

**PAGES
MISSING**

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"Persevere and
Succeed"

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EDITORIAL.

PROGRESSIVE JOURNALISM.

In the closing days of the year, a retrospect of some of the topics vital to the farmer, covered by "The Farmer's Advocate" in its weekly issues during that period, may not be inopportune. That an honest effort has been made to render the paper helpful to its patrons by securing and disseminating reliable and up-to-date information, irrespective of the labor and expense involved, we feel sure will be cheerfully acknowledged. And that our efforts have been appreciated, we are glad to know from having received so many kindly expressions from those we have sought to serve, and from the substantial lengthening of our subscription lists during the past twelve months. A brief recapitulation will serve to show the intimate connection of the principal subjects discussed with the interests and welfare of the farmer, and that our position in the discussion of these questions has been generally accepted by our constituents as sound and sensible, we have good reason to believe.

The urgent need of more careful attention being given to the proper ventilation of basement stables, in the interest of the health of animals so housed, has long been given prominence in "The Farmer's Advocate," and early in the year a fresh-air-and-exercise propaganda was inaugurated with an article puncturing the winter "June conditions" fad, and teaching that simpler and more inexpensive means are the most likely to attain the desired object.

The attention of breeders and experimenters was directed to the important question of the possibility of uniting in one class of cattle the double purpose of milk and beef production, in order to enhance the profits of the latter necessary in meeting the conditions and predilections of a large class of farmers. This subject was given free and full discussion, while the claims of the special-purpose cow for the largest milk and butter production demanded by those who make dairying a specialty have been given wide and generous consideration, the steadily upward range of records of production in the case of individual cows and herds being noted and commended, and the importance of using sires bred from high-producing strains advocated in no uncertain terms. The simple system of cow-testing, by means of the scales, in order to obtaining a certain knowledge of the working record of individual cows, and determining which are paying a profit and which are being kept at a loss, has been heartily encouraged and recorded.

The importance of growing in larger proportion alfalfa, red clover and other leguminous crops for the double purpose of maintaining and increasing the fertility of the soil, while producing the most valuable class of stock food, has been given special prominence; while the advantages of devoting much larger areas to corn production, and of better care in selection of seed corn, and intelligent corn culture, have been emphasized strongly.

The farm-labor problem, so acute and perplexing, has received a large share of consideration, and suggestions given for the partial relief of farmers and their wives in this regard, such as the employment of more labor-saving implements and machinery, the use of three and four-horse teams, the making provision for the yearly employment of married men with families, with the hope of securing extra help from that source, and the co-operation of neighbors, where practicable, in order to lighten the labor.

General farm-crop culture, harvesting, storing,

feeding and marketing have received more than usual attention, the object being to secure the largest crop returns for the labor and expense incurred, and the most satisfactory financial results from the operations of the year.

Full and fair reports, prepared by practical and experienced writers, have been published of the principal features in all departments of the leading live-stock, agricultural, dairy, horticultural, and other exhibitions and conventions.

By means of the split-log-drag competition, the results of which were announced in our Christmas Number, last week, a successful effort was made to focus public attention upon earth-road improvement and the use of that effective implement.

Poultry-raising, a branch of farming which is constantly becoming more profitable, the demand and the prices increasing in proportion as towns and cities grow and population increases, has received a full share of attention, special consideration being given to the healthful housing and general management of the flock.

Beekeeping, a specialty deserving greater attention, has been dealt with by specialists from issue to issue.

The sheep-breeding industry, for which the climatic and feed-growing conditions of our country are especially well adapted, and which has been sadly neglected by too many farmers, has been given a fresh impetus by the improved demand and prices, and by the attention of our people being called to the moderate amount of labor and expense involved in founding and maintaining a small flock of this dividend-paying class of stock. The phenomenal success of Canadian sheep-breeders in prizewinning at International Exhibitions year after year, speaks volumes for the suitability of our soil and climate, and the ability of our people to excel in this line of live stock.

Horse-breeding has also experienced a revival of interest, owing to the improved demand as a consequence of the settlement of the new lands of the West, the growth of our cities and towns, and the extensive construction of new railways. "The Farmer's Advocate" has given special attention to the question of the improvement of the horse stock of the country and the measures best calculated to insure the production of a profitable class of uniform type and quality.

A popular and decidedly useful feature with fruit-growers has been the able series of articles in which, under the title, "Horticultural Progress," are given the attested results of investigations at experiment stations and elsewhere, with pertinent comments regarding their applicability to Canadian conditions.

The reform of the educational system of the country, the whole tendency of which has been to draw our young people away from the farm, has been advocated and insisted upon, in order that a more sane and sensible course may be adopted by which the dignity and wholesomeness of farm life may be properly appreciated, and a programme of studies adopted which will fit farmers' sons and daughters for the duties of farm life, instead of inclining so many of them to the already overfilled professions.

Domestic and literary life have received a liberal share of attention in the ably-conducted Home Magazine department of "The Farmer's Advocate," the influence of which is freely acknowledged as being wholesome and elevating in its tendencies.

In addition to the features above mentioned, in which the paper has served its patrons, we may mention that in the Questions and Answers department nearly three thousand queries of interest have received replies prepared by expert

scientists and men of practical experience, and thereby much useful and helpful information disseminated. The paper is always profusely illustrated with high-class photogravures, adding greatly to its educational value.

Our programme for the coming year will be equally full of interest and usefulness, grappling with each practical issue as it arises. New and important features are in contemplation, and we appeal to our patrons for not only a renewal and continuation of their own subscriptions, but an interest in a wider spreading of the influence of the paper by their inducing others to avail themselves of the helpfulness of "The Farmer's Advocate," which for over forty years has proven itself not only in name but in fact the "farmer's advocate" in the best sense of the term. We invite the attention of our readers to special offers and valuable premiums given for securing new subscribers, and urge immediate action, in order that new subscribers may have the benefit of the paper for the balance of this year and all of next year for the yearly subscription price. Figure out the modest cost of the weekly visits of "The Farmer's Advocate," and appraise its benefits. The decision will be, we are quite sure, that neither yourself nor your neighbor can afford to do without it.

THE RURAL - SCHOOL GARDEN.

We wish to call the attention of our readers to a special feature of the Home Magazine department of this issue, viz., a series of illustrated articles presenting the results of school-gardening, as carried on in connection with some of the most successful Canadian schools. "The Farmer's Advocate" has persistently upheld the idea that some sort of training which might tend to awaken interest in agriculture should be given in our public schools throughout the rural districts, better fitting the sons and daughters of the farm for the agricultural pursuits. School-gardening, if rightly conducted, should surely be a great means to this end, besides proving, as well, a distinct medium of educative intellectual work.

We have much pleasure in calling the attention of parents, teachers, inspectors and school boards to these articles, and trust that the reading of them may be an incentive to many more experiments of this kind during the summer of 1908. We are on the eve of important changes for the better in our public-school policy, and school gardening emphasizes one aspect of the reform. Read, study and preserve the articles on "The New Education," and the experience of wide-awake teachers who made use of gardens as an educational agency.

TEACH THE BOY: SAVE THE FARM.

We are thankful to read, from time to time, an effective word in Hoard's Dairyman on the subject of public-school reform, one of the greatest needs of the times, whether viewed from an agricultural or a national standpoint. Referring again to the Syracuse, N. Y., convention, which "The Farmer's Advocate" reviewed some time ago under the caption, "The Undoing of the Farmer," our clear-sighted Wisconsin contemporary makes the following observations: "There has been a decline of the fine old farming spirit which used to prevail in New York fifty years ago. Then good men were proud of being farmers, and their sons were anxious to fill their father's shoes. But the effect on the productive capacity of New York soil has resulted in an enormous decline in land values, amounting to \$126,000,000 in thirty years. Had the common schools of New York taken hold of the minds of the children of the farm 30 years ago, and taught them enough of the elements of

THE FARMER'S ADVOCATE AND HOME MAGAZINE.

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DOMINION.

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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.

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an enlightened agriculture, so that they would have acquired a taste for agricultural reading and knowledge, we do not believe this great loss would have come to that state. The children of to-day are the farmers of to-morrow. Upon their education and mental bias of to-day will depend the character of their farming to-morrow. There is no use of 'crying over spilt milk,' but the educational sentiment of New York and every other State should take steps at once that there should be no more spilling of good milk. To this end, make the elements of agriculture a part of every day's exercises in the common school. Familiarize the youthful mind with sound doctrine in reading lessons, if nothing more can be had. The effect will remain to give an impulse in thousands of instances towards the farm. Better save one good farm boy to the farm than import a half-dozen ignorant substitutes."

CALF CHAMPIONSHIPS.

The winning of the grand championship over all pure-breds, grades and cross-breds of fat cattle at the International Live-stock Exposition, by the high-grade Shorthorn, fifteen-months-old, 1,090-pound calf, Roan King, raises the question as to the wisdom or propriety of such a course. In 1906, this high honor at Chicago was won by a Hereford calf, Peerless Wilton 39th's Defender, which this year returned to receive only third in his class. But does that signify? The task of carrying over a fat beast, of whatever age, is admittedly most difficult, and it would be almost a super-human achievement to win two grand championships at Chicago with the same animal, no matter at what age it was first fitted, and there would seem to be no valid reason why a steer finished for the block should not receive recognition, whether fifteen months old or three years. At any rate, Mr. Durno's decision was generally popular, and illustrates the marked tendency towards the production of early-maturing, handy-

weight butchers' cattle. There has been a rooted conviction, long prevalent, that these young cattle lack flavor, being neither beef nor veal. That is true of the half-starved things killed at six or eight months, but not of the well-fed, ripe year-old. Such an animal, receiving a ration in which milk forms a part, produces the very choicest and spiciest of tender steaks, and when people realize this more fully, there will be a much greater impetus given to the production of meaty, thick-fleshed baby beeves.

THE SPHERES OF THE WINTER FAIRS.

As the echoes of the December live-stock exhibitions subside, it is timely to reflect upon their value and their respective spheres. When the live-stock exposition at Chicago was launched, some eight years since, on its present gigantic scale, a few disquieting thoughts were entertained that the Canadian fat-stock show at Guelph would be quite outclassed. In dimensions, it certainly has been; but in educational value, the distinctive features of the Ontario fair, and its replicas at Amherst, N. S., and Ottawa, Ont., only stand out more pronounced.

The International is a great show—a perpetual revelation. Phenomenally successful from the start, each succeeding year turns a more impressive page. In scale and quality of exhibits, it annually sets new records which only itself can surpass. Surpass them it does, however, with certainty and ease. Record-breaking rings are successively outclassed, as though they had been mere State or County exhibits. Champions of previous years go down by the pairs and half-dozen. High-class show-yard material of eight years ago is hardly looked at now, while the second-raters have been almost eliminated from the stalls. The International early won continental acclaim as the climax of American live-stock exhibitions. It is the prospective goal of every ambitious exhibitor, the cynosure of all stockmen's eyes. It is the American exhibitors' centering point, the objective toward which all hopes verge. It is more than that. It is a standard-fixer; an educative exponent of the progress of live-stock husbandry toward ideals of perfection in animal form, and of early maturity in the case of meat animals, as witness the winning of the grand championship for two years in succession by steer calves—last year a Hereford, this time a Shorthorn. But, to be educational in its most practical sense to the individual visitor, this show is rather large. A Canadian visitor misses the lectures and the carcass demonstrations. True, there is a block test, and this year there was a carcass talk, but it is fairly lost in the vast scale of everything else.

In the Canadian Winter Fairs, at Guelph, Ont., and Ottawa, Ont., and Amherst, N. S., we have unique institutions which serve their spheres as well as or better than Chicago fills its place. These smaller shows, though big enough, are not too large to comprehend, and they take in nearly everything in which a farmer is interested, from cattle to poultry, seed grain, and the milking competitions, which, by the way, should be increased in point of accommodations and extent. The block test and dressed poultry exhibits, with their lessons, are here matters of general interest, and more can be made of them than at Chicago. Add to this the practical addresses and discussions in the farmers' parliament, in the lecture-rooms, and we have winter shows capable of immense educational benefits. That these are appreciated, is proven by the large attendance of farmers and their families who attend year by year. The Canadian winter fairs occupy a position of great and growing importance in our exhibition scheme. They evidently will never be displaced by larger institutions of the Chicago order, though this show, too, renders an invaluable service to American agriculture and animal husbandry.

As I have been taking "The Farmer's Advocate for some time, I am prepared to say that it is the most useful paper printed on agricultural subjects. It has been well named, as it discusses every point on all subjects relating to farm practice. Wishing you every success.

Oxford Co., Ont.

W. S. H.

OUR MARITIME LETTER.

THE CANADIAN FORESTRY SITUATION.

In the "Wood Building," where also the Militia Department carries on its multifarious concerns connected with the defence of the country—the Lord forgive us our warlike proclivities!—and at whose wide main portal an armed sentry moves to and fro with measured step, we found R. H. Campbell, the quondam secretary of the Canadian Forestry Association, now the Superintendent of Forestry, since Mr. E. Stewart relinquished his engagement with the country and went to the general office of a strong lumber syndicate in Montreal, to direct the company's affairs fortuneward. Mr. Campbell has always been an enthusiastic worker for forestry, one who could impart to those about him somewhat of his own helpfulness—and on this occasion his greeting for old friends and co-workers could not be more cordial.

We have long felt that the forestry policy of the country needed to be carefully formed, coordinating all the local and federal interests, and stretching, with its benefactions, to the utmost limits of exploration, conservation, reparation, and development. We are too near to the National Conference, when all the literature of the country teemed with forestry education; and, therefore, need only speak of the progress made in the interim towards organization and a public policy which may save us the reproach of other countries that have foolishly deprived themselves of their forests and the immense contribution they make to water power, their actual economic bearing on the wood and lumber trade, and their beneficent influence in the tempering of severe climatic conditions and the production of better field crops.

It was the opinion of all those who foregathered at Ottawa in 1905 that the time was opportune for the formation of a general forestry policy for Canada. We had the experience of the great Republic to the south of us, many of whose once fruitful plains are now arid and unproductive, over whose exposed plateaus great wind-storms sweep unimpeded by bush or forest, to the great detriment of animal life; whose wood-working factories have to look to the stranger also for material, which was theirs in abundance for all time, if only properly administered, and the field fertility of many of whose divisions is vastly impaired by a general and wanton denudation. We then looked over our own domain and found the older portions of it, here, almost completely stripped; there, greatly impaired in their woodlands; the new illimitable regions of coniferæ directly menaced by fire and ax. We had data placed before us by experts to show that our great watersheds were in imminent danger of loss of power, and that the fertility of our fields, the comfort of our homes, the beauty and monetary advantage of our country, needed instant administrative action; and we decided by formal resolution, served there and then on the governing power, in the persons of the Representative of the King, Earl Grey, and the Prime Minister, Sir Wilfrid Laurier, himself the President of the Conference, to shut the door here in Canada against the great national wrongs writ so broadly across the forestry policy, or want of policy, of other lands.

Well, things have gone along slowly enough since that meeting, with its enunciation of desiderata, and we were, we confess, beginning to be somewhat impatient of delays, particularly when we recalled the favorable disposition of the Prime Minister, and his ability to put them to the practical test. We confess, however, that this visit to the Department cheered and encouraged us; and we now believe firmly that all this talk eternal will give place shortly to a real forward movement for forestry.

We found, as we have said, Mr. Campbell in the Wood Building, occupying there a large suite of spacious apartments, and presiding over a public department which controls from fifty to sixty subordinates in bureau and field. Messrs. Stewart and Ross have gone, but the services of a competent forester have been secured—one who knows the scientific and practical sides of this great enterprise, and can represent its needs everywhere. A successor for Mr. Ross, who has returned to university work, has been found, and from his services much is expected in the West. Several new men to satisfy the technical demands of the Bureau are at the moment perfecting themselves in the Forestry Schools of the continent, and Chief Campbell thinks that he will be able to give intelligent supervision to the vast field before him in the very near future. The localities requiring expert service first will, of course, first be served. He informs us, too, that it is the policy of the

Division to extend the national reserves—those already made need enlargement, and others are required elsewhere, and there will be something yearly effected in this regard in Parliament until the whole proposed scheme is completed. The Superintendent was over the western ground last summer, as far and as completely as limited time would permit; he intends to return to the work of personal inspection next year. His zeal and enthusiasm should do much to evolve a proper and adequate system of administration.

Dr. Fernow, Forester for Ontario, and Professor of Forestry at the Toronto University, is co-operating heartily with Dr. Campbell, and his intellectual strength and wide experience must abundantly benefit the new national establishment. It is the intention of New Brunswick to arrange for a school of forestry at the University of that Province. It, too, should co-operate in developing the national plan. For provinces like ours, without any reserves, or any kind of reforestation system, we are glad to know that it is the intention of Mr. Campbell's Division to educate the people by means of competent teachers, and, also, to furnish trees for planting whenever possible. This will be a great boon. The publications of the Forestry Association, and the bulletins of the Division, must contribute greatly to the end in view. As we said before, then, the outlook for Canadian Forestry is reassuring.

A. E. BURKE.

TARIFF CONDITIONS ADVERSELY AFFECTING FARMERS.

Editor "The Farmer's Advocate":

Much is being said and written regarding a change in our system of public-school education that will invest farming and rural life with a new and higher interest, tending to retain, instead of drive to the professions and shops of the town, the flower of our country youth; and, while these efforts are laudable in their way, we may well impress the authorities with the fact that no system will ever accomplish this object which does not enthuse the members of the teaching profession with such a love for the farm and farm life that they will delight to urge and inspire their pupils along agricultural lines—an enthusiasm which, generally speaking, we may say is almost entirely absent from the minds of those who are engaged in the teaching profession at present. While efforts are being put forth to accomplish this desired end, agriculturists might well bestir themselves and endeavor to realize their true condition, with a view towards removing some of the economic handicaps which at present are a burden upon their requirements and the products of their energy. If they take to heart the effusions of manufacturers, managers of railway and transportation companies, leading directors of various industrial associations, and, as well, many of our Legislators, they would indeed be touched with the spirit of deep solicitude which these all feign to manifest in the farmer's behalf. These manifestations are becoming so current on the part of many engaged in other lines, that I am almost wont to exclaim, "Lord help the farmers." They are indeed the great silent class, and yet revelations are continually being made which emphasize the fact that their interests and the interests of the great consuming public do require effective representation. As was then said, the evidence given before the Tariff Commission was extremely moderate, and showed that, under existing conditions in Ontario, it is impossible for the better class of farmers to make much more than a fair living; that it is impossible for those less fortunately situated to make more than a bare one; and that the tariff, as it stood before the revision, did little or nothing for them, while it imposed quite heavy and unavoidable burdens. The tariff has been revised, and although that revision was accepted, it was only as a compromise, as a first instalment of what every student of agricultural requirements must know is their due. The question now is, why should this country require that any degree of burden should be placed upon its great foundation industry, the very mainspring of its national existence, for the benefit of any other class in the land; and this more particularly so when the great problem is to endeavor to hold the flower of our country youth on the farm, where they ought to be? The future welfare of the industry itself and the rights of posterity both demand that agriculturists awaken themselves to realize the gravity of the situation.

The Members of the House of Commons have again assembled. The manufacturers, through their president, have taken their stand. They are ready to beat at the doors of Parliament. They are after more blood; another vein (an artery, if possible) in the loins of agriculture, mining, lumbering, or other self-supporting industry, is to be opened. Although the census of manufactures, taken last year, shows that the capital invested in those lines has increased from \$446,000,000 in 1900, to \$834,000,000 in 1905, an increase of \$387,000,000, and the value of products was \$706,446,000, an increase of \$225,393,000, yet the manufacturers are not satisfied,

because they say that the great consuming public of Canada have so far escaped from their clutches, that they have succeeded in obtaining so much better value for their money elsewhere; that, with all this increase in trade, the manufacturers have not materially strengthened their hold on the Canadian home market. "That, while the capital, the wage bill and the output of Canadian manufacturers had increased, their share in the home market had remained practically at a standstill," and now they are after a tariff in which minimum protection would be high enough to reserve the home market for the Canadian manufacturer, and give a preference to the British Empire on articles that could not be produced at home. How does this further demand compare with the evidence given before the Tariff Commission? Let one reference suffice: On November 16th, 1905, the merchant tailors, representing 167 tailors in and out of Toronto, opposed the demands of the woollen manufacturers by saying that Canadian woollens had not the style and finish of the English article, and that tailors had to go to Britain for their best woollen goods; that they had asked the branches of their trade if, since the increase in the duty to 30 per cent., they had increased their use of Canadian woollens, and the invariable answer was no. Everyone versed in the trade knows that, possibly with the exception of one Canadian factory or so, notably the Caldwell Woollen Factory, in Lanark, where not a pound of shoddy is used, this showing of the tailors is so. Then, why should agriculturists and consumers generally be burdened by duties like these?

It should never be forgotten that a tariff, although a necessity for revenue purposes in Canada, is an instrument whereby the protected interests can collect unduly high prices for their wares. Take the following list of articles, and the customs duty thereon, all of which affect and are to a greater or less degree a burden on the farmer and other consumers. Upon the basis of importations during the year 1905, being the latest returns I have to hand, and corresponding with the census of 1905:

ARTICLE.	Imports from U. S.	Imports from Britain.	Total Imports.	Preferential Tariff %.	General Tariff %.
Wearing apparel, ready-made clothing, composed wholly or in part of wool, wool and mfres. of.....	Dut. \$ 524,066	Dut. \$13,153,729	\$17,529,415	22½ to 30	30 to 35
	Free 305,670	Free 1,134,112			
Cotton and mfres. of.....	Dut. \$1,864,548	Dut. \$ 5,782,676	\$14,853,048	25	35
	Free 6,079,522	Free 363,860			
Agr. implements	\$1,571,474	\$ 21,265	\$ 1,598,914	12½ to 17½	17½ to 25
Buggies and carriages	\$ 97,019	\$ 2,806	\$ 98,825	22½	35
Paints and colors	Dut. \$ 706,089	Dut. \$ 260,910	\$ 1,498,691	10 to 30	15 to 37½
	Free 121,667	Free - 76,008			
Spades and shovels	\$ 24,885	None	\$ 38,718	20	32½
Stoves.....	\$ 403,047	None	\$ 410,672	15	25
Windmills	\$ 37,939	None	\$ 38,083	12½	20
Nails, spikes, screws and general hardware				17½ to 22½	20 to 35
Boots and shoes	\$1,112,736	\$ 60,499	\$ 1,178,118	17 to 20	25 to 30
Harness and saddlery	\$ 64,354	None	\$ 83,924	20	30
Oilcloths—floor, shelf and table.....	\$ 154,469	\$ 598,910	\$ 771,443	25	35
Biscuits and confectionery				15 to 22½	25 to 35
Drugs in crude form, free; in preparation, 20 to 25 per cent.					

This table is given to show the extent of duty imposed, and, in some instances, what a small percentage of the total consumption is imported, thus allowing manufacturers the whole benefit of the tariff.

A resume of some of these lines will show what degree of protection our manufacturers have:

1. Agricultural Implements.—Value of Canadian output in 1905, \$28,409,806. As there is no competition from Britain, the general tariff, from 17½ to 25 per cent., prevails, and puts into the pockets of the manufacturers \$5,700,000.
2. Boots and Shoes.—Value of Canadian output, 1905, \$11,819,165. As only \$60,000 comes from Britain, the U. S. is the great competitor, and a general tariff of 25 per cent. gives them a margin of \$3,000,000.
3. Bread, biscuits and confectionery, \$10,387,797. No competition from Britain. General tariff gives 25 to 35 per cent. protection.
4. Carriages and Wagons.—Output of \$9,654,926. No competition from Britain, and, with a general tariff of 25 per cent. on wagons and 35 per cent. on carriages, the manufacturers have a margin of \$3,200,000 annually to pay duties on raw material and put in their pocket.
5. Harness and Saddlery.—Canadian output, 1905, \$4,085,223. Nothing in this line comes from Britain, and a tariff of 30 per cent. gives them a margin over foreign goods of \$1,200,000 annually.
6. Cottons.—Canadian production, 1905, \$21,938,823. With preferential duty of 25 per cent., they have a margin to themselves of over \$5,000,000 annually.

938,823. With preferential duty of 25 per cent., they have a margin to themselves of over \$5,000,000 annually.

7. As the Canadian production of woollen goods has diminished from \$10,486,198 in 1900, to \$6,938,683 in 1905, a duty of from 22½ to 30 and 35 per cent. does not seem to stimulate the production, why longer burden the consumer with such duties?—although there is one redeeming feature in favor of the heavy importations, the margin goes into the treasury of the country.

8. Leather, tanned.—Production in 1905, \$11,193,851. Tariff, 12½ to 17½ per cent. As the bulk of imports are from the United States, an average duty of 15 per cent. gives the manufacturers an annual protection of \$1,650,000.

9. Along with these lines, we might mention men's and women's custom and factory clothing, with an annual output of over \$18,000,000, which, with a duty of from 20 to 35 per cent., gives a substantial margin; and yet, with margins such as these, is it not pitiable to behold the continual wail of our manufacturers?

There seems to be something in human nature that makes dependents, whether individuals or classes, perpetually discontented, and prompts the recipients of favors continually to demand more. In free-trade England, where the manufacturers enjoy no favors at the expense of the general public, and are obliged to give full value in goods for the prices they receive, they are never heard to complain of their treatment. Their success continually depends on their ability to give their customers better bargains than can be obtained from any other part of the world, yet such a thing as an organized demand for better treatment is unknown. To find complaint, discontent and peremptory demands for favors in their worst and most unreasonable form, we must look to the United States, where taxation is levied without even the pretence of raising revenue, and is designed to allow manufacturers to exact all the way from 25 to 100 per cent. above the market price of their goods. Canadian manufacturers, in their further declarations regarding the tariff, illustrate the natural tendency to regard as rights,

favors long enjoyed. They seem to feel that they have a right to the protection accorded them at the expense of agriculture, mining, lumbering, and other self-supporting industries, and that they are merely seeking their own in asking greater favors.

What is and has been the result of these protection duties? Let the judges on the bench, in the law courts of our country, give the answer! The revelations which have come to light in the case of the plumbers, tack manufacturers, wholesale grocers and druggist combines have proven that, to a great degree, through the action, combination and forms of agreements in existence, almost every article used in Canadian homes to-day is augmented in price beyond its legitimate value, and the great consuming masses in the land have to bear the unjust burden. Let us recall the words of Mr. Justice Clute, in delivering judgment upon a certain druggist case, in June of 1906. This was an action brought by a wholesale druggist firm in Montreal to compel a firm of retail druggists to stick to an agreement regarding prices. The case was dismissed, on the ground that the agreement was an unlawful conspiracy interfering with the freedom of trade, and, in delivering judgment, he stated that this form of agreement was used not simply in this class of commodities, but it was the form adopted by the committees representing a great part of the wholesale and retail trade of Canada, and it meant that almost every article in common use was subjected to a hard-and-fast contract which set the

manufacturer's price, the wholesale price and the retail price, below which none can sell, and no one would be allowed to purchase who did not first become a member of the association and agree to sign the contract in question. He stated, further, that it was indeed difficult to conceive of a scheme more effective in destroying competition and enhancing prices than this agreement was. It was the form used by associations of retail and wholesale merchants in Canada, and included, to the extent of the membership of these associations, a very large part of the entire trade of Canada. The result is that, to the extent to which these associations are able to reach persons engaged in manufacture and trade, they will be able, absolutely, to control prices; not only to limit, but destroy competition; and, in effect, to declare that no one will be permitted to deal in the commodity who does not first of all bind himself to sell the same only at a certain price.

When we are brought face to face with conditions such as these—conditions by which every mouth, every family, and every household in this Dominion is being mulcted and penalized for the benefit of a few, is it not high time we were asserting our rights? No one can notice these developments and revelations without feeling that action such as this, fostered and encouraged by too many of our captains in the field of Canadian industry, must have a strong tendency to degrade the high character which should pervade the industrial and national life of Canada. The manufacturers of this country, in days gone by, prayed for a temporary shelter from the biting wind of foreign competition, promising as soon as they had gathered strength to stand alone; and by these tactics we have seen our farm labor stolen from us by a competition we could not meet. For the last twenty years we have seen our rural population in this Province steadily decreasing, and we remained silent. Now, however, when we see these protected interests clamoring for further favors, that they may be given a greater opportunity to prey upon us, is it not time to speak? It is useless to reason with them. The first object of our mission is to so impress our people that the attention of the nation will be focused upon agriculture to such a degree that there will be such a readjustment of national ideas as will place agriculture and its claims, to the best intelligence and highest skill of our people, in the very forefront of national thought; and, when this awakening is sufficiently emphatic there will then be no more hastening to the city, but a national revolt against the worship of manufacture and trade as being the only forms of progressive activity, and a revolt, also, against the false notion that wealth built upon these, at the expense of the labor and exertion bestowed upon agriculture, can endure.

Such a recognition on the part of the whole people, from the highest to the lowest, that the tillage of the soil is the natural and most desirable form of occupation, to which every other is subsidiary, and to which all else in the end must yield, is the first requisite. We must not shut our eyes to the fact that, to too great an extent, genius and ability has shunned the farm and is expending itself in the trades, the professions, in commerce, and the manifold activities whose favorable reactions filter back but slowly to the farm. While the cities are being continually replenished from the youth and vigor and the best brain of the farm, do we find our city youth drifting back to the farm again? This inquiry must meet with one reply! We are still clinging to the skirts of a civilization born of the city. It is very largely the men from our towns and cities who are shaping the legislation and directing the government of our country. The consequence is that, if there are any lines of manufacture in their constituency, when the personal interests of these firms are being considered, those representatives are as silent as the grave. This is one reason why: If we count a fair wage for the farmer and his family, his investment pays him scarcely any dividend, while manufacturers have an annual dividend of 17 per cent, or better. As the result of such a condition, we find small farmers, discouraged, are selling their holdings to the larger proprietors, who may thus more profitably substitute machinery for men. This country needs more workers on the soil, and we are never going to get them unless we can make our financial situation more favorable.

If we but grasp and master our problem aright, all this will change, and a larger comprehension of agriculture, as our main resource and our most dignified and independent occupation, will for the future direct to its just aim in the improvement of methods and increase of yield, the wisdom and the science and the willing hands of millions who may thus receive a just remuneration for their labors, and also be able to transmit to posterity an unimpaired inheritance.

Huron Co., Ont. THOS. McMILLAN.

I received your premium knife all right, and am well pleased with it. It is certainly a dandy.
DAVID K. BOSHART.

Waterloo Co., Ont.

HORSES.

LAMENESS IN HORSES.

CAPPED HOCK.

Capped hock is a term applied to a fluctuating swelling on the point of the hock. There are two kinds: (1st) synovial capped hock and (2) serous capped hock. The first, as the name implies, consists in distension of a synovial bursa. It appears as a tense, fluctuating swelling, situated on each side of the point of the hock. The bursa being anterior to the tendon that passes over the hock, cannot bulge at the center on account of said tendon. This form is caused by disease of the bursa, or by violent strain. It usually causes lameness, is tender to pressure, is quite easily noticed, and hence easy to diagnose. The second form is simply a serous abscess on the point of the hock, is caused by a bruise, usually by the horse kicking in the stall, on train board, etc., and the point of the hock coming in contact with the stall post, partition, etc. It is seldom that lameness is present, the usefulness of the animal is not often interfered with, but the presence of the tumor is unsightly and reduces the animal's value.

TREATMENT.—The first form is very hard to treat. The patient must be given rest; good practice to give a light purgative and low diet. The affected part should be bathed with hot water several times daily, and after bathing it should be rubbed with an anodyne liniment for a few days to allay the inflammation, after which repeated blisters will have a tendency to cause contraction of the bursa and a lessening of the tumor. Another method of treatment is to lance the sac and allow an escape of the synovia, and then apply a bandage, or compress and flush out the cavity twice daily with an antiseptic, as a three or four per cent. solution of carbolic acid. There is considerable danger of this treatment causing violent inflammation of the parts unless skillfully treated after the operation, hence unless the case be in experienced hands it is better to not operate.

The second form should be treated as an ordinary abscess. If only a small quantity of serum be present, its absorption may be caused by a blister, but if considerable fluid be present, the sac should be lanced and the cavity flushed out two or three times daily with an antiseptic until healed. Of course, the cause must be removed.

CURB.

A curb is an enlargement on the lower portion of the posterior border of the hock. It consists in a sprain of a ligament, called the calcaneo-cuboid ligament, which passes from the point of the hock to the cuboid bone at the lower part of the joint. Hyperdevelopment of the cuboid bone gives the hock an appearance simulating curb, but a close examination will readily detect the difference. Weak, sickle-shaped hocks are predisposed to curb, but the accident may occur to any horse. It is caused by the hind legs slipping forward and spraining the ligament. In horses that are predisposed it is easily caused by slipping, jumping, rearing, etc., etc., and while any horse may suffer, it is very seldom we notice a curb in a well-formed, strong hock, with a straight posterior border. Curb usually causes lameness in the early stages. It is not hard to diagnose. The horse will go more or less lame, and will usually rest the leg when standing. An examination will reveal a swelling on the lower and posterior portion of the hock, there will be abnormal heat in the part, and upon pressure the patient will evince pain. On exercise he is inclined to walk or trot as much as possible upon the toe.

TREATMENT.—The lameness from curb will usually yield to treatment readily, but the reduction of the enlargement is a slow process in most cases. The patient should be given rest and the usual constitutional treatment, consisting in the administration of a purgative, followed by low diet adopted. A shoe with the heel about an inch higher than the toe should be put on the foot of the lame leg. This keeps the heel elevated, and throws the diseased ligament in a state of repose. During the inflammatory stages, the long and frequent application of hot water, followed each time by the application of an anodyne liniment, as one composed of 2 ozs. tincture of opium, 2 ozs. chloroform, 1 oz. acetate of lead, 2 ozs. alcohol, and water to make a pint, will in a few days allay the inflammation and remove the lameness. While the lameness can, in most cases, be cured by this treatment, and the usefulness of the animal restored, there will be quite a visible enlargement remaining. This enlargement is hard to reduce, and if the patient be an animal of ordinary value and required only for ordinary work, it is often deemed advisable to put him to work and allow the enlargement to remain, but if he be a high-class animal, or if from any reason the owner is anxious to restore the parts to the normal condition, he must allow continued rest, and blister the part repeatedly in the meantime, keeping shod with a high-heeled shoe. The ordinary blister, composed of 2 drams each of biniodide of mercury and cantharides, mixed with 2 ozs. vasoline, and applied in the ordinary manner gives good results. If it is necessary to work the patient, and at the same time endeavor to reduce the enlargement, it can often be done. He should be shod with shoes slightly higher at heel than at toe, but the difference should not be more than 3/4 inch, as if too great there will be a danger of causing injury to other parts of the limb, by placing the foot in an unnatural position. An absorbent, as a liniment, composed of 4 drams each of resublimed crystals of iodine and iodide

of potassium, and 4 ozs. each of alcohol and glycerine, applied with smart friction once daily, will generally reduce the enlargement, but such enlargements are tedious to treat, and a great amount of patience must be exercised. "WHIP."

HORSES IN THE UNITED STATES.

Horses are increasing fast in the United States, as evidenced by the Government report for the first of the current year, giving the number at 19,746,853, an increase of 1,213,605, as compared with January, 1906. On January 1st, 1902, there were 16,533,224 horses in the United States, which number increased 3,213,359 head in five years.

While this increase has been most remarkable, there has been no accumulation of surplus. The expansion in commercial and industrial lines, the establishment of great manufactories, the increase by millions of acres in the areas devoted to agriculture, have all contributed to broaden the demand for horses faster than they can be produced. Horses are increasing fast in the United States and Canada, but we are not producing them fast enough yet to be in much danger of having an over-supply. The general demand for horses seems to increase year by year, and the standard of excellence of market classes continues to improve. In no line of live stock at the present time is there brighter money-making prospects than in horse-breeding. But promiscuous breeding will not pay; only classified offerings of good quality will pay a reasonable profit on the cost of production. Nondescripts are not wanted.

LIVE STOCK.

HOW SHALL WE FEED?

Perhaps the question of greatest moment to many at present is "What shall we feed?" To such, it is difficult to offer suggestions, and so, for the time being, we shall consider briefly how we shall use the fodder at hand. Seldom has this question so absorbed the attention of feeders of live stock in general as at the present. Not that this problem has not always been deserving of more thought and application of intelligence, as there has always been broad scope for improvement of methods followed, but because conditions render care and judicious handling of the supply at hand imperative with the vast majority of feeders.

While we are suffering a monetary loss in a few instances, through the present scarcity of fodder directly, the effect must not be regarded solely as a calamity. Beneficial results are bound to accrue. The skillful handling of the fodder at hand, necessitated by the scarcity of the same, will impress lessons on the minds of many feeders not soon to be forgotten. In this particular section, it would seem the shortage has come at a most inopportune time. We have previously been blessed with abundance of fodder of all kinds; this year, the reverse. As a direct result of plenty, very easy methods of feeding have been practiced, and always a surplus; while another direct result has been the lack of discrimination in the quality and number of young stock reared. As a result just now, when fodder is scarce and prices for beef very flat, there is an influx of youngsters. While the theory of selecting when coming into milk is good, we believe time is too short to risk raising any but those from the very best dams. However, there is now afforded an excellent opportunity to make selections of what we have on hand. If some have to go, let it be the poorest; let the weeding be shrewd, and, hereafter, let the selection of calves for rearing be prudent—raising fewer, but raising better than formerly.

With us, the shortage was noticed early in the season, only to be more forcibly impressed at time of harvesting. As a result of the early drouth, pasturage was very short, and remained so throughout the season; consequently, where pastures were not supplemented, the stock enter the winter season in thin condition. There has been a severe drain on the constitution of many big-producing matrons, which will surely manifest its effect throughout the winter. In fact, it will require intelligent feeding, regardless of stores at hand, to place many herds in proper condition for a profitable season's production. With many, the problem is, "Will it pay me to supply my herd with the quality and quantity of feed necessary to put them in this condition?" Fodder being very dear, hay likely to be anywhere above eighteen dollars, and the more concentrated feedstuffs equally as high, bran at twenty-four dollars, corn at thirty dollars per ton, the question is one demanding careful consideration. To the owner who has a supply of fodder sufficient on hand, this, to my mind, should be no perplexing problem. By all means feed the stock as they are deserving, and do not be tempted by the prevailing high prices for fodder. To the owner, however, who has not a supply of fodder sufficient to winter the herd on hand properly, the question is more serious. In the writer's opinion, the best course to pursue in this case would be to weed the herd of all but profitable animals, or, rather, to the number that could, by most economical handling of fodder at hand, be wintered well. Even at the exceptionally low prices ruling for surplus stock, we believe any such

to be offered can be handed to very good advantage by exercising keen foresight in disposing of these.

