wisely concerning this.—Eccles. vii. : 10.

"I am not glad till I have known
Life that can lift me from my own;
A loftier level must be won,
A mightier strength to lean upon,
And heaven draws near as I ascend;
The breeze invites, the stars befriend;
All things are beckoning towards the
Best:
I climb to Thee, my God, for rest."



Weed-seed Studies in the College Gymnasium.

There's a farm on the hillside, a mill on the river;
There's a store on the highway, a mine on the mountain;
There's a shop on the lowland, a ship on the ocean.

There's a man with his reaper, a man with his dinner;
There's a man with his shovel, a man with his measure;
There's a man with his tool-box, a man with his canvas.

There's a home with its comfort, a street with its goers;
There's a club with its actors, a hall with its speakers;
There's a church with its people, a school with its learners.

Browning's wonderful poem, "Rabbi Ben Ezra," has lately been thoroughly studied by our readers; and I hardly need say that the heading of to-day's Quiet Hour is a quotation from it. The poem is brimming over with confident hope, and the triumphant assurance that God is to be trusted in His dealings with our lives. Why should we be afraid of old age when "the best is yet to be"? Why should we look with sad longings back to the days of youth, when the last of life—that for which the first was planned—lies before us and beckons our eager steps forward? The apple tree may be very attractive during the short period of its pink and white bloom; but when it is bending beneath its load of fruit in the autumn surely it has little cause to look back enviously. And even when the fruit



Normal Teachers in Their Gardens.

These all are God's agents. Relentless and ceaseless
In workshop and homespun they weave the Great Fabric.
They are builders of nations, they are makers of Heaven.

As the race in its progress, so the child in its nurture
And the flight of the post come up out of Labor.
Constructive, creative, will the method of nature
Of life and its content make the School of the Future.
—"The School of the Future." Bailey.

is gone and it stands bare and cold under the dull winter sky, stripped of all that makes life beautiful, still it can look forward, not back—forward to a time when new life will stir within its limbs and it shall again be adorned as a bride; again bear fruit to the glory of God and for the service of men.

Our way is always up—there should be no monotonous level spaces in the road of life. "To-day," as Emerson declares, "is the best day in the year"; therefore, by the same rule, to-morrow must be still better, and the next day better still. If each day that comes to us is the best we have ever known, then our path must

shine "more and more" unto the perfect day. Christ is the Master and Ruler of life's feast, and He still keeps the "best wine" until the last.

We can see better as we climb higher. Each victory over selfishness or worldliness opens new possibilities before our delighted eyes—possibilities of becoming more like God. If we have been steadily fighting against sin for years, and reaching out continually for a clearer understanding of the truth, then we are far richer than we were, possessing treasures which cannot be taken away from us. Emerson speaks from the standpoint of a man who keeps his footing easily on a wide and solid rock when he says:

"The soul is the perceiver and revealer of truth. We know truth when we see it, let sceptic and scoffer say what they choose."

But, though we certainly do know truth when we see it; if we are honestly trying to live up to our light to-day we shall have more light in the glorious future that lies ahead. Don't be afraid to face it, or imagine that God has already taught the world all that can be learned here about Him. There is "no truth so sublime, but it may be trivial to-morrow in the light of new thoughts." We are not called to grope our way doubtfully through an untracked wilderness. We follow a Leader Who knows—by personal experience—every step of the way. He is the true Ark going before us, as Joshua's officers said to the Israelites, "that we may know the way by which we must go, for we have not passed this way heretofore." They went forward triumphantly, knowing that the Living God was certainly in their midst, and that He would without fail give them the victory over all their enemies. Surely we have more light than they! Are we looking ahead with gloomy forebodings, showing that we have no confidence in our Leader, in spite of all He has done for us in the past? If we took the trouble to set up an "Eben-ezer," or monument of help given in time of need, writing on it, "Hitherto hath the LORD helped us," perhaps we might learn to expect His help with more confidence whenever there is an extra hard bit of climbing to be done.

The other day I was face to face with an untried problem, and just at the last moment all difficulties were suddenly swept aside and the way was clear and easy before me. I called up a friend by telephone and told her how wonderfully the help I needed had come to me from a totally unexpected quarter. She said, with quiet common-sense, "Surely you were not surprised, were you?" Why should I be surprised? God has always kept His promise in the past: "Commit thy way unto the LORD; trust also in Him; and He shall bring it to pass."

We don't know what God may require of us in the future; but He never asks impossibilities, and He will lead us—if we really follow the path plainly marked out—not only in the way that is best, but in the way that will fill us with joy.

But Death lies ahead, and perhaps we are filled with fear as the swiftly-flying years bring us nearer to it. A heathen writer declared that death was the most terrible thing of all, because it was the end. Really, we Christians sometimes speak as though he had been right. But, when we stop to consider the matter, we know better, don't we? "Death the end!" Why, it is more like the new beginning of the glad springtime after the cold and dreary winter. When we step through it we can still look forward with eager, enthusiastic hope—for "the Best is yet to be." What new light will be thrown on the problems which perplex us now; with what power from God we shall be able to help our fellows; how wonderful will be the Master's Welcome to His Paradise! If we can be glad and secure when Death is facing us, how much more safe will be our position when—for the first time in our lives—we can turn our backs on it and stand with the great Conqueror of Death on the other side of the dark and difficult pass. To depart and to be with Him must be "far better" than anything yet revealed to us. One of our readers sent me the following lines, which have been long in appearing, because they were mislaid for a time:

"Jesus, these eyes have never seen
That radiant form of Thine,
The veil of sense hangs dark between
Thy blessed Face and mine.

"I see Thee not, I hear Thee not,
Yet art Thou oft with me,
And earth hath ne'er so dear a spot
As when I meet with Thee."

Let the opponents of Christianity explain—if they can—how this Man can win the passionate love and devotion of thousands of hearts in every age and every country. It is unique in the world's history. No dead man could win hearts in this marvellous fashion; and a King who can rule so supremely by love, really satisfying the soul-hunger of all who yield their lives unreservedly to His absolute control, must certainly be Divine. If you have not learned by personal experience that the service of Christ is a glory beyond anything that the world can give, at least you have the witness of a multitude which no man can number, who throw down their lives at His feet as a proof that they mean what they say. Look in their faces, if you doubt the power of their Royal Master to give Joy and Peace. He is your rightful King too.

"Thou shalt know Him, when He comes,
Not by any din of drums,
Nor the vantage of His airs;
Neither by His crown,
Nor His gown,
Nor by anything He wears:
He shall only well-known be
By the holy harmony
That His coming makes in thee."

We must never rest satisfied with our progress. If we have not gone ahead, then we have been allowing ourselves to fail. Which of us has not heard the children at examination time eagerly hoping that they will "pass." They are not satisfied to be no farther ahead than they were last term. They consider it a distinct failure to be doing the old work as imperfectly as in the past. Their best is always in front of them. Gannett, in "Blessed be Drudgery"—a little book that was recently given to me by our friend "H. A. B."—says:

"Daniel Morell, once President of the Cambria Rail Works, in Pittsburg, which employed seven thousand men, was an artist, and trained artists. 'What is the secret of such a development of business as this?' asked the visitor. 'We have no secret,' was the answer; 'we always try to beat our last batch of rails.

That's all the secret we have, and we don't care who knows it.'"

If we always make to-day more perfect than yesterday, and press forward in the determination to make to-morrow still better, we may be like the professor who said he had "no time to make money"; but at least we shall make a grand success of life here and be ready to press on to life hereafter.

"If my hand slacked,
I should rob God."

DORA FARNCOMB.

The New Book.

In "The Vision of His Face," the author of "Hope's Quiet Hour" has given us a rare and beautiful book that will find its place in countless homes and hearts, along with the devotional classics of J. R. Miller, F. B. Meyer, John MacNeil, Andrew Murray, and Hannah W. Smith. It appeals to the best that is in us, and does so without strained notes. When the book is read the wholesome tone of it abides and the pages invite to re-study. It withdraws from the lowering and deadening tendencies of a mere naturalism, investing the things of one's spiritual life with their true reality. Familiarity with these themes is combined with a delicacy of touch and discernment that give peculiar charm to "The Vision of His Face," which came out of the author's life, written, as she naively says, because she "could not help it."

READER.

The Roundabout Club

Robert Browning.

Robert Browning, recognized as one of the three truly great poets of the Victorian era, was born at Camberwell, then a country suburb of London, on May 7th, 1812. It is probably true that there is no law by which genius arises; so long as examples such as Abraham Lincoln may be pointed to, it must be acknowledged that no stock, no matter how prosaic, how illiterate even, may despair of producing the man or woman destined to shine among the brightest stars of the galaxy by which history is illuminated. But it is also true that characteristics

are, in by far the greater number of cases, transmitted from ancestor to progeny, from parent to child, so that it is not at all surprising to find that genius may point to some strain of blood more or less remote, as the source of its distinction, the spark which needed just a little development to become the illuminating power.

Robert Browning's father and grandfather were both clerks in the Bank of England. The father, in particular, was noted for a remarkable combination of characteristics which afterwards reappeared strikingly in the son—a genius for versifying, a remarkable simplicity, unworldliness and sweetness of nature, extraordinary intellectual and artistic gifts, and a detective faculty in criminal cases which is said to have been strangely intuitive—the faculty which stood Robert Browning in good stead when he wrote his great detective poem, "The Ring and the Book." Mrs. Browning, the poet's mother, is also said to have been a woman of unusual intellectual vigor, a woman in every way worthy of her husband, and the home was literally an atmosphere of books. To history in particular was attention devoted, and to this fact may be attributed some of the obscurity with which Browning has been charged. When, for instance, he came to write "Sordello," he took it for granted that everyone should know all about the history of Italy in the Medieval Ages, and plunged at once into a discussion of conditions without giving an adequate description of the conditions themselves.

Somewhere away back in the Browning blood, it is said, occurred a Jewish strain, and to it has been attributed by many biographers the very evident interest which Browning always evinced in the Jews. His grandmother was a Creole, and here again heredity has been supposed to speak. To her has been traced the passion for color which may be found everywhere in Browning's work. Some of his poems, in fact, almost flame with color. Read this for an example of brilliant sky description:

"Day"
Faster and more fast,
O'er night's brim, day boils at last;
Boils, pure gold, o'er the cloud-cup's
brim,
Where spurting and suppressed it lay,
For not a froth-flake touched the rim
Of yonder gap in the solid gray

Of the eastern cloud, an hour away;
But forth one wavelet, then another
curled.

Till the whole sunrise, not to be suppressed,
Rose, reddened, and its seething breast
Flickered in bounds, grew gold, then
overflowed the world."

And, again, to grasp his appreciation of the quiet tints and tones of nature:

"Where the quiet-colored end of evening
smiles,
Miles and miles
On the solitary pastures where our sheep,
Half-asleep,
Tinkle homeward through the twilight."

Outside of the facts noted above, Browning's ancestry seems lost in some obscurity. Some contend that his forbears were prominent in feudal times; Farnvall claims to have traced his descent to a footman in the service of a country magnate. Neither this nor that matters. We have Browning, with his faults and excellences, Browning the brilliant, the pure-minded, the sincere, the enthusiastic, at all times the wholesome Englishman who never grew old, and who has managed, perhaps more than any other poet, to inspire other men with hope and courage. He believed, with all the strength of his peculiarly virile nature, that all will be well.

"God's in His Heaven,
All's well with the world."

and the very strength of his belief has impressed the conviction on others. Tennyson had his doubts (as has had many another strong man); Swinburne's song, beautifully sung, has the wail of despair in it; Browning throughout is staunchly and happily optimistic, and wholesomely practical. As Chesterton in his brilliant essay remarks, "He met George Sand and her poetical circle, and hated it with all the hatred of an old city merchant for the irresponsible life. He met the Spiritualists and hated them. . . . His intellect went upon bewildering voyages, but his soul walked in a straight road." As a boy, coming out of a home "crammed with knowledge, Browning was, as might be expected, very precocious at school. Possessed of great physical charm, and filled with the joy of living, he was everywhere a favorite. He enjoyed the companionship of others, and found equal pleasure in strolling about crowded market places, or pawn-shops,—anywhere where unconventional man might be seen—in following gipsy caravans, and in striding alone over breezy commons. To these propensities is probably due the fact that when he came to write serious poetry humanity appears everywhere in his work. In the first of the "Ring and the Book" actually occurs a description of a pawnshop, a subject which any other poet would have passed by.

"Picture frames

White through the worn gilt, mirror-
scences chipped,
Bronze angel-heads once knobs attached
to chests,
(Handled when ancient dames chose forth
brocade),
Modern chalk drawings, studies from the
nude," etc.

While Browning loved nature, he recognized man as nature's highest and most interesting triumph. In this respect he took a step further than Wordsworth and his devotees. Indeed, among all the poetry that he wrote that one delightful fragment, "Oh to be in England, now that April's there," is about the only one that can be pointed to as an example of pure nature poetry.

He attended University College, and when there, in 1833, wrote "Pauline." In 1835 "Paracelsus" appeared. But neither of these attracted attention. Had he written of the men and events of his time he could probably have been recognized sooner, but he was more given to poking about in the "holes and corners" of history. He wrote of great principles, and today it is being recognized that these principles are of no age but of all. At the time the principles were lost sight of. It took many, many years for England to see that anything was to be gained by taking interest in such unprofitable and unobscure historical talk as King Arthur or Sordello, the musician,



Lift your leafy roof for me,
Part your yielding walls,
Let me wander lingeringly
Through your scented halls.

Open your doors and take me in,
Spirit of the wood;
Take me—make me next of kin
To your leafy brood.

—A. T. Westcott

Abt Vogler; or even the obscure Jewish Rabbi, Ben Ezra, into whose mouth Browning chose to put the "largest and sublimest scheme of morals and religion which his imagination could conceive." A few people, however, saw that in this young man was sprouting a poet more than ordinary. Mill, Landor, Leigh Hunt, Talfourd and Carlyle were attracted to him. He was, indeed, one of the very few people with whom the last-named got on well.

Even lacking recognition, it never occurred to Browning to be discouraged. He was at no time obliged to write for money, and he could afford to wait. A description of him, written at this time by Miss Fox, is interesting. "He was," she writes, "slim and dark and very handsome, and—may I hint it?—just a trifle of a dandy, addicted to lemon-colored kid gloves and such things, quite the glass of fashion and the mould of form. But full of ambition, eager for success, eager for fame; and, what is more, determined to conquer fame and to achieve success."

In 1840 Sordello was published, and Carlyle wrote to say that his wife had read it with great interest, and wished to know whether Sordello was a man, or a city, or a book. Tennyson said that the first and last lines,—“Who will may hear Sordello's story told,” and “Who would has heard Sordello's story told,”—were the only two lines in the poem that he understood, and they were his. . . . It may be imagined what the reception by the ordinary world amounted to.

But Browning was full of fight. "I was ever," he says, "a great fighter,"—and so he was. As was remarked of him, "He was always contending, whether it was with a German theory about the Gnostics, or with a stranger who elbowed his wife in a crowd,"—and so he arose from the attacks on "Sordello," with undaunted face.

The very next year "Pippa Passes," designated by a famous modern critic as "the greatest poem ever written, with the exception of one or two by Walt Whitman, to express the sentiment of pure love of humanity," was published, and two years later, "Dramatic Lyrics." Following these came "The Return of the Druses" (1843), a poem replete with Browning's typical qualities, but above all the poem which presents the first rise of that peculiar psychological tendency which was destined to mark his work henceforth as peculiarly original, absolutely Browningsque.

About this time he became interested in some poems written by Miss Barrett, an invalid, bedridden at her home among the Malvern Hills, and a correspondence began which developed into a romance, well worthy a place in the history of "Great Lovers." Finally, and after some difficulty, Browning called on the lady, to whom the new interest seems to have brought the elixir of life. An elopement followed, the world stared, and Wordsworth concisely summed up his opinion of the situation as follows: "So Robert Browning and Miss Barrett have gone off together. I hope they understand each other—nobody else would."

The elopement was, however, followed by the happiest consequences. The two settled in Florence, Italy, and there followed a life, quite idyllic, altogether ideal. Here Browning dabbled in art, painting, sculpture and music, and wrote his poems, thenceforth colored, nay mirrored, with the Italian atmosphere, and surcharged with the vivid political pulsations of the stirring times of Garibaldi, Mazzini and Cavour. As yet the poems were not recognized at their worth in England, but they were gaining ground, and in Italy a host of personal friends were being attracted to this unique home of poets. Mrs. Browning has always been described as a woman of great sweetness, and Browning himself possessed the faculty which drew to him the love of men—"even of geniuses."

The ideal life was, however, all too short. In 1861 Mrs. Browning died, and Browning returned to England, where he devoted himself henceforth to his only son.

In 1868, "The Ring and the Book," that strange psychological study which has baffled so many readers, was published, and Browning at last, among the circles of the learned at least, became famous. In the succeeding years he wrote almost with feverish rapidity.

"Herve Riel," "Balaustion's Adventure," and "Prince Hohenstiel-Schwangau," "Fifine at the Fair," "Pacchiarotto," "La Saisiaz," "Dramatic Idylls," "Ferdinand's Fancies," "Asolando," are a few of the poems that marked this fruitful old age.

In 1887 his health began to break up slowly, and on August 13th, 1888, he set out for Italy for the last time, and there the last months came easily. "The old man could be seen continually in the lanes round Asolo, peering into hedges and whistling for the lizards," but one day he was not there. On December 12th, 1889, he died at Venice, or perhaps he would have preferred it said that he had not died. "Without death, which is our church-yardy, crape-like word for change, for growth," he once said, "there could be no prolongation of that which we call life. Never say of me that I am dead."

He spoke of his own personality. Of his work it may be said that it has just begun its richest, fullest life. Browning is appreciated to-day as never before.

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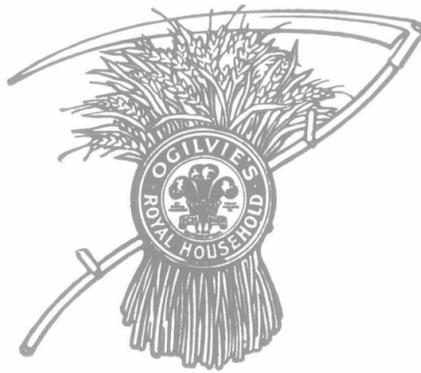
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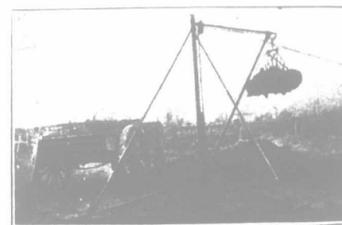
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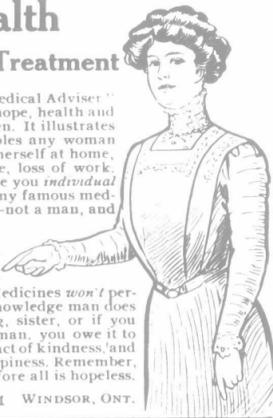
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International Council of Women.

The motto of the International Council of Women has been, from the first, "Do unto others as ye would they should do unto you." The only variation of it that is permitted is used by the branch that is making the fight against tuberculosis its special work. Its members say, "Do unto your children as ye would your parents had done to you." This seems to be a good place to say something of the

ANTI-TUBERCULOSIS CAMPAIGN.

Many addresses were given on the subject, but Lady Aberdeen's summing-up covers almost the whole ground. She spoke of the centuries in which consumption raged unimpeded, because it was regarded as a visitation from God that could not be withstood. Dr. Koch's discovery of the tubercle bacillus proved that it was a communicable disease, and so a preventable one, but it has taken nearly twenty years for the world to realize what that discovery means. The present obstacle arising from that awakening is that people are panic-stricken over the fact that the disease can be communicated, and the poor consumptives are shunned, and deprived of the care that would cure them in the early stages of their trouble. This fear will be lulled into a respectful acknowledgment of the power of the plague and the necessity for preventive measures, which will include a system of notification of the disease; a hospital for advanced cases, to protect the community, as well as to care for the sick; a sanatorium for early cases, to effect a cure; a well-equipped dispensary, and instruction school for patients.

Purely preventive work will educate the public to appreciate fresh air, playgrounds, outdoor sleeping, nourishing food, and, above all, pure milk for the children.

In Lady Aberdeen's own words: "We have set ourselves to hunt out one demon of the world who has too long been allowed to flourish unmolested; and, in carrying on our relentless hunt, we shall find we have sapped the life-blood of many another enemy of the human race; and, in the end, the world may bless the foe whose depredations awakened the nations to the imminent danger, and to find, in their hand-to-hand struggle to escape, a new and higher form of life in the cult of fresh air, simple diet, healthy surroundings, temperance, and self-control."

THE CARE OF THE FEEBLE-MINDED.

So important was this subject considered that three sections united to discuss it together. A representative of that little but progressive Holland led off. Miss Van Ewijk said that in Holland children were sent home from the schools who were epileptic or moral defectives, as well as mentally weak, but so far no other provision had been made for them. Miss Denby, of Manchester, England, was the chief speaker. When serving on the school board of that city, she was appalled by the number of backward children in the schools. She investigated, and found terrible conditions in some of the homes, and out of 38,400 children inspected, 500 were found to be decidedly defective mentally, getting no good at school, and proving detrimental to the other children. Private charity supplied a tract of land, and money came in freely, and in 1898 she founded the Lancashire and Cheshire Society for the Permanent Care of the Feeble-minded. Other institutions of the kind kept such unfortunates only till they were sixteen, and then they went out into the world to perpetuate their kind. Miss Denby holds that the great work is to segregate the defectives all their lives. The defectives are not always the products of the slums. Rich and poor, city and country, supply them in

about equal proportions. There are three defective boys to every two girls, and Canada has her share among the nations. The marriage of mental defectives is a crime.

TREATMENT OF PRISONERS.

The plea for the criminal was an earnest one, not running to sentimentality, and with a full realization of the heinousness of crime. Mrs. G. Loring Spencer, of New York, has devoted many years to visiting girls and women in prison to make their acquaintance, preparatory to helping them on their release. The matron of the Mercer Reformatory, in Toronto, says that there is "no large percentage of reformed women coming out from the Mercer. The seed of reform seems to be cast on rocky ground with our women. They make such rapid growth, and give such promise of betterment, but the moment they are liberated it is all gone. They say we don't give them a chance when they get out. Perhaps that is true, and it is more the fault of us on the outside."

Miss Sadie American pleaded for the provision of more places of innocent amusement for young people. There are plenty of evil places, and youth will go to them if there are no clean places. She asked for kindly pity and help for the girl who has gone wrong. Hers is not the only wrong. "Young girls are forced to work. Their fathers are not able to earn enough to keep them according to the modern standard of living. They get small wages, and some of them go wrong. But it isn't only the girl who goes wrong. Isn't it immoral to work girls 16 or 18 hours a day? Isn't it immoral for us to forget the needs of these young girls?"

Miss Rose Barrett, of Ireland, read a paper on juvenile courts, holding that, since the establishment of properly-governed children's courts, the volume of crime had materially decreased. It has been found that a large proportion of childish evil-doers are illiterate or mentally defective, and prison life, with hardened prisoners, is no cure for either of these diseases.

CAREERS AND PROFESSIONS FOR WOMEN.

This section of the great congress seemed invariably well attended, and one gleaned some interesting facts about the kinds of work women have undertaken successfully. There are seven thousand woman doctors in the United States, and their work was related by Dr. Rosalie Morton. Miss Janes, London, England, had made a list of occupations which women could do well in England. There were registrars, rate collectors, school-attendance officers, road contractors, botanists, accountants, police matrons, librarians, telegraph operators, factory inspectors. Some of these combined genuine philanthropy and charitable work, such as rent-collector and property supervisor for landlords. This scheme was described by Marion Blackie, of Glasgow, in which city it has been tried. The idea is to secure from landlords the position of rent-collector. The worker then arranges to collect the rent weekly, and in this way rents are paid promptly, the necessities and general condition of each household is known by the collector, and the proper aid can be given without appearing to interfere unduly with the household affairs.

The place of women in outdoor careers aroused interest. Miss Nellie Edwards, one of the delegates, is an advocate of poultry-raising. She speaks from experience, because in Gloucester she has the largest pure-bred poultry farm in England. Her stock is all sold alive for breeding purposes, and her farm comprises a hundred acres. Her Buff Orpingtons were the first of that breed to come to America.

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a gentleman in Quebec; one has gone to South Africa to superintend school gardens; one is an apiarist in New Zealand. Many of the graduates go in for poultry, vegetables, fruit and bees, and make an excellent living in a wholesome way. Miss Helen Beardmore, Ontario, knows something of practical farming. She is interested in the co-operative idea for working in the lighter branches of agriculture, and in marketing the produce. She would like to see women working together, each owning or renting her small plot of land, and working the soil to the highest point of cultivation for the production of strawberries, violets, etc., or for the raising of poultry, dairying, etc., the benefits to be obtained being mutual help in the marketing and transportation of the produce.

WOMAN SUFFRAGE.

This topic, in spite of the keen interest every woman felt in it, was not allowed to usurp time belonging to other questions. One general evening meeting and one afternoon in the section of Laws Concerning Women was given to its consideration. There was nothing of the suffrage militant or the shrieking sisterhood about these gatherings. The women who talked had studied the question, and could give a reason for the hope that is in them that some day women will have equal privileges of citizenship with men. "I say equal privileges," said a speaker from Germany, "but that does not mean that men have not too many privileges when it means voting."

Mrs. Dobson, of Australia, said her experience disproved the contention that a wife's vote only supplemented her husband's. Woman suffrage has worked nothing but good in Australia.

D. Alice Salomon: "It should be granted from the mere sense of justice; women's share in the state has an equal value through her capacity of wife and mother."

Froken Gina Krog, of Norway, spoke as a full-fledged "holder of franchise." "In 1885 we started. We were very few—only twelve—but we divided the country between us. In the name of historical development and logic, as well as in the name of justice and humanity, politicians could no longer refuse us; but it took twenty-five years for the parliamentary suffrage to come. We have tried not only to speak to their brains, but their hearts, and they have hearts, if you can only reach them."

Mrs. Edwards, of Calgary, spoke to the resolution that the Council of Women endeavor to place women as members of public boards and on commissions. She said: "An Al-bani or a Melba does not shudder at the publicity that comes from singing, and men urge them to it; but if they should stop the song, and begin to speak on some important subject, men and women would write them down as unwomanly." It is our duty as mothers to be placed on school boards to see to the welfare of our children; on hospital boards, boards of health, public charities, and on juries too. If we are not fit to govern, we should be trained differently."

And last of all, the International President, Lady Aberdeen, sent the audience home rejoicing because of her stand on the question.

"At the present time, when my husband occupies the position he does, it is not considered desirable that I should speak on any subject of public controversy. But to-night, as President of the great Council, binding together so many women workers of the world, when they again solemnly reiterate their conviction that the granting of the suffrage to women is the basis of all further progress, I cannot keep silent. It has always seemed to me a nonunderstandable thing why a bogey has been made of all this. It is a pretty safe prophecy that in a few years suffrage will be granted to women in most countries having representative governments. Suffrage

Don't Be Led Into Side Shows

The best sights in the circus are all under the main tent. They are the big show, but the road to the big show is lined by low-priced side shows, of minor attractions, with wily barkers outside, ceaselessly striving to draw the passing throng off the main thoroughfare.

It is just this way with cream separators in Canada. "THE MAGNET," Canada's only Cream Separator, is in the big tent, in a class by itself, with its large steel bowl, supported at both ends (MAGNET patent). Its one-piece skimmer, taking all the butter-fat out of the milk, and at the same time removing the impurities from both.

Its complete set of Square Gears, cut from solid blanks, last fifty years.

MAGNET Brake circling the bowl (MAGNET patent).

Capacity Change to any size in the one machine.

Easy Turning, operated by children.

Easy Cleaning, can be cleaned in less than half the time of any other separator.

The wily barkers from every country are here trying to keep the dairy farmer from getting to the big tent. Do not be misled by their loud cries, but get into the main show with the MAGNET. Study its construction and its eleven years' record in our own country.

When once inside the main tent, the MAGNET solves the separator problem for you for fifty years.



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Current Events.

Diamond fields, valued at \$250,000,000, have been discovered in German Southwest Africa.

Plans for a greater Cobalt are already under way. A building inspector has been appointed, and the town is to be rebuilt with more substantial buildings, wider streets, and better sanitation.

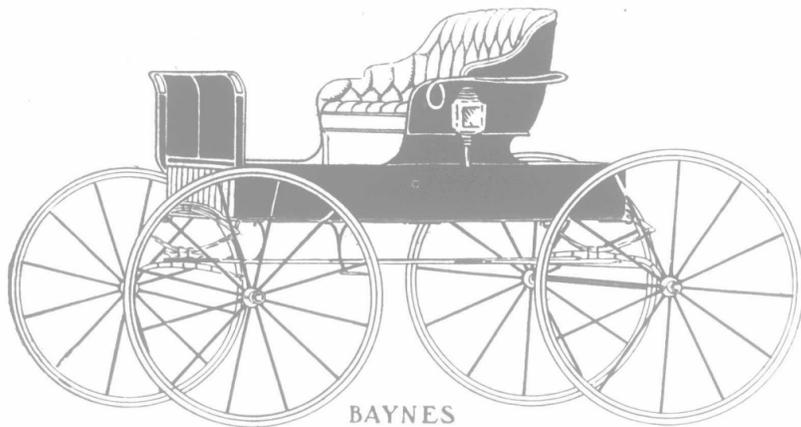
Commissioner of Insurance Barry stated, at a meeting of the Michigan Manufacturers' Association, recently, that the total fire loss in the United States in 1908 amounted to \$457,000,000.

Norbert Wiener, 14 years old, has taken his degree as Bachelor of Arts at Tufts College, Boston. He will enter Harvard in the fall, and will graduate from there in 1910, at the age of 15, after which he intends taking up further courses abroad.

Lord Strathcona has cabled a \$500,000 donation to McGill University, \$450,000 being to complete the new medical building, and \$50,000 to augment the salaries of the staff. This makes a total of \$1,000,000 given by Lord Strathcona to this University.

A keen interest in aviation is being taken by the French people. A number of machines are now preparing to attempt to cross the Channel, and the University of France has just received a gift of 1,500,000 francs for the purpose of founding a Chair of Aviation, and for special investigation into the principles of aerial navigation.

An expedition is being organized in New York for the purpose of taking photographs from balloons of wild animals in their native haunts in East Africa. Several balloons will be taken, and a number of cameras, one of which will hold a plate 22 by



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55 inches. The "African Balloon-
graph Expedition" expect to obtain
a number of interesting and valuable
pictures.

There are now being exhibited in
London, Eng., a number of bronzes
which are attracting considerable at-
tention. These bronzes have been
rescued from the galleys of Tiberius
and Caligula, which have lain for
over eighteen centuries at the bot-
tom of the sea. The most impor-
tant figure is that of a woman,
about three feet in height, wearing
the costume of that period. The
remaining pieces are smaller, and
symbolical in character.

Transplanting in Hot Weather.

During hot weather, people are often
deterred from filling gaps in the flower-
beds and borders by the fear that if plants
are moved they will die from the heat
before they have had a chance to become
established. Of course, one can wait for
a rainy day, but I have hit upon a plan
whereby plants may be moved at any
time during the hot weather.

Every spring I save all rakings of grass
and leaves, and put them in a pile to
form leafmold. When transplanting, I
make the hole for the plant about two
inches deeper than is really necessary, in
which I place a layer of about an inch
and a half of the partly decomposed
leaves, having first wet them thoroughly
with water. I then fill in the hole with
soil, and when setting the plants use a
dibble to make the hole for the roots.

The wet leaves put the moisture just
where the plant most needs it—at the
roots. The ground does not become
caked around the roots, as is often the
case when water is poured into the hole,
but the moisture from the leaves is drawn
to the surface by capillary attraction,
and the soil remains loose and moist
around the plant for several days.

When lifting, be sure to get as many of
the roots of the plant as possible, and be
especially careful not to expose them to
the wind or sun while out of the soil.
—From Garden Magazine.

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A Canadian Historical Romance.

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CHAPTER XXIV.—Continued.

A long table in the middle of the
room was surrounded by a lot of fel-
lows, plainly of the baser sort—sail-
ors, boatmen, voyageurs—in rough
clothes, and tuques—red or blue—up-
on their heads. Every one had a
pipe in his mouth. Some were talk-
ing with loose, loquacious tongues;
some were singing; their ugly, jolly
visages—half illumined by the light
of tallow candles stuck in iron
sconces on the wall—were worthy of
the vulgar but faithful Dutch pencils
of Schalken and Teniers. They were
singing a song as the new company
came in.

At the head of the table sat Master
Pothier, with a black earthen mug
of Norman cider in one hand, and a
pipe in the other. His budget of
law hung on a peg in the corner, as
quite superfluous at a free-and-easy
at the Fleur-de-Lis.

Max Grimeau and Blind Bartemy
had arrived in good time for the eel
pie. They sat one on each side of
Master Pothier, full as ticks and
merry as grigs; a jolly chorus was
in progress as Cadet entered.

The company rose and bowed to
the gentlemen who had honored them
with a call. "Pray sit down, gen-
tlemen; take our chairs!" exclaimed
Master Pothier, officiously offering his
to Cadet, who accepted it, as well as
the black mug, of which he drank
heartily, declaring old Norman cider
suited his taste better than the choic-
est wine.

"We are your most humble servi-
tors, and highly esteem the honor of
your visit," said Master Pothier, as
he refilled the black mug.

"Jolly fellows!" replied Cadet,
stretching his legs refreshingly, "this
does look comfortable. Do you
drink cider because you like it, or
because you cannot afford better?"

"There is nothing better than Nor-
man cider, except Cognac brandy,"
replied Master Pothier, grinning from
ear to ear. "Norman cider is fit
for a king, and, with a lining of
brandy, is drink for a Pope! It will
make a man see stars at noonday.
Won't it, Bartemy?"

"What! old turn-penny! are you
here?" cried Cadet, recognizing the old
beggar of the gate of the Basse Ville.

"Oh, yes, your Honor!" replied
Bartemy, with his professional whine,
"pour l'amour de Dieu!"

"Gad! you are the jolliest beg-
gar I know out of the Friponne," re-
plied Cadet, throwing him a crown.

"He is not a jollier beggar than
I am, your Honor," said Max Grim-
eau, grinning like an Alsatian over
a Strasbourg pie. "It was I sang
bass in the ballad as you came in—you
might have heard me, your Honor?"

"To be sure I did; I will be
sworn there is not a jollier beggar in
Quebec than you, old Max! Here is
a crown for you, too, to drink to the
Intendant's health, and another for
you, you roving limb of the law,
Master Pothier! Come, Master Po-
thier! I will fill your ragged gown
full as a demijohn of brandy if you
will go on with the song you were
singing."

"We were at the old ballad of the
Pont d'Avignon, your Honor," re-
plied Master Pothier.

"And I was playing it," inter-
rupted Jean La Marche; "you might
have heard my violin, it is a good
one!" Jean would not hide his
talent in a napkin on so auspicious
an occasion as this. He ran his bow
over the strings and played a few bars
—that was the tune, your Honor."

"Ay, that was it! I know the
jolly old song! Now go on!" Cadet
thrust his thumbs into the armholes
of his broad waistcoat and listened

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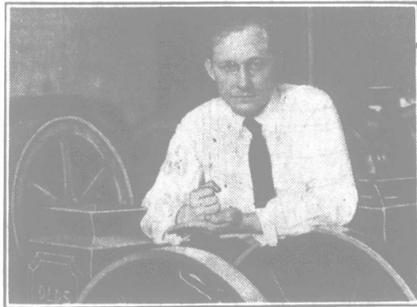
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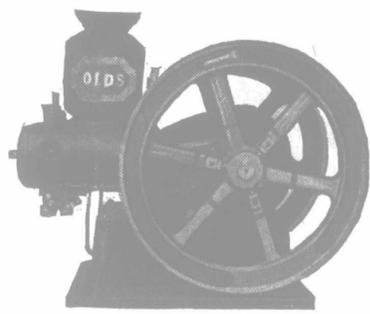
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Olds Hopper Jacket Engine.

attentively; rough as he was, he liked the old Canadian music. Jean tuned his fiddle afresh, and placing it with a knowing jerk under his chin, and with an air of conceit worthy of Lulli, began to sing and play the old ballad:

"A St. Malo, beau port de mer,
Trois navires sont arrives,
Charges d'avoine, charges de bled;
Trois dames s'en vont les marchand-
er!"

"Tut!" exclaimed Varin, "who cares for things that have no more point in them than a dumpling! give us a madrigal, or one of the devil's ditties from the Quartier Latin!"

"I do not know a 'devil's ditty,' and would not sing one if I did," replied Jean La Marche, jealous of the ballads of his own New France. "Indians cannot swear because they know no oaths, and habitants cannot sing devil's ditties because they never learned them; but St. Malo, beau port de mer,—I will sing that with any man in the Colony!"

The popular songs of the French Canadians are simple, almost infantine, in their language, and as chaste in expression as the hymns of other countries. Impure songs originate in classes who know better, and revel from choice in musical slang and indecency.

"Sing what you like! and never mind Varin, my good fellow," said Cadet, stretching himself in his chair. "I like the old Canadian ballads better than all the devil's ditties ever made in Paris! You must sing your devil's ditties yourself, Varin; our habitants won't—that is sure!"

After an hour's roystering at the Fleur-de-Lis, the party of gentlemen returned to the Taverne de Menut a good deal more unsteady and more obstreperous than when they came. They left Master Pothier seated in his chair, drunk as Bacchus, and every one of the rest of his companions as blind as Bartemey.

The gentlemen, on their return to the Taverne de Menut, found De Pean in a rage. Pierre Philibert had followed Amelie to the city, and learning the cause of her anxiety and un concealed tears, started off with the determination to find Le Gardeur.

The officer of the guard at the gate of the Basse Ville was able to direct him to the right quarter. He hastened to the Taverne de Menut, and in haughty defiance of De Pean, with whom he had high words, he got the unfortunate Le Gardeur away, placed him in a carriage, and took him home, receiving from Amelie such sweet and sincere thanks as he though a life's service could scarcely have deserved.

"Par Dieu! that Philibert is a game-cock, De Pean," exclaimed Cadet, to the savage annoyance of the Secretary. "He has pluck and impudence for ten gardes du corps. It was neater done than at Beaumont noir!" Cadet sat down to enjoy a broad laugh at the expense of his friend over the second carrying off of Le Gardeur.

"Curse him! I could have run him through, and am sorry I did not," exclaimed De Pean.

"No, you could not have run him through, and you would have been sorry had you tried it, De Pean," replied Cadet. "That Philibert is not as safe as the Bank of France to draw upon. I tell you it was well for yourself you did not try, De Pean. But never mind," continued Cadet, "there is never so bad a day but there is a fair to-morrow after it, so make up a hand at cards with me and Colonel Trivio, and put money in your purse; it will save your bruised feelings." De Pean failed to laugh off his ill-humor, but he took Cadet's advice, and sat down to play for the remainder of the night.