But what of the supply of fodder at hand? This should receive first consideration. On our farm, we very fortunately have quite sufficient feed for all purposes, with the addition of such feedstuffs as we do not purchase. We are weeding our stock to some extent; but rather than turn them off at "canneries," as many are doing, we are finishing these animals at home, a better policy, we think, than suffering them to go at sacrifice prices and selling a little fodder and soil fertility.

We have a fine supply of corn silage, and shall make this the basis of our ration, not striking out very much from our usual plan of feeding. Briefly, this will be the menu for a day: We feed our cows that are milking, approximately sixty pounds of silage and mangels per day, fed in two feeds, thirty pounds of each mixed. Some individuals eat more than this amount, others less, but, as near as I can estimate, sixty pounds per cow per day is the amount consumed. The mangels will not last throughout the feeding season; when finished, more silage will be fed. We feed one feed of this mixture along with half the allowance

of meal per day, the first feed in the day just after milking. This feed is disposed of by the time we return after breakfast, and, immediately, they receive a feed of straw. We do not cut or mix the straw fed, for, after the cows have had a feed of silage, a feed of straw does not seem to lack palatability, and, as practically all is disposed of, there seems to be little to be gained. We then water and bed down, and leave them pretty well to themselves until feeding time again. At four o'clock they are again fed silage and roots and meal. This followed by a feed of clover hay. As to the quantity of hay fed, we feed about all they will clean up nicely, while the dry cows do not receive so much. The dry cows do not receive any mangels, about forty pounds of silage per day being their allowance. As a meal ration for these dry cows we are using a by-product of a starch factory in adjoining county. In combining the meal ration for the milkers, we aim at increasing the protein content of our ration, as we are supplying the carbohydrates in bulk in our ration in the roughage grown upon the farm. Protein being the most expensive component of a ration, much judgment must here be exercised. Still, in balancing a ration, one very often has to suit his

ration to the supply and prevailing prices of fodder and feedstuffs at hand, rather than theoretical calculations. The supply and prevailing prices of feed of all kinds at present must make a great difference with many in the way they combine the meal ration. We are using principally gluten meal, combined with oat and barley chop and bran, when it can be procured. Of the mixture, two parts oats and barley, two parts bran and one part gluten meal, we feed about six pounds meal for twenty pounds milk per day, those giving more milk receiving more meal, any giving less receiving less meal.

Economy will necessarily be the watchword in handling all feed throughout the feeding season, and even the shrewdest economy will leave little profit in winter dairying; but, withal, the milkers must not be stinted.

Careful and judicious handling of the supply of feed at hand will work wonders in the maintenance of the herd, while lessons will be gleaned in feeding economically that will be surprising in their simplicity and application in years to follow.

Dundas Co., Ont.

CLARK HAMILTON.

The Maritime Winter Fair at Amherst, N. S.

The Maritime Winter Fair, held at Amherst, Nova Scotia, Dec. 2 to 5, was a decided success; attendance, the largest in the history of the Show, and exhibits in nearly every class more numerous and of better quality than ever before.

The evening meetings were well attended, and the addresses of a very high order. The Monday evening meeting was taken up with addresses of welcome from the Mayor of Amherst and the Warden of Cumberland County, which are replied to by Hon. S. E. Reid, Commissioner of Agriculture of Prince Edward Island, and the address of Gov. McKinnon, of Prince Edward Island, who formally opened the Fair. Addresses were also delivered by Hon. W. T. Pipes, Attorney-General of Nova Scotia; Hon. C. W. Robinson, Premier of New Brunswick, and Prof. Cumming, of the Nova Scotia Agricultural College. Tuesday evening, Staff Capt. Jennings, of the Immigration Department of the Salvation Army; Mr. John Gardhouse, on "Care and Management of Sheep," and Mr. Duncan Anderson, on "The Production of Beef." Wednesday evening, addresses were delivered by T. H. Mason, on "The Hog as a Paying Market for the By-products of the Farm," John Gardhouse, on "The Horse as a Revenue Producer on the Farm," and L. H. Newman, on "The Place of the Canadian Seed-growers' Association in Maritime Agriculture," and Mr. L. F. Jarvis, on "Ideas to be Sought After by Breeders of Poultry." Thursday evening, Messrs. Jarvis, Mason and Anderson delivered interesting and instructive addresses to a large and attentive audience; and Rev. Father Burke, after an eloquent and witty address, in which he referred to the many prizes taken by his Island home, presented the cups, trophies and special prizes to the exhibitors who had been fortunate enough to win them.

The show of beef cattle was considerably larger than last year, and fully as good in quality. Perhaps there were no better cattle shown this year than last, but there were fewer poor ones, and the large, coarse ox has entirely disappeared from our shows, as he is fast doing from the stables of the country. Nearly all of the cattle were brought out in show condition, and it is certainly a credit to the exhibitors that in this year of poor crops and high prices of grain, they have fitted their cattle in really good shape for the showing.

Competition in most of the classes was keen, and often those standing by the ring-side were in doubt as to where the red ribbon should go; but Judge Duncan Anderson, with his keen eye and long experience, both as a judge and a feeder, placed the awards, and gave his reasons to the satisfaction of all. As the judging progressed, interest among exhibitors, herdsmen and those by the ring-side became more intense. First the cattle were shown in their own classes; then the first-prize animals in different classes were brought together in the special classes, until it was narrowed down to the best pure-bred beef animal, any age, for the silver cup donated by Sir Frederick Borden, which was won by C. R. H. Starr & Son on their Shorthorn cow, Marr Beauty, which has captured so many premiums for them. Then came the selection of the best grade of any age, for the cup donated by Hon. Dr. Wm. Pugsley. This was won by W. W. Black's grade Hereford two-year-old steer. Then came the best beef animal, any breed or grade, under two years old, for the "Giles" Cup, which was won by Harold Vernon in 1903, by W. W. Black in 1904 and 1905, by Edwin Forrest in 1906, and this year by Fowler Bros., of Amherst Point. Then came the grand championship for the best beef animal of any breed or grade, any age. This was won by Starr's invincible Marr Beauty, and, amid enthusiastic applause, the red ribbon was again placed over the back of the white cow.

W. W. Black, of Amherst, the indefatigable superintendent of the Fair, a man who manages to keep a cool head and an unruffled temper in all sorts of conditions, shows a splendid string of thirty head—eleven Herefords and nineteen grades—not one of which any exhibitor would need to be ashamed of, and the bloom and fettle in which they were shown reflect the highest

credit on his capable herdsman, Wm. Robertson. Mr. Black won all the first prizes in the pure-bred classes, and most of the seconds. In grades, he won first on three-year-old steer, first on two-year-old steer, first on yearling steer, first on senior calf, and first on junior calf, second on grade cow, first and fifth on two-year-old heifer, second on senior yearling, first on junior yearling, and third on heifer calf, also sweepstakes grade steer any age, grand championship grade male or female, any age, thus winning the Pugsley Cup. C. A. Archibald, of Truro, N. S., showed thirteen Shorthorns in beef classes and one Ayrshire heifer in the dairy test. Mr. Archibald won first and second on junior yearling steer, first, second, fourth and fifth on two-year-old heifer and first on junior yearling heifer, and first, second, third and fifth on heifer calf, second on Shorthorn female, any age, with a seven-months-old calf. We predict an interesting future for this little roan, Katrina. He also won two of the special prizes given by the Amherst Boot & Shoe Company.

C. R. H. Starr & Son, Port Williams, N. S., showed eight Shorthorns, most of them of excellent quality, and brought out in the pink of condition. As has been stated, Mr. Starr won everything in sight with the white cow, Marr Beauty. He also won third, fourth and fifth on Shorthorn cow, third on two-year-old heifer, and second on yearling heifer.

James B. Etter, of Westmoreland Pt., and Hazen Etter, of the same place, were strong exhibitors in the Shorthorn classes, and the yearling steer, White Cloud, took first in his class, and was good enough to make things interesting for others in the competition for the championships.

Frank R. Congdon, of Waterville, N. S., showed half a dozen Galloways.

Donald McIntyre, Fort Lawrence, a new exhibitor, showed a Shorthorn heifer and two grades, and brought his exhibits out in good shape.

Ernest W. Embree, East Amherst, another new exhibitor, won fourth on grade steer calf, and also a special prize of fifty rods of fencing.

Other exhibitors of cattle were: Chas. W. Forrest, Amherst Point; Laurie Anderson, Sackville; Albert Anderson, Sackville, Thos. F. Etter, Westmoreland Point; John B. Roper, Charlottetown, P. E. I.; Geo. M. Holmes, Amherst, and Fowler Bros., Amherst Point, who have been referred to above as the winners of the much-coveted "Giles" Cup.

The exhibit of sheep was fully up with last year, both as regards numbers and quality, and the judge, Mr. John Gardhouse, of Highfield, Ont., had indeed a busy time, but placed the awards to the satisfaction of exhibitors and spectators.

Logan Bros., of Amherst Point, put up the largest exhibit, showing twenty-five head of Shropshires and grades, and won first place in every class in which they exhibited, and most of the seconds. The other principal exhibitors were: Jas. E. Baker & Sons, Barronsfield, N. S., and Fred S. Black, Amherst, with Oxford Downs and grades; Albert Boswell, Pownal, P. E. I., and Cephas Nunn, Winslow Road, P. E. I., with Lincolns and grades; Jas. T. Stewart, Amherst Point, and Olive C. Saunders, Trille, P. E. I., and T. W. Keilor, Amherst Point, with Shropshires and grades; Henry Leithead, Lyon's Brook, P. E. I., and Charles Symes, of Minudie, N. S., showed Cheviots.

Some of the trophies competed for in the sheep classes were: The cup donated by Senator Mitchell for best pen, including one two-shear ewe, one shearing ewe, and one ewe lamb, won by Logan Bros.; the Hewson Woollen Mills prize of one lady's costume length of tweed, won by Jas. T. Stewart, and the suit of tweed, by the same company, won by Logan Bros.

The exhibit in hogs was by long odds the best ever put up at a Maritime Province Show, and more numerous than last year by about thirty, the quality being away ahead of any previous Show. As it is to be expected, the lion's share of the prizes went to the "Garden of the Gulf," the Island breeders being here in force, and with exceptionally good hogs.

Among the exhibitors in the hog classes were: Peter Brodie, Little York, P. E. I., with nine Berkshires and

two grades. Mr. Brodie won first and second prizes in every class in which he had entries, also the cup donated by J. E. Wood, of Halifax, for the best three bacon hogs of any breed. While at the Fair, Mr. Brodie sold two sows to go to Jamaica. Leonard Court, of Donaldson, a new exhibitor, showed eight Chester Whites, winning four firsts, two seconds, and one third prize. Chas. M. Shipley, East Amherst, exhibited three Yorkshire grades, winning third and fourth prizes in the classes in which he was entered, also ninth in the block test. G. G. Lowther, of Truemanville, was here for the first time with hogs, showing seven grades, and taking second on sow under fifteen months old, also winning in the block test. A. A. McBeath, of Marshfield, P. E. I., exhibited the pair of Yorkshire sows that won first at Charlottetown in October, and second in export bacon class, and held his own at Amherst by winning first and second in pure-bred classes, and a special for best breeding sow over six months. Mr. McBeath considers them too good to enter in the block test. Roper Bros., of Charlottetown, showed eight Yorkshires, seven Tamworths, eight grades and one Chester White, and won a big slice of the prizes, also the Dominion Swine-breeders' special for best sow under fifteen months, and the Blatchford special for best Tamworth sow under fifteen months. Wm. Gibson, of Marshfield, P. E. I., for the first time showed five Tamworths, two pairs of which were prizewinners in the Charlottetown Exhibition in October. Mr. Gibson won first and second on sow under nine months, first and second on barrow under nine months, and second on sow under fifteen months, also first and second in the block test, Mr. Brodie taking third, sixth and twelfth. C. W. Holmes, of Amherst, won second and third on Yorkshire barrow under nine months, third and fourth on barrow under six months, second and fourth on sow under twelve months. Mr. Holmes is also a strong exhibitor in the poultry department. Other exhibitors in the hog classes were: Logan Bros. and Jas. T. Stewart, Amherst Point, with Yorkshires; J. R. Semple, Brule, N. S., with Berkshires, and Jas. E. Baker & Son, Barronsfield, with Durocs; Charles Symes, of Minudie, with Berkshires; Leonard Court, of Donaldson, P. E. I., and Geo. M. Holmes, of Amherst, with Chesters.

The show of poultry was not up to last year in numbers, but was really better in quality, the Barred Rocks, White Wyandottes and Buff Orpingtons being especially fine. The utility classes were well filled with very superior specimens. Messrs. Hillhouse, who judged the utility classes, and Jarvis, who judged the open classes, expressed themselves as more than pleased with the steady improvement the poultry exhibit had made ever since the inauguration of the Fair. The department was well managed by Mr. J. P. Landry, of Truro, N. S.

The show of dressed poultry deserves especial mention, being well filled in all the classes, and the quality of the exhibits being vastly superior to former years. Some of the largest exhibitors were: C. W. Holmes, of Amherst, who showed five Barred Rocks, winning two firsts, one second and one third prize; in White Plymouth Rocks, four birds won two firsts, one second and one third prize. In White Wyandottes, Mr. Holmes showed four birds, also Silver-laced Wyandottes, Faverolles, Anconas and Indian Games, and was a winner in almost every class, and, also, in utility and dressed-poultry classes. Seth Jones, of Sussex, N. B., also showed a number of breeds and exhibits in the utility and dressed-poultry classes, having some splendid specimens in Barred Rocks and Brown Leg-horns.

Wm. Robertson, Amherst, was a strong exhibitor in Barred Rocks and in the utility and dressed-poultry classes, and won the medal donated by C. S. McLeod, Amherst, also the china tea set donated by the T. Eaton Co. for the best display of dressed poultry. Other exhibitors were: Walter McMonagle, Sussex; Craig Bros., Amherst; Edgar Ayer, Sackville, N. B.; B. A. Wilkins, Halifax, and Ernest Embree, East Amherst.

Samuel Harrison and J. R. Harrison, of Maccan,

were among the principal exhibitors of turkeys and geese.

The Seed Department was, perhaps, the most notable improvement of any in the whole Fair, being fully double as large as ever before, and vastly superior in quality, especially in regard to purity of seeds. Competition was keen in all classes. The display of grain in sheaf and in bags made by Mr. Donald Innes, of Tobique River, N. B., was one of the drawing features, and the quality of grain as well as the taste in arranging the exhibits, reflect credit on Mr. Innes. He won the Steele-Briggs Cup for the best display of seeds made by a member of the Canadian Seed-growers' Association. Other principal exhibitors in the seed classes were: Peter Brodie, of P. E. I.; H. B. Parlee, Sussex, N. B.; John R. Harrison and Samuel Harrison, Macan.

The fruit exhibit was much smaller than last year, and some of the classes hardly up in quality. Prince Edward Island had a fairly good sample from each county. Five New Brunswick counties were represented; some of them with very creditable exhibits. Only eight Nova Scotia counties were represented, but the quality of most of the exhibits was good. The apples from King's, Hants and Annapolis Counties, as would be expected, were of very fine quality, being well grown and clean; but, owing to the cool, cloudy summer, the coloring was not quite so good as one would like. Mr. N. N. Hamblen, of Durham, N. S., who superintended this department, deserves credit for his willingness to oblige spectators, being always in his place, and giving all information asked for.

In the Dairy Department, or Dairy Test, there were not quite so many exhibits as last year. Logan Bros., of Amherst Point, N. S., had five Holsteins in the test, and won first, second and third in cows, and first and second on heifers. Fred. S. Black, of Amherst, showed two Ayrshire cows, one Ayrshire heifer and one grade cow, winning first and second on cows, first on heifer, and first on grade cow. H. S. Pipes, Amherst, showed three Jersey cows and two Jersey heifers; C. A. Archibald, one Ayrshire cow; W. N. Boomer, Amherst, two grade cows.

The Canadian Guernsey Breeders' Association and the Canadian Seed-growers' Association met during the Fair. The Guernsey breeders elected the following officers: President, Walter McMonagle, Sussex; Vice-President, James Roper, Little York, P. E. I.; Sec.-Treas., Howard Corning, Chegoggin, N. S. Directors—John McDonald, Shubenacadie, N. S.; R. Robertson, Nappan; John Roper, P. E. I.; Wm. McCready, Jacksonville, N. B.; D. G. McKay, Heathbell, N. S.

END OF RANCHING IN QU'APPELLE VALLEY.

The cattle industry in Qu'Appelle Valley, Saskatchewan, is rapidly giving place to grain-farming, and soon the only relic of the olden times which is left near Regina will have disappeared. Grain-growers have invaded the country. On the north side of the valley, where formerly thousands of cattle could graze unmolested by the farmer and his crops, there are now quarter-sections taken up everywhere, and the rancher has to herd his stock, making the business of fattening beef too expensive. Another chapter closes with the passing of the range.

THE FARM.

TOWNSHIP CANADIAN CLUBS PROPOSED.

Editor "The Farmer's Advocate":

We can scarcely glance over a paper at this season of the year without noticing an account of some new Canadian Club being formed in a city or town, or the revival of a former one, and the great good it is doing by increasing patriotic interest in national and municipal questions, together with the levelling down to a great extent of partisan, religious and business prejudices. One feels compelled to ask why could not and should not rural Ontario more quickly follow the splendid example of our urban friends? There may be drawbacks in the country, such as distance, to its success, but they are fully compensated by the advantages. At present there is no opportunity, at least in this district, for farmers to meet and discuss any questions of the day, save at the annual meetings of their respective political parties, but at these they hardly dare express themselves at variance with their leaders. Surely there should be some chance for the twentieth-century farmer to explain his stand on the tariff and other vital questions, so that our legislators would know something of his opinions.

In an educational sense, would it not prove a great boon, especially to young men, helping us to express ourselves in a clear and suitable manner? There is at present little opportunity in that direction; for, no matter what may be said to the contrary, the decadence of stump speaking is to be deplored. True, it has been claimed that most elections have been won to a great extent of late by quiet canvassing; but personal canvassing is really at the bottom of much of the bribery carried on throughout the country, and which will continue until candidates are compelled by public opinion to stand on their past record, or on the platform they lay down in their speeches.

No one should demand that his representative should be a modern Cicero, or a heaven-sent orator, but yet when a man receives \$2,500 sessional allowance, he owes it to his constituents to explain to them, at least once

a year, what he has helped to do for them, and his reasons for supporting or opposing the different bills or measures that have come before him.

Few people realize how much might be learnt by meeting as a Township Canadian Club and discussing the various farming methods, together with improvements in roadmaking and other municipal affairs. To sum up, the advantages to be derived by forming Canadian Clubs are as follows:

1st.—The encouragement of independent thinking by the farmer.

2nd.—The educational benefits derived by giving the young man a chance to express himself suitably in public, as well as hearing intelligent men speak.

3rd.—The revival of stump speaking, and the consequent gradual elimination of personal canvassing.

4th.—The advantage the conscientious and faithful M. P. will receive by having a chance to explain his stand on different public questions.

5th.—The added interest that will take place in regard to advanced methods in farming and municipal improvements.

FARMER'S SON.

East Middlesex, Ont.

A BAD NEW WEED.

Editor "The Farmer's Advocate":

In your issue of November 7th there appeared a very valuable article, in which a newly-introduced weed of the mustard family was very thoroughly described. I would like to endorse, most emphatically, what the writer (Mr. Dearness) has said about this weed. It is one which has been heard of from two or three different sections of Ontario during the past summer, and in each instance seems to give a great deal of trouble. The seed traces back to the lucerne seed which is being imported from the Old Country. I understand that in Russia, where lucerne is grown extensively, it is one of the most vigorous and most determined weed that the peasant has to contend with. The best way to cope with a weed of bad reputation, is to attack it before it attacks you, otherwise the battle will be a hard and strenuous one. If we in this country would see to it that what weeds we have were prevented from spreading, and what weeds that we haven't got were prevented from being introduced, the weed problem would be practically solved. There are three maxims which every farmer should keep in mind this coming season, e. g.: Fight, Fight, Fight.

1st.—Fight those weeds that you have got.

2nd.—Fight those weeds that you are getting.

3rd.—Fight those weeds that you haven't got.

For the first, "Thorough cultivation." For the second, "Pull and spud, or otherwise destroy before

carry the boat along, while, if it were flat, the wind would slip off without forcing the boat ahead. Perhaps Prof. Reynolds, or someone who has given this matter some thought, would favor us with some suggestions on this matter.

York Co., N. B.

WM. JAFFREY.

RE COUNTY ROADS.

Editor "The Farmer's Advocate":

I have read with considerable interest the letter by D. L., in the issue of November 11th, on Oxford County roads. D. L. would leave the impression that the work of the council on the county roads left nothing to be desired, whereas to my mind, and to many, it is a piece of high-handed extravagance. Every progressive farmer wants good roads, and in Oxford County the roads have improved in keeping with the farms and buildings, and why the county should be put to such an added expense it is hard to understand.

D. L. tells us that the estimated cost of the 260 miles of county roads is \$354,000, or \$1,361.50 per mile; yet we find that under the most efficient management of the committee of the County Council and two capable inspectors, the road which they have completed this summer has cost about \$3,500 a mile, or the total cost of the 260 miles when completed will be \$910,000, or nearly a million dollars. Thus, the 100-acre farm, which, according to D. L., would be taxed for 64 cents per year, will be taxed for nearly three times that amount.

Out of 260 miles of road to be built, we believe that about eight miles was completed this season, so that it will take 32½ years to finish it.

Another fact is that in the construction of four miles they ruined three or four times that amount of side lines and concessions by hauling material.

It is comforting to know that the House of Refuge is soon to be paid for, but we fear that by the end of seven years there will be need of large addition for the accommodation of the over-taxed farmers.

Oxford Co., Ont.

J. C. S.

GARDEN & ORCHARD.

HORTICULTURAL DEVELOPMENT IN ONTARIO.

[By Prof. H. L. Hutt, O. A. C., Guelph, before the Ontario Fruit-growers' Convention, November, 1907.]

The wonderful progress made in the various branches of horticulture in this Province during the past decade is something that very few fully realize. I wish to call attention to a few points in this connection, for it is by considering the progress in the past that we have come to an understanding of our present position, and are able to form some idea of the outlook for the future.

Horticultural development in Ontario has been characterized of late years by specialization, organization and co-operation. No doubt the rapid progress of late has been brought about largely by specialization and co-operation, and the results already obtained certainly augur well for the future.

As an indication of the recent progress, let me call your attention to the numerous and varied horticultural organizations we now have in Ontario, most of which have been organized within the past ten or twelve years.

PROVINCIAL ORGANIZATIONS.

In fruit-growing, besides our Provincial Fruit-growers' Association, which was about the only horticultural organization heard of about ten or twelve years ago, we have a number of local organizations in the large fruit centers. Then, we have another Provincial organization, the Co-operative Fruit-growers of Ontario, and about forty local co-operative associations, actively engaged in the handling and marketing of the fruit crop; or, in all, about fifty organizations under the head of fruit-growing.

Then, we have the Ontario Vegetable-growers' Association, another Provincial organization, and about twenty-five local vegetable-growers' associations, organized within the past two or three years.

In floriculture, we have what is called the Canadian Horticultural Association, an association made up largely of the commercial florists of On-



Group of Imported Berkshire Sows.

Included in dispersion sale of H. M. Vanderlip, Cainsville, Ont.

they go to seed." For the third, "Send a sample of your seed grain to the Seed Branch, Dept. of Agriculture, Ottawa, and have it tested for purity, free of charge." Especially would I recommend the latter to all those who are thinking of sowing lucerne. Let us see if we cannot keep this new pest (*Eruca sativa*) out of this country of ours. J. A. HAYES, Seed Commissioner's office, Calgary, Alberta.

A QUERY IN WINDMILL CONSTRUCTION.

Editor "The Farmer's Advocate":

Being secretary of the St. Mary's Village Water and Fire Commissioners, who are installing a water system, and expect to have a windmill for pumping, I would like the manufacturers to give a reason, through the columns of your paper, why the fans are made concave. It is my opinion that there is a great loss of power, and my reason is that they hold the wind, instead of letting it slip off, as it should do to revolve the mill. It is just the opposite to what is wanted in a sail-boat; when it is tacking, the sail is allowed to bag so that it will hold the wind and

tario, who also have local organizations in some of the largest centers of the trade, as they have here in Toronto. These associations are all made up of those more or less commercially engaged in one or more of the branches of horticulture.

Then, there are the amateur horticulturists, with their Provincial organization and sixty-six local horticultural societies in various parts of the Province—in all, about one hundred and fifty purely horticultural organizations.

There is not another Province in the Dominion, nor State in the Union, that can compare with us for completeness of organization. Does not all of this indicate that our people are becoming alive to their best interests, and are uniting so that, by mutual co-operation, they may make still more progress in the future? I firmly believe that, because of such organization and co-operation, the progress of the next ten years will be many times that of the past ten.

I regret that as yet we have not full or reliable statistics as to the status of these various industries. Both the Provincial and Federal Governments are considering the problem of getting such statistics, and I trust that before long these figures will be available. The fruit statistics presented by Mr. A. W. Peart at the last Dominion Conference of Fruit-growers gave us a little idea of the value of the fruit industry of the Province. The capital value of the fruit industry is estimated at between fifty-five and fifty-six million dollars, and the annual value of the fruit trade is put at about \$8,000,000. This is merely the fruit-growing end of it, to say nothing of the many allied industries.

The canning industry affords a good illustration of the development and progress of some of the allied industries. Fifteen years ago there were only six canning factories in Ontario; now there are sixty-six, and the number is increasing every year. These factories employ about seven thousand hands, and pay out for produce about \$800,000 a year. The establishment of so many canning factories within the last few years is a most hopeful sign of the progress of the times. They afford a ready means of disposing of a large part of the crop, whereby it can be distributed to all parts of the country and made use of at all seasons of the year.

Regarding the vegetable-growing industry, we can get, as yet, no reliable statistics, but I think I am safe in saying that one phase of the industry, that of forcing crops under glass, has doubled many times over during the last five years.

Commercial floriculture is another branch of horticulture that has made wonderful strides within the last few years. It has been estimated that this trade has increased four hundred per cent. during the past ten years, and now amounts to about \$2,000,000 per year.

I need not say more along this line. I refer to it merely to show how horticultural work is specializing and developing. Fruit-growers are specializing even in the culture of certain classes of fruits. Vegetable gardeners are specializing in field and forcing-house crops. Florists are specializing in the production of cut flowers and decorative plants. While the ever-increasing number of enthusiastic amateurs in both town and country, interested in all branches of horticulture, are giving more attention to town and country gardens or civic and rural improvement. And for all, in each line of work, the outlook was never more promising.

There are, no doubt, a few dark clouds in the sky. The San Jose scale has come in, and appears to be going to stay. But this only means that the men who do not spray will have to go out of business, and the wide-awake, aggressive and progressive growers, who wage war on this and all other such pests, are going to grow more and better fruit.

The failure of the railroads in providing adequate facilities for handling the fruit crop is a matter that was well shown up lately by a few of our leading fruit-growers before the Railway Commission. Such things will be remedied, and the sooner the better for all concerned. There will always be battles to fight, but such fighting keeps us keen and on the alert. If you will permit a personal reference, I may say that when, fifteen years ago, I was appointed Horticulturist at the Ontario Agricultural College, I was the first in the Dominion to outline and teach a regular course in horticulture. And for years, until the School of Horticulture was opened in Nova Scotia, ours was the only institution in Canada giving instruction in horticulture.

At that time, fruit-growing, because of the commercial importance it had attained, naturally overshadowed the other branches of the subject, and vegetable-gardening, floriculture, and landscape gardening, were looked upon more as side issues, and were treated on our College curriculum more from the standpoint of the amateur. But such is not the case to-day. These one-time minor features in the horticulture of the Province have made such wonderful advancement during the past few years that none of them care to take second place even to fruit-growing.

The development and specialization in horticulture and the commercial interests concerned are opening up extensive spheres for our young men, and the demand on our educational facilities increases in proportion. The introduction of agriculture and horticulture in our High Schools; the development of our fruit experiment stations; the extension of our co-operative work, in which there are already over six thousand experimenters engaged; the establishment of our new Horticultural Experiment Station in the Niagara District, with improvement of facilities in our own College which we are looking for, as well as the kindly co-operation of the Experimental Farm at Ottawa, and the new colleges in the other Provinces—all these should afford to the rising generation inspiration and equipment for the work in which they are to engage. And the horticulturist of the next ten years, whether fruit-grower, vegetable-grower, or florist, is going to have an immense advantage over his predecessors of the past decade.

A CANADIAN FRUIT LIST.

Editor "The Farmer's Advocate":

The Horticulturist of the Central Experimental Farm would be grateful to individual Horticultural Societies or Farmers' Institutes for assistance in preparing a complete list of varieties of Canadian fruits, by sending to him the names of any seedling or cross-bred fruits of Canadian origin which should be recorded. It is especially desired to get information regarding local or unnamed seedlings of merit. Please send, if possible, the originator's name, the date of origin, the name of the place where originated, a description of the fruit, and any other information regarding it. Any or all of these particulars would be appreciated. Even if the name and address only of the originator were sent it would enable us to correspond with him and get further information. The Horticulturist will be glad to examine and report on the merits of any new fruits which may be sent to him. Letters and mail parcels under five pounds in weight may be sent free of postage. W. T. MACOUN, Horticulturist. Central Experimental Farm, Ottawa, Ont.

POULTRY.

A WOMAN'S EXPERIENCE WITH POULTRY.

Editor "The Farmer's Advocate":

We have taken "The Farmer's Advocate" for a number of years, and like it better all the time. I want to give my experience in keeping fowl. We have kept hens on a small scale for twenty years, but have never paid such particular attention to profits as this year. I started in November 1st, 1906, with 16 hens and 11 pullets. I didn't get any eggs until about February 1st, 1907, but from that time till November 1st of this year my hens laid 150 dozen eggs, for which I received the sum of \$35.25. Now, as I killed off 11 hens in June, since that time I only had 16 hens, and I think 22 would be the average of my flock all the year around. You will see that my hens brought me over \$1.50 each, which I think is a very good showing. I fed whole grain in the morning—never more than three pints to the flock of 27—about 1½ pints at noon, and about 2 qts. hot mash at night; the greater part of the cold weather I fed Indian corn in the morning. I firmly believe it to be the best food to make hens lay, if used sparingly. But I have had very good results from wheat and other grain fed hot. Our henhouse is 12 x 16 ft., with cement walls 2 ft. high, the rest double boarded, with two large windows in the south. I can never get my hens laying before the middle of January, as every year I make the mistake of having them too fat, owing to not having a proper place to keep my fattening fowl, but just feed them all together. I always keep plenty of grit and fresh water before them, but they scarcely ever get any meat, though I believe meat is a very necessary part of their food.

I do not write this in a spirit of boastfulness, but just to show what can be done with a small flock, and I think that with the same management (taking care to keep them clean and dry) the same results may be obtained. Now, hoping you may find space for my short letter, and wishing you greater success than ever the coming year. M. E. L. Haldimand Co., Ont.

GUINEA MALE AND FEMALE.

Editor "The Farmer's Advocate":

In reply to S. L.'s question re guinea fowl, the birds are exactly the same in color and appearance, but their voices differ. The cock bird has one prolonged sound, like "Kurr - - -". The hen's call to her mate is commonly known as "Buckwheat, buckwheat," etc., or "Come back, come back"—the wheat part in a much higher tone than the other syllable. I have raised these birds, and know this to be the correct answer. WM. H. HALL. Parry Sound, Ont.

[Note.—"Lash," Kent Co., sends a similar answer, but adds that the male bird has larger wattles than the female.—Editor.]

ROOSTING COMPARTMENTS.

Editor "The Farmer's Advocate":

In your issue of Sept. 19th last there was a description, by Mr. A. F. Hunter, of the curtain-front house owned by Prof. Gowell, Maine Agricultural College. In this house the compartments are each 20 feet by 20 feet, making 400 square feet floor-space, and the roosting apartment the full length of the back wall, 4 feet 10 in. wide, containing three roosting poles. Now, would this not be a very inconvenient roosting place from the operator's standpoint? Very often a poultry-keeper requires to handle his birds at night, and it would be simply impossible to reach the back row in this case. Then, for removing the droppings, it would be a tedious, slow operation, reaching so far back. It may be argued that, in order to accommodate 100 birds in a room 20 x 20, it is necessary to have three perches. Well, this raises the question, Are not 100 hens too many for a house of this size? It may give good results (and evidently does) where the best of skill and care are at work, but I would say, let the average farmer, with his time and skill, operating upon several subjects, be very chary about putting up 100 hens in a pen 20 by 20 feet. But, if it is necessary or desirable so to do, would not a longer and narrower building answer the purpose better? Say a pen 18½ by 30. In this size, two roosts across the back would equal in length the three roosts across the 20-foot pen. There are other reasons why the narrower pen gives best satisfaction. The hens naturally work the litter towards the dark side, and the operator is kept constantly kicking and raking it back to the front. This work is reduced to a minimum in the narrow pen, because the whole pen is light. This has reference to the open front. When the litter must be brought forward, it is less work to bring it across a 12 or 14-foot pen than a 20-foot one. Then, the sun, that great cleanser and disease-germ destroyer, has full action upon every portion of the narrow pen.

In building, there are many things to observe, in order to get the best results and have the greatest possible convenience. It is too much to expect that we may ever reach perfection, but we want to come as near to it as possible. J. R. HENRY. Wentworth Co., Ont.

[Note.—The Gowell poultry house was described by Mr. Hunter in a paper prepared for the National Poultry Conference, Reading, England, on "The Curtained-front Poultry House," the particular feature commended being the curtain front. The information as to dimensions and number of birds to a pen was quoted incidentally, and allowed to stand for what it was worth. Our correspondent is quite in order, however, in drawing attention to the fact that 100 breeding fowls are too many for the ordinary farmer, or, for that matter, the expert poultryman, to attempt to house in one compartment. The shape of the building and its appointments afford room for difference of opinion, and all shades are invited.—Editor.]

CARBOLIC ACID FOR ROUP IN TURKEYS.

Editor "The Farmer's Advocate":

A few years ago I had some turkey eggs given to me, and had splendid success in raising them. I got a young tom, and kept two of my best hens. Here is where the trouble arose: I thought it cruel to leave them outside, and put them in the warm henhouse, with the usual result—roup. They began to sneeze and heads to swell. We worked with them every day, tried different remedies till we got tired of it, then thought we would try carbolic acid. We took a sharp-pointed knife and opened the swelling close to the bill, then took a small feather, dipped it in the acid (full strength), and, after squeezing all the matter we could from the swelling and nostrils, inserted the feather in both the opening and nostrils, and into the slit in roof of mouth. I think it was only about twice we had to use the treatment. They got over the disease and laid well in the spring, but in the fall roup appeared in the young ones, so I got fresh stock, and have never had roup since. I allow them to roost outside, except in very bad weather. Wishing "The Farmer's Advocate" the best of success. Bruce Co. GEO. H. TOLCHARD, JR.

INDISPENSABLE EVERY WEEK.

I have received premium knife for sending you one new subscriber, and must say I am more than pleased with it. I think it is well worth \$1.00. I read many valuable articles in your paper which have proven a practical benefit to me, and would be lost without my "Farmer's Advocate" every week. C. H. WESTBROOK. Norfolk Co., Ont.

APIARY.

FEEDING IN COLD WEATHER.

It sometimes happens that the beekeeper finds a colony of bees in his apiary at this time of year that, either through carelessness or lack of opportunity to give it proper attention at the proper time, is short of stores to such an extent that it will certainly starve to death before spring unless something is done to help it, and often because the owner does not know just what to do and how to do it, the unfortunate bees are left to their fate, and the unfortunate owner is out of pocket to the extent of their value. The discrepancy in weight is usually discovered when the hive is lifted to be carried into the cellar, or is being prepared for packing on its summer stand, and the owner wonders how he came to miss it at the general feeding time, and what is to be done with it now. The bees cannot be fed liquid feed now, as they could have been two or three months ago, for the weather is too cold for them to leave their cluster to carry the feed from the feeder, and it could not be properly ripened and sealed up even if it should be stored in the combs. It is obvious, therefore, that some other method of feeding must be adopted. A good way to supply a colony with food at this late season of the year is to make "candy" of white granulated sugar and water, and lay the cakes of candy on top of the frames directly over the cluster of bees, so that they can reach it without leaving the cluster. The candy is made by placing granulated sugar in a vessel with just enough water to moisten it, then place the vessel on the stove and melt up the sugar. Let it boil, and stir it occasionally until it is "done." To find when this stage is reached, dip out a little with a spoon every few minutes, and stir it on a cold dish. When it will cool hard and white, without any stickiness, it is done. Have ready a pan or dish of some kind—a square-cornered pan is handiest, as it makes a cake of candy of a shape most convenient to lay on top of the frames of the hive—pour the material into the pan, having first very lightly greased the latter, or, better still, lined it with paraffine paper, to prevent the candy adhering to it when cold. Stir the candy while cooling, until it becomes too stiff, and, when it has hardened and cooled, remove it from the pan and place it on the frames directly over the bees. Cover it up with several thicknesses of cloth, if in the cellar, and with a cushion in addition, if outside, and there you are. One very important point to remember is that the greatest care must be taken not to let the sugar become burnt or "scorched" in the melting, as candy that has been even slightly burnt will kill the bees sure if fed to them. If it should become burnt, it must be discarded and a fresh lot made. Within the last few years several successful beekeepers in various parts of the country have reported good results from feeding ordinary loaf sugar, just as it comes from the grocery, only very slightly moistened with water. If this can be used successfully—and it apparently can be—it will do away with the necessity of making candy as described above. The candy, however, has stood the test of years, and is almost universally used where bees have to be fed in cold weather.

E. G. H.

THE FARM BULLETIN.

RE TELEGRAPHIC SERVICE FOR CANADA.

The Victoria, B. C., Board of Trade, at a general meeting, held on November 14th, adopted the following resolutions:

1. That the Federal Government be memorialized to take into consideration the advisability of assisting in the establishment of a telegraphic service, primarily Canadian in character, but embracing the news of the motherland and of other British possessions, as well as of the United States.

2. That in dealing with this question, the Federal Government be asked to consider aid in the following forms:

(a) A cash subsidy on a sliding scale, for a term of years, to an association of Canadian newspapers, along somewhat similar lines to that in force for several years and now expiring with the Canadian Associated Press.

(b) Placing at the disposal of such an association the Yukon telegraph line, when not engaged with commercial business, for the free transmission of press news between the outer portions of Canada and the Yukon Territory.

(c) A similar arrangement with regard to the other telegraph and telephone lines of the Government, as well as the use of the news collected at the wireless station of the Department of Marine and Fisheries.

(d) An arrangement with the other Governments concerned in and responsible for the deficit on the Pacific cable, whereby that line may be used at certain periods of the day when the commercial business does not offer for the free transmission of press dispatches between the Dominion of Canada and the Commonwealth of Australia and the Dominion of New Zealand.

ONTARIO AGRICULTURAL EXPERIMENTERS IN SESSION.

The members of the Ontario Agricultural and Experimental Union, inspired with enthusiasm over the practical results of another year's work, assembled in large numbers in the Massey Hall, Ontario Agricultural College, Guelph, on Dec. 9th, week of the Winter Fair. The President, J. M. McCallum, in his annual address, recommended that the Department divide Ontario into districts, and classify the results of experiments in each. The districts should be divided according to soil and climate. He closed with an eloquent appeal for more co-operation among farmers, and eulogized the Union as an agency in that direction.

W. L. Smith supported the President's proposition of dividing the Province into districts for experimental purposes. He deplored the fact that farmers have so little voice in political matters, and said that the recently-amalgamated Grange and Farmers' Associations was the best medium to forward the political influence of the farmer.

SECRETARY'S REPORT.

Prof. C. A. Zavitz, Secretary, reported that some progress has been made in reference to securing a law to regulate the sale of feeding stuffs, and a larger amount of co-operative experimental work has been conducted than in any previous year. In 1907, nearly 8,000 farmers, fruit-growers, gardeners, poultry-raisers and beekeepers conducted co-operative experimental work at their own homes, the work increasing in volume and importance in all departments. The experimenters deserve great credit and sincere thanks for the excellent work which they are doing. The average increase in yield of grain per acre for the three principal cereals grown in Ontario, for the ten years from 1897 to 1906, inclusive, over the average yield per acre for the ten years from 1887 to 1896, inclusive, is fully 18 per cent. The work of the Union, however, has a marked influence by the introduction of superior varieties of crops, and in the encouragement of improved methods. No less than 1,693 experimenters have made good reports of successfully-conducted experiments in each of two or more years previous to 1907, and some in each of ten or more years. The work of the Experimental Union will continue to grow in efficiency and in influence, and similar work will gradually spread over many of the countries of the world as its true value becomes better known and more thoroughly understood by the people. A somewhat similar organization has been started recently in Scotland, and in each of at least seven of the States of the American Union. Under date of September 11th, 1907, I received a letter from Professor R. B. Greig, of the Agricultural College at Aberdeen, Scotland, from which I quote the following: "Our work here is extending, and it will interest you to know that we have started an Experimental Union, but as yet, of course, on a small scale." Only the other day I received a letter from Professor Bailey, of Cornell University, in which he says: "I look upon your Experimental Union as the leader in this kind of work." And also another from R. W. Silvester, President of the Agricultural College at Maryland, in which he says: "I feel sure that you are in closer touch with the active farmers in the Province of Ontario than is the case with any other institution in the Western hemisphere." Probably most of the farmers of Ontario, when carrying out their individual experiments at their own homes, do not realize that the very work they are performing so faithfully is not only helpful to themselves and to their fellow farmers, but that the whole movement is being watched and even followed by the people of other countries.

CO-OPERATIVE EXPERIMENTS WITH VEGETABLES.

Professor H. L. Hutt had the honor of making the report of the first year's experiments in vegetables. He particularly emphasized the fact that the best way and the best place to conduct these experiments was by the teacher and pupils in the school gardens.

The crops with which experiments were conducted were beets, carrots, lettuce and tomatoes, three of the leading varieties being sent out for each test. Seeds were sent out for 1,481 experiments. These were sent into every county and district in the Province, from east to west, and from north to south. The work will be extended. One of the objects of this work is to call attention to the importance of the vegetable garden as an adjunct to the home, not only in the country, where it has been sadly neglected, but also in towns and cities, where the small back yards may be utilized to good advantage. Many valuable, practical lessons were reported by the experimenters. As all of this work has its educational as well as its practical value, it was thought wise to introduce it into the schools of the Province. We communicated with all the school inspectors, and found that every inspector who had schools with gardens in his inspectorate appeared to be proud of them, and most of those who had not, were desirous of having them established. We were able to introduce these co-operative tests into about thirty schools every school having a school garden, and also in some schools where gardens have not yet been established. In such schools the pupils took the seeds home and grew them in their own gardens. Special mention was made of the school garden display at the Guelph Central Exhibition, fully reported in "The Farmer's Advocate" for October 17th. A little bulletin, giving carefully prepared cultural directions for conducting the test,

and a blank form upon which to report the results at the end of the season, accompanied each lot of seed sent out.

Beets.—The varieties distributed were Eclipse, Early Model, and Black Red Ball. The first is one of the old standard varieties which has long been known as one of the best. The other two are new varieties, of excellent quality, but not yet as well known. The results of the test go to show that Eclipse was the favorite with the majority of the experimenters, as it matured the earliest, and gave a good crop of fair quality. Early Model ranked second in popularity, and Black Red Ball third, although many of the experimenters state that the latter was of better quality and finer appearance than either of the others. It is smaller and later in maturing than either of the others.

Carrots.—The varieties distributed were Chantenay, Danvers Half-long, and Rubicon, and they ranked in the order given for popularity with the experimenters. Chantenay is an old standard variety, which matures early, is of fairly large size, and good quality. The others are newer varieties which do not mature quite so early as Chantenay, but are of large size and good quality.

Lettuce.—The varieties distributed were Hanson, Black-seeded Simpson, and Denver Market. There was much diversity of opinion among the experimenters regarding the results of the experiments with lettuce. Most of them conceded Hanson to be the strongest-growing variety and earliest maturing, but Black-seeded Simpson and Denver Market made finer heads and were of better quality. For general popularity, they ranked in the order given.

G. A. M., Carp, Carleton County, one of the school principal where school gardens have been adopted, says: "My children were delighted with the experiments, and followed your directions as closely as possible. We took \$19.00 in prizes at the fall fair, open to all. We had the best exhibit this year at the Carp and Huntley fair. Hope you will again favor us with the opportunity of conducting experiments."

Tomatoes.—The varieties distributed were Earliana, Success and Stone. As the tomato requires a long, warm season to mature a full crop, naturally the results with this experiment depend largely upon the season and locality. In northern sections of the Province, where the seasons are shorter, only the earliest varieties can be brought to maturity; and, in a cool season, like the one we have just had, even the earliest kinds do not always ripen. Earliana being one of the earliest varieties known, naturally gave the best results this year in most sections of the Province. In southern sections, however, where tomatoes are largely grown, the Success and Stone, which are much later, and of better quality, are the favorite varieties.

Judges at fall fairs should consider the quality in judging garden vegetables, for it is not the largest roots that are of the best quality.

EXPERIMENT WITH GRAINS.

Prof. C. A. Zavitz reported on the results of co-operative experiments with grain crops. There were 4,000 experimenters in 1907. Of these reports, only less than one-half are used in the report, as the majority have some slight defect which condemns them for this use. There were experimenters in every county, and probably in every township in the Province. The new barley originated at the O. A. C., No. 21, now has proved itself better than the famous and popular Mandshouri. The common emmer did remarkably well, and ought soon to have a good standing among field crops. The Genesee Valley corn, sent out in 1907 for the first time, gave a most remarkable result, yielding 1,860 pounds per acre, while the former champion was down 150 pounds, and had poorer quality besides. In the mixtures experiments, one bushel Daubemey oats and one bushel Mandshouri barley, sown together for the fourth consecutive time, easily beat all experiments. It means an advantage of about 200 pounds of grain per acre to "mix" the crop.

USE AND IMPROVEMENT OF SWAMP SOILS.

Prof. R. Harcourt, of the O. A. C., summarized the results of his experiments on swamp soils as follows: Generally speaking, where the original growth of the swamp was tamarack or black spruce, the soil is unproductive. Swamp soil lying over sand is almost always reported unsatisfactory; but when the subsoil is clay, especially when some of it is mixed with the top soil, there were excellent results. As a rule, when the organic matter is deep, the result is poor. A study of the figures submitted indicates that, in the majority of cases lime gave decidedly beneficial results, and that potash and phosphoric acid may be used on some of the soils to increase the yields. Prof. Harcourt invited anyone interested in the cultivation of swamp soil to communicate with him, and he might be able to help them.

FIELD-CROP COMPETITIONS.

T. G. Raynor, of the Seed Department, Ottawa, who had charge of the Field-crops Competition in Ontario, in conjunction with the Provincial authorities, spoke forcibly on the great value of these competitions. The assistance given by the Governments is not commensurate with the value of the product, which equals \$135,000,000 in Ontario yearly. The usual encouragement given at exhibitions has proved of little assistance in producing better seed. The ideal of the Seed Department, viz., produce seed, would be quickly achieved if the Field-crops Competition were made possible in every section of the province. Mr. Lockie Wilson, Supt. of Fall

Fairs, assured the meeting that the competition would be extended this year, on account of the great value of this year's experiments. A bulletin, announcing the results and aims of this work, is issued by the Seed Department, Ottawa.

EXPERIMENTS WITH ROOTS.

Prof. C. A. Zavitz reported the mangel crop in Ontario increasing, yearly, rapidly. The Yellow Leviathan gave about two tons an acre more than the second-best mangel obtainable, and exceeded it nearly 45 per cent. in comparative value. He could not too strongly emphasize giving this variety a trial. In Swede turnips experiments, Carter's intermediate was easily best in quality and yields. The Red-top White Globe fall turnip was first.

The Japanese Common and the Japanese Panicle millets have proved exceptionally good for fodder in a dry season, such as we have experienced. It is hard to obtain seed true to name, as seedsmen have the names of the varieties mixed.

It was found there were 64 varieties of potatoes grown extensively in Ontario. Rural New Yorker No. 2 was the most extensively grown. Empire State was second in acreage. Of the late varieties, the Empire State surpassed all kinds of early, medium and late varieties in yield and quality. A greater acreage of this variety should be grown. A potato immune from blight and rot, possessing good quality and yield, has not yet been found. Of the medium varieties, Burpee's Extra Early was best in quality and yield. Of the early kinds, Early Fortune was the most popular.

Of the 50 varieties of sweet corn tested at the O. A. C., the Golden Bantam is certainly the best for home use, and is the very choicest quality.

EXPERIMENTS WITH FERTILIZERS.

As the experimenters are becoming much better educated and efficient, the experiments are increasing in value. The fertilizer experiments in potatoes in 1907 are the best yet. The following table summarizes the results. The "cost" column represents the cost per acre, without allowance for handling, etc. The value to be placed on farmyard manure varies, and can be estimated to local standards. All fertilizers were applied when the potatoes were planted, by mixing it broadcast in the surface soil.

Average Yield per Acre—Potatoes.

Fertilizers.	Weight		Cost.	1 Year. 22 Tests.
	Lbs.	Cost.		
Unfertilized				107.2
Nitrate of soda	160	\$4 80		138.6
Muriate of Potash	160	4 00		144.3
Superphosphate	320	3 92		146.3
Mixed fertilizer	213	4 24		152.9
Royal Canadian	320	5 60		149.0
Potato fertilizer	320	5 52		149.1
Cow manure	40,000	6 00		158.8

EXPERIMENTS IN FRUIT-GROWING.

Prof. H. L. Hutt reported that Clyde and Tennessee strawberries have been the heaviest yielders, and splendid ones of the best early varieties.

Among the raspberries, the favorite varieties have been Marlboro for early, and Cuthbert for main crop; while Golden Queen is one of the best yellow varieties, and Columbian the best purple-fruited variety. Of the black raspberries, Gregg has been the most productive, but it is not hardy enough for the northern sections of the Province. Older is one of the hardiest of the black raspberries. In pruning raspberries, it was recommended to cut out all of the old canes after they have fruited, and thin out the new canes to five or six of the strongest.

Thimbleberries are best adapted to southern sections of the Province, and have proved more or less of a failure where tried in northern sections. Agawam is one of the hardiest varieties, while Kittitiny is the favorite variety for southern sections.

Red Cross and Victoria are the most productive red currants. Fay is a favorite variety because of its extra large fruit. The White Grape is the best of the white currants, and is much prized for home use. Lee's Prolific has been one of the most productive of the black varieties, although Black Victoria, a newer variety, has made a good record.

The most productive varieties of gooseberries have been Pearl and Downing. Whitesmith, one of the English varieties, bears the largest, finest fruit, but in some seasons it is subject to mildew, with which the other varieties of American origin are not affected.

The early-ripening varieties of grapes, selected for northern sections, were: Champion, Worden, Winchell, Delaware, Lindley, and Moyer. For Southern Ontario, the varieties selected were: Concord, Wilder, Niagara, Lindley, Brighton, and Vergennes. This includes some of the best varieties of each color. These should begin bearing in two or three years from time of planting.

Apple trees were sent out last year for the first time. For Northern Ontario, the varieties distributed were: Transparent, Duchess, Wealthy, MacIntosh, Scott's Winter, and Hyslop Crab. For the trees in Northern Ontario, it is recommended to train them to low heads in order to avoid injury from sunscald. In Southern Ontario, where this trouble is not so common, trees of the ordinary standard-sized trunks may be grown. The varieties selected for Southern Ontario were: Primate, Gravenstein, McIntosh, Blenheim, Rhode Island Greening, and Northern Spy. This makes an excellent selection of varieties to cover the season, from the earliest to the latest.

FARM FORESTRY IN ONTARIO.

Prof. E. J. Zavitz, of the O. A. C., reported about 200,000 plants, composed chiefly of White pine, Scotch pine, Jack pine, Norway spruce and Black locust, sent out last spring for co-operative experiment. Scotch pine and Black locust did best on the poorer soils. The Department is prepared to make planting plans, and furnish planting material free to persons having waste lands; applicant to pay cost of transportation of trees and doing the actual work of planting. For planting in spring of 1909, applications should be in before June 15th, 1908.

THE MINISTER OF AGRICULTURE SPEAKS.

The Hon. Nelson Monteith spoke in complimentary terms of the new president, Mr. Brodie. He was pleased to observe the growing regard of the farmer for his occupation, and to render it assistance. He counselled the students, when they leave the O. A. C., to make themselves felt for good in their respective communities.

The high-school agricultural movement will require the services of more men, and will be extended. The school gardens will be brought under Departmental control and encouraged. By giving the youth an agricultural tendency, the status of the great profession of agriculture will be raised on a par with the so-called learned professions.

At the evening's banquet, in introducing the chief guest of the evening, Dr. Falconer, President of Toronto University, Mr. Monteith stated that the Department of Education and Agriculture were proceeding, hand in hand, to promote the study of agriculture in the public school. It is possible to train school children to remember their profession in the days of their youth before the time comes when, having been wrongly trained, they shall say they take no pleasure in agriculture.

President Falconer complimented the O. A. C. as a world-famous institution, and asserted his belief that the hope of the country lay in its rural-grown population. He felt that no great university could survive without having a rural population to draw upon.

NAMING HOMES AND PRODUCTS.

President Creelman, in his ten-minute address, took one topic only, viz.: "The Naming of the Farm Home." The value of a name to live up to was proved, exemplified and strongly impressed. More pride in the profession is required. Name the farm, name the products, and improve the place, and increase its profits. An apt suggestion offered the O. A. C. students was to have letter-heads printed, with the name of the farm and owner, and sent as a Christmas present to their parents.

FEEDING-STUFF CONTROL.

W. P. Gamble reviewed the subject of "Legislative Control of Feeding Stuffs," which has received considerable attention from this Association in years gone by.

Investigation and analyses amply justified the demand for legislative oversight in order to the protection of farmers. At the annual meeting last year, a resolution was passed which advised as follows:

(1) That each package of commercial feeding stuffs should be labelled with the percentage of protein and fat contained therein; (2) That the term bran should be legally defined; (3) That copies of the resolution should be sent to Farmers' Institute meetings to be signed by the members, and forwarded to the Minister of Inland Revenue as a petition. A short time ago he wrote Mr. Gerald, Deputy Minister of Inland Revenue, asking what action had been taken or was in contemplation. In his answer, he states that the matter is receiving the consideration of the Honorable the Minister of Agriculture and of Inland Revenue, but just what action was in contemplation he was unable to say. In conclusion, Mr. Gamble moved the following resolution: That this meeting approve of the action taken at last year's annual meeting, and that we again urge upon the Honorable the Minister of Inland Revenue the desirability of a law enacted on the lines of last year's resolution. Carried.

It was claimed that carloads of weed seeds and screenings were sold from the elevators at Fort William and elsewhere, and mixed with a corn or bran base, and sold throughout the East, and men were actually taking credit to themselves for starting this industry. It was also asserted that sawdust was being palmed off as bran.

AGRICULTURAL INSTRUCTION.

Mr. C. C. James, Deputy Minister of Agriculture, gave an address on "Agricultural Instruction" preliminary to the reports of the six pioneer agricultural high-school teachers. He reviewed the attempts to introduce the study of agriculture into the public schools from the time when Dr. Egerton Ryerson issued his first excellent book on the subject, and it failed. Subsequent works also failed to give the great subject of agriculture a standing in the school course in any way commensurate with its importance. There is nothing of agriculture in the schools of Ontario today, except nature-study. It was now proposed to begin at another point, and gradually lay a basis that would finally carry agricultural teaching through the whole school system. Contemporaneous schemes were proposed by the Ministers of Agriculture and Education to promote this kind of education. The two propositions submitted were finally crystallized into a plan of providing instruction in the high schools, and six instructors, graduates of the O. A. C., were appointed for the work. It was not expected that

classes in agriculture would be very popular in the high school, so an office was established at each center, and the instructor encouraged to get into touch with the farmers, and influence them gradually to the value of the new education. The reports of the instructors given immediately after Mr. James' address showed that the result was as anticipated. The movement received sympathy from the best minds of the several districts, but was not greedily taken hold of by the farmers generally. As many as eight students were obtained in some schools, and none at all in others. Some of the instructors wished, at times, to be removed from this vale of tears, but they all kept on, and worked faithfully and well, and, even in the three months since the work was inaugurated, have accomplished much towards making this high-school teaching and agricultural office center a permanent institution, and one that will eventually be established in every county in Ontario. They have used various methods to accomplish their results. Nearly all are establishing short courses, which will popularize and pave the way for agricultural study.

R. S. Hamer, of Perth Collegiate, has eight students taking the agricultural option, a course equivalent to the first year at the O. A. C. F. C. Hart, of Galt, has eight, but they are mostly city pupils, who will train as specialists in poultry, entomology, etc. F. H. Reed, of Lindsay, has worked hard among the farmers, and is assured of a good attendance at the extensive short course to be shortly started. A. McKenny, of Essex Co., has just held a preliminary short course, attended by sixty, and is assured of a good number for his winter course. W. A. Munro, of Morrisburg, had to go out to the highways and hedges and compel them to come in, and, though at first he was received in "the same manner as a bookseller or pedlar," he has been welcome on better acquaintance, and is really getting a firm hold on the situation. Where there was not an interested person in attendance at his first meetings, he now has large enthusiastic gatherings at some points, and the work is growing. R. E. Mortimer, of Collingwood, has taken the botany and zoology subjects in the institute, and thus gets in touch with the pupils into whom he instils an "agricultural tendency." A good plot for experimental purposes has been secured; several short courses at various points are being arranged for, and much agricultural leaven introduced at teachers' meetings.

The discussion revealed great satisfaction over the excellent beginnings made in this work, and encouraged the "boys" who were so efficiently working out the difficult problem.

On Monday evening the ex-students were entertained at the home of President and Mrs. Creelman, of the O. A. C.

The election of officers resulted as follows: President, G. A. Brodie, Bethesda; Vice-President, J. O. Laird, Blenheim; Secretary, Professor C. A. Zavitz, O. A. C.; Assistant Secretary, Lecturer J. Buchanan, B. S. A., O. A. C.; Treasurer, Professor H. L. Hutt, O. A. C.

A resolution was unanimously adopted, asking the Minister of Agriculture to inaugurate a series of experiments to discover the value of bees as pollinating agencies for fruit blossoms.

EXPERIMENTAL FARM FOR MEDICINE HAT.

As intimated in these columns some weeks ago, a movement was under way for the establishment of an experimental farm at Medicine Hat for the demonstration of dry-farming methods, along the line advocated by Professor Campbell. The Agricultural Society and Board of Trade procured land within two miles of the city. In addition, the Canadian Pacific have promised a grant of one hundred dollars. Hon. W. T. Finlay, Minister of Agriculture for Alberta, is lending to the scheme his personal support, and promises substantial Government aid for the project. He advises the placing of such a demonstration farm in the hands of reliable, practical men, in whom the Agricultural Society and the Department of Agriculture would have confidence. The work will likely be carried on under the direction of the local Agricultural Society.

FORTHCOMING EVENTS.

- Dec. 18th to 20th—Nova Scotia Fruit-growers' convention, at Berwick, N. S.
- Jan. 6th to 11th—Eastern Ontario Fat-stock and Poultry Show, Ottawa.
- Jan. 8th, 9th and 10th—Eastern Ontario Dairymen's Association, Picton.
- Jan. 15th and 16th—Western Ontario Dairymen's Association, Woodstock.
- Jan. 28th to 30th—Nova Scotia Farmers' convention at Antigonish.
- Feb. 4th—Annual meeting Dominion Shorthorn Association, in Toronto.
- Feb. 12th to 14th—Ontario Horse-breeders' Show, Toronto.
- May 4th to 9th—Canadian National Horse Show, Toronto.

New subscribers to "The Farmer's Advocate and Home Magazine" receive the copies for the balance of this year, including the Christmas number, so long as the supply of extra copies holds out, and all of 1908 for \$1.50.

The Ontario Provincial Winter Fair.

Bigger and better than had been was the Winter Fair at Guelph, December 9th to 14th. The weather was favorable; the people came in crowds; the livestock features showed more uniform excellence than at any former meeting here; the judging was well and satisfactorily done; the lectures and discussions were of a high order of practical merit; the management of the show, under the capable generalship of Secretary Westervelt and his efficient staff, was ideal, and the visitors were delighted with what they saw and heard. The only drawback in connection with the whole event was the usual one of lack of building space to accommodate the various features of the show, and to give visitors the opportunity of seeing and hearing to best advantage. This lack, it is pleasing to note, is likely, in the not distant future, to be provided for, and the prospect for a still greater and still more useful Winter Fair in the Royal City is bright with promise.

Attendance figures are difficult to obtain, because a large proportion of the visitors enter on Farmers' Institute passes, which admit the holder as often as he desires throughout the show. There were 600 more of these passes issued this year than last. As to money receipts, the total to Thursday evening was slightly behind 1906, but this was far more than made up on Friday morning, when the largest Friday audience in the history of the show assembled to hear and witness Mr. D. Ward King's lecture and demonstration on the breaking of a colt. All told, it is officially calculated that there were 3,000 more admissions than last year.

THE CATTLE CLASSES.

The entries in the cattle classes, though perhaps somewhat less numerous than last year, showed a greater uniformity of approved type throughout, and though the best may not in some sections have been equal to the winners in former years, yet there were more good ones than usual, especially in the younger sections, which are the most likely to be carried over for another year, and which, if kept going on well, should make the showing for next year's event a record one. What is most urgently needed, in order to the best success of the show in the cattle department—and, indeed, in all sections—is more money, in order that the prizes offered may be sufficiently attractive to induce more breeders and feeders to prepare for the competition. To this end, it is up to the breed associations and the Government to contribute more liberally; the management should eliminate the cow classes, which are made up largely of breeding stock and worn-out matrons, which should have no place in such a show, and the money used to provide more attractive prizes for young animals, and for carload lots of commercial cattle.

Reviewing the cattle classes in the order of the catalogue, which were capably judged by Messrs. Robert Miller, Stouffville, and James Smith, Rockland, Ont., with John T. Gibson as referee, it may be said that the exhibit of pure-bred Shorthorns was an exceedingly creditable one, the sections for young things being admirably filled. In two-year-old steers of this class, the first award went to a smooth, well-fleshed red entry of fine type, shown by J. & D. J. Campbell, Woodville; the second place being given to a useful roan, not in high condition, exhibited by John Barr, of Blyth. The yearling section brought out a quartette of high-class animals, in which was included the grand champion of the show, a white steer, of ideal type, character, quality and smoothness, named Allison, shown by John Brown & Sons, Galt, sired by Royal Stewart—46037—; the second and third ribbons going to excellent entries, shown by W. R. Elliot & Sons, Guelph, and Alfred Barron, Speedside, both by sons of Imp. Royal Sailor. In a capital class of steers under a year old, W. R. Elliot & Sons came in first with a blocky, low-set, thick-fleshed youngster, White Hero, sired by Scottish Hero (imp.); Alex. McKinnon, Coningsby, being second with Crimson Rambler, a typical roan, of fine promise though not in high condition, and John Currie, Eramosa, with a soggy roan, was third. The class for cows, three years or over, was filled with better individual entries than usual, the four animals exhibited being all comparatively younger for the class than in former years, of uniformly excellent type, and having the appearance of being barren. The first winner, the richly-bred red, Lady Hampton, by Merry Hampton, shown by John Brown & Sons, is a model of the breed, while a very close second was the stylish, smooth and well-finished roan, Queen Jewel, by Red Duke (imp.), shown by Israel Groff, Elmhira.

In an extra good trio of two-year-old heifers, Flora 90th, the grand champion female of the breed at Toronto last fall, and winner of second award in a great class at Chicago the first week in this month, shown by Geo. Amos & Son, Mo'at, created a sensation by her grand appearance, and was, of course, a clean first. It is questionable, indeed, if, taken all in all, she has ever been equalled as a representative of the breed in this country, and she is certainly a distinct credit to her skillful and enterprising breeders. Brown & Sons, Galt, were second, with a capital roan, also bred by Messrs. Amos, and got by the same sire as Flora 90th, namely, Imp. Old Lancaster. John Barr, of Blyth, was third with a good heifer.

G. & W. Parkinson, Eramosa, led in the yearling

heifer section with Hannah, a very perfect butcher's beast, smooth, thick and well finished; Amos & Son being second with Lady Myrie, a mossy-coated roan, another daughter of Old Lancaster.

Herefords and Aberdeen-Angus, classed together here—steers and heifers competing together—were not strong in either numbers or quality; the first award in two-year-olds going to the well-fleshed Angus heifer, Elm Park Keepsake, shown by James Bowman, Guelph, who was also first in yearlings and in the under a year sections, with typical Aberdeen-Angus entries; John A. Govenlock, of Forest, being second in the last two sections named; Walter Hall, Washington, winning in the cow class with the uncommonly thick-fleshed cow, Newtona 5th, weighing nearly 1,900 lbs.

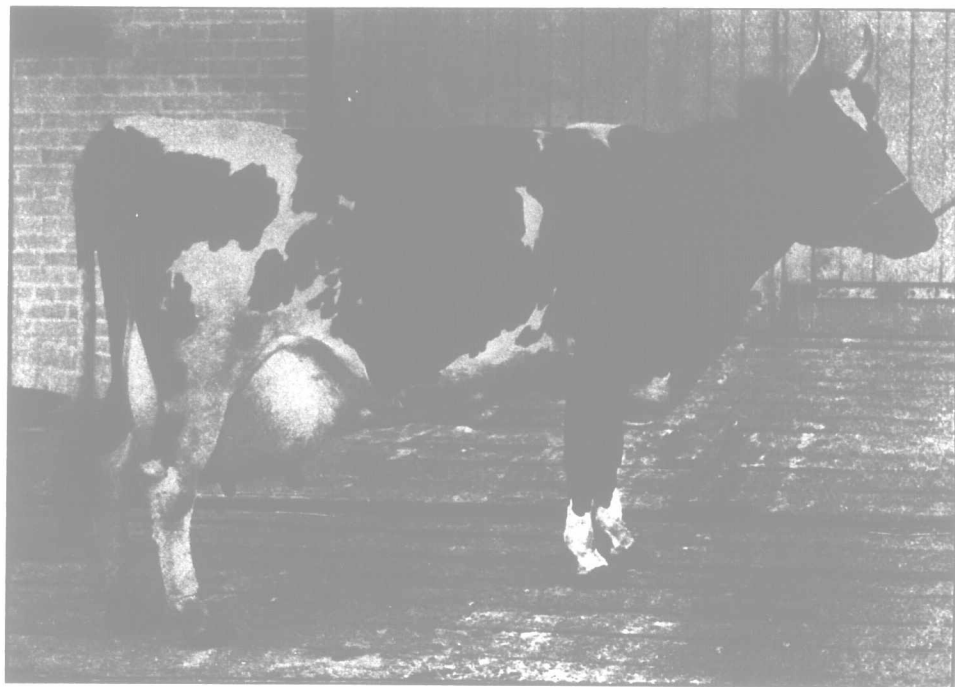
Galloways and Devons, classed together, made a smaller entry than usual, the former being shown in limited entries by D. McCrae, Guelph, and the latter by C. C. Rudd, Eden Mills, the majority of first prizes going to the Galloways.

Grades and Crosses were, as usual, by far the largest classes, and the most interesting feature of the cattle department, a large majority of the entries being Shorthorn grades, while the Angus and Hereford grades made the competition keen in some cases, being more strongly represented than usual, and their standing distinctly encouraging to the friends of those breeds to prepare more animals for this show.

In two-year-old steers, the massive, strong-backed red, Clinker, shown by Jas. Leask, Greenbank, breeder and exhibitor of the International grand champion this year, was a clean first, followed by a right good roan, shown by J. & D. J. Campbell, Woodville.

In the yearling section one of the best things in the show, the red Ike, shown by Jos. Stone, Saintfield, was a clean winner; the same exhibitor being second, and John Barr third.

In steers under a year, Kyle Bros., Avr. had a popular winner in the charming roan, Chancellor's Stamp, by Imp. Boston Chancellor. Here is one of the most promising propositions for future honors seen out this



Jean Armour 15591.

Ayrshire cow. Winner of first award in her class, and second highest producer against all breeds competing in the two days' milking test, at the Ontario Winter Fair, Guelph, December, 1907 (114.26 lbs. milk, testing 3.8 per cent. fat). Owned by Geo. Rice, Tillsonburg, Ont.

year—a model of symmetry, character and quality, delighting to the eye of a connoisseur. Jos. Stone had an extra good roan calf, that, by the vote of the umpire, secured second place, over the capital entry of John Lowe, of Elora, a grade Aberdeen-Angus, black but comely, one of the smoothest and best-fleshed young things ever seen at Guelph or elsewhere, one which might have gone higher in his class with no injustice, and which, if kept going on, will doubtless make it interesting to all corners next year.

In the section for yearling heifers, a remarkably lined heifer was forward, owned by Peter Stewart, Everton, practically perfect in conformation, quality and finish; her silken-coated skin packed full of prime flesh, a model butcher's beast, and a clear first in her class. The champion of the class was Jos. Stone's first-prize yearling steer, Ike; the grand champion over all being, as before stated, John Brown & Sons' white, pure-bred yearling steer, Allison.

The competition for the prizes for the best three export steers proved one of the most interesting classes in the cattle department, the contest being closer than usual and the cattle of a better class. The first award went to John Brown & Sons, for a trio, consisting of one Hereford grade and two Shorthorn grades; the second to Jas. Leask, for three Shorthorns, and third to Brown & Sons, for three blacks, two of which were Angus grades and one a Galloway grade, the last but being favorites with many of the exhibitors. It would be well if this Province produced many more of the class of cattle seen in this competition.

SHEEP.

The sheep classes were well filled at Guelph with high-class animals of all the principal breeds, most of the Canadian winners in the fat-stock classes at the International being forward, together with a considerable number of others fresh from their homes. The Long-wooled breeds were especially well represented by strong exhibits, while the general display was well up to high-water mark in point of quality. The Long-wooled breeds were judged by T. Hardy Shore, Glanworth; the Oxfords by Professor Arkell, Macdonald College; the Shropshires by J. C. Duncan, Lewiston, N.Y.; the Southdowns by W. H. Beattie, Wilton Grove.

In the Cotswold class the principal exhibitors were Rawlings & Bailey, Forest; John Sockett, Rockwood, and E. Brien & Son, Ridgetown. In the section for single ewes under one year the competition was very strong, all the entries being full of character and quality, the first and third awards going to Rawlings & Bailey, and second to Sockett. It is seldom that so many good ones are seen together, all being home-bred, as required by the rules, showing that Canada is singularly well adapted for sheep-raising. The section for three ewe lambs was equally well filled, and the prizes went in the same order as in the single showing. For yearling wether, Rawlings & Bailey were again first, Brien & Son second and third, while the last-named exhibitors were first for wether under a year, and first and second for three wethers under a year. The champion wether of the class was Rawlings & Bailey's first-prize yearling.

Lincolns made a strong showing in the hands of J. T. Gibson, Denfield; J. H. Patrick, Ilderton, and L. Parkinson, Eramosa; Gibson winning first in single ewe lambs and for the best three ewe lambs, and first and championship for a yearling wether of extra good type and quality. Parkinson was first for single wether lamb and first and second for the best three of same age; and Patrick was second in four out of the five sections.

Leicesters made a good showing in the entries of John Kelly, Shakespeare, A. & W. Whitelaw, Guelph; G. & W. Parkinson, Eramosa; Hastings Bros., Crosshill; Oliver Turnbull, Walton, and John S. Cowan, Donegal; Kelly winning the championship with a model yearling wether, the International champion, firmly fleshed and finished to the King's taste; Whitelaw being second in that section. Oliver was first for wether under a year, and for three of the same age; Parkinson being second for single wether lamb, and Hastings Bros. second for three of that class. Whitelaw's were first for single ewe under a year, and Turnbull second. Cowan won for the best three ewe lambs; Turnbull being second, and Kelly third in each case for ewe lambs.

Oxfords were very strongly shown by R. J. Hine, Dutton; W. E. Wright, Glanworth; J. W. Lee & Sons, Simcoe; A. Stevenson, Atwood; J. A. Cerswell, Bond Head, and Alex. Stewart, Living Springs; Lee & Sons winning in ewe lambs single and for three; Stevenson being second in the single-ewe section, and Hine third in both. Wright was first for yearling wether, and also won the championship with the same sheep—an extra good one, well brought out. Cerswell was first for three wethers under a year, Wright second, and Stevenson third.

Shropshires made a very nice showing in limited numbers, but well up in quality, the exhibitors being J. & D. J. Campbell, Woodville; W. E. Wright, Glanworth; Abram Rudell, Hespeler. Campbell won all three first prizes for ewes under a year, and first for three of same age, Rudell being second for three. In yearling wethers, in a still tussle for supremacy between Campbell and Wright, the latter won out, and later secured the championship of the class for the same sheep—a grand specimen of the breed, full of quality and well brought out. For wether under a year, and for three of same age, Campbell won first, Wright coming second in the latter class, and Rudell third.

Southdowns made a capital showing of entries from the flocks of Sir Geo. Drummond, Beaconsfield, Que.; Robt. McEwen, Byron; Teffer Bros., Paris, and Geo. Baker, Simcoe. McEwen was first for single ewe lamb and second for three; Baker winning in the latter case, while Teffer Bros. were second for ewe lamb and third for three. In the yearling wether section the Drummond entry won the best three awards with the Inter-

national grand champion over all breeds included, though here the hero of that event had to take second place to his room mate. These are marvellous specimens of the breed and of the model mutton sheep, remarkably well brought out and exceedingly creditable to Manager W. H. Gibson and the capable shepherd at Huntlywood. Col. McEwen was fourth in that class with a right good one, while Telfer Bros. were first, second and third for single wethers under a year, and first for three of same age, Jackson being second and Drummond third.

Dorset Horns made a very good showing indeed in the hands of R. H. Harding Thorndale and Jas. Robertson & Son, Milton; Harding winning for ewe under a year and for yearling wether, also championship of the section and for three under a year, Robertson won first and second in single wether under a year, and first for three of same age.

Hampshire and Suffolk Downs, classed together, were shown, the former by John Kelly, Shakespeare, and Telfer Bros., Paris; and Suffolks by James Bowman, Guelph. Kelly was first in ewe lambs, and Bowman second; while in yearling wethers and wether lambs Bowman was first and champion with his excellent yearling wether, full of good flesh.

In Grades and Crosses (long-wooled) there was a splendid showing, the first award in yearling wethers going to L. Parkinson, Eramosa; in wether lambs, first to E. Brien & Son, Ridgetown (the latter also winning for three lambs); Rawlings & Bailey, Forest, being second in each case; Parkinson securing the championship with his excellent yearling wether.

In Short-wool Grades and Crosses, D. & J. Campbell, Woodville, got the best of it, as usual, winning first for yearling wether, for wether under a year, and for three under a year, with capital entries, also championship with their yearling wether. In the yearling class John Kelly was a good second.

SWINE.

On only one occasion since the inception of the Guelph Fat-stock Show were swine out in greater numbers than this year, while the quality was fully up to the average of other years, a remarkable uniformity being manifest in nearly all the classes. Of pure-breeds, Berkshires were out in greatest number, there being 59; Yorkshires, 43; Chester Whites, 35, and Tamworths, 33. All told, including grades or crosses, there were a grand total of 307. In the export-bacon class of two pure-breeds, there were out for competition 26 pairs, representing the four above-mentioned breeds. It is rather significant that all the prizes in this class went to the Yorkshires, for there were certainly some exceptionally choice things out, particularly among the Tamworths, judging from the bacon standpoint. J. E. Brethour, Burford, got first, fourth and sixth; R. F. Duck & Son, Port Credit, second; H. S. McDiarmid, Fingal, third, fifth and ninth; J. Featherstone & Son, Streetsville, seventh and eleventh, and James Wilson & Son, Fergus, eighth and tenth.

In the class for two export bacon hogs, grades or crosses, 22 pair were out for honors, an exceptionally even, uniform lot that kept the onlookers guessing where the ribbons would fall. J. Featherstone & Son won first and fifth on a cross of Yorkshire and Essex; H. Stuart, Burford, second and third on a cross of Yorkshire and Berkshire; C. Currie & Son, Morriston, fourth and seventh on a cross of Yorkshire and Tamworth; and D. Douglass & Sons, Mitchell, sixth on a cross of Tamworth and Yorkshire.

YORKSHIRES.—Taking the classes all through, the quality of the Yorkshires was about the same as last year. If any improvement was noticeable, it was in the class of sows, nine months and under fifteen, where the exhibit was certainly a most creditable one. Of barrows, six months and under nine, only five were out for honors, first, second and fourth going to R. F. Duck & Son, Port Credit; third and fifth to J. Featherstone & Son, Streetsville. Barrows, four months and under six, brought out seven candidates, placed as follows: J. Featherstone & Son, first; Jas. Wilson & Son, Fergus, second; R. F. Duck & Son, third and fifth; J. E. Brethour, Burford, fourth. The class for sows, nine months and under fifteen, brought out six exceptionally choice animals, a credit to the breed and their breeders, first and third going to J. Featherstone & Son, second to R. F. Duck & Son, fourth, fifth and sixth to James Wilson & Son. Sow six months and under nine.—Here, again, there were six out—a high-class lot, and fitted to the Queen's taste. First and second went to the noted Pine Grove herd of J. Featherstone & Son, third to R. F. Duck & Son, fourth, fifth and sixth to James Wilson & Son. Sow under six months—Numerically this was the strongest class of any, thirteen being out for the ribbons. It proved a lucky number to James Wilson & Son, who carried the much-coveted red, second and fifth going to J. E. Brethour; third to R. F. Duck & Son, and fourth to J. Featherstone & Son. In three pigs, the offspring of one sow, bred by exhibitor, Featherstone, again, came to the top for first; Brethour, second, and Wilson, third.