"Oh, Pierre Philibert, how can we sufficiently thank you for your kind-

ness to my dear, unhappy brother?" said Amelie to him, her eyes tremulous with tears, and her hand convulsively clasping his, as Pierre took leave of her at the door of the mansion of the Lady de Tilly.

"Le Gardeur claims our deepest commiseration, Amelie," replied he; "you know how this has happened?"

"I do know, Pierre, and shame to know it. But you are so generous ever. Do not blame me for this agitation!" She strove to steady herself, as a ship will right up for a moment in veering.

"Blame you! what a thought! As soon blame the angels for being good! But I have a plan, Amelie, for Le Gardeur—we must get him out of the city and back to Tilly for a while. Your noble aunt has given me an invitation to visit the Manor House. What if I manage to accompany Le Gardeur to his dear old home?"

"A visit to Tilly in your company would, of all things, delight Le Gardeur," said she, "and perhaps break those ties that bind him to the city."

These were pleasing words to Philibert, and he thought how delightful would be her own fair presence, also, at Tilly.

"All the physicians in the world will not help Le Gardeur as will your company at Tilly!" exclaimed she, with a sudden access of hope. "Le Gardeur needs not medicine, only care, and—"

"The love he has set his heart on, Amelie! Men sometimes die when they fail in that." He looked at her as he said this, but instantly withdrew his eyes, fearing he had been overbold.

She blushed, and only replied, with absolute indirection, "Oh, I am so thankful to you, Pierre Philibert!" But she gave him, as he left, a look of gratitude and love which never effaced itself from his memory. In after-years, when Pierre Philibert cared not for the light of the sun,

nor for woman's love, nor for life itself, the tender, impassioned glance of those dark eyes, wet with tears, came back to him like a break in the dark clouds, disclosing the blue heaven beyond; and he longed to be there.

CHAPTER XXV.

Between the Last Violet and the Earliest Rose.

"Do not go out to-day, brother, I want you so particularly to stay with me to-day," said Amelie de Repentigny, with a gentle, pleading voice. "Aunt has resolved to return to Tilly to-morrow; I need your help to arrange these papers, and anyway, I want your company, brother," added she, smiling.

Le Gardeur sat feverish, nervous, and ill after his wild night spent at the Taverne de Menut. He started and reddened as his sister's eyes rested on him. He looked through the open window like a wild animal ready to spring out of it and escape.

A raging thirst was on him, which Amelie sought to assuage by draughts of water, milk and tea—a sisterly attention which he more than once acknowledged by kissing the loving fingers which waited upon him so tenderly.

"I cannot stay in the house Amelie," said he; "I shall go mad if I do! You know how it has fared with me, sweet sister! I yesterday built up a tower of glass, high as heaven, my heaven—a woman's love; to-day I am crushed under the ruins of it."

"Say not so, brother! you were not made to be crushed by the nay of any faithless woman. Oh! why will men think more of our sex than we deserve? How few of us do deserve the devotion of a good and true man!"

"How few men would be worthy of you, sweet sister!" replied he, proudly. "Ah, had Angelique had your heart, Amelie!"

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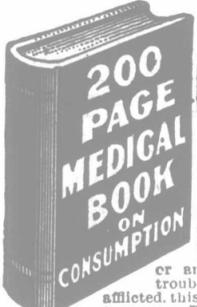
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Write at once to the Yonkerman Consumption Remedy Co., 1327 Rose Street, Kalamazoo, Mich., and they will send you from their Canadian Depot the book and a generous supply of the New Treatment, absolutely free, for they want every sufferer to have this wonderful cure before it is too late. Don't wait—write today. It may mean the saving of your life.



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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.

FOR SALE—Fox and Blood Hounds from the best of hunters. Write: G. C. MacDonald, Branchton, Ont.

FOR SALE—173-acre farm on the 8th concession of Westminster Township. Well adapted for dairying. For particulars apply to James McLachlan, Glanworth P. O., Ont.

PARTIES wanting to buy a farm, or sell any kind of property, now is the time. We have some bargains to offer in farms. Write, stating what kind of a farm you want. We can suit you in suburban, or farm from one acre to 200. B. Lawson, Auctioneer, The London Real Estate, 414 Talbot St., London.

WANTED—Persons to grow mushrooms for us at home. Waste space in cellar, garden or farm can be made to yield \$15 to \$25 per week. Send for illustrated booklet and full particulars. Montreal Supply Co., 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 advertisement 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.

S. C. WHITE LEGHORNS of prizewinning strains. Eggs priced for remainder of season, 75c. for 15, hatch guaranteed. Geo. D. Fletcher, Birkham, Ont., Erin Station.

A sailor, after tarring the side of an old ship, was endeavoring to climb on to the deck by means of a rope dangling from the rail. He failed to reach the deck, whereupon a small boy suddenly exclaimed: "Shove yourself up about nine, shove yourself up about ten."

"You will be glad one day of your present sorrow, brother," replied she. "It is bitter, I know, and I feel its bitterness with you, but life with Angelique would have been infinitely harder to bear."

He shook his head, not incredulously, but defiantly, at fate. "I would have accepted it," said he, "had I been sure life with her had been hard as millstones! My love is of the perverse kind, not to be transmuted by any furnace of fiery trial."

"I have no answer, brother, but this": and Amelie stooped and kissed his fevered forehead. She was too wise to reason in a case where she knew reason always made default.

"What has happened at the Manor House?" asked he, after a short silence, "that aunt is going to return home sooner than she expected when she left?"

"There are reports to-day of Iroquois on the Upper Chaudiere, and her censitaires are eager to return to guard their homes from the prowling savages; and what is more, you and Colonel Philibert are ordered to go to Tilly to look after the defence of the Seigniory."

Le Gardeur sat bolt upright. His military knowledge could not comprehend an apparently useless order. "Pierre Philibert and I ordered to Tilly to look after the defence of the Seigniory! We had no information yesterday that Iroquois were within fifty leagues of Tilly. It is a false rumor raised by the goodwives to get their husbands home again! Don't you think so, Amelie?" asked he, smiling for the first time.

"No, I don't think so, Le Gardeur! but it would be a pretty ruse de guerre, were it true. The goodwives naturally feel nervous at being left alone—I should myself," added she, playfully.

"Oh, I don't know! the nervous ones have all come with the men to the city; but I suppose the works are sufficiently advanced, and the men can be spared to return home. But what says Pierre Philibert to the order, despatching him to Tilly? You have seen him since?"

Amelie blushed a little as she replied, "Yes, I have seen him; he is well content, I think, to see Tilly once more in your company, brother."

"And in yours, sister!—Why blush, Amelie? Pierre is worthy of you, should he ever say to you what I so vainly said last night to Angelique des Meloises!" Le Gardeur held her tightly by the hand.

Her face was growing scarlet—she was in utter confusion. "Oh, stop, brother! Don't say such things! Pierre never uttered such thoughts to me!—never will, in all likelihood!"

"But he will! And, my darling sister, when Pierre Philibert shall say he loves you and asks you to be his wife, if you love him, if you pity me, do not say him nay!" She was trembling with agitation, and without power to reply. But Le Gardeur felt her hand tighten upon his. He comprehended the involuntary sign, drew her to him, kissed her, and left the topic without pressing it further; leaving it in the most formidable shape to take deep root in the silent meditations of Amelie.

The rest of the day passed in such sunshine as Amelie could throw over her brother. Her soft influence retained him at home; she refreshed him with her conversation and sympathy, drew from him the pitiful story of his love and its bitter ending. She knew the relief of disburdening his surcharged heart; and to none but his sister, from whom he had never had a secret until this episode in his life, would he have spoken a word of his heart's trouble.

Numerous were the visitors to-day at the hospitable mansion of the Lady de Tilly; but Le Gardeur would see none of them except Pierre Philibert, who rode over as soon as he was relieved from his military attendance at the Castle of St. Louis.

Le Gardeur received Pierre with an effusion of grateful affection touch-

ing, because real. His handsome face, so like Amelie's, was peculiarly so when it expressed the emotions habitual to her; and the pleasure both felt in the presence of Pierre brought out resemblances that flashed fresh on the quick, observant eye of Pierre.

The afternoon was spent in conversation of that kind which gives and takes with mutual delight. Le Gardeur seemed more his old self again in the company of Pierre; Amelie was charmed at the visible influence of Pierre over him, and a hope sprang up in her bosom that the little artifice of beguiling Le Gardeur to Tilly in the companionship of Pierre might be the means of thwarting those adverse influences which were dragging him to destruction.

If Pierre grew more animated in the presence of those bright eyes, which were at once appreciative and sympathizing, Amelie drank in the conversation of Pierre as one drinks the wine of a favorite vintage. If her heart grew a little intoxicated, what the wonder? Furtively as she glanced at the manly countenance of Pierre, she saw in it the reflection of his noble mind and independent spirit; and remembering the injunction of Le Gardeur—for, woman-like, she sought a support out of herself to justify a foregone conclusion—she thought that if Pierre asked her she could be content to share his lot, and her greatest happiness would be to live in the possession of his love.

Pierre Philibert took his departure early from the house of the Lady de Tilly, to make his preparations for leaving the city next day. His father was aware of his project, and approved of it.

The toils of the day were over in the house of the Chien d'Or. The Bourgeois took his hat and sword and went out for a walk upon the cape, where a cool breeze came up fresh from the broad river. It was just the turn of tide. The full, brimming waters, reflecting here and there a star, began to sparkle under the clear moon that rose slowly and majestically over the hills of the south shore.

The Bourgeois sat down on the low wall of the terrace to enjoy the freshness and beauty of the scene which, although he had seen it a hundred times before, never looked lovelier, he thought, than this evening. He was very happy in his silent thoughts over his son's return home; and the general respect paid him on the day of his fete had been more felt, perhaps, by the Bourgeois than by Pierre himself.

As he indulged in these meditations a well-known voice suddenly accosted him. He turned, and was cordially greeted by the Count de la Galissoniere and Herr Kalm, who had sauntered through the garden of the Castle and directed their steps towards the cape, with intention to call upon the Lady de Tilly and pay their respects to her before she left the city.

The Bourgeois learning their intentions, said he would accompany them, as he, too, owed a debt of courtesy to the noble lady and her niece Amelie, which he would discharge at the same time.

The three gentlemen walked gravely on, in pleasant conversation. The clearness of the moonlit night threw the beautiful landscape, with its strongly accentuated features, into contrasts of light and shade, to which the pencil of Rembrandt alone could have done justice. Herr Kalm was enthusiastic in his admiration—moonlight over Brachenfels, on the Rhine, or the midnight sun peering over the Gulf of Bothnia, pained him of something similar, but of nothing so grand on the whole as the matchless scene visible from Cape Diamond—worthy of its name.

Lady de Tilly received her visitors with the gracious courtesy habitual to her. She especially appreciated the visit from the Bourgeois, who so rarely honored the houses of his friends by his welcome presence. As for His Excellency, she remained smiling, it was his official duty to represent the politeness of France to

Use This Loader and Hire No Men



One man can build the load because the Loader pushes the hay well forward on the wagon. This feature saves one man's wages, over other types of Loaders, every day used. An adjustable apron at top keeps hay from spilling or blowing away.

Here's a Loader that takes hay clean from swath or windrow. The nine rakes are so shaped they can't wrap or tangle, they automatically self-adjust, each independent of the other and pick hay out of low places, don't tear up ground in high places. Wheels set underneath so you can gather hay close to fences or ditches.

You can couple it in a few seconds to any height wagon and uncouple it from top of load. No cog gears, or crossed chains, to cut out, no long crooked crank shaft to break, no ropes to rot, no rollers, cams, or what-nots to wear and make trouble.



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is a model of simplicity, and efficiency. It is light draft, easy to operate and substantially built of best material to stand hardest service. We have specialized on Hay Tool for a quarter of a century. The name Dain on a Mower, Rake, Loader, Stacker or Press guarantees best work, lightest draft, most labor saved, a perfect machine.

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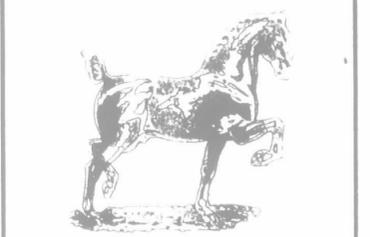
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Great Special Auction Sale
WEDNESDAY, JULY 28, 1909.

35 Imported Clydesdale Fillies
2 Shetland Pony Stallions

Consigned by W. K. Harkness from Glasgow. Mr. Harkness wishes me to state: this bunch are all of extra good size and quality, with the best of breeding, and are all two and three year olds, and registered.

On the same date we will also offer

100 Horses

of all descriptions: Farm Horses and Mares, General Purpose Horses, Heavy Draft Horses, Drivers, and Serviceably Sound Horses of all classes.

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WILSON'S FLY PADS

STAND ALONE AS KILLERS OF HOUSE FLIES.

AVOID USELESS IMITATIONS

"FARMING FOR PROFIT"

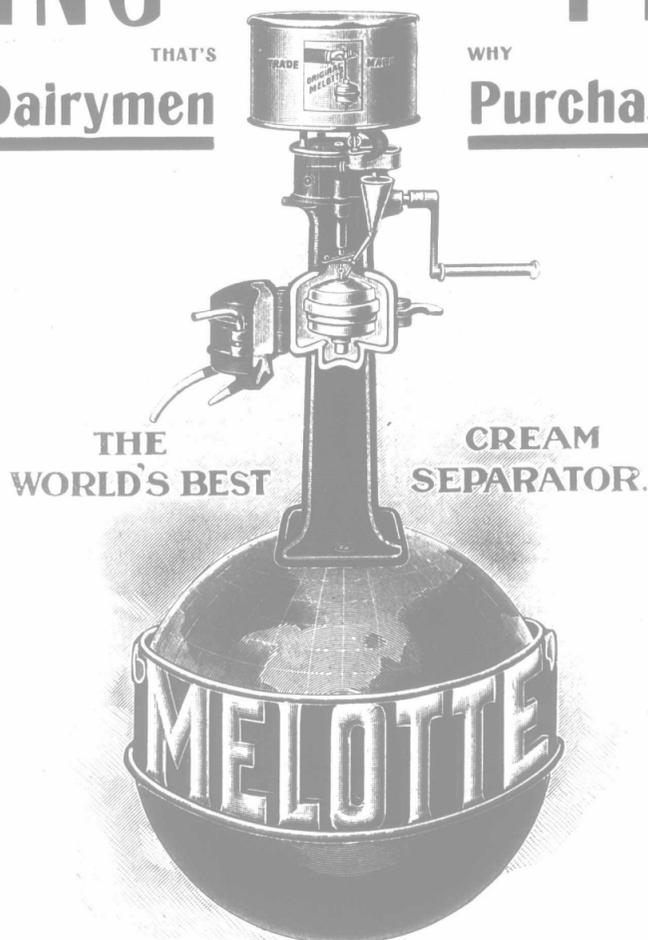
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Last a
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AND PAY FOR THEMSELVES
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Every machine guaranteed by

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the ladies of the Colony; while Herr Kalm, representing the science of Europe, ought to be honored in every house he chose to visit—she certainly esteemed the honor of his presence in her own.

Amelie made her appearance in the drawing-room, and while the visitors stayed exerted herself to the utmost to please and interest them by taking a ready and sympathetic part in their conversation. Her quick and cultivated intellect enabled her to do so, to the delight, and even surprise, of the three grave, learned gentlemen. She lacked neither information nor opinions of her own, while her speech, soft and womanly, gave a delicacy to her free yet modest utterances that made her, in their recollections of her in the future, a standard of comparison—a measure of female perfections.

Le Gardeur, learning who were in the house, came down after a while to thank the Governor, the Bourgeois, and Herr Kalm, for the honor of their visit. He exerted himself, by a desperate effort, to be conversable—not very successfully, however, for, had not Amelie watched him with deepest sympathy, and adroitly filled the breaks in his remarks, he would have failed to pass himself creditably before the Governor. As it was, Le Gardeur contented himself with following the flow of conversation which welled up copiously from the lips of the rest of the company.

After a while came in Felix Baudoin in his full livery, reserved for special occasions, and announced to his lady that tea was served. The gentlemen were invited to partake of what was then a novelty in New France. The Bourgeois, in the course of the new traffic with China that had lately sprung up, in consequence of the discovery of ginseng in New France, had imported some chests of tea, which the Lady de Tilly, with instinctive perception of its utility, adopted at once as the beverage of polite society. As yet, however, it

was only to be seen upon the tables of the refined and the affluent.

A fine service of porcelain of Chinese make adorned her table, pleasing the fancy with its grotesque pictures—then so new, now so familiar to us all. The Chinese garden and summer-house, the fruit-laden trees, and river with overhanging willows; the rustic bridge with the three long-robed figures passing over it; the boat floating upon the water, and the doves flying in the perspectiveless sky—who does not remember them all?

Lady de Tilly, like a true gentlewoman, prized her china, and thought kindly of the mild, industrious race who had furnished her tea-table with such an elegant equipage.

It was no disparagement to the Lady de Tilly that she had not read English poets who sang the praise of tea; English poets were in those days an unknown quantity in French education, and especially in New France until after the conquest. But Wolfe opened the great world of English poetry to Canada, as he recited Gray's Elegy, with its prophetic line:

"The paths of glory lead but to the grave,"

as he floated down the St. Lawrence in that still autumnal night to land his forces and scale by stealth the fatal Heights of Abraham, whose possession led to the conquest of the city and his own heroic death, then it was the two glorious streams of modern thought and literature united in New France, where they have run side by side to this day—in time to be united in one grand flood stream of Canadian literature.

The Bourgeois Philibert had exported largely to China the newly-discovered ginseng, for which at first the people of the flowery kingdom paid, in their silver, ounce for ounce. And his Cantonese correspondent esteemed himself doubly fortunate when he was enabled to export their choicest teas to New

France in exchange for the precious root.

Amelie listened to an eager conversation between the Governor and Herr Kalm, started by the latter on the nature, culture, and use of the tea-plant—they would be trite opinions now—with many daring speculations on the ultimate conquest of the tea-cup over the wine-cup. "It would inaugurate the third beatitude!" exclaimed the philosopher, pressing together the tips of the fingers of both hands, "and the meek would inherit the earth." So soon as the use of tea became universal, mankind would grow milder, as their blood was purified from the fiery products of the still and the wine-press! The life of man would be prolonged and made more valuable.

"What has given China four thousand years of existence?" asked Herr Kalm, abruptly, of the Count.

The Count could not tell, unless it were that the nation was dead already in all that regarded the higher life of national existence—had become mummified, in fact—and did not know it.

"Not at all!" replied Herr Kalm. "It is the constant use of the life-giving infusion of tea that has saved China! Tea soothes the nerves; it clears the blood, expels vapors from the brain, and restores the fountain of life to pristine activity. Ergo, it prolongs the existence of both men and nations, and has made China the most antique nation in the world."

Herr Kalm was a devotee to the tea-cup; he drank it strong to excite his flagging spirits, weak to quiet them down. He took Bohea with his facts, and Hyson with his fancy, and mixed them to secure the necessary afflatus to write his books of science and travel. Upon Hyson he would have attempted the Iliad; upon Bohea he would undertake to square the circle, discover perpetual motion, or reform the German philosophy.

The professor was in a jovial mood, and gambolled away gracefully as a Finland horse under a pack-saddle laden with the learning of a dozen students of Abo, travelling home for the holidays.

"We are fortunate in being able to procure our tea in exchange for our useless ginseng," remarked the Lady de Tilly, as she handed the professor a tiny plate of the leaves, as was the fashion of the day. After drinking the tea, the infused leaves were regarded as quite a fashionable delicacy. Except for the fashion, it had not been, perhaps, considered a delicacy at all.

The observation of the Lady de Tilly set the professor off on another branch of the subject. "He had observed," he said, "the careless methods of preparing the ginseng in New France, and predicted a speedy end of the traffic, unless it were prepared to suit the fancy of the fastidious Chinese."

"That is true, Herr Kalm," replied the Governor, "but our Indians who gather it are bad managers. Our friend Philibert, who opened this lucrative trade, is alone capable of ensuring its continuance. It is a mine of wealth to New France, if rightly developed. How much made you last year by ginseng, Philibert?"

"I can scarcely answer," replied the Bourgeois, hesitating a moment to mention what might seem like egotism; "but the half million I contributed towards the war in defence of Acadia was wholly the product of my export of ginseng to China."

"I know it was! and God bless you for it, Philibert!" exclaimed the Governor with emotion, as he grasped the hand of the patriotic merchant.

"If we have preserved New France this year, it was through your timely help in Acadia. The King's treasury was exhausted," continued the Governor, looking at Herr Kalm, "and ruin imminent, when the noble

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A Nervous Wreck Now in Robust Health.

Mrs. M. E. Harron, of Newton, Ont., writes: "I must say our son would have been in a consumptive's grave long ago had it not been for PSYCHINE. He was taken down with La Grippe and a severe cold. His whole system was weak, including his lungs, which were seriously affected, as is always the case after La Grippe.

"After taking several remedies and treatments we procured PSYCHINE, and tongue cannot tell the marvellous results brought about in two months. He gained over twenty pounds in weight, and strength and appetite returned."

Mr. Harron himself is most emphatic as to the beneficial result of using PSYCHINE. He declares, "To-day I am in splendid health and have never been sick a day since I took PSYCHINE."

PSYCHINE is the greatest tonic known to medical science. It builds up the system and tones up every organ of the body, enabling it to resist and throw off disease. Weak nerves cannot exist where PSYCHINE is used consistently. Send for a trial bottle and prove the truth of these statements.

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PSYCHINE
PRONOUNCED SI-KEEN
THE GREATEST OF TONICS FOR HEALTH AND ENERGY

Caruso, the great opera singer, tells of a lady's maid's artless criticism of an amateur singer, whose methods were of the strained order. The maid was brushing her mistress's hair, when she mentioned that she had heard Miss Bird sing in the parlor the night before.

"And how did you like it?" asked the mistress.

"Oh, mum," answered the maid, "it wuz beautiful!" She sang just as if she wuz gargling!"

Can Do Her Own Work Now. Doctor Said She Had Heart Trouble.

Weighted 125 Pounds. Now Weighs 185.

Mrs. M. McGann, Debes Junction, N.B., writes:—"I wish to tell you what Milburn's Heart and Nerve Pills have done for me. Three years ago I was so run down I could not do my own work. I went to a doctor, and he told me I had heart trouble and that my nerves were all unstrung. I took his medicine, as he ordered me to do, but it did me no good. I then started to take Milburn's Heart and Nerve Pills, and had only taken one box before I started to feel better so I continued their use until I had taken several boxes, and I am now strong and well, and able to do my own work. When I commenced taking your pills I weighed 125 pounds, and now weigh 185 and have given birth to a lovely daughter, which was a happy thing in the family. When I commenced taking Milburn's Heart and Nerve Pills, I could not go upstairs without resting before I got to the top. I can now go up without any trouble."

Milburn's Heart and Nerve Pills are 50 cents per box, or 3 boxes for \$1.25, at all dealers, or mailed direct on receipt of price by The T. Milburn Co., Limited, Toronto, Ont.

merchant of the Chien d'Or fed, clothed, and paid the King's troops for two months before the taking of Grand Pre from the enemy!"

"No great thing in that, your Excellency," replied the Bourgeois, who hated compliments to himself. "If those who have do not give, how can you get from those who have not? You may lay some of it to the account of Pierre, too—he was in Acadia, you know, Governor." A flash of honest pride passed over the usually sedate features of the Bourgeois at the mention of his son.

Le Gardeur looked at his sister. She knew instinctively that his thoughts put into words would say, "He is worthy to be your father, Amelie!" She blushed with a secret pleasure, but spoke not. The music in her heart was without words yet; but one day it would fill the universe with harmony for her.

The Governor noticed the sudden reticence, and half surmising the cause, remarked playfully, "The Iroquois will hardly dare approach Tilly with such a garrison as Pierre Philibert and Le Gardeur, and with you, my Lady de Tilly, as commandant, and you, Mademoiselle Amelie, as aide-de-camp!"

"To be sure! your Excellency," replied Lady de Tilly. "The women of Tilly have worn swords and kept the old house before now!" she added playfully, alluding to a celebrated defence of the chateau by a former lady of the Manor at the head of a body of her censitaires; "and depend upon it, we shall neither give up Tilly nor Le Gardeur either, to whatever savages claim them, be they red or white!"

The lady's allusion to his late associates did not offend Le Gardeur, whose honest nature despised their conduct, while he liked their company. They all understood her, and laughed. The Governor's loyalty to the King's commission prevented his speaking his thoughts. He only remarked, "Le Gardeur and Pierre Philibert will be under your orders, my Lady, and my orders are that they are not to return to the city until all dangers of the Iroquois are over."

"All right, your Excellency!" exclaimed Le Gardeur. "I shall obey my aunt." He was acute enough to see through their kindly scheming for his welfare; but his good nature and thorough devotion to his aunt and sister, and his affectionate friendship for Pierre, made him yield to the project without a qualm of regret. Le Gardeur was assailable on many sides—a fault in his character—or a weakness—which, at any rate, sometimes offered a lever to move him in directions opposite to the malign influences of Bigot and his associates.

The company rose from the tea-table and moved to the drawing-room, where conversation, music and a few games of cards whiled away a couple of hours very pleasantly.

Amelie sang exquisitely. The Governor was an excellent musician, and accompanied her. His voice, a powerful tenor, had been strengthened by many a conflict with old Boreas on the high-seas, and made soft and flexible by his manifold sympathies with all that is kindly and good and true in human nature.

A song of wonderful pathos and beauty had just been brought down from the wilds of the Ottawa, and become universally sung in New France. A voyageur flying from a band of Iroquois had found a hiding-place on a rocky islet in the middle of the Sept Chutes. He concealed himself from his foes, but could not escape, and in the end died of starvation and sleeplessness. The dying man peeled off the white bark of the birch, and with the juice of berries wrote upon it his death song, which was found long after by the side of his remains. His grave is now a marked spot on the Ottawa. La Complainite de Cadieux had seized the imagination of Amelie. She sang it exquisitely, and tonight needed no pressing to do so, for her heart was full of the new song, composed under

such circumstances of woe. Intense was the sympathy of the company, as she began:

"Petit rocher de la haute montagne,
Je viens finir ici cette campagne!
Ah! doux echos, entendez mes soupirs!
En languissant je vais bientôt—mourir."

There were no dry eyes as she concluded. The last sighs of Cadieux seemed to expire on her lips:

"Rossignol, va dire a ma maîtresse,
A mes enfans, qu'un adieu je leur laisse,
Que j'ai garde mon amour et ma foi,
Et désormais faut renoncer a moi."

A few more friends of the family dropped in—Coulon de Villiers, Claude Beauharnais, La Corne St. Luc, and others, who had heard of the lady's departure, and came to bid her adieu.

La Corne raised much mirth by his allusions to the Iroquois. The secret was plainly no secret to him. "I hope to get their scalps," said he, "when you have done with them, and they with you, Le Gardeur!"

The evening passed on pleasantly, and the clock of the Recollets pealed out a good late hour before they took final leave of their hospitable hostess, with mutual good wishes and adieus, which with some of them were never repeated. Le Gardeur was no little touched and comforted by so much sympathy and kindness. He shook the Bourgeois affectionately by the hand, inviting him to come up to Tilly. It was noticed and remembered that this evening Le Gardeur clung filially, as it were, to the father of Pierre, and the farewell he gave him was tender, almost solemn, in a sort of sadness, that left an impress upon all minds. "Tell Pierre—but indeed, he knows we start early," said Le Gardeur, "and the canoes will be waiting on the Batture an hour after sunrise."

The Bourgeois knew in a general way the position of Le Gardeur, and sympathized deeply with him. "Keep your heart up, my boy!" said he on leaving. "Remember the proverb—never forget it for a moment, Le Gardeur: Ce que Dieu garde est bien garde!"

"Good-bye, Sieur Philibert!" replied he, still holding him by the hand. "I would fain be permitted to regard you as a father, since Pierre is all of a brother to me!"

"I will be a father, and a loving one, too, if you will permit me, Le Gardeur," said the Bourgeois, touched by the appeal. "When you return to the city, come home with Pierre. At the Golden Dog, as well as at Belmont, there will be ever welcome for Pierre's friend as for Pierre's self."

The guests then took their departure.

The preparations for the journey home were all made, and the household retired to rest, all glad to return to Tilly. Even Felix Baudoin felt like a boy going back on a holiday. His mind was surcharged with the endless things he had gathered up, ready to pour into the sympathizing ear of Barbara Sanschagrin; and the servants and censitaires were equally eager to return to relate their adventures in the capital when summoned on the King's corvée to build the walls of Quebec.

CHAPTER XXVI.

The Canadian Boat Song.

V'la l'bon vent!
V'la l'bon vent!
V'la l'bon vent!
Ma mie m'appelle!
V'la l'bon vent!
V'la l'bon vent!
V'la l'bon vent!
Ma mie m'appelle!"

The gay chorus of the voyageurs made the shores ring as they kept time with their oars, while the silver spray dripped like a shower of diamonds in the bright sunshine at every stroke of their rapid paddles. The graceful bark canoes, things of beauty

Horse Owners! Use
GOMBAULT'S
Caustic Balsam
A Safe, Speedy, and Positive Cure
The safest, Best BLISTER ever used. Takes the place of all liniments for mild or severe action. Removes all Bunches or Blemishes from Horses and Cattle. SUPERSEDES ALL CAUTERY OR FIRING. Impossible to produce scar or blemish. Every bottle sold is warranted to give satisfaction. Price \$1.50 per bottle. Sold by druggists, or sent by express, charges paid, with full directions for its use. Send for descriptive circulars.
The Lawrence-Williams Co., Toronto, Ont.

Fistula and Poll Evil
Any person, however inexperienced, can readily cure either disease with
Fleming's
Fistula and Poll Evil Cure
—even bad old cases that skilled doctors have abandoned. Easy and simple; no cutting; just a little attention every fifth day—and your money refunded if it ever fails. Cures most cases within thirty days, leaving the horse sound and smooth. All particulars given in
Fleming's Vest-Pocket
Veterinary Adviser.
Write us for a free copy. Ninety-six pages, covering more than a hundred veterinary subjects. Durable bound, indexed and illustrated.
FLEMING BROS., Chemists
75 Church St., Toronto, Ontario

Dr. Page's English Spavin Cure
For the cure of Spavins, Ringbone, Curbs, Splints, Windgalls, Capped Hock, Strains or worm on Cattle and to remove all unnatural enlargements.
This preparation (unlike others) acts by absorbing rather than blistering. This is the only preparation in the world guaranteed to kill a Ringbone or any Spavin or money refunded, and will not kill the hair. Manufactured by Dr. Frederick A. Page & Son, 7 and 9 Yorkshire Road, London, E.C. Mailed to any address upon receipt of price, \$1.00. Canadian agents:
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ABSORBINE
Cures Strained Puffy Ankles, Lymphangitis, Poll Evil, Fistula, Sores, Wire Cuts, Bruises and Swellings, Lameness, and Allays Pain Quickly without Blistering, removing the hair, or laying the horse up. Pleasant to use. \$2.00 per bottle at dealers or delivered. Horse Book 5 D free.
ABSORBINE, JR., (mankind, \$1.00 bottle.) For Strains, Gout, Varicose Veins, Venecocle, Hydrocele, Prostatitis, & Ills of the
W. F. YOUNG, P.O.F., 258 Temple St., Springfield, Mass., LYMAN'S Ltd., Montreal, Canadian Agents.

For Love Knot (Vol. XXVII) [5826]
Sale Imported Clydesdale Brood Mare. Foaled May 25, 1902. Color dark brown, white stripe on face. Sire Lord Fontleroy (10370), dam Bridal Knot (13536). MISS KNOT [7434]; bay, foaled May 17, 1905. Sire Imp. Cairngaan [4757] (12073); Dam Imp. Love Knot (as above). These mares were the property of the late R. S. Cudde, of Barrie, Ont., and are now for sale, and can be inspected any time at Barrie. For further particulars apply to: Thomas A. McCarthy, Box 472, Barrie, Ont.

Ormsby Grange Stock Farm,
ORMSTOWN, P. Q.
DUNCAN McEACHRAN, F. R. C. V. S., D. V. S., Proprietor.

Importer and breeder of high-class pure-bred **CLYDESDALES.**
Farmers or ranchmen starting breeding Clydesdales, pure or grade, specially invited to correspond.

Shetland, Welsh and Iceland Ponies
I have on hand a number of single ponies and matched pairs; all ages; thoroughly broken to harness and reliable in every way.
E. DYMENT, Copetown P.O. and Sta.

CHURCH BELLS
CHIMES AND PEALS
MEMORIAL BELLS A SPECIALTY
FULLY WARRANTED
McSHANE BELL FOUNDRY CO.,
BALTIMORE, Md., U. S. A.
Established 1866

and almost of life, leaped joyously over the blue waters of the St. Lawrence as they bore the family of the Lady de Tilly and Pierre Philibert, with a train of censitaires, back to the old Manor House.

The broad river was flooded with sunshine as it rolled majestically between the high banks crowned with green fields and woods in full leaf in summer. Frequent cottages and villages were visible along the shores, and now and then a little church with its bright spire or belfry marked the successive parishes on either hand.

The tide had already forced its way two hundred leagues up from the ocean, and still pressed irresistibly onward, surging and wrestling against the weight of the descending stream.

The wind, too, was favorable. A number of yachts and bateaux spread their snowy sails to ascend the river with the tide. They were for the most part laden with munitions of war for the Richelieu, on their way to the military posts on Lake Champlain, or merchandise for Montreal, to be reladen in fleets of canoes for the trading-posts up the river of the Ottawas, the Great Lakes, or, mayhap, to supply the new and far-off settlements on the Belle Riviere and the Illinois.

The line of canoes swept past the sailing vessels with a cheer. The light-hearted crews exchanged salutations and banded jests with each other, laughing immoderately at the well-worn jokes current upon the river among the rough voyageurs. A good voyage! a clear run! short portages and long rests! Some inquired whether their friends had paid for the bear and buffalo skins they were going to buy, or they complimented each other on their nice heads of hair, which it was hoped they would not leave behind as keepsakes with the Iroquois squaws.

The boat-songs of the Canadian voyageurs are unique in character, and very pleasing when sung by a crew of broad-chested fellows, dashing their light birch-bark canoes over the waters rough or smooth, taking them as they take fortune, cheerfully—sometimes skimming like wild geese over the long, placid reaches, sometimes bounding like stags down the rough rapids and foaming saults.

Master Jean La Marche, clean as a new pin, and in his merriest mood, sat erect as the King of Yvetot in the bow of the long canoe which held the Lady de Tilly and her family. His sonorous violin was coquettishly fixed in its place of honor under his wagging chin, as it accompanied his voice while he chanted an old boat-song which had lightened the labor of many a weary oar on lake and river, from the St. Lawrence to the Rocky Mountains.

Amelie sat in the stern of the canoe, laying her white hand in the cool stream which rushed past her. She looked proud and happy to-day, for the whole world of her affections was gathered together in that little bark.

She felt grateful for the bright sun; it seemed to have dispelled every cloud that lately shaded her thoughts on account of her brother, and she silently blessed the light breeze that played with her hair and cooled her cheek, which she felt was tinged with a warm glow of pleasure in the presence of Pierre Philibert.

She spoke little, and almost thanked the rough voyageurs for their incessant melodies, which made conversation difficult for the time, and thus left her to her own sweet silent thoughts, which seemed almost too sacred for the profanation of words.

An occasional look, or a sympathetic smile exchanged with her brother or aunt, spoke volumes of pure affection. Once or twice the eyes of Pierre Philibert captured a glance of hers which might not have been intended for him, but which Amelie suffered him to intercept and hide away among the secret treasures of his heart. A glance of true affection—brief, it may be, as a flash

of lightning—becomes, when caught by the eyes of love, a real thing, fixed and imperishable forever. A tender smile, a fond word of love's creation, contains a universe of light and life and immortality—small things, and of little value to others, but to him or her whom they concern, more precious and more prized than the treasures of Ind.

Master Jean La Marche, after a few minutes' rest, made still more refreshing by a draught from a suspicious-looking flask, which, out of respect for the presence of his mistress, the Lady de Tilly, he said contained "milk," began a popular boat-song which every voyageur in New France knew as well as his prayers, and loved to his very finger-ends.

The canoe-men pricked up their ears, like troopers at the sound of a bugle, as Jean La Marche began the famous old ballad of the king's son who, with his silver gun, aimed at the beautiful black duck, and shot the white one, out of whose eyes came gold and diamonds, and out of whose mouth rained silver, while its pretty feathers, scattered to the four winds, were picked up by three fair dames, who with them made a bed both large and deep—

"For poor wayfaring men to sleep."

Master Jean's voice was clear and resonant as a church bell newly christened; and he sang the old boat-song with an energy that drew the crews of half a dozen other canoes into the wake of his music, all uniting in the stirring chorus:

"Fringue! Fringue sur la riviere!
Fringue! Fringue sur l'aviron!"

The performance of Jean La Marche was highly relished by the critical boatmen, and drew from them that flattering mark of approval, so welcome to a vocalist—an encore of the whole long ballad, from beginning to end.

As the line of canoes swept up the stream, a welcome cheer occasionally greeted them from the shore, or a voice on land joined in the gay refrain. They draw nearer to Tilly, and their voices became more and more musical, their gaiety more irrepressible, for they were going home; and home to the habitans, as well as to their lady, was the world of all delights.

The contagion of high spirits caught even Le Gardeur, and drew him out of himself, making him for the time forget the disappointments, resentments and allurements of the city.

Sitting there in the golden sunshine, the blue sky above him, the blue waters below—friends whom he loved around him, mirth in every eye, gaiety on every tongue—how could Le Gardeur but smile as the music of the boatmen brought back a hundred sweet associations? Nay, he laughed, and, to the inexpressible delight of Amelie and Pierre, who watched every change in his demeanor, united in the chorus of the glorious boat-song.

A few hours of this pleasant voyaging brought the little fleet of canoes under the high bank, which from its summit slopes away in a wide domain of forests, park, and cultivated fields, in the midst of which stood the high-pointed and many-gabled Manor House of Tilly.

Upon a promontory—as if placed there for both a land and sea mark, to save souls, as well as bodies—rose the belfry of the Chapel of St. Michael, overlooking a cluster of white, old-fashioned cottages, which formed the village of St. Michael de Tilly.

Upon the sandy beach a crowd of women, children and old men had gathered, who were cheering and clapping their hands at the unexpected return of the lady of the Manor with all their friends and relatives.

The fears of the villagers had been greatly excited for some days past by exaggerated reports of the presence of Iroquois on the upper waters

Heavy Galvanized Steel Stock Watering Trough



Capacity of standard size, about 10 imperial gallons to the foot. Other sizes made to order. Lengths 6, 7, 8, 10 and 12 feet without a seam; no rivets to rust out; the end is fastened by our patented device. No trough to compare with this on the market. Manufactured by

The Erie Iron Works, Ltd.
ST. THOMAS, ONTARIO.

If your dealer does not handle our goods, please send direct to us for any information you may require.



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WEST TORONTO, CANADA.

The Greatest Wholesale and Retail Horse Commission Market.

Auction sales of Horses, Carriages, Harness, etc., every Monday and Wednesday. Horses and harness on hand for private sale every day.