BERKSHIRES.—In point of numbers this year, Berkshires showed a slight falling off, compared with last, but the quality was fully up to the average of other years. Barrow six months and under nine—First and second went to John Kelly, of Shakespeare; third to E. Brien & Son, Ridgetown; fourth to John S. Cowan, Donegal, and fifth to H. Koelln & Son, Glenallan. Barrow under six months—First and third went to W. H. Durham, Toronto; second to E. Brien & Son; fourth to John Kelly; fifth to H. Koelln & Son. Sow nine months and under fifteen was one of the

strongest classes of the breed, and brought out an essentially high-class lot of sows. First went to W. H. Durham; second, fourth and sixth to E. Brien & Son; third to J. S. Cowan, and fifth to H. Koelln & Son. In sow six months and under nine, John Kelly brought out the winner, getting first and third; W. H. Durham, second and fourth; H. Koelln & Son, fifth; E. Brien & Son, sixth. Sow under six months—Fifteen faced the judge in this class, a very uniform lot, true to the type that delights the packer's eye. First, second and fourth went to J. S. Cowan; third, W. H. Durham; fifth, E. Brien & Son; sixth, J. Lawrence, Oxford Centre. Three pigs, the offspring of one sow—John Kelly, first; J. S. Cowan, second; E. Brien & Son, third; W. H. Durham, fourth; J. Lawrence, fifth.

TAMWORTHS.—Only two exhibitors were out with Tamworths, D. Douglass & Sons, Mitchell, and C. Currie & Son, Morriston, two of Ontario's most noted breeders. Both were out to win, with an exceptionally well-fitted lot of hogs. Douglass Star was certainly in the ascendant, else their genial popularity won the good graces of the judges. However, it was the bulk of the red and blue ribbons that went their way. In only one class, that of sow six months and under nine, did Currie get the red. There, it was: Currie, first and fifth; Douglass, second, third and fourth. The other classes all went Douglass, first and second; Currie, third, fourth and fifth, with the exception of three pigs, the produce of one sow, where the ruling was: Douglass, first and third; Currie, second.

CHESTER WHITES.—This old reliable and popular breed was, as usual, well represented, the exhibitors being D. De Courcey, Bornholm; W. E. Wright, Glanworth, and George Bennett, Charing Cross. The awards were pretty evenly distributed on an exhibit of really choice things. Barrow six months and under nine—De Courcey, first and second; Wright, third; Bennett, fourth and fifth. Barrow under six months—De Courcey, first and fourth; Wight, second and fifth; Bennett, third. Sow nine months and under fifteen—Bennett, first, fourth and fifth; De Courcey, second and third. Sow six months and under nine—Bennett, first, third and fourth; De Courcey, second; Wright, fifth. Sow under six months—Bennett, first, second and third; Wright, fourth. Three pigs, the offspring of one sow—Bennett, first and third; De Courcey, second.

ANY OTHER BREED, GRADE OR CROSS.—Barrow six months and under nine—Charles Currie, first; H. Koelln, second; E. Brien & Son, third; J. Featherstone & Son, fourth; D. Douglass & Sons, fifth. Barrow under six months—D. Douglass & Sons, first; C. Currie, second; J. Featherstone & Son, third; H. Stuart, fourth and fifth. Sow six months and under nine—Featherstone, first; Douglass, second and third; Koelln, fourth; E. Brien & Son, fifth. Sow under six months—Stuart, first; Douglass, second; De Courcey, third; Bennett, fourth; Houston, fifth.

The judges of the various breeds were: Yorkshires and Tamworths—Wm. Jones, Zenda, and A. C. Hallman, Breslau; Berkshires—Peter McEwen, Kerth; Chester Whites and any other breed or cross—G. B. Hood, Guelph; bacon hogs—Prof. G. E. Day and R. J. Garbut, Belleville; bacon carcasses—Prof. H. S. Arkell, Ste. Anne de Bellevue, and Geo. F. Morris, London.

DRESSED CARCASSES.

The block test, although not featured this year with a carcass talk, was of value, nevertheless, to the students of animal husbandry in relation to meat production. Its educational value is increasingly manifest in the approximation of awards on live and dressed animals. While it probably never will be possible for the most expert judge to place live animals so that the results of the carcass judging will tally exactly, it is noticeable that they are now able, as a rule, to strike it pretty close—much more closely than was formerly the case.

In the carcass classes of swine, section for two pure-breeds, the awards were: First, third and fifth, J. E. Brethour, the first-prize pair in carcass having been placed fourth alive. Second went to J. Featherstone & Son, with the pair that had been placed seventh alive; fourth and eighth, R. F. Duck & Son; sixth, George Bennett, seventh and ninth, H. S. McDiarmid; tenth, James Wilson & Son. All the prizes in this class went to Yorkshires, with the exception of sixth, which were Chester Whites.

The classes of sheep carcasses were hardly so large as last year, but the general quality was high. It is interesting to follow the record of winners in the fat classes. For instance, Mr. Campbell's first-prize Chicago wether, which, by the way, was beaten in the live class at Guelph, by one belonging to W. E. Wright, of Glanworth, had to bow to the inexorable ruling of the block test, and accord the Wright wether first place on the hooks.

Of cattle there were only four entries in the pure-bred classes, and three in the grades, but they were all good.

THE POULTRY SHOW.

The poultry exhibit at the Winter Fair has been rapidly growing, but on no previous occasion has the advancement been so marked as in 1907. The show now ranks with the greatest on this continent, rivaling in numbers and quality the shows held in New York and Chicago, and far surpassing in importance the Canadian National at Toronto. The number of entries this year was over 4,500, and the small hall proved quite inadequate to properly house and exhibit the

birds, even with the small addition at the back made since last year. As a consequence, some birds were exhibited in coops piled up three layers deep, and the top birds were out of reach of close inspection. With visitors the poultry department proved exceedingly popular; and the alleyways were crowded day and night with intensely interested city and country visitors. As Prof. W. R. Graham said: "This show is the greatest ever; we have quantity to burn; we have quality to burn; the live classes are all good, and the display of dressed poultry excellent."

The principal fault that can be found is the lack of sufficient accommodation. Twice the floor space is required to properly house the birds, so that visitors could see them in comfort, and if the rows of pens were placed farther apart the large crowds could move about freely without continual blockage at the entrances. The judging was long drawn out, some classes not being adjudicated until late Wednesday, but the large entry list no doubt accounted for this delay. One benefit of more accommodation would be to allow of the exhibition of modern poultry appliances—as incubators, brooders, etc.—a feature that would add strength and value to the show.

As usual, the American breeds of poultry proved the most numerous, comprising nearly half the whole exhibit, and Plymouth Rock and Wyandotte men were well to the fore.

White Wyandottes were the largest entry of any single class in the show, excelling the White Rocks, last year's leaders, by eighty entries. Quality was excellent and competition keen. John S. Martin, Port Dover, Ont., was out with a string of birds, the like of which was probably never seen in Canada before. He made a clean sweep of the prizes, taking all the firsts and specials, and won both the Dawson silver challenge cup—held by him last year—and the Bullock cup, formerly held by his close rival, W. Dawson, Niagara-on-the-Lake. The other varieties of Wyandottes were well represented, but lacked the numbers and quality of the Whites. J. M. Thorne, London, took most of the prizes in Silver-pencilled Wyandottes.

Barred Rocks, the old American favorites, were well represented, and honors were quite evenly divided among the exhibitors. I. K. Millard, Dundas, was the most successful, winning first and third in cock, second on cockerel, second on hen, seven specials, and the silver cup for best four birds. Newton Cosh, Port Dover, Ont., won first, third and fourth on hen, second on pullet, and four specials. J. Pringle, of London, won two firsts on cockerel and pullet.

In White Rocks, Geo. A. Robertson, St. Catharines, Ont., won first and second on hen, getting Canadian White Rock Club special for best hen exhibited. Thos. Rice took first on a grand feathered cock. J. T. Brown, Seaforth, took first and special for best cockerel and pullet on show. Fred Andrews, London, exhibited an aged cock that many regarded as the best in the show, and in many points it excelled the first-prize winner.

Buff Rocks were not so numerous as the Barred variety, but what they lacked in numbers they made up in quality. Here were exhibited some of the finest birds in the show, and almost all were of that deep buff color that was formerly seen only to perfection in the Buff Cochins. Remarkable improvement in this matter of color has taken place in the last few years, and almost all the birds exhibited were of the desired shade. Jno. Bawden, Ridgetown, took the majority of prizes and ribbons, including first and second on cockerel, first and second on pullet, first on cock and third on hen, and silver cup. J. O. Harron, Crosshill, won most of the remaining prizes, taking first and special on hen, second on hen, third on both cock and cockerel.

Orpingtons, the only successful rivals of our American breeds, were well represented. The Buff variety were the most prominent, followed by an exceptionally fine display of Blacks and a number of Whites. In Buffs competition was very keen, and the prizes were evenly distributed among the exhibitors. A. W. E. Hellyer, Ottawa South, Ont., took first and third on cock, second on hen, second and third on pullet, and second on cockerel; H. A. Hoffman, Ridgetown, first on cockerel; and Robert Barns, Toronto, the only man to get two firsts, on hen and pullet. In Black Orpingtons, Kemp and Waterman, London, Ont., and Howard Fraleigh, Forest, Ont., divided the ribbons somewhat evenly. In Whites, T. H. J. Moore, Hamilton, was the largest winner, followed closely by F. C. Bogart, Napanee.

The Asiatic breeds were well represented, and proved one of the most attractive features to sightseers. In Light Brahmans, H. W. Partlo had a string of birds that would be hard to duplicate on the American continent. He took all the firsts, second cock, third hen, and numerous specials. In Buff Cochins, Hugh Wyatt, London, had things pretty much his own way. His first-prize cockerel was a very fine bird, deep rich buff color, and feathered right down to the toes. Other prizes won by him were first pullet, first and third hen and second cockerel. Holmhurst Poultry-yards, Whitby, Ont., also showed some high-class birds, and took both first and second on cock, second on hen and third on cockerel. W. B. Martel, St. Jerome, Quebec, exhibited all kinds of Cochins and Brahmans, taking many prizes in other classes than the two mentioned above. R. J. McCurdy, London, was quite successful with his fine Black Langshans.

The Mediterranean classes were only fairly well represented. Minorcas were present in large numbers. Harry Dunn, Toronto, was the most prominent winner in Single Combs, although J. H. Minshell, Brantford, and Chas. Garrett, of Toronto, both won firsts. In

Single-comb Brown Leghorns, W. O. Garvey, London, was extensively successful, winning many firsts. His best hen was a beauty—perfect in shape, coloring and feathering—and won four specials and ribbons for best shaped and colored female of its breed. In Rose-comb Brown Leghorns the old rivals, Wm. Cadman, St. Thomas, and Wm. C. Wilson & Sons, Hawkestone, had a great battle for supremacy. Cadman came out ahead, and Wilson's birds that won first at Toronto were turned down to second place in some classes. Wm. Cadman showed an extra fine hen, which won six specials besides first for him, but was a little off in shape. Wm. C. Wilson won first on cock, as at Toronto, and would have won more if his birds had been in good condition.

The exhibit of Rhode Island Reds was the largest ever seen here, and from the appearance and quality of the birds they are bound to become more popular than at present. Emil Warkel & Son, Waterloo, were prominent winners, taking first in hen and cock.

The exhibit of water fowl was large and of good quality. In Rouen ducks, Baker Bros., Guelph, won first and second on old male, first on old female, and first on young male; C. & J. Bogue, Strathroy, took first and second on young females. In Pekins, C. J. Lawrie, Maple, took first and specials on both old male and female ducks—these two being an exceptionally good pair. Baker Bros. won first on young male and second on female. Indian Runners were exhibited only by T. H. Scott, St. Thomas, Ont., who cleaned up. Geo. Burns, Tillsonburg, had two pair of fine wild geese, which attracted much attention.

Emden geese were the largest entry in point of numbers. Baker Bros., Guelph, were prominent winners, getting first on old male and first on young male. A. McDougal & Sons, Milton, took first and second on females, old. Scanlon Bros., who won so largely in the dressed exhibits of geese, were not nearly so successful in the live classes, getting only a first on old female. In Toulouse, Baker Bros. again won, taking two firsts on young male and female. Chinese and African geese were exhibited in large numbers, and all the exhibits were high-class.

The exhibit of turkeys was the largest ever shown at Guelph, the Bronze variety predominating almost exclusively, only a few White and Black turkeys being shown. In Mam. Bronze, W. J. Bell, Angus, won with startling regularity, losing only one important prize, and that a first, to Chas. Gould, Glencoe, for turkey cock. Mr. Bell has the finest collection of Bronze turkeys that could be found, and now enjoys an international reputation as a successful breeder of show stuff.

DRESSED POULTRY.

Without doubt this year's exhibit of dressed poultry was the largest in numbers and the finest in quality ever exhibited. The birds were nearly all of good color, were carefully picked and prepared for show, and were all plump and attractive looking. Speaking of color, a little excitement occurred after the judges had placed the awards. A lady had on exhibit large entries in chickens, ducks, geese and turkeys. All her entries were very fat, plump and well prepared, and were fine looking, but she only took one premium, and that a paltry third. She naturally wanted to know of the judge what was the matter with her birds, and the judge, Prof. Graham, said: "Color. All your birds are yellow. If they were white-fleshed they would stand a chance of winning." And that lady will not feed her next year's exhibition birds on corn again, but will likely come back with a string of whiter birds and take her due share of prizes. Such are the lessons learned through defect.

In dressed fowl, J. E. Mounce, Armstrong Mills P. O., Guelph, was the outstanding winner. All his birds entered looked plump and well fed, and white in color. Adam A. Armstrong, Fergus, was another large winner.

There was a large entry in dressed ducks, but the quality was only average, all the birds being slightly deficient in color. Woodron & Sons, Beaconsfield, Que., were the principal winners; Isaac T. Knight, Guelph, won first for dressed pair.

In dressed geese, Scanlon Bros., Ennotville, made a clean sweep, and deserve special mention for their fine display. All the birds shown were not too fat, were white in color, and tastefully prepared for exhibit.

In dressed turkeys, Woodron & Sons had a mammoth entry, and took all the prizes. Their birds were not exceptionally large, but showed good color of flesh and skin, and indicated that they had been carefully fasted before killing.

The principal drawback to the dressed-poultry exhibit is the fact that many people never find the room, situated as it is away at the back of all the other space. Unless one looks specially for the dressed exhibit it will very likely be missed. Here, as in all other parts, lack of accommodation is the crying evil.

ANNUAL MEETING OF WESTERN ONTARIO POULTRY ASSOCIATION.

The annual meeting of the Western Ontario Poultry Association was held in the City Hall, Guelph, on Thursday, December 12th, beginning at 1.30 p. m.

The President, Wm. McNeil, in his opening remarks, referred to the great success of the present Show, stating that it was the largest exhibition of poultry he had ever seen, either in the United States or Canada. As President, he expressed gratitude to specialty clubs and the various individuals and committees who had worked so hard to make the Show what it is; and also spoke of the good work being undertaken by the Confederation of Local Poultry Associations of Ontario.

The President made a report of the negotiations carried on with the Secretary of the Canadian Na-

tional Exhibition with a view to getting a second representative.

Motions were voted upon as follows: "That this Association apply to the Canadian National Exhibition for the admission of two delegates as formerly, and suggest that each local poultry association be also given representation, as well as the Confederation of Local Poultry Associations of Ontario." Carried.

"That in the opinion of this assembly the future success of the poultry department of the Canadian National Exhibition depends on the action taken by that Exhibition in the erection of a new building for poultry and the restoration of the prize list to its old form." Carried.

"That the Provincial Winter Fair Board be requested to make an arrangement by which local poultry associations may be given admission to the Winter Fair along somewhat similar lines as the Farmers' Institutes." Carried.

"That this Association send a deputation to Ottawa to interview the Minister of Agriculture, and ask that special arrangements be made so that birds going to exhibitions may be shipped on Sunday." Motion lost.

It was suggested that exhibitors, beyond a certain distance from Guelph, should be allowed until Tuesday morning to get their birds into the show building. This matter was referred to the new Board of Directors for consideration.

Mr. Woodward wished that something more might be done for the pigeon department in classification and prizes.

The election of officers resulted: Hon. Presidents, Hon. Nelson Monteith, Toronto, and Dr. A. W. Bell, Winnipeg, Man.; President, Wm. McNeil, London; 1st Vice-President, Allan Bogue, Woodbank; 2nd Vice-President, W. J. Bell, Angus. Directors—L. H. Baldwin, Deer Park; A. W. Tyson, Guelph; G. G. Henderson, Hamilton; T. H. Scott, St. Thomas; J. R. Laidlaw, Paisley; R. Oke, London; N. K. Cornwall, Thamesville; C. H. Wilson, Hawkestone. Representatives to the Canadian National Exhibition—Wm. McNeil, London; Wm. Barber, Toronto (second representative if two can be secured). Representatives to Western Fair, London—J. H. Saunders, London; R. McCurdy, London. Representatives to Provincial Winter Fair—Wm. McNeil, London; A. W. Tyson, Guelph; L. H. Baldwin, Deer Park; F. A. Woodward, Toronto.

DIRECTORS' MEETING.

At the close of the annual meeting, the newly-elected Directors met in the City Hall.

The following recommendations were made to the Winter Fair Board regarding changes in the classification of the prize list:

That Chinese geese have two classes, one for White Chinese geese and one for Brown Chinese geese. That the Buff Leghorn class read, S. C. Buff Leghorn; the Buff Leghorns, R. C., to show in the A. O. V. fowl class. That classes be added for Pit Games, Indian Game Bantams, Japanese Bantams A. O. V. That Rhode Island Reds be added to the sale class. That a section for Asiatics be added to the sale class.

On motion it was resolved that an additional \$100 be asked for the Pigeon department, and that the distribution of this amount be left to the Canadian Pigeon Fanciers' Association.

Appointment of judges for the show of 1908: All Plymouth Rocks—P. Schwaab, Rochester, N. Y.; Buff Orpingtons and all Leghorns except R. C. White—R. Oke, London; Minorcas, Spanish, Black and White Orpingtons, Andalusians, Dominiques, Javas, LaFleche and Creve Coeurs—N. Cosh, Pt. Dover; Game Bantams and all Asiatics—S. Butterfield, Windsor; Ornamental Bantams, Silkies, Sultans, Hamburgs—Wm. McNeil, London; Rhode Island Reds and all Wyandottes except Partridge—James Tucker, Concord, Mich.; Partridge Wyandottes, Polands, Dorkings, Red Caps, Houdans and water fowl—L. G. Jarvis, Montreal; turkeys—James Anderson, Guelph; pigeons—C. F. Wagner, Toronto; ornamentals—Wm. Barber, Toronto; utility pen and dressed poultry—Wm. Barber, Toronto, and W. R. Graham, Guelph.

It was decided that a wire walking coop, with canvas top, should be supplied each judge at the next Show.

CREAMERYMEN'S MEETING AT GUELPH.

A meeting of the creamerymen and buttermakers, of Western Ontario, was held at the Dairy School Building of the Ontario Agricultural College, Guelph, on the afternoon of Thursday, Dec. 12th. Mr. John McQuaker, Owen Sound, President of the Western Dairy-men's Association, occupied the chair. There were about 100 present during the afternoon. All pronounced the meeting a very successful one. Several points of great interest and value to creamerymen and buttermakers were discussed. Among these may be mentioned the best cream separator, pasteurization of cream, weighing samples when testing with the Babcock test, determination of moisture in butter by short methods practicable for creamerymen, and transportation of dairy products. The liveliest discussion was provoked by Instructor Robertson, who, in his address stated that a number of hand cream separators were being unloaded onto creamery patrons, which were a detriment to the whole creamery business, as they would not skim a cream testing over about 20 per cent fat, which cream is too thin, causing extra expense for hauling and handling at the creamery, and, in addition, it soured quickly, causing a curdy mass in the cream, which was very difficult to handle. One delegate suggested that the creamerymen appoint an

independent party to investigate the actual conditions of separators on the farm, and publish the results, so that persons might be warned against the purchase of these poor machines. Instructor Robertson was pressed very hard to name the firms who were sending out these poor machines, but, with true Scotch caniness, he would not be trapped. Instructor Fred Dean also had similar complaints to make about inferior machines being sold to patrons.

It would seem as if this question is one which ought to be investigated by someone, and let the facts be known, no matter who may suffer. R. W. Stratton, Instructor in Separators at the Dairy School of the O. A. College, said that the various machines at the Dairy School all did good work, and that there was not much difference in the various makes. It would appear that some of the manufacturers aim to supply a better article for the public institutions than is sold to the general public.

Chief Instructor Hens was the first speaker of the afternoon, after a brief address of welcome from the Head of the Dairy Department. He reported 73 creameries in operation in Western Ontario during the year. Of these, only two received whole milk entirely, and the remainder were either cream-gathering or mixed whole milk and cream-gathering. Sixty creameries now pay patrons by means of the Babcock test. The remainder continue to use the oil-test churn. Four of the former weigh samples for testing by means of scales. Combined churns were found in 66 creameries. Seven creameries use pasteurizers; 12 use culture for ripening the cream; 24 use coolers for cooling cream. Fifty-nine creameries are kept clean and sanitary. Cold storages, in many cases, were not good; four creameries have no cold storage for butter. The total amount of money expended on improvements during the year was estimated at \$16,954.

Instructor Fred Dean thought that a week's course at the Dairy School would be excellent for cream-haulers, many of whom did not know good from bad cream. It was difficult to get an improvement in the quality of cream so long as two or more wagons from different creameries travelled over the same route. If the cream was rejected by one driver it would be accepted by the other. He said that many buttermakers keep no record of their work, and do not know how much butter they make daily, weekly or for the season. A maker needs to study his business and make first-class goods all the time, as reputation alone will not sell butter. Buyers who receive one or two lots of poor butter will look elsewhere for their goods. Many of the monthly statements sent to patrons were very unsatisfactory.

Instructor Robertson thought that the lack of proper care of the cream by the patrons was one of the greatest drawbacks to the creamery system. He said makers were to some extent responsible for this poor quality of cream, because they accepted all kinds. Buttermakers should do more outside work among the patrons, and urge them to put up a supply of ice during the winter. Many patrons would not know the buttermaker if they met him on the street. Sometimes cream haulers have 20 to 30 lbs. of cream on their books which is not found in their cans or tanks, owing to pressure from patrons to give good weight. He thought the small "overrun" in some creameries was due to carelessness of cream haulers in weighing and sampling. He urged richer cream. "Ask for 40% cream and you may get 30 to 35," was his comment on the question of a delegate who asked if 40% cream was economical for the producer. One buttermaker thought cream testing over 35% fat was difficult to get out of the can, and was more wasteful than 25% to 30% cream. Mr. Smith, of Alton, suggested that creamerymen get reports of the kind of separators used by the patrons of the various creameries, take notes on quality of cream supplied, etc., and report at the next meeting. Mr. Adam Bell, Tavistock, thought that much poor cream was caused by having separators in the stable. One of the instructors said he knew of a separator being in the hogpen, or a place partitioned off from the hogs.

Mr. Wiancko, of British Columbia, said he had found the poorest cream coming from patrons who have but a few cows, and who have not sufficient to make it worth while to take good care of the cream, or deliver often enough to have it in proper condition for making butter of fine quality.

Mr. Brill, of Teeswater, opened the discussion on Mr. J. H. Scott's paper on the scales for weighing Babcock samples of cream for testing. Both these gentlemen strongly recommended the scales in preference to the pipette. They claimed that testing 24 samples per hour was quite possible by using the scales, balancing 12 bottles at once. Mr. Brill said they had considerable difficulty at first with their patrons, who were accustomed to the oil-test for the last 20 years. After explaining the difference between butter and butter-fat, all were now better satisfied than when the oil-test was used.

W. W. Moore, Chief of Markets Division, Dominion Dept. of Agriculture, Ottawa, and Jos. Burgess, Ice-car Inspector, of the same Dept., gave a full explanation of the refrigerator car and steamship service for dairy products. Mr. Moore said the service was instituted in 1895, by fitting up ten steamers from Montreal with ice refrigerator compartments. In 1897 mechanical refrigeration was placed on the ships; 1906 saw 45 steamers fitted with mechanical refrigeration, and 62 routes on railways were provided with refrigerator cars. Inspectors were sent on the trains, noting conditions of butter as delivered, car temperatures, amount of ice in bunkers, etc. There were also inspectors stationed in Montreal. In case of cars arriving without ice, the

bonus was withheld from the railway company. Cargo inspectors on the ships and in Great Britain reported on temperatures, etc.

He explained that the past season had been one very difficult to maintain an efficient service on the railways, owing to strikes, late season, and small amount of butter shipped. The railways did not fill the bunkers in some cases, owing to the light shipments. To overcome heating at the freight sheds while waiting for freight trains, he thought small refrigerators should be provided by the railways, where the business would warrant the same. Transshipments at Toronto in case of cars not being filled on arrival at this point was also detrimental. Warm dairy butter in the same car as creamery butter was something which they would try to overcome. The Dept. found it difficult to refuse dairy butter, especially when the cars were not full of creamery butter. They recognized that the service was not perfect, but they were doing everything possible to bring about improvements.

Mr. Burgess explained that there were but two icing stations on the G.T.R. west of Toronto, viz., Palmerston and Stratford. Sometimes cars were iced a day or two before loading, and much of the ice became melted before leaving the icing station. The cars usually contained from 600 lbs. to three tons of ice on arrival in Toronto. Some merchants would deliver dairy butter at the freight shed the night before shipping. This butter was too warm to place in the car with cold creamery butter. He thought creamery-butter packages ought to be branded as such, in order to prevent mixing with creamery lots.

Mr. H. L. Fulmer, of the Chemical Department of the College, read an excellent paper on the comparison of short tests, such as the "Gray" and "Beaker," with the official method. The official method is too expensive and takes too much time for buttermakers to use. Everything considered, he thought the "Beaker" method the one most suitable for buttermakers to use. The results compared very favorably with the "official," and the apparatus was very simple. There was no expensive glassware nor chemicals in connection with the test. The time required was about 15 to 20 minutes per sample. H. H. D.

THE DAIRY TEST.

The two-days' test of dairy cows in connection with the Ontario Winter Fair at Guelph last week, brought out rather fewer entries than last year, but a higher average class of cows as regards conformation, vigor and performance, the Holstein breed being most strongly represented, especially in the younger class, the Ayrshires being close competitors in all respects, and making matters exceedingly interesting for the Black and Whites, whose honors at times during the test appeared to be in peril of being wrested from them. The five-year-old Holstein cow, Evergreen March 3896, owned by G. W. Clemons, St. George, Ont., made the highest record of any cow in this competition, namely, 139.82 lbs. milk in the two days, testing 3.4% fat, and scoring 155.57 points. She is a cow of strong constitution, fine conformation and quality, and well-nigh an ideal dairy cow. Her closest rival was the six-year-old Ayrshire cow, Jean Armour 15591, owned by Geo. Rice, Tillsonburg, whose record in this test was 114.26 lbs. milk, testing 3.8% fat, and scoring 139.70 points. In the Shorthorn class, the nine-year-old cow, Kentucky Queen, owned by Jas. Brown, Norval, gave 91.32 lbs. milk, testing 4.1, and scored 119.12 points; while the ten-year-old cow, Canadian Queen, shown by Geo. Armstrong, Speedside, gave 103.87 lbs. milk, testing 3.1, and scored 110.85 points. Jas. Brown's three-year-old Shorthorn cow, Lady McKay 2nd, produced 97.33 lbs. milk, testing 4.2, and scored 131.13 points.

An unfortunate incident occurred in the competition by which one cow with a creditable record was debarred from the standing to which her performance entitled her. When making his entries, Mr. G. W. Clemons had two cows freshening, of which it was hard to decide the better prospect. It turned out that the cow which was not entered did the best, and she was therefore substituted when the cows were brought to the show. On the question as to their identity being raised, Mr. Clemons made a frank explanation, and there was a strong inclination to allow the cow's record to be considered in awarding the prizes. It was decided by the management, however, that the rules must be adhered to as a matter of principle, seeing that if any latitude is allowed in such cases there might be a disposition on the part of others to go further, and possibly buy up cows at the last minute to substitute for their own. The loss to Mr. Clemons is, nevertheless, regrettable, especially in view of his many years' service in the superintendence of this department, and it is only fair that the cow's performance should be chronicled. Her name is Alice Wayne, and she gave in the two days 118.49 pounds milk, testing 3.2% butter-fat. We understand that her score was 125.68 points, which would have made her second in her class.

The awards were made by the following scale: 25 points for each pound of fat, 3 points for each pound of solids not fat, 1 point for each ten days in milk after the first thirty days; limit, 10 points. The following table shows the individual record of all the cows in the competition:

RESULTS OF THE DAIRY TEST, ONTARIO WINTER FAIR, 1907.

NAME OF COW AND OWNER.	Lbs. Milk.	Per cent. Fat.	Lbs. Fat.	Lbs. Solids Not Fat.	Pts. for Days in Milk.	Pts. for Fat.	Pts. for Solids Not Fat.	Total Points.
SHORTHORNS—CLASS 45.								
Sec. 1—Cow, 48 months and over—								
1st—Kentucky Queen 38948; Jas. Brown, Norval.....	91.32	4.1	3.74	8.54		98.5	25.62	119.12
2nd—Canadian Queen, Vol. 19; Geo. Armstrong, Speedside	103.87	3.1	3.22	6.45	2	80.5	28.35	110.85
Sec. 2—Cow, 36 months and under 48—								
1st—Lady McKay 2nd 69110; Jas. Brown, Norval.....	97.33	4.2	4.09	8.86	2.3	102.25	26.58	131.13
2nd—Rose of Kentucky 34th 69970; Jas. Brown, Norval	89.08	3.6	3.21	7.79	.7	80.25	28.37	104.32
Sec. 3—Heifer, under 36 months—								
1st—Lady Guelph 76721; Jas. Brown, Norval.....	80.86	4.0	3.23	7.33		80.75	21.99	102.74
2nd—Gracey Gwynne 80976; John Kelly, Shakespeare	53.32	4.4	2.35	4.89		58.75	14.67	73.42
AYRSHIRES—CLASS 46.								
Sec. 1—Cow, 48 months and over—								
1st—Jean Armour 15591; Geo. Rice, Tillsonburg.....	114.26	3.8	4.34	10.40		108.5	31.20	139.70
2nd—Sarah 2nd 13192; H. & J. McKee, Norwich.....	115.56	3.5	4.04	10.34		101.	31.02	132.02
3rd—Victoria 13788; H. & J. McKee, Norwich.....	91.52	4.3	3.94	8.67		98.5	26.01	124.51
4th—Pet of Hickory Hill 21259; N. Dymont, Clappison	91.67	3.8	3.48	7.63	.8	87.	22.89	110.69
Sec. 2—Cow, 36 months and under 48—								
1st—White Rose 2nd 17841; H. & J. McKee, Norwich	95.58	4.2	4.01	8.79	.4	100.25	26.37	127.02
2nd—Old Ada's Last 17340; H. & J. McKee, Norwich	73.57	3.5	2.57	6.99	2.8	64.25	20.97	88.02
3rd—White Floss 18652; Geo. Rice, Tillsonburg.....	55.83	4.1	2.29	5.11	3.7	57.25	15.33	76.28
Sec. 3—Heifer under 36 months—								
1st—White Floss of Brookside 20139; H. & J. McKee	67.88	3.4	2.29	6.10	.9	57.25	18.30	76.45
HOLSTEINS—CLASS 47.								
Sec. 1—Cow, 48 months and over—								
1st—Evergreen March 3896; G. W. Clemons, St. George	139.82	3.4	4.75	11.54	2.2	118.75	34.62	155.57
2nd—Beauty's Buffalo Girl 3562; P. D. Ede, Oxford Centre	115.57	3.2	3.70	10.34		92.50	31.02	128.52
3rd—Canary Starlight Lassie B. 3960; Geo. Rice, Tillsonburg	93.64	3.9	3.65	8.76		91.25	26.28	117.53
Sec. 2—Cow, 36 months and under 48—								
1st—Aralissa 5845; Jas. Rettie, Norwich.....	116.75	3.1	3.62	9.77	1.6	90.5	29.31	121.41
2nd—Daisy Texal Posch 5280; Geo. Rice, Tillsonburg	109.01	3.0	3.27	9.43		81.75	28.29	110.04
Sec. 3—Heifer, under 36 months—								
1st—Iantha Jewel Mechthilde 3rd 5530; M. L. Haley, Springfield	93.64	4.	3.75	9.04		98.75	27.12	120.87
2nd—Iantha Jewel Posch 6821; Jas. Rettie, Norwich	108.32	3.2	3.47	9.21	1.8	86.75	27.68	116.18
3rd—Ina Pauline Mercedes 6063; H. Bollert, Cassel... ..	92.68	3.7	3.43	8.89	.5	85.75	25.17	111.42
4th—Queen Pietertje Mercedes 2nd 6094; Geo. Rice, Tillsonburg	71.87	3.6	2.59	6.68		64.75	20.04	84.79
GRADES—CLASS 50.								
Sec. 1—Cow, 48 months and over—								
1st—Holstein Lassie; Geo. Rice, Tillsonburg.....	99.76	4.1	4.09	8.98		102.25	26.79	129.04
Sec. 3—Heifer, under 36 months—								
2nd—Pet; N. D. Liddycoat, Clappison	64.82	3.4	2.20	6.		55.	18.	73.

THE SEED DEPARTMENT.

A growing department is the exhibit of seeds of the clovers, grasses and cereals. There are two separate classifications, one for exhibits of selected seeds grown by the Canadian Seed-growers' Association, and a general or open class. The Canadian Seed-growers' exhibit was particularly good, being larger and more complete than last year, most of the old members and some new ones being represented. In point of quality marked improvement was shown. While owing to its being an off year for corn the entries here were slightly shy, both in the Canadian Seed-growers' and in the Institute classes, the exhibit of grains and potatoes was very strong, pronounced by Mr. Raynor almost unparalleled in the Province, both as to extent and quantity.

Mr. C. R. Gies, of Heidelberg, Ont., member of the Seed-growers' Association, who has been working for eight years improving a strain of Dawson's Golden Chaff wheat, exhibited a very hard and evidently glutinous sample of his improved strain, winning the first prize in White winter wheats. In Red winter wheats, David H. Taylor, of Corwhin, exhibited a sample with a very large hard red berry, which resembled Turkey Red, although the name of the variety was not given. In barley it was noticeable that the plumpest berry received no prize, owing to its being entered as Mandscheuri, whereas it looked to the judges like two-rowed barley, and was, therefore, out of its class. Among the many fine exhibits of potatoes, attention was drawn to some of the Hammond variety, conspicuous for their smoothness and shallow eyes. This variety, however, while of good quality, is not considered very productive.

A feature worthy of special notice in the seed department was the educational exhibit, showing, among other things, boxes of germinated seeds, demonstrating the advantage of sowing large plump barley and clover seeds as compared with shrunken ones; and of sound whole peas as compared with split, wormy or weevily ones; also the exhibit of sheaves of selected grain by members of the Canadian Seed-growers' Association. Following is the list of awards in the competition in the Canadian Seed-growers' classification:

Class 262, Sec. 1—Fall wheat, hand-selected seed (selected from the first or second year's breeding crop).

—1, Duncan Carmichael, West Lorne, Dawson's Golden Chaff; 2, W. M. Smith, Scotland, Dawson.

Class 262, Sec. 2—Group exhibit, fall wheat.—1, C. R. Gies, Heidelberg, Dawson's Golden Chaff; 2, Herbert Davidson, Mount Nemo, Early Red Clawson.

Class 263, Sec. 1—Spring wheat, hand-selected seed (from first or second year's breeding plot).—2, Robert N. Woods, Metcalfe, Red Fife.

Class 263, Sec. 2—Spring wheat, group exhibit.—1, Robert McKay, Maxville, Red Fife.

Class 264, Sec. 1—White oats, hand-selected seed (from first or second year's breeding plot).—1, Robert N. Woods, Metcalfe, Ligowo; 2, W. M. Smith, Scotland, Dodds.

Class 264, Sec. 2—White oats, group exhibit.—1, David Prouse, Goderich, Newmarket; 2, D. Carmichael, West Lorne, Ligowo; 3, Wm. W. Ramage, Thistle, Tartar King.

Class 265, Sec. 1—Six-rowed barley, hand selected (seed from first or second year's breeding plot).—2, W. M. Smith, Scotland, Mensury.

Class 265, Sec. 2—Six-rowed barley, group exhibit.—1, D. Carmichael, West Lorne, Mandscheuri; 2, D. Carmichael, West Lorne, Mensury; 3, Charles L. Mackie, Kinsall.

Class 266, Sec. 1—Corn, best 10 ears, any variety, Flint, White.—1, G. W. Ryckman, McNab, Red Glaze.

Class 266, Sec. 2—Corn, best 10 ears, any variety, Flint, Yellow.—1, Edward Smith, Ridgeway, Compton's Early; 2, Leonard H. Hankinson, Grovesend, Longfellow; 3, H. Smith, Ruthven, Compton's Early; 4, D. G. Thomson, Cumming's Bridge, North King.

Class 266, Sec. 3—Corn, best 10 ears, any variety Dent Corn, White (Whitecap Yellow included).—1, H. Smith, Ruthven; 2, Jos. C. Thomas, Blytheswood.

Class 266, Sec. 4—Corn, best 10 ears, any variety Dent Corn, Yellow.—1, G. W. Coatsworth & Son, Kingsville; 2, D. Carmichael, West Lorne, Reid's Yellow Dent; 3, A. H. Woodbridge, Kingsville, Reid's Yellow Dent.

Class 266, Sec. 5—Corn, best 10 ears, any variety, Sweet Corn, late.—1, H. & W. McKee, Norwich, Stowell's Evergreen; 2, J. O. Duke, Olinda.

Class 266, Sec. 6—Corn, best 10 ears, any variety, Sweet Corn, early.—1, J. O. Duke, Olinda; 2, Charles Pearce, Wellington, Pearce's Early Evergreen.

Class 267, Sec. 1.—Potatoes, round white type.—1, W. M. Smith, Scotland, Carman; 2, F. W. Krouse, Guelph.