The largest, best equipped and most sanitary stables in Canada. Half-mile of railway loading chutes at stable door. Quarter-mile open track for showing horses. Northwest trade a specialty. **HERBERT SMITH, Manager.** (Late Grand's Repository).

CLYDESDALES AND FRENCH COACHERS

We have still on hand a few choice Clydesdale stallions—all young—that for size, style and quality will stand inspection. We have also a few Clyde fillies—imported and Canadian-bred, and two French Coach stallions. Correspondence and inspection invited. Our prices are easy and terms to suit. Phone connection.



R. NESS & SON, HOWICK, QUEBEC.

T. H. Hassard, Markham, Ont., LATE OF MILLBROOK.—As I have just completed one of the finest stallion barns in Canada, in addition to the large barns purchased last year, I am now in a position to compete with any opposition in the stallion trade. I have made the largest importations of any firm in Canada the last three years, and the quick sales prove that I always have the right kind of horses, and sell at a right price. I intend sailing for Europe in August, to return with a larger and better importation than ever in September, and, consequently, will not be an exhibitor at the Toronto Exhibition, and would strongly advise intending purchasers to wait and see my stock, and judge for yourselves before buying, and not be governed by some of the judging so frequently done at show fairs. Markham is only 20 miles from Toronto, on the G. T. R., and 3 miles from Locust Hill, on the main line of the C. P. R., where I am always pleased to meet visitors upon short notice, by letter or phone. Long-distance phone in connection.

CLYDESDALES AND SHORTHORNS.—Both imported and Canadian-bred, at Columbus, Ont., the Home of the Winners. Our last importation landed in August. They include the pick of Scotland, from such renowned sires as Baron's Pride, Everlasting, Baron o' Bucklyvie, Hiawatha, Marselle, Sir Everest, and Prince Thomas. We have on hand over 30 head to choose from, from the above noted sires, from 1 to 6 years old, and including stallions and mares. Correspondence solicited. Call and see them at our barns, Columbus, Ont., before purchasing elsewhere. Our prices are right. Long-distance phone in houses. Phone office, Myrtle station, C.P.R.; Brooklyn station, G.T.R.; Smith & Richardson & Sons, Columbus, Ont. Oshawa station, G.T.R.

For Sale: Choice Clydesdale, Hackney and French Coach Stallions; 100 acres 3 1/2 miles from Meaford.
Close to school. Soil clay loam, free from stone or gravel. 90 acres level. Good house, barn and stables. \$3,500 for quick sale. **Henry M. Douglas, Box 48, Stayner, Ont.**

IMPORTED SHIRES At their St. Thomas stables, the John Chambers & Sons, of England, have for sale stallions and fillies from their noted Shire stud, high-class representatives of the breed. Correspondence solicited. Address **DR. C. K. GEARY, St. Thomas, Ont.**

Clydesdales and Hackneys We have for sale a few choice Clydesdale mares, imported and Hackney stallions and mares for sale always. **WODKINSON & TISDALE, BEAVERTON, ONTARIO.** G. T. R. and C. N. R. Long-distance phone.

I HAVE STILL LEFT THREE CLYDESDALE STALLIONS
two of them 3 years old, the other a 4-year-old; big flashy fellows, full of quality and character, and right royally bred. I will sell them cheap and on terms to suit, as I want the room for a new importation. **T. D. ELLIOTT, BOLTON, ONT.**

IMPORTED CLYDESDALES My new importation of Clydesdale stallions and fillies, imported and right royally bred. I will sell them at very close prices, and on terms to suit. **C. W. BARBER, Batineau Point, Quebec.** "Close to Ottawa."

Clydesdales and Hackneys I still have on hand a few right good Clydesdales, from 2 to 6 years old. Any one of them fit for show horses. Prices moderate. Terms to suit. Full particulars will be cheerfully given to anyone asking for same. **T. L. MERCER, MARKDALE, ONT. P. O. and Station.** Long-distance phone 17.

NEW IMPORTATION OF CLYDESDALES. **STALLIONS AND MARES.** We shall be pleased to supply any person desiring a first-class Clydesdale stallion or mare when our new consignment arrives, which will be about August 20, 1909. **JOHN A. BOAG & SON, QUEENSVILLE, ONTARIO.**

Please Mention this Paper.

Ring-Bone

There is no case so old or bad that we will not guarantee

Fleming's Spavin and Ringbone Paste
to remove the lameness and make the horse go sound. Money refunded if it ever fails. Easy to use and one to three 45-minute applications cure. Works just as well on Siesbone and Bone Spavin. Before ordering or buying any kind of a remedy for any kind of a blemish, write for a free copy of

Fleming's Vest-Pocket Veterinary Adviser
Ninety-six pages of veterinary information, with special attention to the treatment of blemishes. Durable bound, indexed and illustrated. Make a right beginning by sending for this book.

FLEMING BROS., Chemists,
76 Church St., Toronto, Ontario



ROCK SALT for Stock. \$10 PER TON.
Toronto Salt Works. G. J. Cliff, Manager.

THE "MAPLES" HEREFORDS

Canada's Greatest Show Herd.
For Sale: 25 bulls from 6 to 18 months of age, bred from imported and show stock; also about the same number of heifers, none better. Prices right.

W. H. HUNTER,
Orangeville P.O. and Sta.

HOMESTEAD ABERDEEN-ANGUS

Young cows at \$60 and up. Calves at \$25 and up. Come and see them, or write:

WM. ISCHE,
Sebringville, Ont.
Long-distance phone.

At Dominion Exhibitions, Halifax, Nova Scotia, in 1906; Sherbrooke, Que., 1907; Calgary, Alta., 1908, our Aberdeen-Angus herd won all the champion and grand champion prizes. Out of a possible of 42 first-prizes our herd won 40. We have a good graded show herd for sale. Also single animals, bulls and females.
JAMES BOWMAN, Elm Park, Guelph.

Aberdeen-Angus Cattle

For Sale: Cows, Heifers, Bulls.
Good strains at reasonable prices. Apply to:
Andrew Dinsmore, Manager,
"Grape Grange" Farm, Clarksburg, Ont.

Aberdeen-Angus
For sale: The right sort, some of them by Klondyke, imp. Drumbo station.
WALTER HALL,
Washington, Ontario.

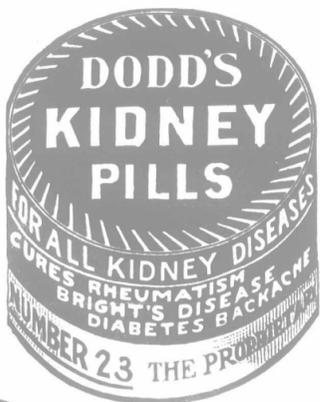
OLENGORE Present offering: Two choice bulls ready for service, and anything in the female line. A choice lot and sold right.
GEO. DAVIS & SONS,
ALTON, ONT., Station, C. P. R.

LOCUST LODGE HOLSTEINS

For sale: 1 bull 2½ years old, sired by Daisy DeKol Boy; dam Canary's Mercedes Butterfly. A grand bull in every particular, and well marked.

A. W. De Long, Norwich, Ont.

"Who is that neglected-looking little boy with that awfully dirty face?"
"He is the child of Professor Sonnenshein, the noted astronomer who lives over the way."
"Oh, is he? Come here, little boy. Run home and tell your father he doesn't need his telescope to see spots on the sun."



of the *Chaudière*. They not unnaturally conjectured, moreover, that the general call for men on the King's corvée, to fortify the city, portended an invasion by the English, who, it was rumored, were to come up in ships from below, as in the days of Sir William Phipps with his army of New Englanders, the story of whose defeat under the walls of Quebec was still freshly remembered in the traditions of the Colony.

"Never fear them!" said old Louis, the one-eyed pilot. "It was in my father's days. Many a time have I heard him tell the story—how, in the autumn of the good year 1690, thirty-four great ships of the Bostonians came up from below, and landed an army of the *ventres bleus* of New England on the flats of Beauport. But our stout Governor, Count de Frontenac, came upon them from the woods with his brave soldiers, habitans and Indians, and drove them pell-mell back to their boats, and stripped the ship of Admiral Phipps of his red flag, which, if you doubt my word—which no one does—still hangs over the high altar of the Church of Notre Dame des Victoires. Blessed be our Lady, who saved our country from our enemies—and will do so again if we do not by our wickedness lose her favor! But the arbre sec—the dry tree—still stands upon the Point de Levis, where the Boston fleet took refuge before beating their retreat down the river again—and you know the old prophecy, that, while that tree stands, the English shall never prevail against Quebec!"

Much comforted by this speech of old Louis the pilot, the villagers of Tilly rushed to the beach to receive their friends. The canoes came dashing into shore. Men, women and children ran knee-deep into the water to meet them, and a hundred eager hands were ready to seize their prows and drag them high and dry upon the sandy beach.

"Home again! and welcome to Tilly, Pierre Philibert!" exclaimed Lady de Tilly, offering her hand. "Friends like you have the right of welcome here." Pierre expressed his pleasure in fitting terms, and lent his aid to the noble lady to disembark.

Le Gardeur assisted Amelie out of the canoe. As he led her across the beach, he felt her hand tremble as it rested on his arm. He glanced down at her averted face, and saw her eyes directed to a spot well remembered by himself—the scene of his rescue from drowning by Pierre Philibert.

The whole scene came before Amelie at this moment. Her vivid recollection conjured up the sight of the inanimate body of her brother as it was brought ashore by the strong arm of Pierre Philibert, and laid upon the beach; her long agony of suspense, and her joy—the greatest she had ever felt before or since—at his resuscitation to life, and lastly, her passionate vow which she made when clasping the neck of his preserver—a vow which she had enshrined as a holy thing in her heart ever since.

At that moment a strange fancy seized her; that Pierre Philibert was again plunging into deep water, to rescue her brother, and that she would be called on by some mysterious power to renew her vow, or fulfill it to the very letter.

She twitched Le Gardeur gently by the arm, and said to him, in a half-whisper, "It was there, brother! do you remember?"

"I know it, sister!" replied he; "I was also thinking of it. I am grateful to Pierre; yet, oh, my Amelie, better he had left me at the bottom of the deep river, where I had found my bed! I have no pleasure in seeing Tilly any more!"

"Why not, brother?" Are we not all the same? Are we not all here? There is happiness and comfort for you at Tilly."

"There was once, Amelie," replied he, sadly, "but there will be none

for me in the future, as I feel too well. I am not worthy of you, Amelie."

"Come, brother!" replied she, cheerily, "you dampen the joy of our arrival. See, the flag is going up on the staff of the turret, and old Martin is getting ready to fire off the culverin in honor of your arrival."

Presently there was a flash, a cloud of smoke, and the report of a cannon came booming down to the shore from the Manor House.

"That was well done of Martin and the women!" remarked Felix Baudoin, who had served in his youth, and therefore knew what was fitting in a military salute. "The women of Tilly are better than the men of Beauce," says the proverb."

"Ay, or of Tilly, either!" remarked Josephite Le Tardeur, in a sharp, snapping tone. Josephite was a short, stout virago, with a turned-up nose and a pair of black eyes that would bore you through like an auger. She wore a wide-brimmed hat of straw, overtopping curls as crisp as her temper. Her short linssey petticoat was not chary of showing her substantial ankles, while her rolled-up sleeves displayed a pair of arms so red and robust that a Swiss milkmaid might well have envied them.

Her remark was intended for the ear of Jose Le Tardeur, her husband, a lazy, good-natured fellow, whose eyes had been fairly henpecked out of his head all the days of his married life. Josephite's speech hit him without hurting him, as he remarked to a neighbor. Josephite made a target of him every day. He was glad, for his part, that the women of Tilly were better soldiers than the men, and so much fonder of looking after things! It saved the men a deal of worry, and a good deal of work.

"What are you saying, Jose?" exclaimed Felix, who only caught a few half-words.

"I say, Master Felix, that, but for Mere Eve, there would have been no curse upon men, to make them labor when they do not want to, and no sin, either. As the Cure says, we could have lain on the grass sunning ourselves all day long. Now it is nothing but work and pray, never play, else you will save neither body nor soul. Master Felix, I hope you will remember me if I come up to the Manor House."

"Ay, I will remember you, Jose," replied Felix, tartly; "but if labor was the curse which Eve brought into the world when she ate the apple, I am sure you are free from it. So ride up with the carts, Jose, and get out of the way of my Lady's carriage!"

Jose obeyed, and, taking off his cap, bowed respectfully to the Lady de Tilly as she passed, leaning on the arm of Pierre Philibert, who escorted her to her carriage.

A couple of sleek Canadian horses, sure-footed as goats and strong as little elephants, drew the coach with a long, steady trot up the winding road which led to the Manor House.

The road, unfenced, and bordered with grass on each side of the track, was smooth and well kept, as became the Grande Chaussee of the Barony of Tilly. It ran sometimes through stretches of cultivated fields—green pastures or corn-lands ripening for the sickle of the *ensitaire*. Sometimes it passed through cool, shady woods, full of primeval grandeur—part of the great Forest of Tilly, which stretched away far as the eye could reach over the hills of the south shore. Huge oaks that might have stood there from the beginning of the world, wide-branching elms, and dark pines, overshadowed the highway, opening now and then into vistas of green fields, where stood a cottage or two, with a herd of mottled cows grazing down by the brook. On the higher ridges, the trees formed a close phalanx, and with their dark tops cut the horizon into a long, irregular line of forest, as if offering battle to the woodman's axe that was threatening to invade their solitudes.

(To be continued.)

Had Stomach Cramps

Would Roll on the Floor in Agony.

Mr. Wm. Kranth, contractor and builder, Owen Sound, Ont., writes:—
"Having read some of the testimonials of cures effected by Dr. Fowler's Extract of Wild Strawberry, I thought it advisable to say a word of praise for its merits.

Some years ago I was much troubled with stomach trouble and cramps. I used to roll on the floor in agony, and on one occasion I went into a faint after suffering intensely for four hours. A short time after this, in driving to town, I was attacked again and had to lie down in my rig, seeking relief.

"When I reached the drug store I asked the druggist for a quick remedy and laid behind the counter until relief came. The remedy I received from the druggist was Dr. Fowler's Extract of Wild Strawberry. Whenever, after that time, I felt cramps coming on, I found speedy relief in the above mentioned remedy, and I am now cured of this dreadful malady. The bottle is small, but its contents effect a marvelous cure. I can recommend it highly for the cure of cramps."

Dr. Fowler's Extract of Wild Strawberry has been on the market for 64 years. It is not a new and untried remedy. Ask for it and insist on getting what you ask for. Refuse substitutes. They're dangerous.

Price 35 cents. Manufactured only by The T. Milburn Co., Limited, Toronto, Ont.

1854—Maple Lodge Stock Farm—1909

Shorthorn bulls and heifers of extra quality and breeding, and from best milking strains.

Lecesters of first quality for sale. Can furnish show flocks.

A. W. SMITH, Maple Lodge P.O., Ontario
Lucan Crossing Sta., G. T. R., one mile.

Green Grove Shorthorns and Yorkshires

A few young bulls and sows, ready for service, to offer. Geo. D. Fletcher, Binkham P. O., Ont., Erin Shipping Station C. P. R.

Edward, aged four, prided himself on his bravery. Suddenly meeting a strange dog in a vacant lot near his home, he unceremoniously fled to the house. Upon being questioned as to whether he was afraid, he said, "No; I just thought it was a good time to see how fast I could run."

Which do you think won?

Not long ago two men, athletes, went into a contest to see which could stand erect and hold his arms stretched out full length at either side of his body for the longer time. One man had fed on steaks and chops, sausage, ham, roast beef, etc.; the other ate heartily, but confined himself to such foods as Quaker Oats, rice, macaroni, etc. Which do you think held out longer?

The first man lasted twenty-two minutes. The Quaker Oats-macaroni-rice chap concluded to stop after he had been at it more than three hours.

There's more strength and economy in eating lots of Quaker Oats than most people imagine.

Every family should eat plentifully of Quaker Oats at least once every day. Breakfast is the best time. It strengthens you for the day. The big mills of the Quaker Oats Co. at Peterborough, Canada, are one of the big industries of this country.

Regular size packages for city trade, large size family packages for those who are not convenient to the stores. Grocers sell both of these. The large package contains a piece of handsome china for the table.

QUESTIONS AND ANSWERS.
Miscellaneous.

SALE OF BULL.

I bought a Holstein bull two years ago from a Western breeder and he proved a failure, only getting two calves from him. Sold him three weeks ago to a buyer, who sold him to another buyer, and he was sent to Montreal and condemned, being affected with tuberculosis. Will I have to refund the money I received for him, or will the buyer who took him to Montreal have to lose it?
Ontario. F. C.

Ans.—Assuming that the transaction was bona fide, that no warranty was given, and no misrepresentation made, we do not see that you are obliged to refund any portion of the purchase price, or are liable in any way.

ECZEMA.

My horses, in the winter, started scratching their legs and kicking little short kicks, first one and then the other, till it went through the whole stable. I thought it was just want of work, and would be soon all right when they went on the grass. Now they have been on the grass a month, and yet they do it still, and you would think they were going to eat the heels off themselves; and a brood mare, the mane is all coming out. What is the reason, and the remedy?
W. S.

Ans.—The symptoms indicate eczema. Clip legs, and wash the whole body of each horse thoroughly with strong, warm soft-soap suds, applied with a scrubbing brush, giving particular attention to affected parts. Then dress affected parts twice daily with corrosive sublimate, 20 grains to a pint of water, until itchiness ceases. Meantime, give internally one ounce Fowler's Solution of Arsenic, night and morning, every alternate week, as long as necessary.

MITES ON HENS.

I am greatly troubled with mites on hens, and have had difficulty getting my hens to remain on their nests to hatch. Last fall I cleaned and swept out my henhouse and whitewashed the walls, roosts and nest boxes. I disinfected every place and article about the place, and put sulphur in the dust baths, nests, etc., and thought I was rid of them. My hens did well during the winter, but I find they are as bad as ever this summer. Now, is there any remedy, and what is it? I want to get something that will keep them off the fowl, and rid my premises of them.

A SUBSCRIBER.

Ans.—It is very difficult, if not impossible, to keep hens entirely free of vermin. One should never relax his vigilance. No doubt enough mites escaped treatment to become the progenitors of the present troublesome brood; or nits may have afterwards hatched out. If, in addition to the precautions taken, you had occasionally washed the roosts, or even sprayed the whole inside of the houses with coal oil, you would probably have succeeded in keeping them reduced. Dust baths and nest material should be frequently changed, the fresh material being dusted each time with sulphur. A poultry correspondent whose letter is before us, recommends applying black oil, or crude petroleum, to the hens at night. We would say, clean out the house again, wash every removable article with coal oil, burn sulphur inside the henhouse, whitewash the whole interior, dust each hen with insect powder or sulphur before she goes in the renovated house, and henceforth observe the precautions noted above.

GOSSIP.

The first new 2.10 performer of 1909 turns up in the pacing stallion Black Dart 2094, that had generally been supposed to have reached his speed limit in 1907, when he took a record of 2.124, writes Raymond, in the Horse World. Last season, it is true, Black Dart raced consistently over the half-mile tracks, but in none of his races did he give indication that he would be better than a 2.10 pacer early the following season over a two-lap track. It was, however, over the half-mile track at Clarksburg, W. Va., that Black Dart made his new record of 2.094, and the performance was scored in a winning race as well. Black

Asphalt—a Good Pavement
—But Poor Roofing

No matter how good asphalt may have proved for other purposes, it makes but the poorest of roofings.

The fault is not with the asphalt itself. It is that asphalt cannot be applied to a roofing as it is to a roadway. For to impregnate asphalt into a roofing, it must be fluxed with volatile oils.

Under the rays of the sun these oils evaporate. They are drawn to the surface of the roofing in little globules. And slowly they are absorbed by the air.

Networked With Holes

Where there was a globule of oil, there remains a hole. Behind the hole, there must be a channel. And these channels, tiny, though they be, form a network which leaves a porous, instead of a solid roof.

They leave a roof which is watersoaked, instead of waterproof. That is why asphalt roofs, in scores of tests have failed to withstand the weather.

Ruberoid roofing is not an asphalt roofing. It is not a tar roofing, not an asbestos roofing, not a rubber roofing.

Its wonderful properties are due to the exclusive use of Ruberoid gum—which makes it heat proof, cold proof, rain

proof, snow proof. And a roof of Ruberoid is so nearly fireproof that hot coals thrown upon it will set fire neither to the roofing nor to the timbers underneath. Because there are no volatile oils to evaporate, a roof of Ruberoid retains its flexibility. The first Ruberoid roofings ever applied—more than seventeen years ago—are still waterproof and weather-tight.

No other roofing has stood such a test, for Ruberoid was the first ready roofing by several years.

Unlike asphalt and other ready roofings, Ruberoid comes in attractive colors—Red, Brown, Green. These colors are not painted on—they are impregnated in the roofing under our patented process.

Valuable Book Free

Before deciding on any roofing for any purpose send for our free book which tells about all kinds of roofings.

It tells what we have learned in twenty years of actual weather tests about tar, tin, shingle and ready roofings. It is a gold mine of practical roofing information.

To get this valuable book, address Dept. 98G the Standard Paint Company of Canada, Ltd., Montreal.

RUBEROID
(TRADEMARK REGISTERED)

Be sure to look for this registered trademark which is stamped every four feet on the under side of all genuine Ruberoid. This is your protection against substitutes which many dealers brazenly sell as Ruberoid. Ruberoid is usually sold by but one dealer in a town. We will tell you the name of your Ruberoid dealer when you send for our free book.

The Standard Paint Company of Canada, Ltd., Montreal, Canada

New York Hamburg London Paris

We are **5 Good Young Bulls** at very reasonable prices in order to clear, also **2 VERY CHOICE JUNIOR YEARLINGS IN SHOW CONDITION**. We can sell some extra well bred cows and heifers (bred or with calves at foot) at prices which should interest intending purchasers. Our farms are quite close to Burlington Jct., G. T. R. Long-distance telephone.
W. G. Pettit & Sons, Freeman, Ontario.

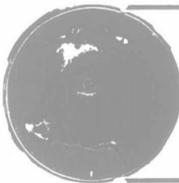
Shorthorn Cattle
AND LINCOLN SHEEP.

Females of all ages for sale of the thick-fleshed, low-down kind that have been raised naturally, neither stuffed nor starved. Twenty-five Lincoln ewes, bred to our best imported stud ram, also a few choice yearling rams. Prices very reasonable for quick sale.
J. T. GIBSON, DENFIELD, ONT.

A. Edward Meyer,

P. O. Box 378, Guelph, Ontario,
Breeds **SCOTCH SHORTHORNS Exclusively**

Twelve of the most noted Scotch tribes have representatives in my herd. Herd bulls: **Scottish Hen (imp.) = 55042 = (90065) 295765 A. H. B.; Gloster King = 68708 = 283804 A. H. B.** Young stock for sale. Long-distance phone in house.



SOME SHOW PROPOSITIONS IN BOTH MALE AND FEMALE

SHORTHORNS

as well as a number of the useful sort of both sexes. Prices right. Large lot to select from. Up-to-date in breeding, etc. Catalogue.
JOHN CLANCY, Manager. H. Cargill & Son, Cargill, Ont.

Shorthorns and Shropshires SHORTHORN BULLS PRICED

Herd headed by Imp. Queen's Counsellor = 64218 = (96594). For sale: Three young bulls; also cows and heifers bred to Queen's Counsellor. The Shropshires are yearling rams and ewes, bred from imported Buttar ram.

H. L. STEAD, Wilton Grove, Ont.
London, G. T. R., 6 miles; Westminster, P. M. R., 1 mile. Long-distance phone.

Red, two years old, from a good imported cow, price \$100.

Roan, thirteen months old, extra good, short-legged calf from one of my best cows, \$100.

Red and White, thirteen months, out of Lady Madge, by Langford Eclipse, price \$75.

JOHN MILLER, BROUGHAM, ONTARIO.
CLAREMONT STATION, C. P. R.

7 Imported Scotch Shorthorn Bulls 7

Six imported bull calves from 9 to 14 months old, 3 reds and 3 roans. They are of such noted families as Clara, Jilt, Roan Lady, Butterfly, Claret and Broadhooks. One imp. bull 2 years old, red; a most valuable sire. One bull 11 months old, roan, from imp. sire and dam; promising for a show bull. Two bulls 12 months old, from imp. sire and dam; suitable for pure-bred or grade herd. Also females all ages. Write for catalogue. Prices reasonable. Farm 1/4 mile from Burlington Junction station, G. T. R.

FRED. BARNETT, MANAGER.

J. F. MITCHELL, BURLINGTON, ONT.

Geo. Amos & Son,
MOFFAT, ONTARIO.

For sale: Several good young heifers, some of them show heifers, and all of the very best Scotch breeding. Correspondence solicited and inspection invited.
Moffat Station, 11 Miles East of City of Guelph, on C. P. R.

SHORTHORNS

Nine bulls from 8 to 20 months old, reds and roans; 10 yearling heifers and a few cows. Will sell very cheap to make room in stables.

CLYDESDALES

One pair of bay mares and one dark brown, heavy draft and two spring colts.

JAMES McARTHUR, Gobles, Ontario.

WHY NOT BUY A HIGH-CLASS SCOTCH SHORTHORN COW, Or a Heifer, Or a Bull, Or a Few Shropshire Ewes, Or a Few Cotswold Ewes, NOW, While You Can Buy Them Low?

I can offer you something in any of them that will make a start second to none. Write for what you want.
ROBERT MILLER, STOUFFVILLE, ONT.



HAWTHORN HERD
OF DEEP-MILKING
Shorthorns

For Sale: 2 young bulls and 10 heifers, sired by Aberdeen Hero (imp.) = 28840 =. Some bred to the Lavender bull, Lavender Lorne = 68706 =.
WM. GRAINGER & SON, Londesboro, Ontario.

MR. A. J. HICKMAN
Court Lodge, Egerton, Kent, England

Exports pedigree live stock of every description to all parts of the world. During the fall months the export of horses of the light and heavy breeds will be a specialty. Write for prices, terms and references.

Dart is bred in lines that could be expected to produce extreme speed. He was sired by Directum 2.054, dam Miss Copeland 2.254 (dam of Copeland 2.094, and granddam of Major Delmar 1.594), by Almont Star 2.284, son of Almont 38; consequently, he is the second 2.10 performer for his dam, and his performance places her in the exclusive list of mares bearing that distinction. He is another feather in the cap of those who believe development is a factor in speed production, and if his performance over the Clarksburg two-lap track is a true indication of what may be expected of him later on, he is likely to have a much lower record when the season closes than that now held by him.

IRISH HUNTER HORSES SELL WELL

At the Knightsbridge sale in London, the following prices were realized by guaranteed hunters from the stud of Mr. Burke, Tipperary:

	Gns.
Rathbud, a prizewinner at Clonmel.....	115
Quinn, by Crackenthorpe, brown gelding.....	57
Ballyneal, by The Penman, won jumping.....	64
Hall Dare, a dark brown hunter.....	100
Rathcannon, by Walmsgate, dark brown.....	165
Monkey Brand, won three events.....	140
Lewin, won point, also jumping.....	155
Power, by Harlem, won prize at Killenny.....	180
Condon, by Rocket, bay hunter.....	160
Quinlan, by Douglas, won first prizes... 220	
V.S., by Prince George, bay hunter... 220	
Patrick, by Senanus.....	51
Gabbins, by The Wraith.....	51

H. Cargill & Son, Cargill, Ont., breeders of Shorthorn cattle, report: We are still doing some business, as witness following list of sales: Bull, Golden Blood, to Smith Bros., South Woodilee; bull, Lord Rosebery, to J. & W. Vollick, Mildmay, Ont.; bull, Crown Jewel, to W. Mothhausen, Walkerton; heifers, Florretta C. 3rd and Golden Beauty, to Nova Scotia Agricultural College; bull, Flower Lord, to L. N. McLean, Glamis; heifers, Belle Royal and Lady Royal, to Wm. McIntosh, Burgoyne; bull, Prince Rameses, to McIntyre Bros., Malcolm; bull, Cobalt, to A. Crow, Tara; bull, Lancaster Royal, to A. Stringer, Kingarf; bull, Royal Falconer, to Wm. Stanley, Purple Grove; bull, Merry Mistletoe, to A. W. Smith, M.P., Maple Lodge. The number is too great to describe, hence, it will probably suffice to say, all were up to our usual standard of excellence in both conformation and breeding. We still have a few good bulls old enough for service, and a beautiful bunch of heifers, doing nicely, on good grass. If in the market, come and see them; we have the right goods at reasonable prices.

During the Busy Season If you need a Shorthorn bull we will ship one on approval, and if you are not suited you may ship him back. Write us for terms and conditions. Just two ready for service. Both Cruickshank Lavenders.

MAPLE SHADE FARM. STATIONS: } MYRTLE, C. P. R.
BROOKLIN, G. T. R.

Long-distance telephone. JOHN DRYDEN & SON, BROOKLIN, ONT.

Show Cattle The best bunch ever on the farm. All ages. Not exhibiting this year.
H. Smith, Exeter, Ont.

Willow Bank Stock Farm
SHORTHORNS AND LEICESTERS.
Herd established 1855; flock 1848. Am offering a special good lot of young females, bred to the great Dutch bull, Imp. Joy of Morning = 32070. Also young bulls and Leicester sheep fitted for showing. Write for prices.
JAMES DOUGLAS, CALEDONIA, ONTARIO.

Imported Bull!
To save inbreeding I will sell the Cruickshank (Duthie bred) imp. bull, Sittyton Victor = 50093 = (87397), a proven sire of merit, gentle and active. Also some young bulls by him, out of imp. dams. Address:
John Brydson, Milverton, Ont.

A FEW YOUNG BULLS and 20 YOUNG COWS and HEIFERS
COMPOSE OUR LIST FOR PRIVATE SALE.
J. A. WATT, SALEM, ONTARIO. ELORA STATION, G. T. R. AND C. P. R.
FARM ADJOINS TOWN. BELL TELEPHONE.

SHORTHORNS
Belmar Parc.
Calves for sale by our grand quartette of breeding and show bulls—Nonpareil Archer, Imp., Proud Gift, Imp., Margold Sailor, Nonpareil Eclipse. Females imported and from imported stock, in calf to these bulls. An unsurpassed lot of yearling heifers.
John Douglas, Manager. PETER WHITE, Pembroke, Ont.

SPRING VALLEY SHORTHORNS
One 14 months' old imported bull, bred by A. M. Gordon. Good enough to head any herd. Five Canadian-bred bulls from 12 to 16 months. Will be priced very reasonable, as we do not want to run them over.
KYLE BROS., AYR, ONT.

GLENBURN STOCK FARM!
One yearling SHORTHORN BULL, and a lot of cows, heifers and calves. Prices reasonable.
John Racey, Lennoxville, Que.

VALLEY HOME SHORTHORNS AND BERKSHIRES
For sale: 6 grand young bulls from ten to eighteen months old, young cows with calves at foot, and ten one and two-year-old heifers. All our own breeding. Some are very choice show animals. Also young sows, and a fine boar 12 months old.
S. J. PEARSON, SON & CO., MEADOWVALE P. O. AND STATION C.P.R.

Choice Scotch Shorthorns
Mayflowers, Lancasters, Miss Ramsdens, Stamfords and Broadbooks. High-class show heifers among them. Also a few extra good young bulls.
S. F. Johnston & Son, Ashburn P. O., Myrtle Station.

Scotch Shorthorns Five choice red roan, 10 to 15 months, by imp. bulls and one imp. dam. Also cows and three-year-old heifers in calf.
McFARLANE & FORD, BOX 41, DUTTON, ONT.

SHORTHORNS AND BERKSHIRES
One choice young Lady Fanny bull for sale—good herd header; also several young heifers. A few prizewinning Berkshires, both sexes. Write or come and see them. Prices moderate.
ISRAEL GROFF, ELMIRA, ONTARIO.

Rowan Hill Shorthorns The 1908 Toronto grand champion, Royal Chief 6695, heads my herd. For sale are: 3 spring bulls and a few heifers, sired by him, and out of show cows. These are choice young things that are sure to please.
R. F. DUNCAN, Carlisle P. O., Ont., Caledonia Station, G. T. R., or station 13 Hamilton and Brantford Electric Road.

Scotch Shorthorns Canada's greatest living sire, Mid-dred's Royal, heads my herd. For sale are young bulls and heifers, show stuff and Toronto winners, out of Stamford, Lady Ythan, Claret, Emeline, Matchless and Belona dams. A visit will be appreciated.
GEO. GIER, Grand Valley P. O., Ont., Walsmer Sta., C. P. R.

JOHN GARDHOUSE & SONS
Always have for sale a number of first-class Shorthorns, Shires and Lincolns, of both sexes. Drop us a line, or better, come and see for yourself.
HIGHFIELD P. O., ONTARIO.
Weston Sta., G. T. R. & C. P. R. Long-distance phone in house.

Stoneycroft Ayrshires
Choice young bulls and heifers of the very best breeding, combining show and dairy quality.
Large Improved Yorkshire Pigs from imported sires and dams, now ready to ship.
Stoneycroft Stock Farm, Ste. Anne de Bellevue, Que.

A BETTER LOT OF AYRSHIRE Cows and Heifers
Were never to be seen before at Stockwood. Deep milkers, good teats; lots of size, just the kind for foundation stock. Young bulls from prizewinning dams; also heifers. Prices low. Terms to suit purchaser. All stock guaranteed before shipping.
D. M. WATT, St. Louis Sta., Que.

Stonehouse Ayrshires.
36 head to select from. All imported or out of imported sire and dam. For sale: females of all ages. Am now booking orders for bull calves.
HECTOR GORDON, Howick, Quebec.

AYRSHIRES AND YORKSHIRES!
Kindly send in your orders at once for imported stock. We can cable orders and have them shipped in May. Calves from imp. dams or from home-bred Record of Merit dams. Females any age. A few young pigs.
ALEX. HUME & CO., MENIE, ONTARIO.
HOARD'S STATION, G. T. R. Phone in residence. EYA de MENIE

UTILITY GLENORA OF KELSO = 15798 = AYRSHIRES at head of herd. For sale: Females of all ages, and several young bulls, some out of 11,000-lb. cows. Come and see, or address: R. C. CLARK, Hammond, Ont. Railway station, Hammond (G. T. R. and C. P. R.).

Ayrshires Two young bulls, 12 months and 15 months old, of true dairy type.
Very fashionable. N. DYMENT, CLAPPISON'S CORNERS, ONTARIO.

Springhill Ayrshires Present offering: A number of high-class bull calves, out of imp. sire and dams. Females all ages, imported and home-bred. Write your wants. Visitors always welcome. Phone connection.
Robt. Hunter & Sons, Maxville, Ont.

CHERRY BANK AYRSHIRES. I am now offering young bulls and heifers true to type and high in quality. Some with imp. sire and dam; also will spare a few older females.
P. D. McArthur, North Georgetown P. O., Que. Howick station, Que.

Ayrshire Cattle—Imported or Canadian-bred, for sale at all times; satisfaction guaranteed. For particulars, write:
W. THORN, Lynedoch, Ont. Trout Run Stock Farm.
When Writing Please Mention this Paper.

QUESTIONS AND ANSWERS.
Miscellaneous.
CHICKEN ROOST — EGGS SUCKED.
1. How is the best way to make a good hen-roost? How is the best way to make hen's nest?
2. We have found hens' eggs sucked in the nest, but do not know what it is. The eggs are broken in two and the contents emptied out.
A YOUTHFUL READER.
Ans.—1. Make them removable and flat (all the perches on one level) and not higher than three feet from the ground. Under the perches should be a platform, or dropping board, on which the excrement will fall. This should be kept covered with a thin layer of fine or very dry sand, ashes, or lime, and cleaned off daily. The dropping boards should be made of matched lumber, and should be 20 inches wide for one roost, and three feet for two perches, the first perch being placed eight or ten inches from the wall. Most poultrymen prefer 2 x 2 inch perches, with the edges slightly rounded. They may set into square notches sawn out of the supports. Allow nine inches of perch room for each bird of the Rock and Wyandotte class, eight inches for Leghorns, and ten inches for Brahmans.
2. It may be a skunk or a cat. Set a steel spring trap at night near the nest, covering lightly with litter to avoid suspicious appearance. Be careful to prevent hens from springing it. Better give the marauder a feed or two first, after setting the trap, to embolden him.

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FALL SEEDING.

Am buying a farm this fall, and there are a couple of fields I would like to seed down as quickly as possible. A neighbor suggested seeding this fall. Could that be done, and could hay be cut off it next summer? If so, what seed would be the best to sow? The fields are both growing oats this year.
M.
Perth Co., Ont.

Ans.—It is very doubtful whether these fields could be successfully seeded to clover after the oats are off, and it would not be advisable to attempt it before. On good soil, however, a fair catch of timothy might be obtained, and a pretty good yield next summer by plowing lightly as soon as the oats are shocked (finishing, of course, after they are removed), working up fine, sowing the seed, and then rolling and finishing with the harrow, leave a loose surface. It would probably be advisable to include a couple of pounds to the acre of alsike, and the same of red clover. If any of it comes on and survives the winter, the extra investment would be repaid. No doubt some oats will germinate, and grow up, affording a degree of winter protection. Probably it would be advisable to prepare one field for fall wheat, sowing timothy with the wheat this fall and clover next spring.

ORANGE HAWKWEED.

I enclose a weed I would like to know the proper name of, and whether it is liable to become troublesome.
P. A. B.

Ans.—The plant enclosed did not arrive in a very good condition to botanize, but from a general examination appears to be orange hawkweed, or devil's paint brush, a low-growing, vigorous, but shallow-rooted perennial, filled with bitter, milky sap, and throwing out many creeping branches close to the ground. The flowering stems are one to two feet high, erect and simple, almost leafless, bearing at the top a corymb of about a dozen handsome flower heads about an inch across. The color of the flower is a fiery orange-red. The whole plant is hairy. It commonly flowers in June, ripening seed in July. Propagates by seed and creeping stems. It is abundant and troublesome in the upland pastures of the Eastern Townships of Quebec, and parts of New Brunswick and Prince Edward Island. Reported occasionally from Ontario. It spreads vigorously, and rapidly overruns pastures and meadows left a few years without breaking up. Plowing and surface cultivation will kill it. For mountain pasture or uplands, where plowing is difficult, salt broadcast over the patches at the rate of 14 tons to the acre will kill all the hawkweed plants it touches while injuring the grass.

PUTTING A VOTE.

What are Parliamentary rules in putting a vote by the chairman of a meeting, when there are a motion, an amendment, and an amendment to the amendment? Is it right for the chairman to ask all in favor, then all against the amendment to amendment first, then putting the amendment the same, then the original motion? If not, how would a meeting vote down all three motions when not satisfactory?
A SUBSCRIBER.

Ans.—The procedure outlined is Parliamentary. If the second amendment were rejected, it would be in order to move another (provided it were different in purport from the one already negated) as soon as the speaker had again proposed the question: "Is it the pleasure of the house to adopt the amendment to the main motion (or original question)?"

GOSSIP.

Mrs. Bleeker (upstairs)—Bridget, have you turned the gas on in the parlor, as I told you?
The New Domestic Jewel—Vis, mum, can't you smell it?