Class 267, Sec. 2.—Potatoes, long white type.—1, F. W. Krouse, Guelph.

Class 267, Sec. 3.—Potatoes, Rose type.—1, W. M. Smith, Scotland, Pat's Choice; 2, F. W. Krouse, Guelph.

THE LECTURES AND DISCUSSIONS.

Demands on our space by the numerous events of last week preclude the possibility of any attempt to report the excellent lecture programme in this issue of "The Farmer's Advocate." Suffice to say, our editorial representative made copious notes which will be worked up into articles of seasonable and practical value for subsequent issues. The programme of lectures and discussions was unusually good. The good roads' session was attended by a large audience, who heard two addresses by Mr. A. W. Campbell and D. Ward King. At the conclusion of Mr. King's address, ninety people signified their intention of making split-log drags to be used on the roads in their respective neighborhoods. Mr. Campbell, in an excellent speech, emphasized the salient principles of good roadmaking, paid a graceful compliment to the "intelligent interest" taken by "The Farmer's Advocate" in the subject of road improvement, and heartily endorsed the split-log drag as a means of keeping earth roads in the best possible condition.

Among the discussions, one of the most interesting was that on Thursday afternoon, when the recommendations proposed by the directorate of the Ontario Horse-breeders' Association, with a view to the enactment of a stallion license law, were endorsed pretty nearly unanimously, not only in principle, but almost precisely in detail. These as approved are:

1.—That only pure-bred and registered stallions should be allowed to stand for service; except:

(a) That owing to one-third of the stallions in the Province being found by the inspectors to be unregistered, that for three years grade stallions known to be good sires, and upon inspection found to be of good conformation and free from hereditary unsoundness, should be granted a license, to be known as "Class 2."

2.—That all stallions standing for service should be free from hereditary unsoundness.

3.—That all stallions standing for service should reasonably comply with the standard of conformation for the breed which they represent.

4.—That stallions should be inspected, and that those complying with the above requirements, except those provided for in Section (a) of resolution 1, should be given a license, to be known as "Class 1."

5.—That no person should be allowed to accept a service fee for any stallion unless a license has been taken out for said stallion.

6.—That all printed matter advertising any stallion should include a copy of the license certificate issued for such stallion.

7.—That the inspection should be done by a County Inspector or Inspectors, appointed by the Government.

8.—That the license fee should be \$10.00, out of which the expenses of the inspection should be paid, and that the surplus collected from each county should be returned to the county, to be used for the encouragement of Spring Horse Shows, no more than two of which shows should be held in any electoral district.

9.—That local horse show associations should be encouraged in each county; that the spring horse shows should be held under the management of these associations, and that these associations should be affiliated with the Ontario Horse-breeders' Association.

10.—That educational meetings should be held in connection with the Spring Horse Shows held in each county, by arranging to have special lectures on practical subjects relating to the horse industry.

11.—That "syndicating," under the generally accepted meaning of the word, should not be encouraged, and that some legislation should be passed to regulate it.

It was further concluded that annual inspection would be advisable.

The talks on horse-breeding, the addresses on economical feeding, the experiences of men engaged in cow-testing, the poultry session, the seed session, and the public meeting in the City Hall, all drew good crowds, while on Friday morning every inch of available sitting, standing and hanging space was occupied, while Mr. King, of Missouri, demonstrated how to control and subdue an unbroken colt, by catching its left fore fetlock with a running noose, and then presently passing the rope over his back, and by means of a rope girth and a W attachment, lifting his foot when obstreperous until the colt is so thoroughly under control that he will stand the flick of the whip rather than move a pin. To a good many people Mr. King's method was new, but all were convinced of its feasibility and value, and there will doubtless be new experiences in store for many an equine youngster these coming winter months.

For list of awards in cattle, sheep, swine and the dressed carcasses at the Ontario Winter Fair, see next issue of "The Farmer's Advocate."

At the annual meeting of the Turkey and Water Fowl Club, during the Winter Fair week at Guelph, these officers were elected:—Honorary President, Allan Rogie, London; President, Isaac Knight, Guelph; Secretary, Treasurer, Thos. Scott, St. Thomas; Executive Committee, Thos. Shea (Fergus), John Rogie (Strathroy), E. S. Baker (Guelph).

QUEBEC PROVINCE AGRICULTURE IN 1907.

In the section where the drought prevailed, farmers are feeling the pinch of shortage of feed, and, while herds have been reduced by the old cows and poor heifers going to the butcher, it is not a serious loss, and we will start next spring with a better lot of cows than ever, to continue in this greatest of agricultural industries, "dairy farming." Quebec is pre-eminently a dairy Province, and boasts of many fine herds of dairy cattle. Our herds require the "weeding-out" process carried out very severely in many cases, as has been demonstrated in the work carried on by the Dominion Department of Agriculture in their cow-testing associations, for, in the published results, we see a great contrast in the returns from different sections, and, in fact, the returns from the cows in the same herds. Contrast the returns for September from Bagotville and St. Armand, where, at the former place, 152 cows gave 94,160 lbs. of milk, and at the latter place, 170 cows gave 64,675 lbs.; that is to say, eight fewer cows at Bagotville have yielded 29,485 lbs. more milk. We trust this good work by the Department will continue, as it is the most educative in connection with the dairy cow that we have, proving that a dairy cow must produce a certain amount of milk before she gives her owner a profit.

The output of cheese has been a little less than last year. The price has been a shade higher. This season the average price will be about \$9.70 a box, as against \$9.40 last year. On the whole, the season was favorable for the making of a good product, and if there was a fault, it was in snipping the cheese too green, especially early in the season.

The make of butter is estimated at about three-quarters of that of last year, much less was exported, more being required to meet home demands. Butter netted about \$14.10 a box, as against \$13.20 last year.

Prices of milk will net from \$1 to \$1.05 per cwt. made into cheese, and 82c. to 87c. per cwt. made into butter. The high prices for cheese over butter caused many factories to make cheese instead of butter last spring, and continue to do so all season. Fewer factories than usual will be operated this winter. Owing to the high prices of feed, the milk supply will be less, and more is required to supply the city of Montreal, which draws most of its supply from the south-western portion of the Province. The output of milk and cream for city trade is developing with the rapid growth of our cities. The demand for these delicate, but nutritious, articles of diet is ever on the increase. In Montreal city alone, it requires from 60 to 75 farmers, with an output of 50 gallons of milk per day, to supply the wants of an increasing population. So far, the regulations governing the city's milk supply is practically nil; notwithstanding that fact, the supply, on the whole, is of good quality. Last winter, 18c. per gallon was paid to the producer. This summer, 15c., and this winter 22c. is being paid, less railway carriage, which amounts to 2c. and 2-3c. per gallon, according to distance. Even at these increased prices, taking cost of feed and labor into consideration, the dairyman's profits will not be large, but there will be fair remuneration in the business.

The labor problem has not been quite so acute as in the previous year. Then it looked as if many Eastern Township farmers would be forced to abandon their farms through sheer inability to procure help to work them. The demand for farm hands has been partially met, and, what is more important, the possibility of procuring a share of the newcomers from the British Isles to help us in our work has been fully demonstrated, and the Eastern Township farmers are recovering their former contentment. The agent for the Townships, Mr. E. W. Brewster, secured, during the year, 588 immigrants—348 single men, 36 married men and 36 married women, 51 children, 17 single women, and 100 men for railway construction. Besides these, there were about 400 immigrants taken from the immigration office at Montreal to the farms, making about 800 men and women who have come to work on the land during the year. Our French-Canadian countrymen, with their large families, do not feel this labor question quite so acutely as their English-speaking neighbors; with their small families, and perchance should there be a large family, they soon scatter, and leave the land for some more lucrative employment or profession in the cities of the United States or Canada, while quite a few have migrated to work out their destiny on the great wheat lands of Manitoba or Saskatchewan, the ranges of "Sunny" Alberta, or the rich mines of British Columbia. Scarcely can we name a town, county or city in the West that has not a quota of our Quebec boys and girls, and, we are pleased to say, they are successful, and a credit to the place in which they live and to the "old Province" that nurtured them.

Our Province has made greater strides in growing the bacon hog the past year than in any other thing pertaining to agriculture. The sales of bacon hogs, under the auspices of the Dominion Department of Agriculture, the Provincial Department, and the Montreal packers, last year have resulted in placing many fine types of bacon hogs among farmers. Large numbers of brood sows of the best bacon type have been reared, and the series of fall fairs has given strong evidence of this tendency, inasmuch as the exhibits of York shires and Tamworths far exceed all other breeds; and, where Chester Whites were shown, they were almost invariably of the lengthy, smooth-shouldered, deep-sided kind. The high price of hogs that has prevailed during the season, or until the first of November, has further encouraged an increased production, while

the bonus paid by the packers for animals of superior bacon type has created a lively demand for foundation stock of the long, smooth-shouldered, thrifty class. Owing to the lessened grain crop and the high prices of shorts and feeds of late, too many hogs were marketed on the immature side, bringing down the price to some extent.

The open fall and good pasturage were favorable for the stock, which went into winter quarters in good condition, although we anticipate that farmers will not feed as well as usual on grain feeds, and the possibility will be that the cows will be dried off earlier than usual. A large acreage of fall plowing was done. Owing to the poor catch of the new seeding, many fields have been plowed again to be reseeded next spring.

Altogether, the Quebec farmer has much to be grateful for this season, and although he had not bumper crops, yet he has almost enough for his requirements; he has received high prices for all marketable products, and he is in a much better position than the artisan or laborer about to face the winter with a reduced wage, or, worse still, no employment, or even the financial man, who, owing to the financial crisis, finds his business at a standstill. The outlook for 1908 is hopeful, and the prospects bright, for people must be fed, and the farmer must produce the food.

W. F. S.

CONDENSED-MILK BUSINESS.

At the St. Charles Condensed-milk Factory, Ingersoll, Ont., the intake of milk lately has been some 40,000 lbs. per day, for which the price has ranged from \$1.40 to \$1.50 per cwt. No ensilage, turnips or other foods of that character are allowed to be used, and the greatest care must be exercised to keep the milk pure and absolutely clean. Two brands of the product are put up, usually in 20 lb. tins, one sweetened with sugar, and the other not. The latter is sterilized and guaranteed to keep indefinitely, but the sweetened brand is guaranteed for one year. The sugar is added in the evaporation process. The bulk of the output goes to the Canadian West, but there is a growing call for the product locally, so that the demand keeps ahead of the supply. Some used to be shipped to South Africa, but that trade was dropped because of the great demand at home.

WESTERN ONTARIO DAIRYMEN.

The Annual Convention and Winter Dairy Exhibition of the Dairymen's Association of Western Ontario will be held in Woodstock, on Wednesday and Thursday, January 15th and 16th, 1908. The convention will be held in the Opera House, and the dairy exhibit in the Market Building. The convention will be addressed by Hon. Sidney Fisher; Hon. Nelson Monteith; C. F. Whitley, J. H. Grisdale; J. A. Ruddle; G. C. Creelman; Prof. H. H. Dean; F. H. Webster, Chief of the Dairy Division, Washington; G. G. Publow; Prof. R. Harcourt; Geo. A. Putnam; Geo. H. Barr; T. Herbert Lund, University of Wisconsin; A. F. McLaren, M. P.; Col. Munro, M. P.; Geo. Smith, M. P.; D. Sutherland, M. P.; M. Schell, M. P.; H. Glendinning; C. A. Hodgetts, Chief Health Officer, Toronto, and others.

PERCHERON ASSOCIATION ORGANIZATION.

Editor "The Farmer's Advocate":

My attention has been called to an item in the Eastern edition of "The Farmer's Advocate," of Nov. 21st, referring to the organization of the Canadian Percheron Association. You very kindly give me the credit for having taken the initiative in the organization, whereas the credit is really due to the Dominion Live-stock Commissioner, Dr. J. G. Rutherford, and I shall be glad to have you make this intimation.

Winnipeg.

GEORGE H. GREIG.

THE ERADICATION OF TUBERCULOSIS.

In regard to the report of the meeting of farmers and dairymen, at Cowansville, P. Q., last month, we are advised that the statement to the effect that compulsory testing was necessary to the extinction of the disease attributed to Dr. J. G. Rutherford, Veterinary Director-General, was made by the chairman of the meeting.

EASTERN DAIRYMEN'S MEETING.

R. G. Murphy, Secretary of the Eastern Ontario Dairymen's Association, sends us an early copy of the programme of the annual meeting, at Picton, on January 8th, 9th and 10th. Among the new names on the programme, we notice Prof. R. A. Pearson's, of Cornell University, and Thos. McGillicuddy, of the Department of Agriculture, Toronto. President J. R. Dargavel, M. P., will be in the chair, and there will be addresses by Hon. Sydney Fisher, Hon. D. Derbyshire, Geo. A. Putnam, C. F. Whitley, Hy. Glendinning, C. C. James, M. A., Geo. A. Barr, G. G. Publow, Dr. W. T. McConnell, J. A. Ruddle, Prof. J. H. Grisdale, Hon. Nelson Monteith, and Dr. Jas. W. Robertson.

There are 9,407 persons on the pay rolls of the United States Department of Agriculture.

P. E. ISLAND.

December is now here. The work of cultivating and harvesting the crop is over, and it is a good time to take a retrospective view of our agricultural operations for the past season. The spring opened late and cold, with the grass badly winter-killed. Much of the grain was not sowed till June. The early summer was cold and dry, and very unfavorable for the growth of grass, and, consequently, pasturage was poor, and the hay crop light. July and August gave us plenty of rain, which resulted in a very strong growth of the grain crops, but the cool weather delayed the ripening till late, and we had about the latest harvest ever known here. Harvesting did not begin till September, and was not all finished till the last of October. The later harvest was saved with difficulty, as the wet weather continued up till the first of November. On the low lands much of the late grain had to be cut with scythes, as the ground was too wet and soft to carry the binders. But the great bulk of the harvest was saved in good time, and in good condition. The grain crop was a bumper one. Potatoes were an average crop, but are rotting very much. The root crop was hardly an average, as much of it was destroyed by a little white maggot that kept cutting off the turnips till quite late in the season. Fodder corn was largely a failure, the weather being too cold and wet for it to do its best. Dairy men had a very successful season. The damp summer gave an abundance of after-grass, and kept the milk flow well up till the close of the cheese season. Cheese prices were not so high as the previous season, but patrons have larger milk accounts. It is true again this year, as last, that the farmers' best moneymakers were the dairy cow, the sheep, the pig, and the hen, as the prices of their products were high all through the season. Oats at 50c. a bushel brought in considerable cash returns, but it is bad farming to sell much of it from the stock.

Dairying has revived to a considerable extent here the last season, and though we are not turning out so much cheese and butter as we did four or five years ago, our dairy business is having a healthy growth from having more intelligence and dairy knowledge in the man behind the cow, and, though there are fewer cows milked than five years ago, there is more milk per cow, and, consequently, more profit in the business. Still we need a lot of good, practical dairy education before dairying will be the success it should be here. The education particularly needed at this stage seems to be the better feeding of the dairy cow all through the year, and the discarding of non-producers from the herds, fewer and better cows, better fed, on suitable feed, and kept milking for ten months of the year, seems to be the solution of our dairy problem. This is the only way to get value for our raw products fed to the dairy cow. There are still many farmers that are keeping too many half-bred dairy cattle at a loss, who, if they reduced their herds a half, weeding out the poorest and giving all their feed to those left, would find dairying a paying business.

Prices here have dropped considerably for some products. Oats are now 45c., where they were 50c. Pork has got down to 7c. Butter is selling, wholesale, at 28c., and the few eggs on the market are worth 25c. for fresh-laid. Potatoes sell for 25c. per bushel. The condensed-milk factory in Charlottetown is paying \$1.40 per hundred for milk, and not getting as much as they want. The winter dairy stations are doing a good business, and will be able to pay patrons something over a dollar a hundred for milk. There is plenty of feed for stock here, but we miss the clover hay, as we cannot get anything so good to take its place.

Considerable fair quality of beef is being shipped to Sydney and other maritime cities. Stall feeding is not so general here as formerly. This is the effect of the high price of dairy products. We are having our first sleighing here now, Dec. 7th. The mild, fine weather all through November was very favorable for stock, and has lightened the demand on the feed mows.

W. S.

ANOTHER WAY TO RENEW.

If you have not already renewed by sending in \$1.50, we make you this favorable proposition: Send the names of two new subscribers and \$3.25, and we will advance your own subscription for one whole year, as well as send "The Farmer's Advocate and Home Magazine" regularly to the new subscribers from December 1st till the end of 1908.

A BOOK PRESENT.

"Carmichael," the captivating story now running through our Home Magazine, is particularly well suited for a Christmas present, being handsomely bound and illustrated. How can you get it? In two ways: for \$1.25 (postpaid) from this office, if your local bookstore happens not to have it on hand; or as a premium for obtaining only two new subscribers to "The Farmer's Advocate and Home Magazine" at \$1.50. Try the latter plan.

The Canadian White Wyandotte Club met during the Winter Fair week at Guelph and elected the following officers:—Hon. President, W. R. Graham; President, L. H. Baldwin; Vice-President, John S. Martin; Secretary-Treasurer, J. E. Daly (Seaford); Executive Committee, Messrs. Dawson, Dixitt, Hall, Bullcock and Geo. Wright.

DISTRIBUTION OF FARM WEEDS OF CANADA.

It is seldom the demand for a free bulletin outruns the supply, but the new colored work on the "Farm Weeds of Canada" is an exceptional in this respect as in the superlative quality of its contents. Every wide-awake farmer wants it, and stacks of applications are filing in from all directions. Through a recent interview with Seed Commissioner G. H. Clark, Department of Agriculture, Ottawa, "The Farmer's Advocate" learned that it had been found quite impossible to honor the requests as fast as they were received, and the prospects were that the first edition of 15,000 copies would fall far short of supplying all the applicants. The work of printing and binding being necessarily slow, only a portion of the edition had yet been received, and it has been thought expedient to honor first applications from public institutions, such as public libraries, agricultural societies, farmers' clubs and rural schools maintaining free libraries.

It is not, therefore, placed upon the list of publications held for GENERAL free distribution; although it is expected that after public institutions are supplied, there will be a limited number available for distribution to farmers out of the second edition, which has been ordered. It has been found impossible to reply by personal letter to the applications and inquiries for "Farm Weeds."

Applications from rural schools are not honored until the Department has the correct name and number of the school section. The books are in no case provided to the school teachers, but are donated to the school sections, and each is stamped before leaving the office, showing that it is for the use of the pupils and ratepayers of the section, the name of the school being inserted.

The distribution of the bulletin will be proceeded with slowly and deliberately. Complete records are kept of all individuals and institutions to whom it is sent. It is anticipated that there will be much delay in honoring applications, even from public institutions, because the book cannot be supplied to the public faster than it comes from the printer. It is worth waiting for, however, and every school section, public library and up-to-date farmer should get on the waiting list. Address: Geo. H. Clark, Seed Commissioner, Department of Agriculture, Ottawa.

DISTRIBUTION OF SEED GRAIN AND POTATOES.

A distribution is being made of samples of superior sorts of grain and potatoes to Canadian farmers, mainly from the Experimental Farms at Indian Head, Sask., and Brandon, Man. The samples consist of oats, spring wheat, barley, Indian corn (for ensilage only) and potatoes. The quantity of oats sent is 4 lbs., and of wheat or barley, 5 lbs., sufficient in each case to sow one-twentieth of an acre. The samples of Indian corn and potatoes weigh three lbs. each. A quantity of each of the following varieties has been secured for this distribution:

Oats.—Banner, Wide-awake, White Giant, Danish Island, Thousand Dollar, Improved Ligowo, all white varieties. Black oats are not recommended for general cultivation, a few samples, however, being available, which can be sent, if specially asked for.

Wheat.—Red Huro (beardless); Preston, Pringle's Champlain and Huron (early bearded sorts); Percy and Stanley (early beardless varieties).

Barley.—Six-rowed—Mensury, Odessa, Mansfield and Claude. Two-rowed—Standwell, Invincible, Canadian Thorpe and Sidney.

Indian Corn (for ensilage).—Early sorts, Angel of Midnight, Compton's Early and Longfellow; later varieties, Selected Leaming, Early Mastodon and White Cap Yellow Dent.

Potatoes.—Early varieties, Early White Prize and Rochester Rose; medium to late varieties, Carman No. 1, and Late Puritan. These later varieties are, as a rule, more productive than the earlier kinds.

Only one sample can be sent to each applicant, hence if an individual receives a sample of oats he cannot also receive one of wheat, barley, Indian corn or potatoes. Lists of names from one individual, or applications for more than one sample for one household, cannot be entertained. The samples will be sent free of charge through the mail.

Applications should be addressed to the Director of Experimental Farms, Ottawa, and may be sent in any time before the 15th of February, after which the lists will be closed, so that the samples asked for may be sent out in good time for sowing. Applicants should mention the variety they prefer, with a second sort as an alternative. Those applying for Indian corn or potatoes should bear in mind that the corn is not usually distributed until April, and that potatoes cannot be mailed from here until danger from frost in transit is over. No postage is required on mail matter addressed to the Central Experimental Farm, Ottawa.

WM. SAUNDERS,
Director.

DOMINION SHORTHORN ASSOCIATION CONSTITUTION TO BE REVISED.

At the Dominion Shorthorn Breeders' Association annual meeting, on Tuesday, February 14th, a proposed new constitution and by-laws will be submitted by the executive, the aim being to make it comply with the new order of things introduced at Ottawa by the nationalization of the Records Association.

JUNCTION FAT-STOCK SHOW.

The fifth annual Fat-stock Show, under the auspices of the Union Stock-yards, at Toronto Junction, was held on Monday, Dec. 9th. In point of excellent quality of the cattle and sheep shown, and in attendance of exhibitors and those interested in exhibitions of good live stock, the show was greater than any previously held. In the various classes, the cattle and sheep shown were of unusual high quality, and would be hard to excel in any part of the Dominion. For the best load of export steers, A. S. Walker, of Dobbington, Ont., won the first prize and sweepstakes. These cattle were fed by Mr. Walker, and weighed 1,500 lbs. each, and were sold to Maybee, Wilson & Hall, for shipment to Bermuda, for \$5.75 per cwt.

THE PRIZE LIST.

- Best 16 export steers—1, A. Walker, Dobbington; 2, White & Clayton, Guelph; 3, James Shea, Dublin.
- Best 16 export heifers—1, White & Clayton, Guelph; 2, Thomas Heal, Mitchell; 3, White & Clayton.
- Best 18 butcher steers—1, Wm. Pridham, Mitchell; 2, White & Clayton; 3, John O'Keefe, Seaforth.
- Best 18 butcher heifers—1, Thos. Heal, Mitchell, silver cup; 2, White & Clayton, Guelph; 3, Wm. Pridham, Mitchell.
- Best 16 cattle, "baby beef," over 1 year and under 2 years—1, White & Clayton, Guelph; 2, Robert E. Gunn, Beaverton; 3, White & Clayton.
- Best fat steer under 3 years—1, White & Clayton, Guelph, silver cup; 2, White & Clayton; 3, Wm. Hamilton, Guelph.
- Best fat heifer under 3 years—1, White & Clayton; 2, Wm. Hamilton; 3, Urban Schmidt.
- Best fat steer, 3 years and over—1, Wm. Hamilton; 2, White & Clayton.
- Best fat heifer, 3 years and over—1, Wm. Hamilton; 2, John O'Keefe; 3, U. Schmidt.
- Sweepstake prize for best animal of any kind, silver cup, to be competed for three years in succession—Wm. Hamilton, Guelph.
- Sweepstake prize, best load of cattle, silver cup—A. S. Walker, Dobbington.
- Best veal calf, 8 weeks and under—1, Thomas Heal, Mitchell; 2, J. R. Bates, Shelburne; 3, L. Chard, Lambton.
- Best deck of sheep, not less than 50—1, A. Hales, Guelph, silver cup; 2, T. Mason, Clinton; 3, James Thompson, Dobbington.
- Best deck of lambs, not less than 50—1, White & Clayton, Guelph; 2, Wm. Pridham, Mitchell; 3, White & Clayton, Guelph.
- Best pair of ewes—1, James Thompson, Dobbington; 2, White & Clayton, Guelph; 3, Thomas Mason, Clinton.
- Best pair of wethers—1, White & Clayton, Guelph.
- Best pair of ewe lambs—1, White & Clayton, Guelph; 2, White & Clayton; 3, A. Hales, Guelph.
- Best pair of wether lambs—1, White & Clayton; 2, A. Hales, Guelph; 3, J. Lawson, Crediton.

HOGS.—Best English bacon hogs, not less than five—1, John O'Keefe, Seaforth, silver cup.

It will be seen by the prize list that nearly all the prizes were won by dealers and farmers from Western Ontario, where the bulk of the best cattle coming to the Toronto markets are raised.

The Harris Abattoir Co. bought no less than six carloads of cattle, all prizewinners in the car-lot classes, besides seven single cattle, all prizetakers in their several classes; two car lots of prize lambs, and four pairs of sheep and lambs, also prizewinners. Mr. Rowntree, the buyer for the Harris Abattoir Co., stated that he paid from \$5.50 to \$8 per cwt. for the prize cattle.

W. B. and Alexander Levack bought, for the Levack Dressed Beef Co., four carloads of cattle, all prizetakers in the car-lot classes, besides several single cattle, also prizewinners. These two abattoir companies bought nearly, if not all, of the prize cattle, as well as sheep, lambs, calves and hogs.

BOGUS BUTTER NOT ALLOWED.

Jean Keiskider, a Montreal manufacturer of "Borino," which looks like butter, but is a mixture of cotton-seed oil, beef fat, milk and coloring matter, as determined by the Dominion analyst, discovered, before the police court, what the Canadian prohibitory law means to the extent of a \$200 fine. He was prosecuted by D. M. McPherson, Government Inspector.

UNITED STATES WINTER WHEAT.

An official report from Washington, D. C., shows that the newly-seeded area of winter wheat in the States is 1.9 per cent. less than the area of 1906, or a decrease of 596,000 acres; and the general condition on Dec. 1st was 3 per cent. poorer than last year. There is also a decline in the area and prospects for rye.

The Nova Scotia Government was awarded a large silver-gilt medal at the Royal Botanical Society's Show, London, Eng., for apples.

I received the glasses all right: the reading glass is fine. I will do what I can to get some more new subscribers for "The Farmer's Advocate."
JAMES WIGHTMAN.
Algoma, Ont.

MARKETS.

TORONTO.
LIVE STOCK.

Receipts of live stock at the City and Junction markets were fairly large. The quality of fat cattle was the best for a long time, owing to the Junction Fat-stock Show, on Dec. 9th. Twenty-nine carloads of Christmas cattle, that would be hard to equal, were on exhibition for the various car-lot prizes. Outside of the Christmas cattle, the quality was much the same as has been coming for some time. Trade was firm for anything good or approaching good quality. Trade was better generally, and prices were firmer at the close of the week than in the beginning.

At the Junction market on Monday of this week receipts were light—25 carloads; trade fair; prices firm. Exporters' cattle, \$4.25 to \$4.75; Christmas butchers', \$5 to \$5.25; loads of good, \$4.50 to \$5; medium, \$4 to \$4.25; common, \$3.50 to \$3.75; canners, \$1 to \$1.50; calves, \$4 to \$6 per cwt. Sheep, \$4 per cwt.; lambs, \$5 to \$5.25 per cwt. Hogs, \$5.50 for selects, fed and watered.

Exporters.—Prices last week ranged from \$4.25 to \$5, the latter price being paid for one load. There was only a light demand, owing to export space being limited.

Butchers'.—The bulk of the best butchers' for the Christmas trade sold from \$5 to \$6 per cwt., but a few single animals were reported at more money. The ordinary butchers' cattle sold from \$4 to \$4.50 for good loads; medium, \$3.75 to \$4; common, \$3.50 to \$3.75; cows, \$2.50 to \$3.50; canners, 75c. to \$1.50 per cwt.

Feeders and Stockers.—There was a fair demand for good quality feeders at following prices: Best feeders, 1,000 to 1,100 lbs., \$3.50 to \$3.90; best feeders, 900 to 1,000 lbs., \$3 to \$3.50; best stockers, 800 to 900 lbs., \$2.85 to \$3.15; best stockers, 600 to 800 lbs., \$2.40 to \$2.75; common stockers, \$1.50 to \$2 per cwt.

Milkers and Springers.—Trade was not quite as good, and prices were lower, ranging from \$40 to \$55 for the best. Light cows and backward springers were slow sale at \$25 to \$35 each. One dealer from Quebec took a carload at above prices.

Veal Calves.—Prices ranged from \$3 to \$7 per cwt., the latter price being paid for Christmas veal.

Sheep and Lambs.—There was little change in the sheep and lamb market. Export ewes sold from \$3.75 to \$4 per cwt.; culls and rams at \$3 to \$3.75; lambs sold all the way from \$4 to \$5.25 per cwt.

Hogs.—Deliveries of hogs were light. Prices were quoted by the dealers at \$5.25 for selects, on the fed-and-watered basis, early in the week, but at the close, one leading dealer stated that he had offered \$5.40, f. o. b. cars at country points, without getting any, even at that price. It looks like higher prices and we would not be surprised if they went to \$6 before Christmas.

Horses.—Trade in horses on the Toronto market is practically dead, in comparison with what it was one year ago. There are few horses of good quality on sale of any class. Farmers are holding their good horses, knowing that it costs no more to winter a good horse than a poor one. Some of the dealers think that business will brighten up after the holidays. Prices were unchanged from our last quotations. Burns & Sheppard, of the Repository, report selling two or three pairs of good work horses at \$350 to \$390.

BREADSTUFFS.

Wheat.—No. 2 white winter, 96c., No. 2 mixed, 93c., all at outside points. Manitoba, No. 1 Northern, nominal, \$1.13; No. 2 Northern, \$1.07; No. 3 Northern, \$1.04; feed wheat, 62c., No. 2 feed wheat, 52c. to 54c., at lake ports.

Barley.—No. 2, sellers, at outside points, at 76c.

Oats.—No. 2 white, sellers, 43c., No. 2 mixed, buyers, at 43c., at outside points.

Rye.—No. 2, sellers, 80c.; buyers, 78c.

Peas.—No. 2, sellers, 84c.

Corn.—No. 3 yellow, sellers, 70c., at Toronto.

Buckwheat.—Buyers, at 58c., at outside points.

Bran.—Sellers, at outside points, at \$20, in buyers' bags.

Shorts.—\$21 to \$22, in bulk, at outside points.

Flour.—Ontario, 90 per cent. patents, \$3.65 bid for export; Manitoba patents, special brands, \$5.80; second patents, \$5.20; strong bakers', \$5.

COUNTRY PRODUCE.

Butter.—Demand steady; prices unchanged. Creamery, pound rolls, 30c. to 31c.; creamery, boxes, 29c. to 30c.; dairy, pound rolls, 27c. to 28c.; tubs, 26c. to 27c.

Eggs.—New-laid, per dozen, in case lots, 30c.; cold-storage, 22c.

Cheese.—Large, 13c.; twins, 13c., with market steady.

Poultry.—Supplies large; but quality generally poor. Turkeys, 12c. to 13c.; geese, 9c. to 10c.; ducks, 9c. to 10c.; chickens, 9c. to 10c.; old fowl, 6c. to 7c., dressed. These prices are for good to choice quality. Poor quality sell proportionately lower. Some lots of inferior chickens sold as low as 5c. per lb.

Honey.—Market firm. Extracted, 13c.; combs, dozen sections, \$2.75 to \$3.

Potatoes.—Car lots, on track, unchanged, at 85c. to 90c. per bag, at Toronto.

Beans.—\$1.75 to \$1.85 for primes, and \$1.85 to \$1.95 hand-picked.

Hay.—Baled, No. 1 timothy, \$17 to \$18, for car lots, on track, at Toronto.

Straw.—Baled, in car lots, on track, at Toronto, \$9 to \$10.

TORONTO FRUIT.

Apples.—Market easy at \$3 to \$3.75; grapes are still being sold at 20c. for small baskets of black, and 25c. to 30c. for Rogers.

SEEDS.

The William Rennie Co. report the seed market as being dull, with little business to report. Alsike, fancy, per bushel, \$8 to \$8.25; alsike, No. 1, per bushel, \$7.50 to \$8; alsike, No. 2, per bushel, \$6.75 to \$7.25; red clover seed, per bushel, No. 1, \$9.50.

HIDES AND TALLOW.

Prices are quoted as follows by E. T. Carter & Co., 85 East Front St., Toronto: Inspected hides, No. 1 cows and steers, 6c.; inspected hides, No. 2 cows and steers, 5c.; country hides, 5c.; calf skins, No. 1, city, 10c.; kips, 8c. to 11c.; horse hides, No. 1, each, \$2.25; horse hair, 27c.; tallow, 5c. to 6c.; wool, unwashed, 12c. to 13c.; washed, 22c.; rejections, 16c.; lamb skins, 75c. to 85c.

MONTREAL.

Live Stock.—Shipments of cattle from St. John, N. B., during week ending Dec. 7th, were 1,348, those from Portland being 1,157. The local market had an increased supply in excess of the requirements, local and outside demand being limited. Inferior grades still predominate, although the proportion of choice cattle is increasing. Choice cattle, 4c.; fine, 4c.; good, 3c. to 4c.; medium, 3c. to 3c.; common, 2c. to 2c., and inferior, 1c. to 2c. Choice lambs, 5c.; good, 5c. to 5c., and common, 4c. lower. Export sheep, 4c.; butchers', 3c. to 3c., and culls, about 3c. Calves, \$12 to \$15 each for choicest; good, \$7 to \$11, and common, \$3 to \$5. Hogs went up, under short supplies, 4c., and a fair trade was done at 5c. to 6c. for selects, weighed off cars.

Horses.—Little or no demand. Prices continue steady as follows: Heavy-draft horses, weighing 1,600 to 1,700 lbs., \$250 to \$300 each; light-draft, weighing 1,400 to 1,500 lbs., \$225 to \$275 each; good blocks, 1,300 to 1,400 lbs., \$200 to \$225 each; express horses, \$150 to \$225; common plugs, \$50 to \$75 each, and choice carriage or saddle animals, \$300 to \$500 each.

Dressed Hogs and Provisions.—Dressed hogs higher. Fresh-killed, abattoir-dressed, 8c. to 8c., and country-dressed at 7c. to 8c. per lb. Hams and provisions did not vary.

Potatoes.—Some fine Green Mountains have been arriving, carloads costing 82c. per 90 lbs., on track. Quebec potatoes moving freely, and are holding steady at 80c. to 85c. per 90 lbs., carloads, on track, and are reselling in the same position at an advance of 3c. to 5c.

Eggs.—Fall-gathered, stored eggs 27c. to 23c. a dozen for No. 1, best candled

stock being 25c. to 26c., and new-laid stock being anywhere from 35c. to 40c.

Butter.—Dairies are quoted at 24c. to 26c., and are in many cases preferred to creamery, fall dairy being occasionally better than Nov. creamery. Current makes of creamery range from 26c. to 27c., early Novembers being 27c. to 28c., and Octobers, 28c. to 29c.

Cheese.—It would seem that all the November makes had now been taken away from the market, leaving only Octobers and Septembers and earlier makes for sale. Octobers have advanced to 12c. and 12c.; Septembers, 13c. to 13c.

Grain.—Ontario No. 2 white oats, 54c.; Manitoba No. 3 oats, 53c. to 53c.; Ontario and Quebec No. 3 bringing 52c.; while No. 4 brings 50c., and Quebec, 49c. per bushel, in store.

Flour and Feed.—Supplies for Christmas were practically all purchased before the close of navigation, and the market is now dull. Prices: \$5.50 for Manitoba strong bakers' or second patents, and \$6.10 for first patents. Ontario winter-wheat patents, \$5.75, and straight rollers, \$5.50 per barrel, in bags. Millfeeds, \$23 per ton for Manitoba bran, in bags, and \$25 for shorts, Ontario bran being \$23.50 to \$24, and shorts being \$23 to \$24 per ton.

Hay.—Dealers are paying \$17 to \$17.50 for No. 1 timothy, \$16 to \$16.50 for No. 2, and \$14.50 to \$15 for clover and clover mixture.

Hides.—Calf skins, 6c. per lb. for No. 2, and 8c. for No. 1, 5c., 6c. and 7c., respectively, for No. 3, 2 and 1 beef hides. Sheep skins, 80c. to 85c. each, and horse hides at \$1.35 for No. 2, and \$1.75 for No. 1. Tallow is steady at 1c. to 3c. per lb. for rough, and 6c. for refined.

CHICAGO.

Cattle.—Steers, \$4 to \$6.50; cows, \$2.75 to \$4.50; heifers, \$2.50 to \$5.25; bulls, \$2.60 to \$4.90; stockers and feeders, \$2.40 to \$4.50.

Hogs.—Bulk of sales, \$4.75 to \$4.85. Sheep and Lambs.—Sheep, \$3.50 to \$4.75; lambs, \$5.60 to \$6.20; yearlings, \$4.20 to \$4.90.

BUFFALO.

Cattle.—Prime steers, \$5.50 to \$5.75. Hogs.—Heavy mixed and Yorkers, \$5.10 to \$5.15; pigs, \$4.75 to \$4.85; roughs, \$4.40 to \$4.60; dairies, \$5. Sheep and Lambs.—Lambs, \$5 to \$7.25; yearlings, \$5.50 to \$6; ewes, \$4.50 to \$4.75; sheep, mixed, \$2 to \$4.75; Canada lambs, \$7.

BRITISH CATTLE MARKET.

London.—Canadian cattle dull at 10c. to 12c. per lb.; refrigerator beef, 8c. to 10c. per lb.

GOSSIP.

Mr. Alex. Giffen, Snelgrove, Ont., near Brampton (G. T. R.) and Snelgrove (C. P. R.), advertises for sale a good red three-year-old Shorthorn bull, bred from imported sire and dam of the Marr Missie and Princess Royal tribes, respectively.

H. K. Fairbairn, Thedford, Ont., writes: "The two Shorthorn bulls mentioned in my advertisement are in grand shape. The red bull's dam, Matchless 16th, is a fine milker, and has been a great breeding cow. The roan bull will grace any herd, and should be looked after at once by some live man. Queen Ideal and Fair Queen are full sisters; sold for \$2,000. His full brother, Royal Marksman, was sold for \$550. The stock bull, Royal Prince = 31241, in his tenth year now, is in grand form, lively as a yearling; and Queen Ideal's dam gave us a beautiful roan heifer calf in October, which is doing finely. The Golden Prop cow, Golden Queen, sired by Scotchman (imp.), has given us a red heifer, sired by the renowned stock bull, Royal Prince = 31241. The red cow, Lady Beatrice, gave us a red bull calf by Spicy Count (imp.), a right good one. This is also a grand young cow, a good breeder and milker. We have a half-dozen heifers in nice form."

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 must be enclosed.

Veterinary.

WARTS.

Two years ago I sold a grade Guernsey calf to a neighbor. It appeared to be all right. When he brought it in from pasture this fall it was covered with large warts, some of them as large as a man's fist. Is this contagious? Is it a common trouble? Neither sire nor dam was troubled. D. G. McK.

Ans.—This is not contagious, and is somewhat common. Any animal is liable to warts, and the cause is not well understood. They sometimes appear quickly, and when not large, frequently disappear spontaneously. Those with constricted necks should be cut off. Large, flat ones should be dissected off. The raw surfaces should be dressed once daily for three or four days with butter of antimony, applied with a feather, and, after that, three times daily with one part carbolic acid to thirty parts sweet oil until healed. Small, flat ones should be dressed with butter of antimony once daily until they disappear. V.

UMBILICAL HERNIA.

Two-year-old blood filly has a navel rupture the size of a hen's egg. Will it come all right of itself? Would it be safe to break her, and do a little light work? T. W. C.

Ans.—It is not probable a spontaneous cure will result in a two-year-old. It is quite probable it will never interfere with her usefulness under ordinary conditions, doing ordinary work; but its presence reduces her value, and there is a danger that if at any time she should get halter cast, or in any way be subjected to extreme muscular exertion, as very heavy drawing, jumping, etc., the opening will enlarge, and result in a very serious and probably fatal case. You will either have to take chances or employ a veterinarian to operate. In foals, a truss will usually effect a cure, but in a two-year-old it does not. No person but a veterinarian can operate successfully. V.

LUMP JAW.

1. A lump appeared on my bull's jaw. Thinking it was lump jaw, I am treating with Fleming's lump-jaw cure, which appears to be doing good.

2. Is lump jaw contagious?

3. What is the law concerning lump jaw? W. H. K.

Ans.—1. I have had no personal experience with the treatment you mention. The most successful treatment for lump jaw is the iodide-of-potassium treatment. It consists in giving the drug three times daily, commencing with one-dram doses, and increasing the dose by half a dram daily until the appetite and thirst fail, tears run from eyes and saliva from mouth, and the skin becomes scruddy. When any of these symptoms appear, cease giving the drug. If necessary, repeat treatment in two months.

2. If the discharge from mouth or lump gains the circulation of a healthy animal, through an abrasion or raw surface, it might cause the disease, but it is not generally considered contagious.

3. It is an indictable offence to offer for sale an animal affected, or the flesh of an affected animal, but you cannot be forced to slaughter, and are not indemnified by the Government. V.

ADDITIONAL SALE DATES CLAIMED.

In addition to the list of sale dates claimed, appearing elsewhere in this issue, we have received notes of the following:

Feb. 12th.—John E. Disney & Son, Greenwood, Ont., Shorthorns and Chesdesdale mares (imported and home-bred).

March 4th.—Provincial sale of pure-bred cattle, at Guelph.



Life, Literature
and Education.



Mr. G. A. Moore, Teacher, Carp, Ontario.

SELECTIONS FROM THE POETS.

Flower in the crannied wall,
I pluck you out of the crannies,
I hold you here, root and all, in my hand,
Little flower—but if I could understand
What you are, root and all, and all in all,
I should know what God and man is.
—Tennyson.

To me the meanest flower that blows can give
Thoughts that do often lie too deep for tears.
—Wordsworth.

To see the world in a grain of sand,
And a heaven in a wild flower;
Hold infinity in the palm of your hand,
And eternity in an hour.
—William Blake.

THE NEW EDUCATION FOR RURAL SCHOOLS.

It is now some time since the agitation for a more definite teaching of the science of agriculture in the rural districts was first mooted. It was felt that the life-work which must fall to so great a mass of the people should not, especially in the impressionable years of childhood and youth—the best time for that training in sentiment which must underlie all successful and happy work in any calling—be entirely ignored; yet the way to a new system seemed, at first, difficult, most of all, perhaps, because of the indifference with which all things agricultural, except from a merely commercial point of view, were regarded by those in authority.

As usual, in all innovations which affect American schools, the United States led the way in this matter. The first plan was to establish county schools of agriculture, and the first school of this nature on the

continent was founded at Wausau, Marathon Co., Wisconsin, in 1902. Since then the idea has gained in momentum, the importance of agriculture and the needs of the agricultural population have become more widely recognized, and, as a consequence, many agricultural schools have sprung up throughout the United States.

Our readers are familiar with the inception of the new idea in Canada—it is, in fact, scarcely yet past the nucleus—and need not be told especially of the agricultural classes which have been introduced by way of experiment into six of the High Schools of Ontario. This is surely a step in the right direction. There seems no reason that these classes should not be finally introduced into every High-school town, nor that they should not prove a tremendous uplift to the agricultural interests of this country. The great condition is that the men in charge be eminently fitted, both by training and temperament, for the work. A lukewarm, characterless teacher, equipped with but a smattering of book-knowledge, unfixed by actual, practical work on a farm, must only be a millstone to the movement, instead of an uplift.

But the promoters of the new rural-school education are not satisfied with the prospect even of widespread agricultural academic classes. They realize that the movement must strike more closely than this; that a considerable percentage of the rural population can never attend High School, and that, consequently, this scientific training, this knowledge of nature-study, which are to do so much towards stirring up a more noble enthusiasm for their calling among the people of the rural districts, should be brought to the very homes themselves. And how can this be done better than through the rural schools?

That this last suggestion has recommended itself strongly to the most prominent public men and most prominent educators at all interested in the welfare of the country as a whole, is abundantly evident from the active interest in the subject manifested, especially of late, at public meetings and elsewhere, as, for instance, at the recent convention of the Horticultural Society in Toronto, at which the sentiment was strong, and steps were actually taken toward the embodiment of agricultural and horticultural "lessons" in the new text-books, and at which the advisability of adding a school-garden to every school, was dwelt upon by almost every speaker. Such enthusiasm, such conviction, must find issue in action. [Since the above was written, we learn that the Hon. Minister of Agriculture has actually taken in hand the matter of having this class of literature introduced into the text-books.]

A drastic change cannot, however, be immediately expected, nor even a very rich immediate harvest of results in every place which has taken a forward step towards establishing the new education. The problem is much too deep for that. It will be easy enough, perhaps, to incorporate agricultural literature in the school-books, to procure school-gardens, even to equip the schools with the apparatus necessary for demonstrat-

ing the physics and chemistry of everyday things; and in so far a vast improvement will have been effected. But it will not be so easy to provide the right kind of teachers to use these facilities. It seems obvious that teachers cannot be too well trained for this work. There should be the necessary scientific training, plus the practical training, without which there can be little real understanding of the subject, or, rather, of the many subjects, involved. There must be, too, that enthusiasm for agriculture, and that love for nature and the rural life so necessary lest the whole spirit of the work be lost. What, for instance, can a city girl of eighteen or twenty, who knows nothing of the simplest fundamentals of agriculture—who has never been in touch with the rural life, and is naturally out of sympathy with it, perhaps prejudiced against it by reason of homesickness—do with a school-garden and text-books on agriculture and horticulture? She may, perhaps, master the gardening part of it, and go conscientiously on with her pupils, but, unless she be a very exceptional city girl, can she go further than that? Can she create about her the right sort of rural atmosphere? Can she fill her pupils with pride in the calling to which they look forward? Can she impress them with the necessity of scientific thinking in connection with all the branches of agriculture? Can she teach them to see that the quiet rural life may be good for both body and soul? Can she teach them to see beauty in clouds and hills and woodlands, and interest in the very weeds growing by the wayside? Can she instil the poetic spirit which can find its truest development where nature reigns, and may be worth more to its possessors than much gold? All these things should not be beyond the power of the ideal rural teacher—but perhaps we would lay hold on the millennium.

At all events, it is our firm conviction that, unless in exceptional cases, only teachers from the farms, and in full sympathy with the rural life, should ever take charge of our rural schools. May we repeat that phrase, "in full sympathy with the rural life"? For surely there should be no place in the rural school for the young man or woman who, though brought up on the farm, happens, by some idiosyncrasy, or some misfortune of training or home environment, to "hate farming," and is anxious to use the rural school only as a stepping-stone to some occupation in the town, and that as speedily as possible. Every teacher teaches incidentally, perhaps unconsciously, to a greater degree, perhaps, than may be imagined. If he hates the country, he can scarcely help showing his prejudice, and may, possibly, radiate into the minds of the children much of the spirit which fills himself. If, on the contrary, he loves it, he must, of necessity, impart something of that love; his teaching will be by no means confined to school hours, but will be continued at recesses, on the way to and from school, and in his visits to the homes of the section. There are birds and flowers, and trees, and crops, and animals on every hand,

and each must needs be the subject for an object lesson.

This question of the temperament of the rural-school teacher seems to strike at the root of the whole matter. Still, very much depends upon training. The teachers must, to a certain extent, be agriculturists; but not only agriculturists; they must be all-round cultured men and women. A farm training, then a collegiate education, finished by an agricultural-school course, would, united to a natural enthusiasm for the rural life, seem to meet all requirements; but then there comes up the question of salary. Such men and women should be worth money to any section.

In the meantime, however—and while we are working up to the point of not grudging money for the development of our children—surely something can be done. Take a teacher of the right temperament and enthusiasm, supply him with every facility for his work, plenty of books for study, apparatus, school-garden, etc.; take him out with you on your farms at every opportunity, and you may rest assured that, even though he may not be a brilliant success, he will be no failure. Surely these conditions are possible to every rural section.

Just here, perhaps, it may be necessary to call attention to a possible danger, viz., the possibility of running to an opposite extreme, and spending too much time on the new subjects. It must never be forgotten that the lion's share of the public school to-day must still be devoted to "the three R's," after all, the foundation upon which all true education must rest; that attention must still be paid to the speaking of good English; to the outlines of history which everyone should know; to geography; to the study of good literature. All these things are necessary to the rounding out of character.

It is held by the most prominent educationists, and rightly, that, since the development of the thinking powers is the main object in education, the subjects studied do not much matter. That training of the mind in observation, comparison and inference, no matter how accomplished, is bound to give the capability which can grasp any situation and lend itself to the accomplishment of any work. While this is true, there are certain conditions which must be considered in regard to the work of the rural school. A great number of children attending these schools will never have the opportunity of attending High School, and so must miss the more advanced work in Algebra, Geometry, Physics and Chemistry, which mean so much to the development of these powers. Moreover, to the child, Algebra and Geometry are usually "dry" and uninteresting. Why not, then, give him as much of this training as he can grasp at so early an age, in connection with the school-garden, which is bound to hold his interest, and may be made as truly educative as an elementary course in Algebra or Geometry? Apparatus for simple work in Chemistry and Physics should, of course, be in every rural school. Then, the development of the embryo farmer's liking for agri-

culture is, as noted above, no small consideration. Better, far better, surely, to send him forth from the rural school with a wholesome interest in the work upon which he must spend the rest of his life than with an indifference which may never be overcome. Enthusiasm is the price of happiness, as well as of "success."

It may, too, be objected that such a course may tend to make all rural pupils farmers, keeping many out of occupations elsewhere for which they might have more talent. But of this there need surely be little fear.

this should necessarily follow. Money need be seldom mentioned in these gardening operations. If a high moral training be otherwise inculcated, there is little danger that any child, however "practically" trained, shall grow up sordid; nor that, no matter how "successful" he may be when he comes to man's estate, he shall hold his possessions of paramount importance to the open heart and hand, to high purpose—all those things that most make a man a man. Money may, it is true, become the chains of a degrading slavery;

necessary to him as a human being, and the possibility of an over-commercialism need scarcely occasion a thought.

In closing, may we add one injunction: Do not expect that the whole science of farming can ever be taught in the public school. Do not expect a boy to graduate at fourteen with as much knowledge or more than you have gained in thirty or forty years' experience. Be satisfied if he comes forth to this threshold of life with a few basic principles impressed upon him; with an

ing, common sense and useful work count for about everything worth while, whether a man wear fine linen and broadcloth, or a sweater and top-boots. If it has accomplished this much, the rural school may well say, "Veni, vidi, vici."

To have the people of our rural districts happy in their work, interested in it, proud of their proficiency in it; to have them capable, never at sea for want of practical training; sensible, not snobbish, with a true idea of the balance of things; able to distinguish those things which really "count" from those which are merely superficial; thoughtful, honest, useful, contented, intellectual, high-minded, worthy components of the great Dominion—these are the ideal of the new rural education for the rural population of Canada.

RURAL-SCHOOL GARDENING.

Some time ago we wrote to the teachers of several schools in which school-gardening had been carried on during the summer for data regarding the success of the work. In reply came the following letters, which we have much pleasure in recommending to the perusal of all who are in any way interested in the development of the rural districts, especially public-school trustees, parents and teachers:

A SUCCESSFUL EXPERIMENT AT CARP.

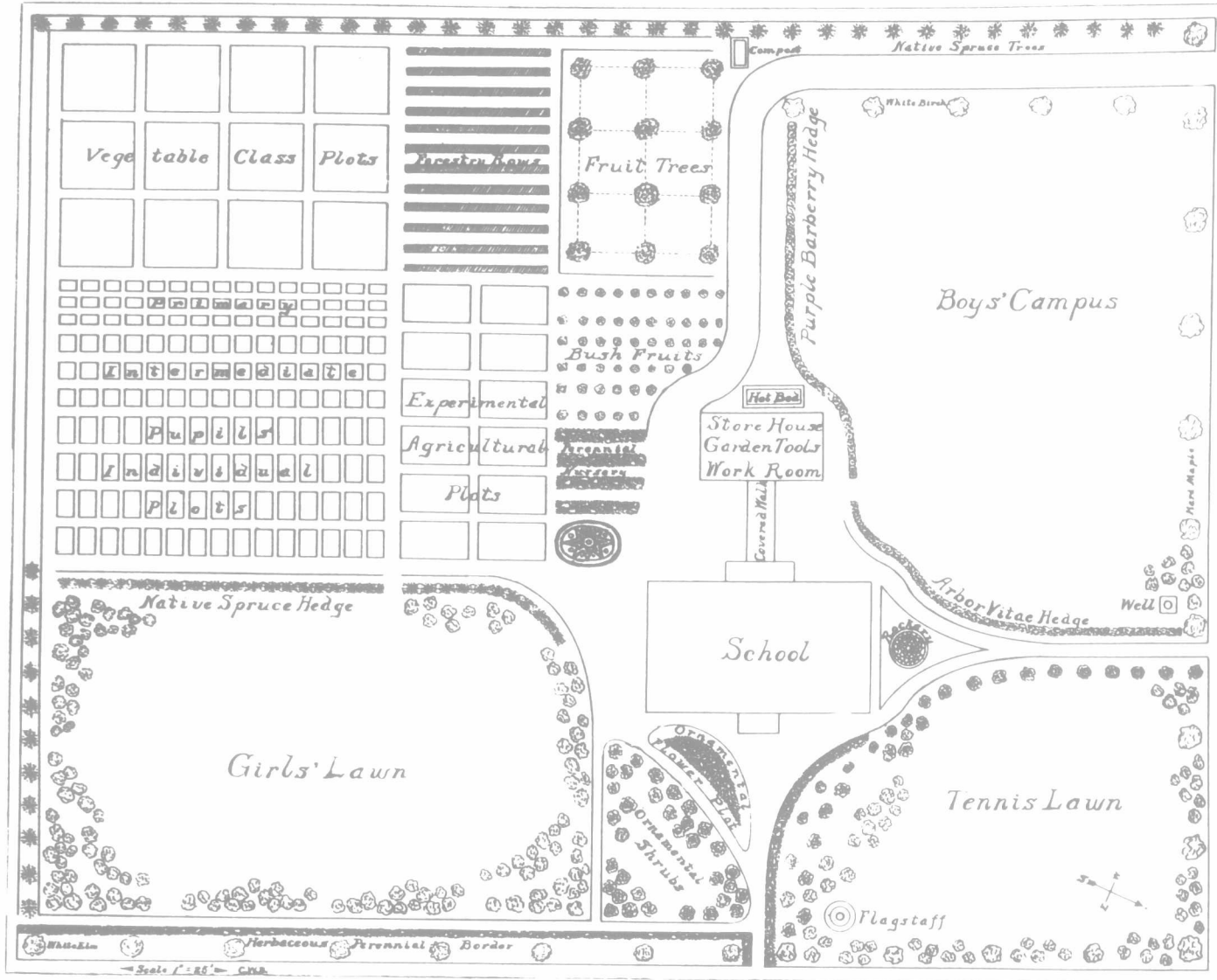
Gardening in our public schools, as a subject of study, is being widely commented upon throughout our country, and is being sanctioned by those who are in a position to speak, judging from practical results. Any man who has at heart the interest of the young Canadian should give this subject his serious consideration. History proves to us that nations move but slowly along the lines of great reforms, and any proposition of a change in our system invariably meets with opposition.

Previous to my direct connection with practical gardening in schools, I was opposed to the idea of placing additional work upon the growing child, and rather favored decreasing the work by eliminating some of the prescribed work. But, after an experience of three years as principal of the school at Carp, my ideas have been radically changed.

In the enterprising town of Carp there stands a fine school building, in the center of a two-acre plot, one-half acre of which is under cultivation by the 150 boys and girls who attend the school. The garden section is divided into two parts, one for vegetables and experimental plots in grains, fruit trees, etc., the other for flowers. Each child has its bed of flowers, and the vegetable, grain and fruit plots are conducted on the co-operative principle.

Contrary to the usual custom, our pupils invent excuses to get coming to school. School-life to the boy and girl becomes a genuine pleasure. All about them they see evidences of their own handiwork. They play their games on grounds seeded and taken care of by themselves, and hedged in by hedges planted by themselves. The ground is divided into several sections, separated by gravelled walks edged with borders of perennials and flowering shrubs—all the work of our future citizens.

I say emphatically that there is nothing so valuable as gardening to teach the boy to love his school. Nothing will take its place in inculcating in him a reverence for life, which is such an important element in character. It is a grand method of teaching him to steer clear of that vandalism so common among boys of public schools. Why, our boys would as soon think of playing football as marring any part of our school property or injuring in any way the work of another.



School Garden & Grounds, Carp, Ontario.

The youth who has really a strong bent for the ministry, or law, or medicine, or the mechanics, will be conscious of it, and will find his niche, in which it will harm him not at all to have pleasant memories of the farm and an appreciation of rural privileges. It is ours to see to the greatest good of the greatest number. The exceptions will take care of themselves.

Again, it may be said that this practical trend of teaching may be too mercenary. We do not see that

it may also be a mighty power for good, and this the rightly-trained boy who grows to be a right-minded man, will invariably recognize. Let the child, in short, be taught practical things, as a matter of course; let him be led to make his school-plot produce to an hundredfold merely as an interesting development of plant-life under proper cultivation; let his gardening operations be made simply the means of developing in him those powers of observation, comparison, inference, so

enthusiastic interest in farming; with an open heart, and a mind fully alive to the necessity of thought, study, observation, in every avenue of life and work, and with the firm conviction that manual labor is to be by no means despised; that hand-work plus brain-work makes a very good combination, and that a man driving a manure spreader in a field may not be in the least degree inferior to the dapper young fellow who measures out factory cotton over a dry-goods counter; that, in short, high think-



School Garden, Carp, Ont.

Photo by R. B. White, Ottawa

The children are as interested in this work as it is possible for them to be in anything which affords them real pleasure. Before school in the morning, at recess, at noon, and after school is dismissed in the evening, it is a pleasure to see the little tots—yes, and the big ones, too—working in the old brown earth.

School-gardening undoubtedly gives the children much information in agricultural subjects, and gives them a marked facility in the handling of tools and in the practice of farm and garden work. It promotes the desire to improve home surroundings, and trains them to do garden work with efficiency. It promotes a spirit of independent investigation in all branches especially valuable to the farmer. It brings the life and interests of the school more closely in touch with the home life of our children. It stimulates their interest in all rural life, and provides healthful exercise for body and mind, and affords the needed opportunity to direct the activities along useful lines. It develops, at an early age, habits of industry, respect for labor, and a love for productive and constructive work. It promotes those qualities that make for good citizenship, such as the responsibility of ownership, respect for public property, consideration for the right of others, and the principle of co-operation in seeking the common good.

I would as soon think of teaching a class, the number 5, without objects or the blackboard, as I would think of producing an all-round citizen without a school-garden. There can be no possible objection sustained as to school gardens, except as to their scarcity in our country. No child has failed an examination in the Carp school since the inauguration of garden work.

The care of the garden during the vacation presents no difficulty. If the proper care has been taken in June, the weeds will have been conquered and the plants well advanced. The children take a delight in visiting the garden frequently during the holidays. Their interest is keen, and, where a child is interested, no urging is necessary.

Generally speaking, we spend two half hours per week in the garden, seeding, weeding, transplanting, pruning, studying plants and weeds, collecting seeds, etc. In the early spring we require a little more time for making and planting hotbeds, cold-frames and window-boxes. But, taking it the summer through, we average one hour per week.

A school garden is not an expensive luxury, even when conducted on a large scale. Our prizes at the fairs, in open competition with the farmers, more than pay any expenses which occur.

It is truly surprising to what extent garden work may be co-related with the ordinary school studies. Advantage may be taken of the garden and garden exercises in adding freshness and in giving practical bearing to subjects which are intrinsically uninteresting to children. Garden work and garden observations afford interesting subject-matter for exercises in drawing and composition—interesting because so closely associated with the pupils' own experiences and life-interests. Many practical problems in arithmetic are suggested, and even demanded, in connection with the work. The keeping of garden accounts is, in itself, a valuable training in bookkeeping and commercial arithmetic. Weights, measures, values and mensuration are more or less involved in garden work. For the advanced classes, the study of botany with garden plants, and of zoology with insects, can be carried on to great advantage. How can nature study be taught properly without the garden?

Every teacher who is really anxious about the moral, intellectual and physical development of the little citizens entrusted to her care should make an honest effort to have a garden in connection with her school, however small.

GEO. A. MOORE,
Carp, Lanark Co., Ont.

HOW THE EXPERIMENT HAS PROCEEDED AT THE RITTENHOUSE SCHOOL.

In answering your letter of a few days ago, I must say my experience with school-gardening is limited. Three years ago I had the pleasure of attending Toronto Normal, when I came in touch with live men, Principals Scott and Elliott, who had us on several occasions visit Broadview Boys' Institute. Here we met Mr. Atkinson, a splendid type of

house school, Jordan Harbor, and I think I may safely say that our garden is more popular this year than ever. Both years we held a fall fair, the children making exhibits of garden produce, flowers, etc., from their individual plots. This year we encouraged them to bring fruits from their homes to supplement our school exhibit. The fruits and vegetables, all properly labelled and arranged, made a very pretty show, which was admired by parents and children from neighboring schools. In all, eight schools were represented, and

for cultivating and teaming, and 5 cents for picking, we still had a profit of \$10. This, of course, was not the object. We do not grow vegetables for money. We give most of our produce away.

In several cases fathers were greatly interested in this experiment, as they grow tomatoes quite extensively in our locality.

At the rear of our garden we have an experiment in many different varieties of the smaller fruits. The boys grow peach trees from the pits; then, in the fall, they bud them.

This autumn, all the girls and boys are learning to propagate. We have geranium cuttings in the window boxes. The fifth class each have a space in the plant conservatory, where they are trying leaf cuttings (triangular) or rex begonia and other plant cuttings.

We always plan to have as much of our garden as possible done by cultivation. The berries, larger vegetables, potatoes, mangels, melons, are cultivated by horse.

During vacation, the individual plots were cared for by the pupils and teacher. The larger part was done by cultivation, our janitor and secretary-treasurer of school board doing this. Our garden was a credit to any community, any time during vacation. At no time did it show neglect or excess of weeds.

I am most decidedly in favor of keeping on with school gardens, and hope to have one as long as I remain in the teaching profession.

I may say I object to the clause which heretofore required one acre of soil in order to get the grant. I believe this is now remedied, which will be advantageous to many schools. It is not practicable for every school to have an acre. Probably much better results might be obtained with one-tenth of that area properly tilled.

We expect to devote two half hours per week to gardening. If we wish, we take more time. When preparing for exhibit, we spend a day, believing the time well spent.

Now that we have two teachers in our school, and have a large Fifth Class, we expect to do much better work, and give our gardening an educational bend, which lack of time heretofore so greatly hampered.

Our manual training is carried on during the winter months. Then we get our propagating, germinating boxes, weather vane, sun dial, etc., ready for our summer garden. We built, this year, a little wigwam, which was greatly appreciated by the tots.

In our gardening, we aim at showing the girls and boys that farming is one of the greatest of sciences, and try to encourage many to remain on the auld soil.

HARVEY M. GAYMAN,
Teacher, Rittenhouse School, Jordan Harbor, Ont.

AN ENTHUSIASTIC BEGINNING AT JOCKVALE.

I am in receipt of yours of the 4th inst., with list of six questions re school garden. I am going to answer question No. 1 by a short account of our experience with school gardens, and by this time next year we hope to be able to answer the other five.

As a matter of fact, we are preparing to start, on a small scale, next spring. As a start in practical work at present, we have requested each pupil to prepare a plan of the new school-grounds, showing lawns, flower-beds, borders, walks, hedges, experimental plots, etc., with the result we have a lot of work showing more or less taste and aptitude, and showing how readily the pupils can be interested in such work.

Our school is a rural school, pure and simple, being situated in one of the best farming districts in the County of Carleton. We have a new school (built in 1906), which accommodates the public-school classes, with about fifty-five pupils under one teacher, and a continuation class which has now twenty-five pupils, making satisfactory progress.



School Garden, Rittenhouse School.

man, who is quietly doing a great work educationally for city boys. To me it was an inspiration to see his little farming world most enthusiastically conducted and managed by city lads.

If city lads can derive pleasure and gain knowledge by growing onions, beets, cabbages, etc., how much more should a country boy, whose very life is dependent upon the soil, be interested and profited by school-gardening?

In answering your questions, I must say we are a highly-favored

helped furnish a splendid impromptu programme.

Gardening most assuredly makes children more refined and careful. They acquire greater love for plant-life, and are interested in plant growth. Plants to them are almost humanized. The dullest boy sees more, and acquires a taste for the beautiful. It gives the slower pupils ideas which could be scarcely gained in any other way. It brings the parents in closer sympathy with the school.

In our school garden we try to



The Result of a Summer's Work, Rittenhouse, School.

school. We have a friend in Mr. M. F. Rittenhouse, who has given us the land, and has helped us in many ways. The Government also assisted us, and now that the Government farm is adjoining our garden, we will undoubtedly be greatly benefited by them. Mr. M. F. Rittenhouse furnishes a gardener and janitor to take care of the school and Victoria Hall grounds, so these men are always at hand, and willing to assist us in any way. In spring, they help to plan the grounds.

We have conducted a garden of one acre for two years at the Ritten-

grow such things as we expect will be of greatest interest to pupils, and also beneficial to the farmers. Last year we grew thirteen varieties of tomatoes. We harvested 110 bushels, grown on 3-17 of an acre. Each variety was carefully experimented with—dates of picking, quantities picked, total yield of each. Each variety was tested at canning factory. The larger boys learned the points which make a good tomato. They learned to classify them by their appearance, the best yielders, etc. It might be interesting to note that, after paying 10 cents per bush,

Now, under the circumstances, it may seem that a school garden is going to add more work in a system already overcrowded with subjects, but surely we should try to introduce this one subject (even if we had to sacrifice some of those now taught), which is likely to be the life-work of perhaps nine-tenths of the pupils. We seldom hear a word about farming as an occupation where a good education would be an advantage. Since we have had this continuation class established, we hear the pupils lectured on the advantage of having such a school brought to their doors, and the possibilities it opens up for them to prepare themselves for the learned professions, pointing out to them the chances for brilliant careers as clergymen, doctors, lawyers, engineers, politicians, etc. This is all very good and true, but, at the same time, can we not crowd in something—a school garden, for instance—that will cause the pupils to take even a side glance at this mightiest and noblest of callings?

We are pleased to see "The Farmer's Advocate" take an interest in rural education, because a journal of such high standing certainly must have an influence for good.

I am sorry we have not a better report, but, as you can see, we are simply trying to introduce the thin edge of the wedge, so that we will be already in line in the near future, when it is to be hoped that agriculture will occupy a more prominent place in the education of boys and girls in rural schools.

P. MADDEN,
Jockvale, Carleton Co., Ont.

LETTERS HELD OVER.

Some interesting letters in regard to school-gardening arrived too late for publication in this issue, but will be published at a later date.

A TRIBUTE.

A short time ago there appeared in the daily papers an obituary notice, telling of the passing away of one whose occasional bright, cheery articles, published under the signature, "One of the Girls," were always most welcome to the readers of the Home Magazine of "The Farmer's Advocate." There are many who may remember these, and we feel sure that their sympathy will go out to her stricken relatives in Canada, as well as to the young husband in far-away South Africa, to whom the sad tidings, instead of the glad news he was eagerly awaiting, must come as a terrible blow.

We allude to the late Mrs. Frank Buckland Hardy, formerly Miss Ethel Gibson, daughter of Mr. Richard Gibson, of Belvoir Farm, Delaware, Ontario.

Miss Gibson was a girl of exceptional qualities, one who excelled in everything she undertook, whether in housekeeping, cookery, needlework (plain or artistic), as well as being a writer of no mean ability, and with literary tastes above the average. Of her it was said that "she was the brightest type of a Canadian girl, always unconsciously and without effort winning the affection and admiration of those with whom she came in contact."

Just two and a half years ago our bright Canadian girl began her short but very happy married life in South Africa, her husband, to whom she had been for some time engaged, being a lieutenant in the South African military service. When a little son was born to them, their cup of joy was full. The young wife's letters, describing her travels and life in the Transvaal, have been always full of interest, and it was with the very happiest anticipation of a return there when the season of unrest had passed, that she came, a little over a month ago, to Canada for a visit to her parents in the old home she loved so well, at Delaware, a visit which, to our poor human intelligence, seems to have ended so sadly;

"Though earthly forms be far apart,
Spirit to spirit nestles nigher;
The music chords the same at heart
Though one voice range an octave higher.

We cannot see them face to face,
But love is nearness. And they love
Us yet, nor change with change of
place,
In their more steadfast world above,
Where love, once leal, hath never ceased,
And dear eyes never lose their shine;
And there shall be a Marriage Feast,
Where Christ shall once more make
the wine."

H. A. B.

Current Events.

President Roosevelt has announced that he will not again run for the Presidency.

The report of the survey for the proposed Georgian Bay ship canal is nearly completed.

Four hundred men lost their lives by a mine explosion at Monongahela, W. Va., on December 6th.

The Grand Trunk Railway has given orders for the construction of one hundred new locomotives.

The famous Bulgarian revolutionary leader, Boris Sarafoff, was killed at Sofia by a Macedonian recently.

The first train to be taken through the tunnel by electricity, from Port Huron to Sarnia, will go through on Christmas night.

The airship Cygnet, invented by Dr. Alexander Graham Bell, has been successfully tested above the Bras d'Or Lakes, C. B.

In a statement submitted to the shareholders of the Ontario Bank, the net loss of the institution was shown to be \$2,157,546, and the shareholders may be called upon to pay from 30 to 50 per cent. of their double liability.

An encouraging sign of the times lies in the fact that, at a recent meeting of the Ontario Bar Association, such topics as simpler law, speedier justice, cheaper procedure, and the right of client and lawyer to make a "free contract" as to the cost of a case, were discussed.

The estimates for the next fiscal year, ending March 31st, 1909, laid on the table of the House of Commons by Hon. Mr. Fielding, provide for a total expenditure of \$119,237,091. Of this, \$30,000,000 are asked for the construction of the National Transcontinental Railway, and \$4,327,250 for the Intercolonial Railway.

King Oscar of Sweden died at Stockholm on December 8th, aged 78 years. He was a grandson of Marshal Bernadotte, who won renown in the French army during the Napoleonic wars, and was made King of Sweden in 1818. The late king is succeeded by his eldest son, Oscar Adolphe, who will reign as King Gustave V.

Baron Ishu, Chief of the Bureau of Commerce of the Japanese Foreign Office, who visited the United States and Canada to investigate the question of Japanese immigration, stated, on his return to Tokio, that he thought emigration of Japanese to the United States should be prohibited, and that it should be greatly limited to Canada.

The Quiet Hour.

NOW.

'Tis not enough to know that one sweet day
My loving Lord washed all my sins away.

'Tis not enough that once—a while ago—
I felt His peace through all my being flow.
I want to know, as at His throne I bow,
He cleanses me, and gives His peace just now.

It does not satisfy to know that He,
Along my way, once walked and talked with me;

That once my yearning spirit did rejoice,
And burn within, while listening to His voice.

I want to live, as this day's moments roll,
Where I can hear His whispers in my soul.

'Tis not enough that once, was set apart
For Him, the first place in my happy heart;

That once His precious love was more to me
Than any earthly love could ever be.

But now, just now, I'd yield to Him,
The best
And purest love that glows within my breast.

Oh loving Lord! past blessings have been sweet:
I've learned life's holiest lessons at Thy feet.

But these do not suffice. I want each day
To have Thy peace, Thy presence on my way;

In life, in death, and through eternity,
My Christ, my King, to closely walk with Thee.

M. CARRIE HAYWARD,
Corinth, Ont.

"CONSIDER THE LILIES HOW THEY GROW."

(Luke 12: 27.)

"CONSIDER THE LILIES how they grow."

Consider the lily: it is pure, therefore it is beautiful; so it is with the people of pure hearts, they are beautiful characters. We have heard, "such an one is handsome," but look at that face for a few seconds, and you seem to see emptiness behind it. Here comes another person, at first glance we say that that person is not as handsome as the other, but, brother, look at that one a few seconds and you will see written there, "The hidden man of this person's heart is a solid, good Christian." Consider the lilies—is your religion nothing but a dead shrub stuck in the ground with paper lilies upon it? Do your actions come up to your words which you speak in class meeting or elsewhere about your religion? Does your religion make you unhappy or so sober that you cannot smile at anybody or anything; or are you nothing but a hypocrite, trying to appear righteous, but having a hypocritical heart? Here comes another person, and, I say, how is it with you? Is your religion like the true, pure, honest lily (if these things can be spoken about a lily)? Oh, is your life one happy song, with a faith and courage strong? Are you living in the sunshine to-day? Do you realize that Christ's words are true—"I am with you"? Are you walking along hand in hand with God, "Leaning, leaning safe and secure from all alarms, Leaning, leaning on the Everlasting Arms." If you are this kind of lily and not a paper lily, surely you can say of a truth, "The Lord is my Shepherd, I shall not want." If, then, the Lord is your Shepherd, and you shall not want, do not go about with a heavy heart and very long face, sorrow will certainly come, but trust thou in God, for you shall yet praise him.

Consider the lily characters of some people: Oh, the people with a red good heart, those people who are founded upon the Rock of Ages, who, when they speak, send out kind words and soft answers. Oh, the good these people do! They themselves are not aware of the good

they do. This kind I do not think will be told, "Depart from Me, ye cursed!" but "Come, ye blessed of my Father!" I like the kind of people that when you speak or shake hands with them you know that there is a real sound soul behind it all. A light that is set on a hill (yes, on the Rock of Ages) cannot be hid. Good cannot be hid, nor yet evil, very long, but it will show somewhere, or somehow. "Let it be the inner man of the heart in that which is not corruptible, even the ornament of a meek and quiet spirit." We are all preachers, either by our lives or behind the pulpit.

Consider the lilies HOW THEY GROW.

They grow with their main working powers hidden; that is, the roots. Take old Sambo, for instance, the outer man may be the roots in work in the eyes of man, but don't forget his soul shall shine as a lily in heaven. People may look down upon a person, because he or she has, what they say, "a low work or trade." They just look at the work, but notice the lives and characters of some of these, and you will find some of the most Christ-like type.

Here is a Babe born in Bethlehem, wise men and shepherds know somewhat of His value. Time passes by, and He works as a carpenter. He learns the trade. Still He works faithfully, and, when about the age of thirty, He is baptised with the Holy Ghost, and then tempted of the devil, preaches the gospel, heals the sick, He is despised and forsaken, suffers for the sin of the whole world, dies a most horrible death to redeem you and me. Brother, if we only TRUST IN HIM! The roots were in earth, but the lily shines in heaven now. And so it is with some or all preachers, they are talked about and persecuted in many ways by mankind; sometimes almost swallowed by a whale, or nearly nibbled to death by a thousand minnows. "Be strong and of good courage; be not afraid, neither be thou dismayed; for the Lord thy God is with thee whithersoever thou goest."—Joshua 1: 9.

Here is another man who sits near a rich man's house; he has sores upon his body, and is very poor; he is glad to get the crumbs which fall from the rich man's table; his hope is founded upon the Rock of Ages, but the rich man has a vain hope. Men saw the paper lily of the rich man, and, also, the true roots of the poor man; but both men die, and things are changed. The poor man is carried by the angels to Abraham's bosom, but the rich man's soul is cast into hell. Lazarus might have said, "What good am I doing here day after day?" So we might feel the same way at times, but be of good cheer, thy God reigneth.

Consider the lilies how they grow. They take sunlight into their lives through their leaves, which help to show to the world a beautiful flower. So may we, if we take the Sun of Righteousness into our lives, we will make the work brighter with a smile. Consider the lilies how they grow. They grow with their roots in the mud, and so are we sometimes in the mud of difficulty, or sorrow, or distress, or affliction, but "let them which suffer according to the will of God, commit the keeping of their souls to him in well doing as unto a faithful Creator." Let us, therefore, humble ourselves under the mighty hand of God. How? by casting all our care upon Him, by trusting and believing in Him, by having childlike confidence and faith. Then we will rejoice with joy unspeakable. How often Christ said, "Be of good cheer," and even sometimes when we are in trouble or danger, or think we are, as when He told the disciples when they were on the stormy sea. But let all those that put their trust in Thee rejoice, rejoice! Let them ever shout for joy, because Thou defendest them. Let them, also, that love Thy name be joyful in Thee.

Are you living in the blessed sunshine?
Are you trusting all the way?
Is your life one happy song,
With a faith and courage strong?
Are you living in the sunshine to-day?

Blessed sunshine, blessed sunshine,
How it cheers us on our way!
In what fulness it abounds,
There is sunshine all around;

Are you living in the sunshine to-day?
W. G. S.

I take great pleasure in stepping aside to-day, leaving the Quiet Hour in the hands of two of "The Farmer's Advocate" readers.

HOPE.

"OCCUPY TILL I COME."
(St. Luke xix.: 13.)