J. J. Ferguson, representing the J. Y. Griffin Company, who have several large packing plants in the Canadian Northwest, visited Ontario during the past fortnight. Mr. Ferguson stated that his company was making plans to promote live-stock interests in Western Canada. If the work develops as anticipated, Ontario breeders may expect to participate in an increased trade in pure-bred live stock.

A hot-weather newspaper despatch from Alton, Ill., the other day, conveyed the novel information that Joseph Junette, who farms a job ranch on the Alton bluffs, thinks he will engage extensively in duck farming, and educate the ducks to eat potato bugs at \$1 a day per duck.

"Just now," the story went on to say, "Junette is enjoying an income of \$15 a day, from fifteen ducks, which he trained to clear potato patches of bugs. He put the ducks in a pen and fed them on potato bugs exclusively, after starving them until they were glad to get the bug diet."

"Junette tried them first on his own patch, which comprised several acres. The ducks went through the patch like a neighborhood scandal. After the performance, Junette shut up his brigade in the bug pen so they would not acquire a taste for other diet."

"The ducks are in great demand on the farms in Junette's neighborhood. Farmers are glad to pay \$1.50 per hour for the services of the brigade."

Life.

Give me a taste of life!
Not a tang of a seasoned wine;
Not the drug of an unearned bread;
Not the grape of an untilled vine.
The life that is really life,
That comes from no fount afar,
But springs from the toil and strife
In the world of things as they are.
Give me the whole of life!
The joy, the hope, and the pain,
The struggle whose end is strength,
The loss that is infinite gain,
Not the drought of a cloudless sky,
Not the rust of a fruitless rest;
Give me the sun and the storm;
The calm and the white sea crest.
Give me the best of life!
To live in the world with God,
Where the seed that is sown and dies
Lifts a harvest over the sod,
Where beauty and truth are one,
Where the right must have its way,
Where the storm-clouds part for stars
And the starlight heralds the day.
Give me the toil of life;
The muscle and mind to dare,
No luxury's lap for my head,
No idly-won wealth to share,
Whether by pick or plane,
Whether by tongue or pen,
Let me not live in vain;
Let me do a man's work among men.
—Charles P. Cleaves.

GOSSIP.

W. D. Breckon, Manager Lakeview Farm, Bronte, Ont., writes, ordering a change of advertisement, as he has sold all the pure-bred bulls fit for service; although, he adds, they have an extra-good grade yearling, by Brightest Canary, and a 10,000-pounds high-grade heifer; also the three-year-old herd bull, a right good one, for sale, at a little better than beef prices.

Canadian judicial talent enjoys a growing demand in the United States. Capt. T. E. Robson, who has officiated acceptably at Chicago and Des Moines, has been this year appointed to judge Short-horns and Polled Durhams at Indiana State Fair, Indianapolis, September 7th. Information as to this appointment came unexpectedly, after he had consented to judge at Toronto, with the dates of which it conflicts. Capt. Robson also judges this year again at the Iowa State Fair in Des Moines.

BACON PRICES LIKELY TO BE MAINTAINED.

This promises to be a remarkable year for dear bacon, writes an English correspondent. Wholesale prices are already far in advance of those ruling last year. Canadian is quoted at 67s. to 69s., against 44s. to 50s.; Danish at 68s. to 75s., against 44s. to 52s. Last year we had large supplies from Denmark and the United States, and prices ruled low—this year the exact opposite rules—supplies from abroad being much smaller.

Alfalfa is very long-lived; fields in Mexico, it is claimed, have been continuously productive without replanting for over two hundred years, and others in France are known to have flourished for more than a century. Its usual life in the United States is probably from ten to twenty-five years, although there is a field in New York that has been mown successfully for over sixty years. It is not unlikely that under its normal conditions and with normal care, it would well-nigh be, as it is called, everlasting.—From Coburn's "The Book of Alfalfa."

It is doubtful whether unlimited pasture may be considered economical, except perhaps for brood sows. The proper amount of land to give over to pasture must necessarily vary, according to its quality and other local considerations, and the length of time the pasture will sustain hogs, likewise, is dependent upon the climate, quality of the crop, age and number of the animals, and other varying conditions. For an average, it may be said that an acre of red clover should support six to ten hogs for three or four months. Alfalfa, the leading pasture-plant for swine, should provide, if of vigorous growth, for twelve to twenty-five animals per acre, but an alfalfa stand should not be grazed by so many hogs that mowing will not be necessary for keeping it in the best condition. The practice with alfalfa should be to pasture fewer hogs than will be able to keep back a rank or woody growth.—From Coburn's "Swine in America."

CHINESE PORK FOR BRITAIN.

According to a recent correspondent of the Daily Mail, eight thousand tons of "frozen pig" were said to be at Hankow awaiting shipment to Liverpool. A refrigerating company has been started, and it appears that the English may shortly expect heavy arrivals of Chinese pork. To those who know from experience in China something of the ways of the Chinese pig, this announcement cannot be otherwise than unwelcome; and before the trade that is expected to result from this enterprise is an accomplished fact, the public will probably require some enlightenment on this subject.

The writer goes on to say: "Notwithstanding that at the annual meeting of a great shipping company in December last, the chairman spoke of 'that valuable product, the Chinese pig,' they will demand that the Government regulations shall be rigidly enforced before Chinese pork is permitted to enter the country and allowed to become an article of daily or even occasional consumption by the British people. To read Charles Lamb's story of the 'origin of roast pig' is one thing; to eat Chinese pork is quite another."

QUESTIONS AND ANSWERS. Miscellaneous.

COTTON-SEED, LINSEED OR GLUTEN MEAL.

As roughage for my dairy herd of Ayrshires next winter I will have mixed clover and timothy hay, and corn silage. Which of the three undermentioned foods, viz., cotton-seed meal, ground linseed-oil cake, or gluten from starch factory, say at equal prices; or if you consider there is a difference, please quote? The above is to mix with wheat bran, of which I will have a good supply. As I purpose buying by the car-load now, when feed is about the cheapest, I wish to purchase only one of the above feeds. A SUBSCRIBER.

Labelle Co., Que.

Ans.—The probability is it will pay to invest in either cotton-seed meal or linseed-oil cake. Either of these, particularly the oil cake, is more dependable than gluten meal. Some samples of gluten meal compare well with oil cake in protein content, but others run very low. For instance, at Ottawa last spring, Frank T. Shutt reported that while gluten meal should contain from 30 per cent. to 35 per cent. of protein, some manufacturers put out under this name an article containing only 12 per cent. to 18 per cent. protein. Gluten feed is a much less concentrated feed than gluten meal, consisting of the whole-corn grain, minus its starch. It is sometimes sold as gluten meal. While the new federal law respecting the regulation of the trade in commercial feeding stuffs will provide for the issue of a guarantee of analysis, it is not to come into effect, we believe, until January 1st, 1910. Meantime, unless we knew the composition of the particular brand we were buying, we would prefer to invest in cotton-seed or oil cake. The cottonseed, if pure, should be worth a dollar or two a ton more than the oil cake, except for feeding pigs or calves, but we would recommend purchasing a proportion of oil cake, even at the same price, for the classes of stock mentioned, and also by way of adding variety to the ration. For winter feeding of milch cows, linseed has this advantage also, that it does not harden the butter-fat so much as does cottonseed. Its effect on the system is also rather more beneficial. As a guide in the estimation of values, we submit the following analyses taken from Henry:

Table with 4 columns: Feed type, % digestible protein, % digestible carbohydrates, % digestible ether extract (fat).

It will be observed that the cottonseed is the richest in protein and oil (ether extract), while the percentage of protein here given for gluten meal is lower than that of some samples analyzed by Mr. Shutt. The various brands of gluten feed are extremely variable. As there is usually a difference of a dollar or two a ton in the price of cottonseed and oil cake, we would be inclined to invest most heavily in the latter, buying also, however, a proportion of cottonseed, as variety is an advantage. For gluten meal, we would not care to invest over \$20 a ton unless we knew exactly what we were getting, though some samples would be good value at \$30 a ton, or even more.

The minister of a certain parish in Scotland was walking one misty night through a street in the village, when he fell into a deep hole. There was no ladder by which he could make his escape, and he began to shout for help. A laborer passing, heard his cries, and, looking down, asked who he was. The minister told him, whereupon the laborer remarked, "Weel, weel, ye needna kick up sic a noise. You'll no be needed afore Sawbath, an' this is only Wednesday night."

Holsteins

FOR SALE: COWS AND HEIFERS

All ages. Also bull and heifer calves, including daughter and granddaughters of Pieterje Hengerveld Count De Kol, whose TWO famous daughters made over 32 lbs. butter each in 7 days, and sire of the "world's champion milking cow," De Kol Creamelle, which gave 119 lbs. in one day, over 10,000 lbs. in 100 days. Also for sale daughters of De Kol's 2nd Mutual Paul, sire of Maid Mutual De Kol, which gave over 31 lbs. butter in 7 days, also granddaughters of Hengerveld De Kol. Other leading breeds represented. Putnam station, near Ingersoll.

H. E. GEORGE, CRAMPTON, ONTARIO.

HOMEWOOD HOLSTEINS

For Sale: Only thrifty bull calves from 4% R. O. M. cows; some will make great herd headers and show animals. Write for prices and description. Station on the place.

M. L. & M. H. HALEY, Springfield, Ont.

MAPLE GLEN Holsteins For sale: Only 1 bull, 11 months old, left; dam is sister to a 26-lb. tested cow. Any female in herd for sale, 7 with records 20 3/4 to 26 3/4 lb. official tests. An 8-yr-old G. D. of Paul Beets De Kol, in calf to Oakland Sir Maids—her record 21.88 as a 5-yr-old. Price \$400, or will dispose of herd en bloc, a great foundation privilege. G. A. Gilroy, Glen Buell, Ont. Long-distance 'phone connects with Brockville.

MAPLE HILL HOLSTEIN - FRIESIANS

Special offering: Am now offering for first time my stock bull, Sir Mercedes Teake (2489), champion bull at Toronto and London, 1908. Can no longer use him to advantage, as I have twelve of his daughters in my herd.

G. W. CLEMONS, ST. GEORGE, ONT.

The Maples Holstein Herd! RECORD-OF-MERIT COWS.

Headed by Lord Wayne Mechtildes Calamity. Nothing for sale at present but choice bull calves from Record of Merit dams; also a few good cows at reasonable prices. WALBURN RIVERS, Folden's Corners, Ont.

Lakeview Holsteins

Herd headed by the ONLY BULL in the world whose sire has 5 daughters averaging over 30 lbs. of butter in 7 days, and whose dam (26.30 lbs. in 7 days) has a daughter with a record of over 35 1/2 lbs. of butter in 7 days (world's record). Bull calves and cows bred to him for sale. LAKEVIEW FARM, BRONTE, ONT. W. D. Breckon, Mgr.

Centre and Hillview Holsteins

For sale: 5 choice bulls fit for service now, from dams of extra good backing. Their sires are Brookbank, Butter Baron and Bonheur Statesman. Their dams and sires' dams and grandams average over 24 lbs. butter testing over 4 per cent. in 7 days.

P. D. EDE, Oxford Centre P. O., Woodstock Sta. Ont. Long-distance 'phone, Burgessville.

HOLSTEINS AND YORKSHIRES FOR SALE.

R. Honey, Brickley, Ontario, NORTHUMBERLAND COUNTY.

Bulls fit for service, from cows with large records. Sows fit to mate, also young pigs, both sexes, of the very best bacon type. Prices reasonable.

DON'T Buy a HOLSTEIN BULL till you get my prices on choice goods from five months to one month old, from best producing strains. "Fairview Stock Farm." FRED ABBOTT, Harrietsville Ont.

Holsteins Record of Merit stock. One bull 13 months old. A number of bull calves, also a few young cows and heifers for sale. THOS. HARTLEY, DOWNSVIEW, ONT.

FAIRVIEW HERD The greatest A. R. O. herd of HOLSTEINS in northern New York.

Headed by Pontiac Korndyke, the greatest sire of the breed, having five daughters whose seven-day records average 29 1/4 pounds each, and over 4.5% fat. Assisted by Rag Apple Korndyke, a son of Pontiac Korndyke, out of Pontiac Rag Apple, 31.62 pounds butter in 7 days, and 126.56 pounds in 90 days, at 4 years old. Cows and heifers in calf to the above two bulls for sale, also young bulls sired by them out of large-record cows. Write, or come and inspect our herd. E. H. DOLLAR, Heuvelton, St. Law. Co., N. Y., near Prescott, Ont.

BUSINESS HOLSTEINS!

Over 60 head to select from. Milk yield from 40 to 85 lbs. a day, and from 35 to 47 lbs. a day for 2-yr-olds. There are 10 2-yr-old heifers, 4 1-yr-olds, and a number of heifer calves. Bulls from 1-yr-old down. Priced right. Truthfully described. W. Higginson, Inkerman, Ont.

Sunny Hill Farm No more Holsteins for sale at present. Eggs from choice White Rocks and Buff Orpingtons, one dollar per setting. DAVID RIFE & SONS, Hespeler Ontario, Waterloo County, C. P. R. and G. T. R.

Broken-down Men



WHO ARE OLD WHILE YOUNG, WHOSE VITALITY IS GONE, WHOSE NERVES ARE SHATTERED, WHO FIND LIFE BURDENSOME, I can cure you with electricity, as I have cured thousands of others. I can make the blood circulate in your veins, the nerves tingle with vigorous life, and the spirit of energy show itself in every move of your body. My

Dr. McLaughlin's Electric Belt

Is a Model, a Modern Home Treatment.

My twenty-eight years of study are shown in this grand appliance. You wear it with comfort at night, and the ELECTRICITY infused into the body cures all Nervous, Kidney and Bladder Troubles, Varicocele, Rheumatism, Lame Back, Indigestion, Weak Stomach, and all forms of pains and weakness. It restores the life while you sleep, and must cure.

MR. THOS. JOHNSTON, Box No. 233, Deseronto, Ont., says: "It is some five or six years since I got your Belt. I am well satisfied with it. It cured me, and I have not been bothered since, and have not used it since then."

MR. HENRY FAUST, Fordwich, Ont., says: "I have worn your Electric Belt according to directions, and am pleased to say it has done all and even more than you said it would. I have recommended it, and will recommend it to others."

You Run No Risk in Using My Belt. I Take All Chances

Any man or woman who will give me reasonable security, I will send them the Belt, with all the necessary attachments suitable for their case, and they can

PAY WHEN CURED.

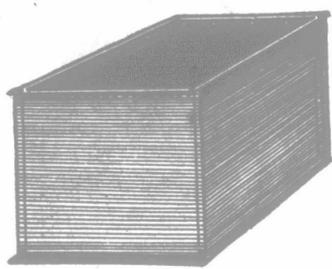
The secret of strength is plenty of electricity in the human body. Keep it full and every organ will do its duty; pain and weakness will disappear.

My Electric Belt does this while you sleep. It pours a steady stream of soothing electricity into the nerves and organs all night long, and is taken up by them just as a sponge absorbs water. It restores strength to every part that is weak.

The whole force of vitality in your body is dependent upon your animal electricity. When you lose that in any manner my Belt will replace it, and I will cure you.

FREE TO YOU.—Get my 80-page book describing my Electric Belt, with illustrations of fully-developed men and women, showing how it is applied. If you can't call, I'll send this book, prepaid, free, if you will enclose this coupon. Consultation free. Office hours—9 a.m. to 6 p.m. Wednesday and Saturday till 8.30 p.m.

Form with fields for NAME and ADDRESS, and a box for DR. M. S. McLAUGHLIN, 112 Yonge St., Toronto, Can.



Send to-day for our DIRECT TO FARMER proposition. We have something good to offer you, for we are headquarters for Steel Tanks and Troughs. Address, Dept. 8.

Steel Trough & Machine Co., Limited :: Tweed, Ont.

Life Is Not Worth Living

on the farm if you are not fitted up with good Storage Tanks. You can have all the luxury of city life for a very small outlay. Our Barn and General Storage Tanks are made of heavy galvanized steel of the best quality, imported from the Old Country to ensure getting the best.



Cattle Labels \$2 and fifty tags. Sheep Labels, \$1 for fifty tags. With name and numbers. By return mail, prepaid. Write to-day. Sample free. **F. G. JAMES, Bowmanville, Ont.**

Pine Ridge Jerseys—For Sale: (Earl Denton head of the herd.) Females, all ages. Yearling bull and a bull calf, 5 months, from a 10,000-lb. cow. Can spare also a few young cows and heifers due to calve soon. **WM. WILLIS, Pine Ridge Farm, Newmarket, Ont.**

Brampton Jerseys

Canada's premier herd. Dairy quality. Bulls all ages for sale, from best dairy and show cows in Canada, and by best sires. Our herd is 175 strong.

B. H. BULL & SON,

BRAMPTON, ONT.

WOOL

HIGH PRICES. ✦ ✦ ✦ WRITE US.

E. T. CARTER & CO.,

84 FRONT ST. E., TORONTO, CANADA

Fairview Shropshires

We now offer Excellent ewes, choice rams, and the best lots of lambs ever offered. All sired by our famous Chicago and St. Louis Grand champion rams, His Best and B. Sirdar.

J. & D. J. Campbell, Fairview Farm, Woodville, Ont.

SOUTHDOWNS AND COLLIES.

Long-distance Telephone.

Orders now solicited for especially-fitted sheep. Your choice of early lambs from imported and prizewinning Canadian-bred ewes, and by the sire of the Grand Champion wether at Chicago, 1907. Twenty shearlings, the choice of last year's lamb crop, also for sale.

ROBT. McEWEN, Byron, Ont. Ry. Stn., London, Ont

Maplehurst Herd of Tamworth Swine.

Bronze Turkeys, Toulouse Geese, Pekin Ducks, S.-C. W. Leghorns.

Tamworths of excellent breeding and ideal bacon type. Herd won sweepstakes at Toronto and London, 1905-6-7-8; winnings at World's Fair, St. Louis, 1904.—sweepstakes aged and junior herd, and two grand championships. Apply to:

D. DOUGLAS & SONS, MITCHELL, ONTARIO.
Bell phone in residence.

NEWCASTLE TAMWORTHS, SHORTHORNS AND CLYDESDALES. Present offering: 3 Shorthorn cows with heifer calf at foot, 3, 4 and 5 months old respectively, and bred again; a choice lot of Tamworth boars and sows from 6 weeks to 5 months old, also a few really good sows bred during April and May. **A. A. COLWILL, NEWCASTLE, ONT.**

Shannonbank Clydesdales, Ayrshires, Yorkshires.—One stallion rising three years, by imp. Hopewell. Two young bulls ten months, and some heifers from six months to two years. Yorkshires of both sexes. **W. H. TRAN, Cedar Grove, Ont. Locust Hill Sta., C. P. R.**

For Sale: CHESTER WHITES

of the right type. Apply to:

DANIEL DE COURCY, BORNHOLM, ONTARIO.



Monkland Yorkshires

We are offering 30 sows from 1½ years to 3 years old that have had litters. All large and excellent sows—proved themselves good mothers. Bred again to farrow in July and August. Also 50 young sows to farrow in August. **Jas. Wilson & Sons, Fergus, Ont.**

Willowdale Berkshires!

Won the leading honors at Toronto last fall. For sale are both sexes and all ages, from imp. stock on both sides. Show things a specialty. Everything guaranteed as represented. **J. A. WILSON, MILTON, ONT., P. O. AND STATION, C. P. R. AND G. T. R.**

BEST IMPROVED CHESTER WHITES.—Largest strain. Old-established registered herd in Canada. Young sows on lactose. Choice pigs 6 weeks to 6 months old. Pairs furnished not akin. Express charges prepaid. Delivered and safe delivery guaranteed. **F. G. GORGE, Putnam, Ont.**

Farnham Oxford Downs

The Champion Flock for Years.