A sacred trust my Lord to me has given:
The pounds are His, to use them is my task.
Whether 'neath skies all bright or tempest riven
His service leads, it is not mine to ask;
He tells me not how long the time shall be
'Till He shall deem it best to call me home;
I only hear Him saying unto me,
"Occupy thou until I come."
He does not say that I may choose my toil,
And only do the things that please me best;
Nor does He tell me when I've served awhile,
That I may lay His armour by and rest,
But He asks for calm endurance to the end,
Alike through joy and pain, through light or gloom,
And promises to be my Guide and Friend,
So I must occupy "till He come."
How dare I then enwrap the precious pounds
In folds of uselessness, and lay aside?
On every side rich fields of toil abound,
Where they may be increased and glorified.
I may not understand why He to me
Gives but perchance one talent, while to some
He gives the five or ten; yet faithfully
Must I still occupy till He come.
Why should it matter whether one or ten,
Since all are His, and but a trust retained
To use for Him, until He come again
To see how much my toil for Him has gained.
But it does matter whether I, at last,
Among the faithless meet a bitter doom,
Or hear Him say to me, "Well done, thou hast
Been faithful till I come."
M. CARRIE HAYWARD.

THE LITTLE FELLER'S STOCKIN'.

Oh, it's Christmas Eve, and moonlight,
and the Christmas air is chill,
And the frosty Christmas holly shines
and sparkles on the hill,
And the Christmas sleigh-bells jingle, and
the Christmas laughter rings,
As the last stray shoppers hurry, takin'
home the Christmas things;
And up yonder in the attic there's a
little trundle bed
Where there's Christmas dreams a-dancin'
through a sleepy curly head;
And it's "Merry Christmas," Mary, once
agin' fer me and you,
With the little feller's stockin' hangin'
up beside the flue.
'Tisn't silk, that little stockin', and it
isn't much for show,
And the darns are pretty plenty round
about the heel and toe,
And its color kinder faded, and it's
sorter worn and old,
But it really is surprisin' what a lot of
love 'twill hold;
And the little hand that hung it by the
chimbley there along
Has a grip upon our heartstrings that
is mighty firm and strong;
So old Santy don't forget it, though it
isn't fine and new,
That plain little worsted stockin' hangin'
up beside the flue.
And the crops may fail, and leave us
with our plans all gone ter smash,
And the mortgage may hang heavy, and
the bills use up the cash,
But whenever comes the season, jest so
long's we've got a dime,
There'll be somethin' in that stockin'—
won't there, Mary?—every time.
And if, in amongst our sunshine, there's
a shower er two of rain,
Why, we'll face it bravely smilin', and
we'll try not ter complain,
Long as Christmas comes and finds us
here together, me and you,
With the little feller's stockin' hangin'
up beside the flue.
—Joe Lincoln, in the Saturday Evening
Post.

The Ingle Nook.

"THE FARMER'S ADVOCATE" FASHIONS.



6977.—Ladies' Apron, 6 sizes, 32 to 42 inches bust measure.



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Address: "Fashion Department," "The Farmer's Advocate," London, Ont.

[Note.—Where two numbers appear, ten cents must be sent for each number.]

Hot-supper Dishes.

Dear Dame Durden,—A short time ago some of the Chatterers wrote asking for hot dishes for supper, so I am sending a few from my "handy tablet," hoping they may be of use. I enjoy the Ingle Nook, and turn to that as soon as the paper comes. May I call again some day?
SCOTCH THISTLE.
Brant Co., Ont.

Possibilities of a Shank.—Shank, 40c. Cut about three lbs. off, put through a Gem chopper, to make one and one-half dozen cakes. Season with salt and pepper (also onion, if liked), and fry in beef dripping.

Put the remainder on in a large pot, with cold water to cover; let come to a boil, skim, and let simmer till meat drops from bones. Take from the broth, and put through the chopper, adding salt and pepper, and any other seasoning desired. Had enough for small bowlful and a two-quart basin, to be sliced cold.

Two quarts of broth, or jelly. Remove the fat; put half the jelly into a granite saucepan, and one-half cup each minced turnips, carrots, and cabbage; three small onions. Let boil for one hour. Add two tablespoons rice. When tender, season ready to serve.

Macaroni.—Break into inch lengths enough macaroni to fill one cup; put on in boiling water, and cook for one hour; drain water off. Put one tablespoon butter in a saucepan, with one tablespoon flour. When boiling, add two scant cups milk, salt and pepper to taste, and, when it all boils up, add one-

third cup grated cheese (stale cheese grates best), and the macaroni. Serve at once. Sometimes I put it on toast, but it is just as good eaten by itself.

Creamed Salmon.—Make a sauce by adding one tablespoon of flour to one cup and a half of milk. Season with salt and pepper, and add the contents of one can of salmon, leaving whole as much as possible. Serve piping hot.

Potato Soup.—Peel and cook potatoes; put through a press or ricer, and to a cup of potato add a cup (scant) of boiling water, a little onion juice or minced onion, with salt and pepper to taste. Let simmer till the onion is cooked, then add one-fourth cup of sweet cream, and it is ready to serve. Of course, this makes only a small quantity, but it may be doubled. In our house it would not go far at a table of six persons, especially on a cold night, when the plates sometimes come back for a second helping.

Salmon and Potatoes.—Fill a two-quart pudding basin with alternate layers of sliced cold potatoes and canned salmon, seasoning each layer with salt and pepper, and having the last layer of potatoes. Beat two eggs well. Add one pint milk (or more, if needed to cover), and pour into the basin. Roll two crackers fine, and sprinkle over top. Cover, and bake three-quarters of an hour.

In making tomato soup, if an onion be minced and fried a delicate brown in butter, then add to the soup, it will be found delicious, as the onion imparts a flavor of its own, which is not to be despised, even by those who do not eat onions served as a dish by themselves.

Cookies.—Four and a half cups flour, one teaspoon soda, two of cream tartar, one and a half cups yellow sugar, one cup shortening. Mix to a soft dough with sweet milk, flavored with vanilla. Roll out with as little handling as possible; sprinkle with granulated sugar, and bake in a quick oven. As a variation, one may be spread with raspberry jam of any sort, and another placed over it, making a jam-jam. The jam must be spread while they are still hot, or they will not hold. Fresh dripping, or butter and lard (half of each), does for the shortening. Another, plainer, is one cup sour cream, one egg beaten with one cup sugar, one-half teaspoon soda, one teaspoon cream tartar. Flavor with nutmeg. Flour to make a soft dough. These will brown quickly.

Many thanks for the recipes. Certainly you may come again, Scotch Thistle.

Chocolate Icing.

Will some kind reader give me a good reliable recipe for chocolate-cake filling and frosting? I have a recipe for boiled frosting, but do not know just how much water to add to sugar, or how long to boil. Would like a recipe for frosting that did not require boiling. Prefer a boiled filling.

N. S. SUBSCRIBER C'S WIFE.

You can get almost any kind of frosting in packages now, all ready to be mixed with a little milk, and put on the cake. If you choose to make your own, you might try the following: Use one ounce chocolate (one square), three tablespoons sugar, one tablespoon water. Place in a pan, and stir over a fire until the mixture is smooth. Beat the white of an egg just enough to thin it. Add eight even tablespoons powdered sugar; stir until smooth, and add to the chocolate. Flavor with half teaspoon vanilla, if liked.

Recitation Books for Children.

Several correspondents have asked where they can procure children's recitation books. These might try: "Tiny Tots Speaker" (for the babies); "Little People's Speaker" (for children of eight or nine years); "Young Folks' Recitations" (for the older children). These are all published by the Penn Publishing Co., 923 Arch St., Philadelphia.

From a Pioneer Chatterer.

Dear Dame Durden,—Can you make just a little room in a corner for an old-time guest? It is so long since I have said anything in your Nook, but I have been listening—and-thinking.

I asked once, through your columns, what should be used to rid one's house

of the tiny little white insects which, in summer-time, make their appearance on wooden furniture, pictures, photographs, etc. I have forgotten the answer which Dame Durden very kindly gave me, so I will be much obliged to know it again.

May I be allowed to express unbounded delight that "The Farmer's Advocate" takes such a decided stand regarding the destroying of beautiful and useful birds?

Where is Margaret? Is it not a long while since we have heard from her?

KATHARINE BLINKBONNY.

To save my life, Katharine, I couldn't think of the precise remedy I gave you before. Probably rubbing with a rag dipped in kerosene would help. My recipes on this subject seem to have disappeared. Perhaps someone else can come to the rescue. Ah, you were very naughty to stay away so long.

From Lankshire Lass.

Dear Dame Durden and Chatterers all,—I believe I had better come again to the cosy corner and chat with you before the severe weather comes, when perhaps I cannot. I have been reading Ingle Nook, and some ask us to tell how we spent the summer. Well, with me, there is nothing new to tell. I always spend every day at home, these many years, so I cannot tell of good times away; but when I count up the blessings from day to day, I find there are many to be thankful for. Yes, even when alone and suffering there are loving letters, and many new and old friends kindly write to me, and that is much pleasure when one is alone and thinking someone cares for us. How glad I am, indeed, for that. Then what a blessing it is to be sure to have kind friends in the young and old come; it does cheer one very much. How lonely often I would be if they forgot me. The winters in a very cold house seem long and a bit lonely, too, on a farm, and always at home; but I am thankful for a good son, and Dame Durden, too, has shed many rays of sunshine across my way. Several others have kindly remembered me. I do thank you, one and all, yes, very much, I assure you. How the Nook helps us, also the Quiet Hour, and, dear Hope, you too have helped me many times. I do want to learn more of Jesus, for see what great things He hath done for us all!

He is my Friend and Saviour dear.

He is with me while I tarry here.

I feel His presence ever near,

So I'll trust on without a fear.

In sunshine and shadow Jesus is an ever-present help, if we trust Him.

Well, I would like very much to help the Nook along, and all I can think of that has not been in it before—I did not notice anyway—are these few ideas: Well, we have a cold cellar in winter, and all apples freeze, so, after the rush and New Year is over, we peel and core the best of them, and boil down into good thick apple sauce, and fill into large quart sealers, and not a bit of sugar—only apples well cooked. They will keep for years. One large quart will make three nice pies, and the apples canned this way are so handy for sauce or pies when fruit is scarce in spring or summer. Try some; I am sure you will like it. Did you ever notice how clean and nice a cupboard is if you have very light, clean-looking oilcloth on the shelves, cut with a fancy-scolloped edge? It will wear for years. About once a month, when you fill your lamps, put in a teaspoon of salt; it makes a brighter light, and the glass keeps clean much longer. Put it in the lantern too.

Now is the time to feed the hens the ground eggshells every day. We keep all the eggshells in summer; they are easy kept, if dry, and feed them in winter. They are splendid for the hens.

Someone asks suggestions about gifts for Christmas. A nice cream neck ribbon or silk tie is nice, and any lady, not too old, can wear one. When collars cannot be worn by all people, a soft tie is comfortable and appreciated; a nice black silk one for an older lady. Never forget the dear old people. a nice black apron, nicely made, is nice for grandma, too. We are too forgetful of the aged ones. Some have worked hard to make it easier for their children, and then they are forgotten. One old lady had a nice bedroom lamp given to her, with handle on to carry, and how delighted



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Ask your druggist for it. If he cannot supply the MARVEL, accept no other, but send stamp for illustrated book—sealed. It gives full particulars and directions invaluable to ladies. **WINDSOR SUPPLY CO., Windsor, Ont.** General Agents for Canada.

she was with it. Then try and send useful gifts to the struggling ones; there are many of them around everywhere. Make as many glad as you can at the coming Christmas and New-Year season.

I have written long, but wish for help. Can you kindly tell me what way to fix fresh-grated horse radish so it will not get dark-colored so soon? It is very white at first, and I use best white vinegar, and put in a sealer, but still it gets dark when grated a while. Now, I had better close, for you will be tired reading this. Again I thank you, one and all, for your thoughtfulness to me. Wishing you all a joyous Christmas and very glad New Year; to Dame Durden, I wish you renewed strength and cheer for your noble work, also "The Farmer's Advocate" very many new subscribers in the new year. Your shut-in friend,—
A LANKSHIRE LASS.

I am sure we all join in wishing you, too, a happy Christmas, Lankshire Lass. Your courage and patience are surely a lesson to us all. D. D.

A Christmas Suggestion.

Dear Ingle Nook Friends,—Our chief, Madame Durden, has been regaling us with such good articles that I feel somewhat diffident about intruding on her space, but, trusting to the possibility that the "powers that be" will be imbued with the real Christmas spirit, and broaden their columns as well as their hearts, I venture into the charmed circle again to share in the general good cheer which pervades that department.

While we have not the realistic little picture heading on our column as of yore, still most of us remember it, and, perhaps—children-like—imagine it as the real spot where our spirits blend and enjoy each others' sympathy. And surely it is not much of a stretch of imagination to fancy an especially bright fire burning in the grate to-day, shedding its reflection upon ornaments, poker and tongs, which laugh back at it in that cheery way that impresses you that they are all on intimate terms with the maid's strong arm, and—perhaps Silico. What a pity we cannot see the mantel, for I am sure the holly is there with its little bits of brightness peering from among the dark green leaves and twined gracefully by Dame Durden's deft fingers, no doubt.

Now, since we are all snugged down so cozily, "you in your small corner, and I in mine," it strikes me it would be almost like sacrilege at this season, when sentiment holds sway to such an extent, to bring a bundle of our "common, ordinary, everyday" troubles or affairs into this quiet retreat, with its "spick and span" appearance and general holiday air. "The Farmer's Advocate" people throughout are considered very practical, and, of course, the women claim their full share of that quality; but it certainly would not do to "talk work" to-day, it would be too much like bringing the mending-basket into the parlor on Christmas day.

It just occurs to me that if I exercise a woman's prerogative, and add a postscript of equal length to my introductory remarks, there will not be much room for the subject proper, so I will intimate the example of the painter—Irish, of course—who hustled so to reach the end of the fence before his paint gave out.

Now, ladies, I have thought of a little plan of showing the Christmas spirit, which, if carried out by all who are able, would give a great amount of pleasure, I am certain. Did it ever occur to you how many people there are in our small and large towns, to say nothing of the cities, who rarely ever enjoy a day in the country? I am not speaking now of the extremely poor—who we all know have few enough pleasures, certainly, poor things! and to whom a little timely aid is so acceptable—but the many not necessarily poor at all, whom we meet every week or so in the stores, at church, and on the street, and with whom we have an acquaintance all the way from the merest bowing type to that of the warm, hearty greeting of the old and tried friend. Now, there are very few of those, possibly, who have their own equipment for an outing for the whole family party, and where occasionally they might hire, the expense incurred would discount the pleasure to some considerable extent.

Now, to the farmer who drives to

town two or three times a week, the trip and scenery en route become monotonous, but to the average town family it would be a delight from start to finish.

While many farmers are very hospitable and kind in this regard, there are many who probably have never dreamed of the possibilities of pleasure wrapped up in that big old-fashioned sleigh or carriage of theirs, so long ago relegated to the back-room in the carriage-house.

Now, my proposition is that during the holiday season, every "Advocate" farmer, wherever it is practicable, will invite some family from town to his home for the day or a few hours, as he saw fit. The goodwife need not trouble about an elaborate bill of fare, for the wholesome, homemade viands, served with the "milk of human kindness," will be most palatable.

After dinner, while the men talk on current events, elections, business interests as related to each, the women-folk could interchange ideas upon house-keeping matters, management of the home, children, and even husbands if they become very confidential; indeed, trust the women to find plenty to talk about.

And if the children of the party don't find something new and amusing before they are there half an hour, they are the strangest children I ever heard of. And if, all together, givers and receivers do not have a thoroughly enjoyable time, and feel the glow of the real Christmas spirit through their blood, I will not ask them again to take the suggestion of—
BERNICE.

Bruce Co., Ont.
A welcome back, Bernice.

About the House.

CHRISTMAS CAKES OF OTHER LANDS.

German Lebkuchen.—Mix one quart of honey and two pounds of granulated sugar, heat slowly, and boil for fifteen minutes, then stir until cold. Spread twelve ounces of flour on a shallow pan, place in a moderate oven, and stir frequently until it is an even light-brown color. In another pan place twelve ounces of blanched and dried almonds, and roast until golden brown; cool and chop fine. To the flour add the nuts, two ounces each of finely-chopped citron and candied orange peel, one teaspoonful each of cloves, ground cardamom seed and white pepper, and a half teaspoonful of salt. Work in the honey and one-half of an ounce of potash dissolved in rose-water. When thoroughly mixed, cover, and set the paste away for twenty-four hours. Roll out a scant half inch thick, cut in pieces three by four inches, lay on waxed or greased pans, and let chill for three hours, then bake in a medium oven. Cut with water-icing, and sprinkle quickly with finely-chopped, roasted almonds.

English Yule Dolls.—Cream together a half cupful of butter and one cupful of sugar. Add gradually two well-beaten eggs, one tablespoonful of cream, one teaspoonful of vanilla, a pinch of salt, and three cupfuls of flour with which have been sifted two teaspoonfuls of baking powder. Stand for an hour in a very cold place. Have ready a tin cutter in the shape of a doll, about five inches long. Take a portion of the dough on the board at a time, roll out half an inch thick, and cut into dolls. Brush each over with milk, and dredge lightly with powdered sugar. Use currants for eyes, and bake on greased pans in a moderate oven. When cold decorate the skirt of each doll with ruffles of frosting. Wrap separately in sheets of waxed paper. In packing, place the doll in a long shallow box, pack firmly with tissue paper, and before closing, add a tiny Christmas card and a sprig of holly, tying the box with scarlet ribbon.—From The Circle, for December.

COOKING TURKEY.

Pluck and wash the turkey, scrubbing it well with water and a small brush (some use soap also, rinsing well afterwards, to make perfectly clean). Next, stuff the turkey, and sew it up. Fasten the neck skin over on the back with a small skewer, also fasten the wings and thighs close to the body with skewers.



The Angle LAMP

The new principle of coal oil lighting employed in The Angle Lamp is fast displacing gas and electricity. Partly due to the quality of light; best in the world. Soft, mellow, restful to the eyes.

Light Without Any Shadow.

You light and extinguish like gas, you can fill without extinguishing. The only lamp of its kind—the light for country homes. Equals the best light of the city man at a fraction of the cost. You can't know all about it until you use it.

Sold On 30 Days Trial.

Send for catalogue and full information. **THE 1900 WASHER CO.,** 355 1/2 Yonge St., 670 Toronto, Ont.

CONSUMPTION

Book Free!

If you know of anyone suffering from Consumption, Catarrh, Bronchitis, Asthma, or any throat or lung trouble, or are yourself afflicted, this book will help you to a cure. Write at once to the **Yonkerman Consumption Remedy Co., 132 Rose Street, Kalamazoo, Mich.** Don't wait—do it now.



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 30 cents.

FOR SALE—White Holland turkeys, \$7 a pair; toms, \$5; hens, \$4. Buff Orpington cockerels, \$1. Miss Anderson, box 104, Sutton West Ontario.

LARGE Narragansett turkeys—Rose-comb Rhode Island Red and Barred Rock cockerels. Fred Baldwin, Colchester, Ont.

MAMMOTH Bronze turkeys. High class, choice young birds at moderate prices. Geo. Braven, Dunville, Ont.

MAMMOTH Bronze turkeys for sale. Bred from a heavy prizewinning tom and high-class hens. T. Hardy Shore & Sons, Glanworth, Ont.

MAMMOTH Bronze turkeys. Bell's strain. Toms, \$3; hens, \$2.50. S. L. Anderson, Crossland, Ont.

MAMMOTH Bronze turkeys—Healthy young toms for sale. Geo. H. Tolchard, Chesley, Ont.

PURE BRED Barred Rocks, White Wyandotte and White Leghorn cockerels, \$1 each. John R. Morgan, Wales, Ont.

WHITE Plymouth Rocks. Best American line bred. Cockerels, two dollars to ten dollars. Pullets, one dollar. Eggs two and three dollars. Willowdale Stock Farm, Lennoxville, Quebec. J. H. M. Parker



Advertisements will be inserted under this heading, such as Farm Properties, Help and Situations Wanted, and Pet Stock. **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.

WANTED—A few good subscription agents for The Farmer's Advocate and Home Magazine. Liberal terms. The William Weld Co. Ltd., London, Ont.

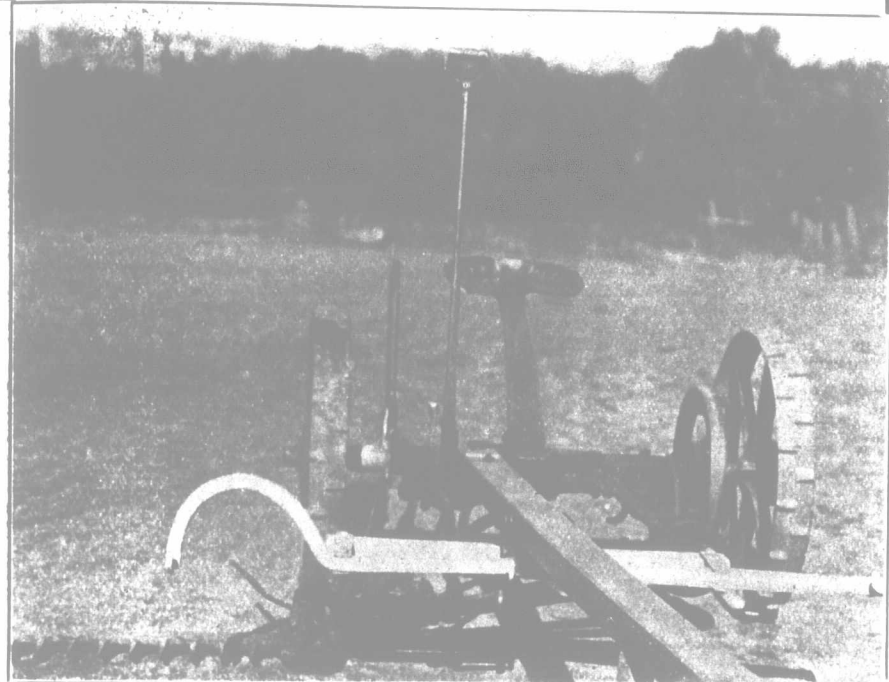
WANTED—Experienced man as head herdsman. Also good man or two for farm. Cottages provided. Address James Smith, Mgr., Pine Grove, Rockland, Ont.

Wanted! I want to tan your hides, skins and furs soft and pliable; never get hard. Also to make and line your robes, or make your fur coats. Try me for best of satisfaction. I aim to please you. Address: **B. F. BELL, Delhi, Ont.**

It is said that Wikins has wooden signs all over the district saying he's the best man in the field.

He said he intended to run the campaign his.

Dain Vertical-Lift Mower



Easy Runner; High Lift; No Side Draft; Simple and Durable.

NOTICE!

DAIN PATENT ARCHED SINGLETREE can be used on any mower, and allows hay to pass straight and untangled to sickle, hence clear-cut ground at the inside show and full swath.

Write and secure agency at once.

Dain Manufac'g Company,
Preston, Ont.

MENTION THIS PAPER.

LARGE REWARD

What We Give Our Subscribers for Getting New Subscribers for Us.

For One New Subscriber:

1. Farmer's knife, Rodgers, a first-class article.
2. The choice of any two of the following: Reading glass, large mouth-organ (harmonica), mariner's compass.

For Two New Subscribers:

1. Bagster's Comprehensive Teacher's Bible.
2. Lady's hand-bag, leather and lined with leather, large enough to carry letters, etc., in.
3. One copy of "Carmichael," bound in cloth, and well illustrated.

Watches:

1. Gentleman's nickel watch for three new subscribers.
2. Gentleman's gold-filled Elgin or Waltham watch for thirteen new subscribers.
3. Lady's sterling silver watch for eight new subscribers.
4. Lady's gold-filled watch for eleven new subscribers.

These articles are all good, and may be relied upon.

In addition, we have books bearing on almost every department of farming, for list of which apply to this office.

Tell your friends about our journal. Secure their names, and let us send you one of these premiums. State definitely which premium you prefer. In each case of above, the regular subscription rate, \$1.50 per annum, must be sent.

TWO SUGGESTIONS:

1. A volume of Carmichael, printed on heavy paper, bound in cloth, and plentifully illustrated. May be ordered through this office. Price, \$1.25, post-paid.
2. A subscription to "The Farmer's Advocate and Home Magazine" for one year. Price, along with your own renewal, \$2.75. If you send the money before December 31st, 1907, your friend will receive our handsome Christmas number, which is alone worth fifty cents.

Address: **THE WILLIAM WELD CO, LTD.,**
London, Ont.

and tie the bird together to keep it in compact shape. Next, rub the turkey with a little salt, and spread all over with a paste made of one-third cup butter, and one-quarter cup flour. Place the bird on a rack in a dripping-pan, and place in a moderate oven, basting once in ten or fifteen minutes, at first with hot water in which a little butter has been melted, afterwards with the gravy in the pan.

Cranberry Sauce.—Put three cups cranberries in a stewpan with one and one-quarter cups sugar, and one cup hot water. Cover, and cook ten or fifteen minutes, then skim and cool.

THE GERM OF THE BULLETINS. NUTS AND THEIR USES AS FOOD.

[Condensed from an article by M. E. Jaffa, Assistant Professor of Nutrition, University of California, in Yearbook of the U. S. Dept. of Agriculture for 1906.]

The constantly increasing consumption of nuts augurs well for a better appreciation of their food value. The time when they were considered merely as a luxury, or as something to be eaten out of hand at odd times, is rapidly passing away, and our principal native nuts are now staple market commodities and bring good prices. The work of growing them for commercial purposes has been forwarded by the Department of Agriculture, and, as with other crops, it has been found that, by selection and breeding, improved varieties are obtainable, of larger size, better flavor, and thinner shells. Our principal nuts show a high nutritive value, being rich in protein, fat and carbohydrates, of which our most common nuts contain the following percentage:

	Protein.	Fat	Starch, etc.
Butternut	27.9	61.2	3.4
Hickory	15.4	67.4	11.4
Pecan	12.1	70.7	12.2
Brazil	17.4	65.0	9.6
Filbert	16.5	64.0	11.7
Walnut	18.2	60.7	16.0
Almond	21.4	54.4	16.8
Cocunut	6.6	56.2	22.6
Beechnut	21.8	49.9	18.0
Peanut	29.8	43.5	17.1
Chestnut	10.7	7.8	73.0

Compare with these:

	Protein.	Fat	Starch, etc.
Round steak	19.8	13.6
Cheddar cheese	27.7	36.8	4.1
Boiled eggs	12.4	10.7
White bread	9.2	1.3	53.1
Dried beans	22.5	1.8	59.6
Potatoes.....	2.2	.1	18.4

Nuts are also comparatively well supplied with mineral matter, this constituting in the majority of varieties exceeding two per cent.

With the exception, perhaps, of dried beans and cheese, no food material has the reputation for indigestibility that has been accorded to nuts, but this discomfort from them is largely due to insufficient mastication, and to the fact that they are often eaten when not needed, as after a hearty meal or late at night. Too much stress cannot be laid on the necessity of thorough mastication of nuts. It must not be forgotten, also, that a certain bulkiness of the diet is conducive to normal assimilation, hence nuts are most advantageously used in connection with more bulky foods, such as fruits, vegetables, breads, crackers, etc. Since they are so concentrated, eating a considerable quantity out of hand at odd times will mean an over-supply of food, if a corresponding reduction is not made in other foods. They should never be used to supplement an already abundant meal, but may very well be made an integral part of the menu.

Nuts may, in fact, be readily used as staple articles of diet, as an ingredient in salads and in soups, as a stuffing for poultry, in the making of desserts, and in many ways. Wild turkey stuffed with pecan nuts, is a dish popular with old Virginia cooks, just as goose stuffed with chestnuts is prized in Germany. In general, the nuts, rich in protein and fat, should be used in combination with carbohydrate foods, as bread, fruit, green vegetables, etc.; while such varieties as the chestnut, which do not contain much protein or fat, but are rich in carbohydrates, may be properly combined with meats, milk and cream, eggs, and other foods containing protein and fat.

Fresh and sweet nut butters and pastes (such as almond paste), nut candies, etc., are all highly concentrated and very nutritious foods, but should, of course, be eaten in a rational way and at proper times. The various nut oils, which are practically pure fats, have a very high fuel value. Like olive oil, they are readily assimilated when properly combined with other food materials, as in salads, as "shortening" for various dishes, etc.

The common nuts—though, with the exception of the peanut, they are more expensive sources of protein and energy than meat and a number of the common foods—may yet be considered reasonably cheap sources of nutrients and energy, and hence may be regarded as justifiable additions to the diet on the score of economy. Ten cents will buy about the same amount of nut protein as of animal protein, except in the case of cheese and skim milk. If spent for peanuts, it will purchase more than twice the protein and six times the energy that could be bought for the same expenditure for porterhouse steak. . . . In short, it may be said, that when rationally used, nuts are well assimilated, and may well be made a part of the regular diet.

Carmichael.

BY ANISON NORTH.

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CHAPTER IX.

The Clearing.

A little clearing, round as a wheel, with a little log house at one side of it, over which in time the bitter-sweet crept, and the wild clematis ran riot, and the Virginia creeper threw its leaves, red as coals, in the autumn, about the doors and in at the windows.

Awakened in the morning by a chorus sung by a thousand birds, and getting up to see the gray dawn fleeing silently to the westward, with one faint, coral cloud in its wake.

Leaning out of an upstairs window toward the great wood, so close, almost, that one could touch its branches, and peering down into the dark depths where the aisles were lost in shadow and the gray tree-trunks ranged, the pillars in a cathedral of God's own making.

Lying awake at night, listening to the murmur of a million leaves, and watching the moving square of moonlight on the floor; or, again, lying there close under the roof, upon which the rain pattered like the feet of a thousand fairies dancing.

Sitting out at the edge of the wood, and looking across the little round clearing to the billowy tree-tops beyond until the harvest moon rose above them like a great golden lantern hung in the sky, and the shadows grew long and black below, with the moonlight lying between like a rime of hoarfrost on the ground, and the tall mulleins and bur-marigolds beside you mystically growing, in the curious, dream-like light, into small trees.

Listening, at such a time, with your ears, and above all, "with your soul," to all the noises of the night, the murmuring of the trees, the soft swishing of the corn leaves in the clearing, the chirp of the crickets at a little distance all about you, the distant, quavering whistle of a raccoon.

Have you known any of these picture at first hand—your pictures, your experiences, not mine? If so, you have known something of our life in the little clearing.

Mayhap you have thought life in such a spot indescribably lonely. Then you have missed something that I, many as were my limitations, possessed, that tang of wildness which belongs only to Indians, and poets, and wild animals, and little birds that build deep in the woods and the fields, and which brings its own sort of happiness.

After the first keen sense of homesickness and strangeness had gone,

and the memory of the dreadful time had passed, as such memories of childhood do, into the semblance of a dreadful dream, I do not think that I was ever very lonely or very unhappy in the clearing, because of it. There was much to do, and busy hands, as a rule, make happy hearts. Then, all of the time, whether at work or at play, the sense of the proximity of the forest was never absent from me, mingling, like a rich, deep note in a chord of music, in all my thought; and, considering my love of the woodland, it was little wonder that I spent every moment, almost, of my spare time within its border, until it came to seem like a great, sheltering mother, within whose arms I was safe, and at home.

Soon, too, I found that, if I sat very still, the little birds, and squirrels, and mice, and other soft, shy, woody things would come, in their curiosity, quite close to me, and even, in time, establish a sort of timid friendship, a shy, silent, undemonstrative friendship, it is true, and yet neither an unsatisfactory nor an uninteresting one; and even when a great girl I would go and watch for my little friends, finding that, if I were alone, I was seldom disappointed in seeing them, although, if even Miss Tring were present, they invariably failed to appear.

It was a marvel to me, too, how many things I saw which escaped Miss Tring, and how hard it was for me to get her to see exactly where they were—the tiny brown nest pasted against the bark of a tree; the little fungus, gleaming redhot from the root of a rotting stump; the small creeper flattening himself against a gnarled branch; or the head of a woodpecker peering around a bare snag to observe us.

But enough of this. Unless you have a bit of the wood's own spirit in you, you will not be interested.

As I have said, there was plenty of work to be done at the clearing; and, for my mother's sake in especial, this was well. Under the necessity of doing things to make money, and making shifts to save, her old energy came gradually back, and with it a shade of the pink to her cheeks, and a glimmer of the old peace to her eyes. As the time went on we would even hear her singing, sometimes in a sort of low crooning, as she made the butter into pats, or knitted the stockings which she meant to exchange at Saintsbury for sugar and tea, and warm winter clothing for us all. At last, one day, the freshly-ironed white apron made its appearance behind the kitchen door, and Miss Tring and I looked at each other jubilantly.

"I really believe," said Miss Tring, "that your mother is quite herself again."

But from the time that my father died, one marked change had come over my mother. Before that time her attitude to the Carmichaels had been a sort of indifference. My father might have his quarrels with Henry Carmichael if he chose, why should she trouble herself? From that fateful night, however, the sight of one of them, even of Dick, was enough to throw her into a wild state of nervous excitement.

"I'd like to find out about that timber," she said one day, "'n' do by it as yer father would ha' done"—poor little soul, the main care of her life now was to do as my father would have done—"but I couldn't hev' an investigation without comin' across the track o' them Carmichaels, 'n' I couldn't stand it, Peggie, I know I couldn't! I'd never come through it alive!" and the nervous flush of her cheek showed that the experiment might be a dangerous one. So the matter of the timber was let rest.

Once only did the field-sparrow trill, which I recognized as Dick's, come to the clearing. After that I was strictly forbidden to have anything to do with my old playmate. At first the restriction was a sore

trial, but as the years went on, the memory of his comradeship, like other memories, drifted off among the dreams of the past, and Dick Carmichael gradually became, as I fancied, nothing at all to me. I saw him but very seldom after coming to the Clearing, and when we met it was only to speak and pass on.

(To be continued.)

Leicester Breeders in Session.

The nineteenth annual meeting of the American Leicester Breeders' Association was convened in the City Hall, Guelph, Tuesday evening, Dec. 10th. President James Snell in the chair. A large number of the breeders were in attendance. In his address, the president called the attention of those present to the fact that the Association had recorded the largest number of sheep in the past year of any year of its existence, also to the fact that reports from a large number of the breeders indicated that it had been a very prosperous year among them, and that the demand was equal to or in excess of the available supply of breeding sheep of the Leicester breed. He urged the members to advertise their sheep more thoroughly, not only by using the pages of agricultural and stock papers, but also by making entries and exhibiting their sheep at the fairs, etc. He called attention to the fact that four cars of Leicester rams had been shipped to the range of the United States in one shipment the past year.

The statement of the secretary-treasurer showed a balance of about \$230 in the treasury, after paying all expenses for past year.

The secretary was instructed to prepare Vol. 6 for the printers as soon as possible, or as soon as 3,000 pedigrees had been entered for same. This will be done by April 1st, it is estimated, as over 2,000 pedigrees are now on hand, besides a large number of transfers, etc.

Grants for 1908 were made to Guelph, Ont., and Winnipeg, Man., fairs; the prizes being \$10, \$8, \$7 for Guelph, for pen of three ewe lambs, bred and owned by exhibitor; and \$10, \$6, \$4 for Winnipeg, for flock of one ram any age, two ewes one year and under three years, and two ewe lambs under one year. The sheep to compete in all cases to be registered with and bear the ear tags of the American Leicester Association.

James Douglas, of Caledonia, was chosen judge for Chicago International for 1908, with C. E. Wood, of Freeman, Ont., as reserve. The election of officers resulted as follows: President, James Snell, Clinton, Ont.; Vice-President, C. E. Wood, Freeman, Ont.; Sec.-Treas., A. J. Temple, Cameron, Ill. Directors—A. Whitelaw, Guelph, Ont.; G. B. Armstrong, Teeswater, Ont.; Jas. Douglas, Caledonia, Ont.; Alex. Hastings, Crosshill, Ont., and John Marshall, Cass City, Mich., with Honorary Vice-Presidents for sixteen States and Provinces. Guelph was chosen as the place for the twentieth annual meeting, during the Fat-stock Show of 1908.

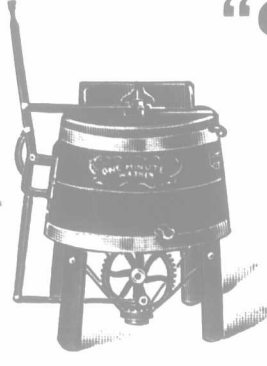
GOSSIP.

In the milking records of the Tring Park herds, the property of Lord Rothschild, Eng., eighteen Jersey cows were in the herd the whole of the year, and their average yield of milk was 7,455 lbs. per annum, the highest individual yield being 10,666 lbs., and the lowest, 4,969 lbs. There were forty-six Shorthorns in the herd throughout the year, and their average yield of milk works out at 6,787 lbs. per annum. The highest individual return in this case was 11,641 lbs., and four others exceeded 10,000 lbs. It should be noted that the average is reduced by several having been dry for a considerable part of the season, one, for instance, having been in milk only 140 days. Of the Red Polled breed, forty cows were in the herd throughout the year, and their average is 6,571 lbs. per annum. Only one animal gave more than 10,000 lbs. in the year, but her record of 12,005 lbs. is the highest of the three breeds. The general average in this case also suffered from a number having been dry for several months.

"One Minute" Washer

FOUR GREAT FEATURES—

1. Easy to operate.
2. Not hard on the clothes.
3. Constructed of the best materials.
4. Moderate in price.



For sale by one dealer in every town in Canada. Write us to-day for the name of dealer in your locality, and we will mail you free circular describing the merits of this machine.

White, Ehrhardt & Co., 122 Logan Ave., Toronto, Can.

Canada's Leading Horse Importers

CLYDESDALES AND HACKNEYS—Greatest collection of stallions and mares ever assembled at Cairnbrogie Farm. Champions of two continents. Stallions and mares. Imported and home bred. The kind that win at the big shows. No firm on either continent can supply more satisfactory foundation stock. Our new importations arrived August 20th, and are now in fine condition for sale. Come and see us, or write us for anything you want in Clydesdales or Hackneys. We have it at reasonable prices and terms to suit.

GRAHAM BROS., Cairnbrogie Stock Farm, CLAREMONT, ONT.

Cairnbrogie Stock Farm is 25 miles east of Toronto on the C. P. R. Long-distance phone.

WHITCOMB STEEL BARN DOOR LATCH

WILL FIT ANY DOOR

Two large handles operate latch from either side. Extra catches furnished to hold door open or closed. Will not catch the harness. Cannot be opened by horse. STRONG, DURABLE, CONVENIENT. Used in forty agricultural colleges. For sale by hardware dealers. If you cannot get it on first call, write us your dealer's name, and we will tell you how to GET ONE FREE.

ALBANY HARDWARE SPECIALTY MFG. CO.
426 Albany Street, Albany, Wis.

Imported Clydesdales

Just arrived, a choice shipment of stallions and fillies; dark colors; all first-class breeding. Inspection invited. Terms to suit. Long-distance phone.