Our present offering is 110 yearling rams; 20 of these fit for the show-ring, and are grand flock-headers. Also 50 yearling ewes, and a number of good ram and ewe lambs. They are all registered and by imported sires or g. sires imported, and a number from imported dams. Our prices are reasonable.

HENRY ARKELL & SON, ARKELL, ONTARIO.
Arkell, C. P. R.; Guelph, G. T. R., and Telegraph.

American Shropshire Registry Association.

HENRY L. WARDWELL, PRESIDENT.

Largest membership of any live-stock organization in the world. Vol. 21 of the Record published. Write for rules.

Mortimer Levering, Sec., LaFayette, Indiana.

CLAYFIELD Buy now of the **Champion Cattle Stock** world flock of America, 1906. Flock headers, ranch rams, ewes of different ages. All of first-class quality, and prices reasonable. Write, or call on **J. C. ROSS Box 61, Jarvis, Ont.**

Large White Yorkshires



Am offering during this month a good lot of young boars ready for service, young sows of breeding age, and a choice lot of spring pigs. Pairs supplied not akin. All bred from large imported stock. Write

H. J. DAVIS, Woodstock, Ont.

MAPLE LEAF BERKSHIRES

For sale: Young sows bred to farrow in May and June; boars fit for service; also young pigs farrowed in March and April. Imp. sires and dams. Pairs not akin. C. P. R. and G. T. R. **Joshua Lawrence, Oxford Centre, Ontario.**

Morrison Tamworths, Shorthorns and Clydesdales. Tamworths from Toronto winners. Either sex. Any age. Sows bred and ready to breed. Pairs not akin. **CHAS. CURRIE, Morrison, Ont.**
Schaw Sta., C. P. R.

SUNNYMOUNT BERKSHIRES

Highest standard of type and quality. For sale: Sows of all ages, and 4 yearling boars. A grand, good lot. Also younger ones. Pairs not akin. **JOHN McLEOD, C.P.R. & G.T.R. Milton P.O., Ont.**

DUROC-JERSEY SWINE

Imported and home-bred. Sows ready to breed. Boars fit for service, and younger ones either sex. Also Embden geese. **MAC CAMPBELL & SONS, HARWICH, ONT.**

QUESTIONS AND ANSWERS.

Miscellaneous.

WHITE CAMPION.

Please find enclosed a sample of weed with blossom. I have pulled all I could see in my hay, thinking that perhaps it might go to seed before haying. Please let me know particulars about it. I do not know whether I got it in the red clover, alsike, or timothy. The dealer I got seed from recommended it as Government-tested, and the best he could buy.

Oxford Co., Ont.

Ans.—The specimen sent is known as White Campion or White Cockle (*Lycnis alba*). The whole plant is rather viscid, hairy, but not so much so as in the Sticky Cockle (Night-flowering Catchfly), which plant it resembles somewhat, but is wider-branched, has many stems, the leaves are larger, and the flowers, which are much more numerous, are pure white. It is a biennial, or short-lived perennial, and as yet is not a common weed in Canada, though abundant in some sections. It propagates by seed only. You did well to pull it up, as it is a persistent weed, with roots fleshy and hard to kill. Remedy: A regular short rotation, with frequent introduction of hoed crops. In meadows, prevent from going to seed.

ALFALFA FOR ESSEX COUNTY—SILO MACHINERY.

1. How many crops would alfalfa produce in one season in Essex County? Would it be good for an all-round summer's pasture? Would it be all right to try seeding with rye in early spring to get a catch, or would it be better with barley and oats?

2. From your knowledge of silos, from which material of the various kinds would you recommend building? Also, what kind of machinery is required in storing silage? We have no silos that I know of here in Essex County from which to gain observations.

Ans.—1. It should commonly yield three cuttings, and occasionally, perhaps, four. It is not without its drawbacks as a pasture. Alfalfa alone, when grazed, is more or less liable to cause bloating, rather more so than clover. Mixed with grass, this danger is largely obviated. It does not, however, stand pasturing over-well, particularly in late autumn. While it may with advantage constitute part of a pasture-mixture, it has greater adaptability for purposes of green feed and hay-production. Rye is not a very good crop with which to seed alfalfa. Barley is better.

2. For an Essex County farmstead, on which the buildings were permanently arranged, a round cement-concrete silo would probably give as good satisfaction as any, though there is much latitude for choice. For ensiling corn, an ensilage cutter, with blower attachment, for elevating the cut stuff, is the only special machinery required. Power to run it may be furnished by a steam thrashing engine. Some few use gasoline engines, or horsepowers. Even a windmill may be employed, but is undependable, and not to be advised.

TRADE TOPIC.

GREAT FAITH IN ABSORBINE.—Another example of what those who have tried Absorbine think of it for use on blemished horses is found in the following letter, received under date of March 19th, 1909, from E. S. Jenkins, Center Point, Ind. He writes: "Have been using your Absorbine for two years with great success for contracted tendons, lumps, swellings, etc. Had a horse that had been lame for 18 months with strained tendons of the left leg, and two and one-half bottles of Absorbine cured him. I have great faith in Absorbine for such cases as I mentioned. Have recommended its use to many, and have aided the druggist in building up a pretty fair sale of it in our little town. I don't deserve any praise for this, for I feel that I owe it to the medicine to tell my friends of its merits." You would find Absorbine equally beneficial, and if you do not already have one of my free booklets, write at once. You can procure the remedy at your druggist's, or sent post-paid upon receipt of \$2. W. L. Young, P.D.F., 73 Temple street, Springfield, Mass. Canadian Agents: Lyman's Ltd., 380 St. Paul street, Montreal, P. Q.

GOSSIP.

Sportsmen generally will regret to learn that the King's well-known stallion, Florizel II., dropped down dead while at exercise last month. The loss to the Sandringham stud is rendered the more severe from the fact that the famous Persimmon died little more than twelve months ago, remarks the English Livestock Journal. Florizel II., who was bred by His Majesty, was eighteen years old, and was an own brother to Persimmon and Diamond Jubilee. He was a good racehorse in his day, and the staying qualities he possessed he transmitted to his stock. Among the races he won were the Manchester Cup, Goodwood Cup, Gold Vase at Ascot, and Jockey Club Cup. The best horses he sired were Volodyovski, Mackintosh, Doricles, Floriform, Prince Florizel, Princess Florizel, Champagne, Victorious, Kuroki, Golden Measure, and Vedas, of whom the last-named won the Two Thousand Guineas in 1905. Volodyovski won many good races, and was victorious in the Derby of 1901, while Doricles won the Doncaster St. Leger the same year, inflicting an unexpected defeat on the Derby winner, and starting at 40 to 1.

DECREASING BACON EXPORTS.

The London Grocer, in discussing the question of Canadian bacon in England, says that the high prices ruling for bacon continue to attract much attention, and their causes are keenly discussed. The falling-off in the supply of Canadian bacon has been one of the main factors which caused the rise, as the imports show, those during 1908 into the United Kingdom having comprised only 1,004,126 cwt., in contrast with 1,192,401 cwt. in 1907, 1,190,524 cwt. in 1906, and 1,191,390 cwt. in 1905. During the first five months of the present year the arrivals from Canada have been 171,546 cwt., against 259,995 cwt. in the same period of 1908, and 333,923 cwt. in 1907. Prior to 1905, there was a steady increase in the export of Canadian bacon to the British market, which must have been a profitable trade. Then the industry gave promise of increasing, not only from a lucrative point of view, but also in production. Since then, however, the export business has fallen off considerably.

PRACTICAL EDUCATION IN CITIES.

In his new work on the relation of education to industrial evolution, Prof. F. T. Carlton indicts the educational system which does not produce the maximum number of efficient workers—which loses its grasp upon the majority of boys and girls too early in their lives. The need is for schools that will assist and train the young workers who will enter the shop, the store or the office. Thousands of young people have to attend night schools or join correspondence schools to secure instruction that they should have got at the regular schools. The demand for this sort of training has caused private correspondence, and Young Men's Christian Association schools to spring up all over the country. These offer the industrial, trade, scientific and commercial education which the public-school system should provide.

The European continuation school for the benefit of the commercial and artisan classes, has done good work. The education of workers in trade and industry is of national importance. It means much to our material welfare as a people, and much for the success of democratic government. Bad economic conditions cause much degradation, and the intelligent use of all our school machinery would make for the improvement of these conditions. There is no reason why the regular secondary school work should not better serve the needs of the many, or why some of the High Schools should not be kept open at night as auxiliaries of the Technical School.—Toronto News.

"Did you have a pleasant time at the picnic, Ronald?" I trust that you remembered to blotcherize, and masticated each mouthful one hundred times.

"Yes, an' while I was chewing my first bite the other boys et up all the grub."—Laf.

"Summer Dreams."

long about this time of year, when nights grow thick and streams grow clear, some quite unknown philanthropist in many seasons has not missed a chance to mail to my address a fishing booklet, more or less in truthful words and pictures done; and, oh! the pages of it run of wooded lakes and pebbly shores, to the boats and silvered oars, to the shady banks and eddies deep, where pike and bass lie fast asleep, and wake to gobble the hook that I may cast in lake or brook. The booklet bears the tang of the hum and whirl of reel and line, the splash of trout, the leap of bass, and I open it there pass before my eyes a glad array of panoramas of a day so glorious and set apart to thrill the angler's heart.

the book has planted, as you see, the seeds of discontent in me, and all that I lie and dream of shade beside the limpid stream, where I may sit and fish my hook and bring big beauties from the brook; and as I lie there I am sure all run down, my health is poor, and the seductive voice and low the lakes calling me to go. My dreams are of fins and scales, of netted sharks and captive whales, of campfires in the night cool, and fish, just drawn from the pool, laid on the fire to broil—I hear the sputter of them in my ear, and such crisp, delicious brown. I am tired of street and town; to-morrow I will pack my grip and set out on my fishing trip.

and so I rise at early dawn and put on last year's trousers on; I hunt a new-worn coat and vest, while life takes a newer zest. And then I'm off by the roads and roads to where they sell me sporting goods, and get a brand-new fishing rod, some quite newfangled flies and odd, a reel and half a mile of line, a gross of hooks both coarse and fine, a net to dip the big ones out, the pike and bass and speckled trout. The place has a vast supply of things, and I just buy and see the charges on the bill and pay them all with right good cheer, for by the brook so clear and blue I will not tarry and renew my wasted strength and be as glad as when I was a child? And so, the salesman returned, I catch a train for Skeeter-est.

By afternoon I've caught a frog and used him from the muddy log whereon I sit and wait and wait for fish to nibble at my bait. This is no limpid stream, indeed. My line gets snarled about a weed, and I pull up some old fish that is quite valueless to me, there are no speckled beauties there, the bass and bass scenes were a snare, and the bites I get are those of buzzing water on my nose. The sun beats down as red and hot as fire; there is no shady spot. I hold my rod across my arms and slap and slap and slap my arms and legs where skeeters light, I know discretion, sense or fright. Now, at length, my line is taut, some monster I have caught; it must weigh high eleven pounds from how it bends my fish-pole. Zounds! I tug and strain and yank and feel the whirring of the unwound reel, till finally it's landed! the monster that is prize to me as I lie gasping on the ground! A bull-head weighing half a pound!

Upon my desk when I come back there are some figures that I tack upon the wall, so they will be a warning all next year to me! To rod and tackle, hooks and line and sundries, eighteen forty-nine; railroad fare and board and guide, just forty dollars; paid to ride from railroad station to the brook, one-fifty; paid for food and cook, six dollars; paid for license ten dollars, and one-twenty-three for burn lotion, vaseline, mosquito ointment and cold cream. And then I credit, defence of angling: "Bull-pout—fifteen cents," and charge the balance—as it seems it should be charged—to Summer days!—J. W. Foley, in Saturday Evening Post.

"How did you manage to get so much for this uncle's estate?" "He married his lawyer's only daughter."—Boston Globe.

Send Now For Sample And Booklet PEDLAR

For any work any culvert can be put to, nothing else yet made quite equals this new Pedlar product —Pedlar's Perfect Corrugated Galvanized Culverts. Only the Pedlar People in all Canada make a culvert of Best Billet Iron, in semi-cylindrical sections, corrugated under enormous pressure (over 60 tons to the

PERFECT CORRUGATED GALVANIZED CULVERT



Most compact and portable culvert made, and the easiest to put in place.

square inch!) and Galvanized After being shaped



This Is The Practical Culvert

Not only is the iron that makes Pedlar Culverts best quality money can buy, but it is unusually heavy—from 14 to 20 gauge, instead of lighter gauges common to inferior goods. This extra-strength enables a Pedlar Culvert to stand heavy traffic upon roads, even though protected by only a very thin cushion of soil. Mark, also, that this is the ONLY culvert made that is galvanized AFTER being curved and corrugated,—thus insuring it positively against rust and decay.

Extra-Heavy, Strong, Rust-Proof
The peculiar Pedlar flange, or locking-rib, along the whole length of each side of these Culverts, clamps together easily and most rigidly. There are no bolts, no rivets, no lock-nuts of any kind,—simply clamp the edges of the flanges together, making a triple thickness of inter-sealed heavy metal along the sides of the pipe (read below here how this is quickly done) and you have a Culvert that is enormously strong, tight, and not only leak-proof but strain and rust and frost-proof, the rib allowing for expansion and contraction.

You cannot appreciate the value and the simplicity of this until you have seen the culvert itself. It is the easiest culvert to put together, and it is better when put together. It is the most portable. It costs less per linear foot to ship by freight, and a whole lot less to haul,—it nests, that's why, of course. And it will serve any culvert use better.

I KNOW it's pretty hard to make some folks believe a new thing is better than what they've been used to—a Pedlar Culvert, for instance, than concrete or wood or whatnot. But I feel pretty sure that you will SEE it is, if you will just look into the question fairly and squarely before you undertake any more culvert construction, or road improvement, or ditching. Don't judge this NEW culvert by anything you've heard about other culverts. MINE IS DIFFERENT—a whole lot different, and a whole lot ahead of any other. Write to my people and make them show you why and how. We're making this in all standard diameters, from 8 inches up to 6 feet, so your wants can probably be supplied. Write and ask questions anyhow.



G. A. Pedlar



When the sections of Pedlar Culvert, of any diameter—it's made from 8 inches to 6 feet—reach you, they are nested like Fig. 1. Note the two distinct flanges—the radial and the recurved. These fit into each other, and are FLAT, while the CURVE of the culvert is corrugated. Place section on top of section, and the flanges, or locking-



ribs, engage easily, as you see in Fig. 2. The joints between one length and another are "broken"—no over-lap reaches more than half-way round the culvert's diameter; and this is possible with NO OTHER metal culvert made. It is a most valuable feature, for it reduces the chance of leakage to the very least minimum.



Write To-day For Postpaid Free Sample and Booklet 20 ADDRESS NEAREST PLACE

THE PEDLAR PEOPLE of Oshawa

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THE SPICE OF LIFE.

The fond mother had brought in her first baby for Mr. Softleigh's inspection. "You know," she exclaimed, "every mother thinks her baby is the best in the world, but mine just proves it." "What can he do?" "Everything." "Does he walk?" "Walk. Why, he's only six weeks old! But just let me hold him in my arms, and see how perfectly he executes the Highland fling." "Er—can he say 'Mamma'?" "Oh, no, Mr. Softleigh. But he can imitate a steam-engine." "How?" "He puffs out his little cheeks, so, and says 'Oo! Oo!'" "Can he—er—crawl?" "Yox silly man! Of course not; he's much too young."

"What else can he do?" "Now, you watch him as I take him up in my arms. See how he smiles at me, and notice how intelligently he breathes!"

WINNIPEG'S HETEROGENEOUS POPULATION.

If anyone has any doubt that every language under the sun is spoken in Winnipeg, and that the Western Capital has the most heterogeneous population of any city in Canada, all he has to do is to take a glance through the city directory. Vowels seem particularly distasteful to the foreigners of Winnipeg. The k's form one long series of jaw-breaking names. Here is a sample: Kon Krzyszinowski. For exercise, try pronouncing this name: Mike Kyrzczak. It is when the z's are reached that a page of the directory looks

like a jumble of all the hard-sounding consonants of the alphabet. Here are four or five, as they appear one after the other in the directory: Zavydowski, Zawarszenink, Zawidoski, Zawogowski, Zazangts, Zborowski.

Rev. Hamilton Wigle, pastor of Zion Methodist Church, Winnipeg, ran into a Welsh name recently which he thinks is just about a record-breaker. A couple came to the parsonage to be married. The groom was Walter John Huntingford, of Elstow, Sask.

"Where is your place of birth?" asked Mr. Wigle.

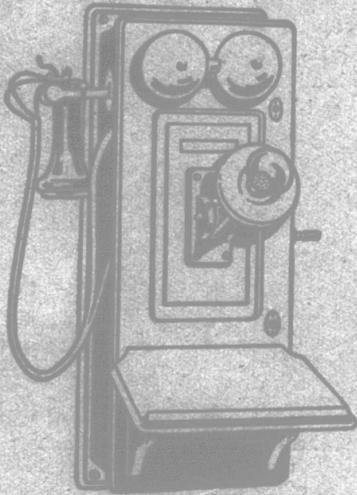
The groom rattled off a name which fairly knocked the parson over.

Finally he got him to write it down, and here is what appeared:

Llanfairpivob: wyrgybgogerythwyrndro- bllandisniogogoch.

There are just 59 letters in the name.

"OUR FRIEND ON THE WALL"



THAT'S how the farmer's whole family soon gets to regard the rural telephone

UNTIL you have actually learned from our Bulletin 1216 just what use the farm telephone really would be to you, you probably will keep on thinking that a telephone is a luxury not for the farmer.



Perhaps you partly realise the value of a telephone but imagine it takes a lot of capital and organization and outlay to instal a 'phone in a rural community.



Send for Bulletin 1216 ("Rural Telephone Equipment") and you will learn that both ideas are wrong,—'way, 'way wrong. The Bulletin is free, but it is instructive. It tells—



—how to interest your neighbors, every one of them, in farm telephone service;—



—how to get up a company, with very little ready money, to equip yourselves with the same good telephone service they have in the great cities;—



—and it also shows you where, how, and why the installation of such a service on your farm will actually *save* money instead of *costing* money.

"Our Friend on the Wall"

For one thing, the telephone will surely help you to get better prices for what you sell, and help you to sell it to the best advantage every time. A couple of minutes talk over the 'phone will post you as to how the market is *that day*. Even a daily newspaper could only tell you how the market was *the day before*.

"Our Friend on the Wall"

If sudden sickness comes, with the horses far off in the fields at work, or the menfolks away, or nobody able to drive in for the doctor,—there's the 'friend on the wall' instantly ready to summon help. And help may mean life as against death. Because some illnesses develop to a hopeless degree in the extra time it would take to go and get the doctor.

"Our Friend on the Wall"

Suppose you think of cutting your hay to-day because the weather looks like holding fair. The telephone would ascertain for you just what the weather man says the weather will be to-morrow. That might make the difference for you between profit and a big loss.

"Our Friend on the Wall"

When the womenfolk are lonesome and want a chat with their neighbors—when you want help in case of fire—when the young folks want to get a jolly little party together quickly for a little fun—when you want to know the outcome of some important event—in a hundred ways, every day of the farmer's year, winter, summer, spring or fall, the rural telephone saves, helps, economises time, spares trouble—and earns its cost so often over and over that you will know in a week after it's in that it *makes* money for you *instead* of costing money.

Please send for Bulletin 1216. Do that to-day—it costs nothing to read it, and it will tell you a great deal you want to know.

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