Geo. G. Stewart, Howlok, Que.

Shorthorn Bull For sale: Royal Mistletoe=53899; red; calved Feb., 1904. Sire Lord Mistletoe, Imp. =45194; dam Princess Royal 21st, Imp. =48690. A fine individual and sire; in good condition. Offered only on account of pregnancy coming of breeding age. A Giffin, Snelgrove Ont.

GOSSIP.

A brand-new semi-monthly paper, the Canadian Holstein-Friesian Record, of St. George, Ont., has made its bow in the interests of the popular black-and-white dairy breed. It contains the official lists of transfers and other data of interest. James Henson is the editor and publisher.

Mr. R. H. Reid, Pine River, Bruce County, Ont., in ordering a change in his advertisement of Shorthorns, writes that, owing to the scarcity of feed throughout the country, he is holding over his last season's crop of bulls and heifers until some time in February, when he will offer them by credit auction sale at his farm, which will be a good opportunity for securing good stock of choice breeding.

At the recent meeting of the Council of the English Shire Horse Society, it is satisfactory to notice that fifty new members were elected, indicative of enthusiasm and life in the trade for this particular draft breed, and that the market is widening is proved by the number of purchases which have recently been made for export to Argentina, the demand for Shires for that country giving promise of equalling that which has existed for some years for English Shorthorns, as exporters have only lately commenced including Shires in their shipments of live stock to South America. [Live-stock Journal].

Norwich Fat-stock Show.

The chief item of interest at the recent Norwich Fat-stock Show, England, was the fact that the two of the highest honors attainable were secured by pure-bred Aberdeen Angus animals. These were Mr. J. J. Cradlan's heifer, Elegance of Mausemore, female champion and also the champion of the whole Show, and Mr. R. W. Hudson's champion male, Banfield Waterman. They met in the

final tussle for championship, the latter being placed reserved to the former. Mr. Cradlan's heifer is two and three-quarters years old, and scales the not too heavy weight of 1,450 lbs. She is, however, a very deep and beautifully-developed example of the merits of the doddie as a beef-producer. Mr. Hudson's steer, at one year and ten and a half months old, weighs 1,275 lbs., and is a splendidly-furnished beast of grand symmetry and prime quality. These two animals headed their respective classes. H. M. the King was an exhibitor of Shorthorns, winning first for two-year-olds, with a well-finished white steer that scaled 1,550 lbs. at two and three-quarters years. Mr. H. S. Leon, of Bletchley Park, supplied the winner in the female class with a shapely, well-topped heifer, which beat, for the position, a representative of the Royal farm. The cross-breeds were headed by a Shorthorn-Angus in the three-year-old steer class, and in the small-cattle section Mr. R. W. Hudson had two first prizes, one for a Dexter-Shorthorn steer, and the other for a pure-bred Dexter heifer, the latter being a particularly level, plump and well-furnished animal that eventually stood reserve to Mr. Cradlan's choice A-A cow for the female championship. The third prize in this class was Sir W. Gilbey's Dexter, which was bred by Mr. R. G. Nash, Lucan.

QUESTIONS AND ANSWERS.

Veterinary.

BOG SPAVIN.

Three-year-old colt has bog spavin. She is not lame. J. B.

Ans.—Some colts are predisposed to puffs of this sort, and in such cases it is seldom a permanent cure can be effected. Make a blister of two drams each of biniodide of mercury and cantharides, mixed with two ounces vaseline. Clip the hair off. Tie so that he cannot bite the part. Rub well with the blister daily for two days. On the third day wash off and apply sweet oil. Let head down now, and oil every day. As soon as the scale comes off blister again, and, after this, once every four weeks all winter. V.

"It doesn't take these little Russian children long to catch on to things in this country," remarked a teacher of the Educational Alliance. "When one explains a word to them they never forget, and they are always ready with an illustration of its meaning, too. I remember that some time ago I had explained to the class the meaning of the word 'ambiguity,' and then, as the custom is, I turned about and made them explain the word to me.

"Now, is there anyone?" I asked, "who can give me an illustration?" "A grumpy little urchin at the back of the room stuck up his hand. "Here's an ambiguity for ye," he cried. "Little Johnnie Rose sat on a tack-tittle Johnnie Rose, see?" "Oh, no," concluded the teacher, "you don't have to explain a thing to the next one could twice."

QUESTIONS AND ANSWERS.

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

Miscellaneous.

KILLING DOG—HAY FORK.

1. I shot at a dog, wounded it, and followed it to a neighbor's, and killed the dog. He was chasing my sheep when I saw him, and shot at him the first time. The dog was two and a half miles from home. The owner wants me to pay for him. Am I liable for damages?

2. A sells a farm to B, with a hay fork up in the barn. A took down the carriage, fork, rope and pulleys, and sold them at the sale. Can B claim damages? ALGOMA SUBSCRIBER, Ontario.

Ans.—1. No. See Revised Statutes of Ontario, 1897, Chap. 271, Sec. 9 and 10.

2. Judging from the foregoing statement of facts alone, we would say that he is not in a position, legally, to do so.

PIGS COUGH.

Pigs of all ages, except the sows, seem to have a cough. Are fed different kinds of food, with plenty of exercise. The floors are kept dry, but the fowls are at liberty to be with the hogs. E. K.

Ans.—Coughing is sometimes caused by dust in the bedding or on the floors. If fowls roost in the hopen, their dried droppings are liable to create dust, which might affect the hogs. Fowls should not be allowed to roost in a hopen. Coughing sometimes results from constipation, and sometimes from worms in the throat. For either, the feeding of sulphur, at a rate of, say, a teaspoonful to each animal twice a day for a week, would probably be helpful. If constipation is acute, half a cupful of raw linseed oil to those over five months old may be given.

POINTS OF A CLYDESDALE.

I would like a little information about the most important points of the Clydesdale horse—the shoulder, elbow, fore and hind legs, kind of bone and hair desired. Which is best to stick to, size or quality, in regard to money? Describe the bone of the canon or shank. J. M.

Ans.—In the light horse, where a great deal of action is required, there must be a sloping shoulder, such a condition increasing the elasticity of the gait and diminishing concussion. On the other hand, in the draft horse, a more upright shoulder is preferred, so as to bring a good bearing surface into the collar. The bone of both fore and hind legs should be flat, of good size, and free from meatiness, and the hair of a fine, soft, silky texture. Coarse, curly or wavy hair indicate coarseness of quality, and predisposition to grease or scratches. Size, with quality, is the ideal, but quality with medium size is much preferable to extreme size lacking quality. Overgrown males of any class of stock are seldom good sires; while the most of successful sires have been of medium size, with strongly-marked breed character and masculinity, a well-muscled neck, strong, short back and large heartgirth. Sloping, oblique or springy pasterns are considered most desirable in either a driving or a draft horse, lessening concussion either in driving or drawing heavy loads. But it is possible to have too much of this, and, overdone, it amounts to a fault. A recent authority claims that there is no such thing as flat bone, as the term is used in the horse, that the canon bone—that part of the leg between the knee and hoof—is round, and that it is the tendon that gives the flat appearance, and that the roundness of the leg in the horse, lacking quality, is produced by the thickness of the skin and the presence of tissues about the tendon.

GOSSIP.

In this issue will be found a new advertisement of Holston bulls, by Mr. Jas. M. Boyd, Lynden, Ont. If interested, look it up.

SALE DATES CLAIMED.

Dec. 20th.—W. S. Carpenter, Simcoe, Ont., Shropshire sheep. Jan. 6th, 1908.—Estate of Wm. Hendrie, Hamilton, Ont., Shorthorns. Jan. 8th.—H. M. Vanderlip, Cainsville, Ont., Berkshires.

The price of wool has more than doubled for some classes since 1901, when it was at its lowest. A British compilation from various authorities puts the annual averages as follows: Leicester r, 5 1/2d. to 6d. per lb. in 1901, and 12 1/2d. to 13d. in 1906; half-bred, 5 1/2d. to 6 1/2d., and 13 1/2d. to 14 1/2d.; Southdown, 7 1/2d. to 9 1/2d., and 14 1/2d. to 15 1/2d.; Lincoln, 6 1/2d., and 14 1/2d. to 15 1/2d.; White Cheviot, 5 1/2d. to 8 1/2d., and 13 1/2d. to 14 1/2d.; White Highland, 4d. to 4 1/2d., and 8 1/2d. to 9 1/2d.

SHANNON BANK AYRSHIRES AND YORKSHIRES.

Improvement, year after year, by the careful weighing and testing of each cow's production, and the weeding-out process of all those not proving profitable, was the plan carried out in the Shannon Bank herd of Ayrshire cattle, that has resulted in their bringing in their owner, Mr. W. H. Tran, of Cedar-grove, Ont., the neat sum of \$100 a month for milk alone. That the herd is now a highly-profitable one and capable of producing a very large milk yield, the following figures of a few of them will prove: Frances 2nd, in three and a half months, as a two-year-old, gave, this summer, 3,447 lbs., that tested 3.5 per cent. Beauty 2nd, in five months, as a two-year-old, gave 4,075 lbs., that tested 4.2 per cent. Beauty 1st, aged, in five months, gave 3,096 lbs., that tested 5 per cent. Rosy 3rd, as a four-year-old, in four months, gave 5,239 lbs., testing 3.4 per cent. Lizzie 3rd, as a four-year-old, in six months, gave 3,632 lbs., testing 3.8 per cent. Snow Drop, at one year and ten months of age, in five months, gave 4,701 lbs., testing 3.6 per cent. Rosy, aged, in five months, gave 5,209 lbs., testing 3.3 per cent. Shannon Bank Doll, at two years, in six months, gave 4,494 lbs., testing 4 per cent. At the head of the herd is the grand bull, Lochnagar 21800, by Imp. Fullbloom of Hindsward, dam that great champion show cow, Imp. Fairy Queen of Barcheskie. This is one of the very best bulls in the country, a show bull all over. He has only been shown twice, and won two firsts, but, next fall, will likely be out for honors at Toronto. He is the sire of two young bulls, about ten months of age, that are for sale. Both are out of great producing dams, one out of the cow, Rosy 3rd, whose record is given above. In females, for sale are half a dozen heifers, from six to twelve months of age, a choice lot. Mr. Tran reports the demand for Ayrshires as exceedingly brisk, and, at the time of our visit, was preparing to ship a pair of choice heifer calves to Mr. Wm. Reid, of Murillo, a short distance west of Port Arthur. In Yorkshires for sale are a number of both sexes, from two to six months of age, sired by Dalmeny Woodstock Boy 2nd (imp. in dam), and out of Broomhouse Hope 2nd (imp. in dam), and her daughters, of which there are some in breeding. Mr. Tran is also offering for sale one yearling and one two-year-old Clydesdale stallions, full brothers, sired by Imp. Hopewell, dam Shannon Bank 6883, by Imp. Darnock Davie, granddam Nell 2nd 6882, by Imp. Scottish Lad. They are a pair of colts full of Clydesdale character, with plenty of substance, and good bone and ankle. Write Mr. Tran, to Cedar-grove P. O.

TRADE TOPIC.

CASH PRIZES FOR NAMES.—The Metal Shingle and Siding Co., of Preston, Ont., offer, elsewhere in this issue, a series of cash prizes for the names of persons who contemplate building in 1908. Read the advertisement, and get busy, for the lists must be in before Jan. 10th, 1908.

LOOK \$200.00 IN CASH AND 500 VALUABLE PREMIUMS

In order to introduce our goods into homes where they are not already known, we have decided to give away the above-named sum and 500 handsome premiums. The cash and premiums will be given in order of merit to persons sending in the best ending to the Limerick Verse that is written in part below.

- 1st prize.....\$50.00 in cash
2nd prize.....\$40.00 in cash
3rd prize.....\$35.00 in cash
4th prize.....\$25.00 in cash
5th to 9th prizes, five prizes of \$10.00 each.....\$50.00 in cash
10th to 14th " Five Ladies' or Gents' Gold Filled Hunting Case Watches.
15th to 19th " Five Family Dinner Sets. (97 pieces).
20th to 24th " Five Ladies' or Gents' 14k Gold Plated Watches.
25th to 29th " Five sets of half a dozen Silver Plated Knives and Forks. (Rogers)
30th to 34th " Five Ladies' or Gents' Solid Silver Watches.
35th to 39th " Five Handsome Violins and Bows.
40th to 44th " Five Hardwood Accordeons.
45th to 49th " Five Magnificent Fur Ruffs.
50th to 54th " Ten Ladies' Toilet Sets
55th to 59th " One Hundred Ladies' or Gents' 14k Gold Filled Rings.
60th to 64th " One Hundred Waterton Fountain Pens.
65th to 69th " One Hundred Sets of 6 Silver Plated Tea Spoons (Rogers).
70th to 74th " Forty Ladies' Hand Bags.
75th to 79th " 110 Sets of Silver Plated Sugar Spoons and Butter Knives (Rogers)

Below will be found the Limerick Verse WITH A MISSING LINE, which line we expect our competitors to supply:

In giving good prizes we take pride,
They make known our goods both far and wide:
Why delay,
Call or write to-day,

(Fill in the line above.)

Please note that the last line should rhyme with the first two lines. As a last WORD for the missing line, we would suggest the use of any of the following words: "divide," "applied," "lied," "simplified," "provide," "confide," "supplied," "denied," "beside," "sighed," "tried," "decide," "betide," "cried," "died," "bride," "side," "compiled," "died," "implied," "spied," "inside," "died," "tried," "ride," "tied," "abide," "aside," "deride," "astride," "belied." These words all rhyme with the endings of the first two lines in the verse.

CONDITIONS

There is another simple condition attached to this contest about which we will write you as soon as we receive your answer to the above. This condition does not involve the spending of one cent of your money.

The judging of the Limericks will be in the hands of a committee of three gentlemen of undoubted integrity who have no connection with this office. No employee of ours or any of their relations will be allowed to compete, and the committee's judgment must be accepted as final.

I agree to abide by the decision of the committee of three appointed by the Bovel Manufacturing Co., and enter this competition on that distinct understanding.

Signature.....

Address.....

(State whether we are to address you as Mr., Mrs. or Miss.....)

Please write very plainly. Cut out this advt. and send it to us after filling in the blank line. The filling in of the missing line may take a little thought and time, but it should be time and energy well spent. There are over five hundred prizes, any one of which is well worth the time and energy that we ask you to expend. Surely this is enough for everyone! Write to-day. Do not send any money. We will answer your letter immediately, and tell you of the simple condition that must be adhered to. Address very plainly

BOVEL MANUFACTURING CO., Dept. 10, MONTREAL

SALEM HERD OF

Shorthorns

The number of important premiums won by this herd is excelled by no other. It has placed herd headers that have earned distinction for their buyers in many leading herds of the United States and Canada. At present there are a number of this kind for sale; also some high-class heifers. They are bred, fed and priced to the advantage of buyers.

J. A. WATT,

Salem P. O.

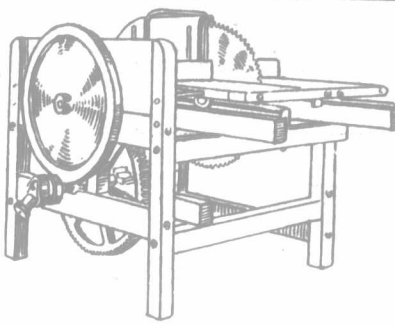
Elora Stns., G. T. and C. P. R., 13 miles north of Guelph. Long-distance phone.

The MISSISSIPPI IRON WORKS

Aimonte, Ontario

Manufacturers of Circular and Drag Sawing Machines, 4, 6 or 8 h.p.; Well-Drilling Machine; Monarch Fanning Mills; Feed Boilers and Sap Evaporators (combined); Ideal Steel Stanchions (made of angle steel—wood lined); Straw Cutters; Flows.

Write for catalogue & prices



SAVE THIS ANYWAY.

Here is a simple home-made mixture as given by an eminent authority on Kidney Diseases, who makes the statement in a New York daily newspaper, that it will relieve almost any case of Kidney trouble if taken before the stage of Bright's disease. He states that such symptoms as lame back, pain in the side, frequent desire to urinate, especially at night; painful and discolored urination, are readily overcome. Here is the recipe; try it:

Fluid Extract Dandelion, one-half ounce; Compound Kargon, one ounce; Compound Syrup Sarsaparilla, three ounces. Take a teaspoonful after each meal and at bedtime.

A well-known druggist here in town is authority that these ingredients are all harmless and easily mixed at home by shaking well in a bottle. This mixture has a peculiar healing and soothing effect upon the entire Kidney and Urinary structure, and often overcomes the worst forms of Rheumatism in just a little while. This mixture is said to remove all blood disorders, and cure the Rheumatism by forcing the Kidneys to filter and strain from the blood and system all uric acid and foul, decomposed waste matter, which cause these afflictions. Try it if you aren't well. Save the prescription.

On one occasion a Bishop who prided himself on never forgetting either the name or the face of any clergyman in his diocese, happened to be travelling somewhere by rail, when, at a certain station, a clergyman got into the same carriage in which the Bishop was. The Bishop recognized the man's face, but could not remember his name, and, not wishing to acknowledge his forgetfulness, leaned forward, and, with a charming smile, said:

"Excuse me, but how do you spell your name?"

"J-O-N-E-S, my Lord," was the reply.



Top Prices for Poultry

Suppose your flock of chicks or old fowls will average a certain weight at market time. Suppose you so handle them as to make each weigh a full pound more than you expected. That would be a nice, clean, extra profit, wouldn't it? Do you know that

DR. HESS
Poultry PAN-A-CE-A

given as the makers direct, will help a fowl to digest and use such a large portion of the daily feed that it actually grows larger and heavier than it would be possible to make it without Poultry Pan-a-ce-a? This is true. Poultry Pan-a-ce-a contains the bitter tonics to act upon the digestion, iron for the blood and nitrates to expel poisonous matter. It is the prescription of Dr. Hess (M.D., D.V.S.) and is a guaranteed egg-producer as well as flesh-former. Makes chicks mature early and also prevents poultry disease in old or young.

Poultry Pan-a-ce-a is endorsed by poultrymen in United States and Canada. Costs but a penny a day for 30 fowls.

Sold on a written guarantee.

1 1/2 lbs. 35c 5 lbs. 85c.
12 lbs. \$1.75 25 lb. pall, \$3.50

Send 2 cents for Dr. Hess 48-page Poultry Book, free.

DR. HESS & CLARK,
Ashland, Ohio, U.S.A.
Instant Louse Killer Kills Lice.

Hatch Chicks by
Steam with the
EXCELSIOR INCUBATOR
Or WOODEN HEN

Simple, perfect, self-regulating.
Hatch every fertile egg. Lowest
priced first-class hatchery made.
GEO. H. STAHL, Quincy, Ill.

Send for free
Catalogue.

QUESTIONS AND ANSWERS.
Miscellaneous.

VETERINARY BOOK.

Where can I get a good reliable veterinary book, up-to-date; state price?

B. S. I.

Ans.—"Veterinary Elements," by Hopkins, is a very useful work for farmers and stockmen; price, \$1. "Veterinary Pathology," in two volumes, \$2.75 each, a translation of Friedberger & Frohner's, is a more elaborate and technical treatise, for professionals. Either may be ordered through this office.

FEEDS AND FEEDING.

I noticed a short time ago some books advertised in "The Farmer's Advocate." One I noticed, especially, was "Feeds and Feeding," by Henry.

1. Does that work show how to work out the commercial value of foods in respect to the different nutrients contained?

2. Does it contain a table of the commonly-used feeds, giving the percentage of the different nutrients contained in them?

3. How many different kinds of live stock does it refer to?

4. Is it a work for the ordinary farmer, or is it especially adapted to colleges?

5. Could you send me sample pages of its contents? SUBSCRIBER.

Ans.—1 and 2. Yes.

3. All kinds.

4. Valuable for both. It is simple enough to instruct the beginner as well as the expert. Any farmer with an ordinary education can understand it by reading it carefully through.

5. No; we have no such leaflets on hand.

BLACKBERRY PLANTING.

I am going to plant two acres of thimbleberries next spring, and would like you to let me know which is the most profitable commercial kind for this district. I have at present one acre fruiting, but am not satisfied with the varieties, which are Snider, which is too small a berry and is apt to dry up; Western Triumph, much the same as Snider; Kittitunny, which is too soft a cane and does not stand the winter well enough, and is too late in the season for good prices. A neighbor of mine has been growing a few Eldorado, and they seem to do very well, but do not yield so heavily as the others. I have seen the Agawam highly recommended, but have never seen it grow or fruit. Which is the best kind for common purposes, Eldorado or Agawam? R. J. H.

Ans.—Blackberries, or thimbleberries, as they are commonly called, are the tenderest and most uncertain of any of our small fruits. I would not advise planting them largely, unless you have made a test on a small scale, and are certain they will succeed in your locality and upon your soil.

With reference to the choice of varieties, this is very much of a local question, as what does well in one locality will not necessarily be satisfactory for another. The variety most grown in southern parts of Ontario, where the canes are not injured by frost, is the Kittitunny, but, as you say, this is too tender for northern districts. We have tried over twenty varieties at Guelph, but none of them will succeed upon our soil, and none of them do well in this locality. Snider is one of the hardy kinds, but, as you mention, the fruit is too small and dries up readily on the bush.

The best plantation of blackberries I have seen in northern Ontario is that of Mr. G. C. Caston, of Craighurst, twelve miles north of Barrie. He grows both Agawam and Eldorado. For several years he considered the Eldorado one of the best, but since his experience with some of our recent severe winters, he now looks upon Agawam as the most reliable and satisfactory for his district. This experience, I may say, coincides with that of many of our co-operative experimenters to whom we have sent varieties of blackberries for co-operative testing.

I believe, therefore, that you would be wise in giving Agawam a thorough test before planting largely with any of the other varieties. H. L. HUTT.

O. A. C.



Tudhope Sleighs

The Tudhopes started making sleighs in 1855. Three Tudhopes are in command at the Tudhopes Works at Orillia.

It's a family affair—with a natural pride in building sleighs that live up to the Tudhope tradition of quality. And every Tudhope Sleigh is guaranteed.

TUDHOPE No. 92

This cutter is a new design, planned to suit the requirements of those who desire a "Solid Comfort" cutter with bent dash. High spring back and spring cushion, and padded quarters. Trimmed in Figured Plush or Green Wool Cloth.

Write for free catalogue, showing the many styles made by us.
THE TUDHOPE CARRIAGE CO., Ltd. 13 ORILLIA, Ont.



Imp. Clydesdales (Stallions and Fillies), Hackneys, Welsh Ponies.

I have now on hand Clydesdale stallions and fillies—Scotland prizewinners and champions; Hackney fillies and Hackney pony; also Welsh ponies. There are no better animals, nor no better bred ones, than I can show. Will be sold cheap and on favorable terms. A. AITCHISON, GUELPH P. O. AND STATION.



SIMCOE LODGE CLYDESDALES

Our stable of imported and Canadian-bred Clydesdale stallions and fillies was never so strong in show stuff as now, although we have had some very strong lots. Call and see what we have before buying elsewhere. H. J. KINGSON & TISDALE, BEAVERTON, ONT., G. T. & C. N. R. Long-distance phone.



IMPORTED CLYDESDALES! 9 stallions, 1 to 6 years of age; 10 fillies, 1 to 3 years of age, several of them in foal; 1 two-year-old Hackney stallion; 1 two-year-old Shire stallion; 3 Percheron stallions, 3 years old. All are selected animals, bred in the purple. Will be sold cheap and on terms to suit. T. D. ELLIOTT, BOLTON, ONT. Phone.



Imp. Clydesdale Stallions and Fillies.

Our new importation of stallions and fillies are the best we could select in Scotland, particularly well bred, with the size, smoothness and quality that Canadians admire. Show-ring stuff. Come and see them. Will sell on terms to suit.

JOHN A. BOAG & SON, RAVENSHOE P. O., BROWN HILL STA.

Bone Spavin

No matter how old the blemish, how lame the horse, or how many doctors have tried and failed, use

Fleming's Spavin and Ringbone Paste
Use it under our guarantee—your money refunded if it doesn't make the horse go sound. Most cases cured by a single 5-minute application—occasionally two required. Cures Bone Spavin, Ringbone and Sidebone, new and old cases alike. Write for detailed information and a free copy of Fleming's Vest-Pocket Veterinary Adviser

Ninety-six pages, durably bound, indexed and illustrated. Covers over one hundred veterinary subjects. Read this book before you treat any kind of lameness in horses.
FLEMING BROS., Chemists,
75 Church Street, Toronto, Ontario

WOODSTOCK COLLEGE

Woodstock, Ont.

A residential school for boys and young men, offers educational facilities not excelled anywhere.

Four courses: Matriculation, Teachers', English Scientific, Commercial.

A thorough scholastic training, teaches the boy "to do" by "knowing"

A fully-equipped manual training teaches the young man "to know" by "doing."

A new gymnasium under medical supervision ensures healthy physical conditions.

The distinctly christian and moral life of the school safeguards from immoral and hurtful influences.

College reopens Tuesday, Jan. 7th.

Write for calendar.

A. T. MacNeill, B. A., Principal.

Tobacco Habit.

Dr. McTaggart's tobacco remedy removes all desire for the weed in a few days. A vegetable medicine, and only requires touching the tongue with it occasionally. Price \$2.

Liquor Habit.

Marvellous results from taking his remedy for the liquor habit. Safe and inexpensive home treatment; no hypodermic injections, no publicity, no loss of time from business, and a cure certain.
Address or consult Dr. McTaggart, 75 Yonge Street, Toronto, Canada.

WHEN WRITING ADVERTISERS
PLEASE MENTION THIS PAPER

TENANT SELLING STRAW.

If a tenant rents a farm, there being no lease, and the only thing mentioned in the verbal agreement is the amount of the rent the tenant must pay, can this tenant sell any straw? W. D. A.

Ontario.

Ans.—Yes, unless there is a fully-established custom of the locality to the contrary.

MANAGEMENT OF SMALL FARM.

1. My farm comprises 60 acres of clear land in fairly good condition. I want to make a specialty of dairying and hog-raising. How shall I farm it? How many cattle and hogs can I keep? What crops should I grow, and in what rotation?

2. What is the value of a ton of oat straw as manure? How would you apply it to the land?

3. What does seaweed contain that makes it valuable as manure? Is it still of service to land to which it has been applied at intervals for twenty years? Would it be a good plan to mix seaweed with stable manure? E. M.

Ans.—1. It is impossible, without knowing local conditions and many other points in connection with the soil and market, to answer this question intelligently. I should advise your correspondent to study local conditions and the practice of successful farmers in his neighborhood. The experience of successful Prince Edward Island farmers is invited.

2. If we give to nitrogen a value of 15 cents a pound; to potash, 5 cents, and to phosphoric acid, 1 1/2 cents, oat straw will have a manurial value of about \$3.50 per ton. On clay land it may be applied directly, and be plowed under without rotting, as it would tend to open up the soil. On sandy soil, such a practice cannot be followed. It is possible that in the great majority of cases it would be best to allow a pile of straw to rot before applying to the land. The best possible use would be to feed oat straw as part of the coarse feed for cattle, or to use it as bedding in the stable, and allow it to go into the manure heap in that way.

3. Seaweed contains the same manurial constituents as farmyard manure, and in about the same quantity. It may be used year after year on the land, the same as manure would be. If it is used frequently on light land, it should be well rotted before applying. If the seaweed is mixed with stable manure, it will aid in the decomposition of the mass. R. HARCOURT.

KENDALL'S SPAVIN CURE

The Horseman's Friend
—Safe and Sure.

If you have a lame horse, get Kendall's Spavin Cure. If you have a horse that you can't work on account of a Sprain, Strain or Bruise, get Kendall's Spavin Cure. If you have a horse, that even the veterinary can't cure of Spavin—or any Soft Bunches or Swellings—get Kendall's Spavin Cure.

Be sure you get KENDALL'S. Two generations—throughout Canada and the United States—have used it and proved it.



"I have been using Kendall's Spavin Cure for the last 20 years, and always find it safe and sure."
HUBERT P. MCNEILL.
\$1. a bottle—6 for \$5. Write for a copy of our great book "Treatise On The Horse." It's a mine of information for farmers and horsemen, who want to keep their stock in prime condition.
Mailed free. 25
DR. B. J. KENDALL CO.,
ENOSBURG FALLS, - VERMONT, U.S.A.



Nothing but the Best!

Importation of Clydesdales and Hackney

Stallions Just Arrived.

I am prepared to offer for sale more Old Country premium and H. and A. Society Winners than any other importer in America, consisting of such horses as Acme, Monarch of Marquette, Rozelle, Ardethan Goldsmith, King's Seal, Baron's Charm (a full brother to Benedict), Baron Garrick, Abbey Fashion, and Medallion (a full brother to the great horse Silver Cup), and many others equally as good. Thirty-six in all. Prices will be found most reasonable, and within the reach of every one.

Oswald Sorby, Guelph P. O., Ontario.

Largest Importation of Clydesdales, Hackneys and Percherons of the Year.



My latest importation has just arrived home. I have now on hand for sale: 20 Clydesdale stallions from 1 to 5 years of age; 25 Clydesdale fillies from 1 to 4 years of age; 13 Hackney stallions from 2 to 5 years of age; 13 Hackney fillies, all young; and 4 Percheron stallions 3 and 4 years of age. A total of 73 head, with size, quality and action, and bred in the purple. Largest selection in Canada. Will be sold right, and on terms to suit.

T. H. HASSARD, MILLBROOK, ONT.

CLYDESDALE STALLIONS

Our new importation has just landed. An exceedingly good lot. Some extra big fellows. They may be seen at our stables, Fraser House, London. Call and see them, or write

MESSRS. DALGETY BROS., GLENCOE, ONT.

CLYDESDALES AND FRENCH COACHERS, IMP.

Scottish and Canadian winners, stallions, mares and fillies. The Clydes represent the blood of such noted sires as Baron's Pride, Up-to-Time, Royal Favorite, Ethiopia and Acme. They combine size, quality and action. The French Coachers are a big, flashy, high-stepping lot, and are winners in both France and Canada. Our prices are right, and our horses as good as the best. Long-distance telephones.

ROBT. NESS & SON, Howick, Quebec.

Graham - Renfrew Co.'s CLYDESDALES AND HACKNEYS.

Our Clydes now on hand are all prizewinners. Their breeding is gilt-edged. Our Hackneys, both stallions and mares, are an exceedingly high-class lot. We also have a few high-steppers and carriage horses. Yonge street cars pass the door every hour. Phone North 4483.

GRAHAM-RENFREW CO., LTD., Bedford Park, Ont.

CLYDESDALES

At Columbus, Ont., the home of the winners, this year's importation just arrived. The pick of Scotland's best. For size, style, conformation, quality and royal breeding, they eclipse any former importation we ever made. Look them up in our barn on Exhibition Grounds. Over 30 head to select from.

SMITH & RICHARDSON, COLUMBUS, ONTARIO.

25 Imported Clydesdale Stallions and Fillies 25

Two Clyde stallions, 1 Hackney stallion, over 20 Clyde mares and fillies, from 1 to 5 years of age. Many high class show animals among this lot. Many winners in Scotland among them. They have size, quality, style, action and breeding. Come and see them.

GEO. A. BRODIE, Bethesda P. O., Steubenville and Germantown Stations.

Oak Park Stock Farm BRANTFORD, ONT.

IMP. HACKNEYS, SHROPSHIRE, AND BERKSHIRES. A large number of Hackneys (stallions and fillies), imp. and out of imp. stock; all ages; show stock. Shropshire imp. stock; all ages; show stock. Shropshire imp. and from imp. stock; singly or in car lots. About 30 choice young Berkshires, imp. sire and dam. Everything strictly high class. T. A. COX, Manager, Brantford, Ont.

QUESTIONS AND ANSWERS. Veterinary.

SWOLLEN LEGS.

Imported Clydesdale stallion stalks badly in hind legs. There were eruptions at both hind fetlocks, but they healed, but the parts remain swollen.

J. B.

Ans.—Heavy horses, with beefy legs, are predisposed to this trouble, and high feed and want of exercise is usually the exciting cause. I am of the opinion you will always have trouble in preventing stalking in this horse. Purge him with twelve drams aloes and four drams ginger. Follow up with two ounces Fowler's solution of arsenic twice daily, every alternate week, for six weeks. Feed lightly on hay, roots, bran and linseed meal, with very little oats, and give daily exercise.

V.

QUITTOR.

Driving mare went lame in September. After a time an eruption occurred at the coronet at heel, and has discharged matter ever since. Her legs swell.

W. R.

Ans.—The matter that escapes at the coronet is formed in the foot, probably between the sensitive and insensitive soles. It may be due to a suppurating corn. The sole under the opening from which the pus escapes, must be pared down until the seat of irritation is reached. This will allow the pus to escape at the bottom. A little hydrogen-peroxide, or other good disinfectant, should be injected into the sinus from above, twice daily, for two or three days. Poutice the foot with warm linseed meal until lameness disappears.

V.

TESTING FOR TUBERCULOSIS.

Would you kindly let me know, through the columns of your valuable paper, if there is an inspector appointed by the Government for cases of tuberculosis in cattle? What steps are necessary in order to have one's herd examined? Who bears the expense?

J. C. S.

Ans.—Write to Dr. J. G. Rutherford, Veterinary Director-General, Department of Agriculture, Ottawa, stating how many cattle you wish to have tested, together with the name and address of your local veterinary surgeon. Dr. Rutherford will send him the number of doses of tuberculin required, with a chart, with instructions to the veterinary surgeon how to make the test. The veterinary surgeon will return the chart, filled out, to Dr. Rutherford. If any of the animals react, Dr. Rutherford will send one of his inspectors to earmark the reacting animals. The owner of cattle will pay the veterinary surgeon for making the test.

T.

TUMOR ON SHOULDER.

I worked a three-year-old colt a few days last spring, and, in about a week, a lump appeared on his shoulder. It was about the size of a hen's egg. My veterinarian dissected it out, and the wound healed, and was, to all appearances, as well as ever. I have not worked him since. In October, I noticed an enlargement on the same spot. It is now four inches in diameter and one and a half inches deep. It is hard and not sore. Had I better kill him, or can anything be done for him?

W. C. R.

Ans.—Do not think of killing him. It is not unusual for a tumor to appear in the same place that one has been dissected out of. The first cause was pressure by the collar, and the fibrous tissue was irritated over a greater surface than showed at first, and this has continued to increase until the present tumor has formed. Get your veterinarian to dissect this one out. The wound will be healed in February or early in March, in time to give you the opportunity of giving him a few weeks' light work or driving to prepare him for spring work. This will harden the shoulders gradually, and there will not be the same danger when he is put to hard work.

V.

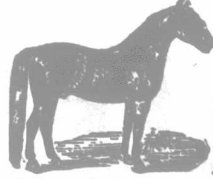
Canadian Jersey Breeders' Meeting

The annual meeting of the Canadian Jersey Cattle Club will be held at the Walker House, Toronto, Monday, Dec. 30th at 10.30 a. m. R. REID, Secretary.

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 CAUSTIC OR FIRING. Impossible to produce scar or Membranes. 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 returned if it ever fails. Cures most cases within thirty days, leaving the horse sound and smooth. All particulars given in

Fleming's Vast-Packed

Veterinary Adviser

Write us for a free copy. Sixty-six pages, covering more than a hundred veterinary subjects. Durable, bound, indexed and illustrated.

FLEMING BROS., Chemists,

75 Church Street, Toronto, Ontario.

ABSORBINE

will reduce inflamed, swollen joints, Bruises, Soft Bunches, Cure Bolls, Fistula, or any unhealthy sore quickly; pleasant to use; does not blister under bandage or remove the hair, and you can work the horse. \$2.00 per bottle, express prepaid. Book 7-0 free.

ABSORBINE, JR., for marking, \$1.00 per bottle. Cures Varicose Veins, Varicocele, Hydrocele, Strains, Bruises, stops Pain and Inflammation.

W. J. BROWN, R.F.F., 73 Monmouth St., Springfield, Mass.

Canadian Agents: LYNAN BROS. & Co., Montreal.

RIVER VALLEY CLYDESDALES AND SHORTHORNS.

For Sale—Two stallions, one imp., the other imp. in dam; 2 imp. mares 2 and 4 yrs. of age—a grand pair, with size and quality; 1 fully foal imp. in dam. Shorthorns all ages, of both sexes; straight milking strain.

A. V. GARROST, Thornbury Sta., Reeling P. O.

Hudson Heights, P. Quebec, Can.

HACKNEY STALLION

MARQUIS OF DUFFERIN—Rising 4; registered; Silver Medal, Dominion Exhibition. A beauty. Chestnut, 15.2; fine action; splendid condition; sure getter. Sire Bell Boy, champion of Canada Exhibition, recently sold for a large sum in U.S.; dam first at Dominion Exhibition, by Barhorse Performer. Bargain for quick buyer. Railway fare of purchaser deducted from price. MOUNT VICTORIA STOCK FARM, (Clydesdales and Hackneys), Hudson Heights, P. Quebec, Can.

The Ontario Veterinary College, Ltd.

Temperance St., TORONTO, Canada.

Affiliated with the University of Toronto.

Felices: Governor-General of Canada, and

Lieut. Governor of Ontario. Fee, \$25.00 per session. Apply to ANDREW GUNZ, F.R.C.V.S., Principal.

Clydesdales, Shorthorns and Cotswolds—For individuals of above breeds, write me. My new Cotswold and Clydesdale importations will arrive early in the season.

J. C. ROSS, Jarvis P.O. & Sta.

Aberdeen - Angus Cattle

FOR SALE!

Young bulls, also females of various ages. Good, growthy, quick-feeding animals, of excellent breeding and type. Come and see them or address: WM. ISO - E., P. O. and G. T. B. Sta., Sebringville, Ont.

ABERDEEN - ANGUS

For sale, 50 head to pick from, males or females by imported sire. Drumbo station.

WALTER HALL, Washington, Ontario.

W. R. BOWMAN, MT. FOREST.

Durham bulls, roans and reds, sired by imported Newton Pines, \$75. Shropshire ram and ewe lambs, \$1.00 to \$15 each, sired by our own rams—Prolific (imp.) a Chicago winner, and Dickens (imp.). A few choice breeding ewes at \$12 to \$15 each. Yorkshires so sired due to farrow in February, sired by an imported boar, weighing over 200 pounds, at \$50 each. One boar ready for service at \$15. A Jersey bull, two years old, a winner at London; quick sale \$50.

LISTEN!

We are offering **Special Bargains in Shorthorns** just now. The **Reason** is that we have a **Large Stock** and **Feed is Scarce**. Most of you know the **Kind of Cattle** we have, so that it is useless repeating the usual formula. In order to **Reduce Our Stock**, so that we may be able to pull through the winter, we **Will Sell at Prices** which will **Well Repay the Purchaser** who has feed to keep them until spring. We have pretty nearly anything **You** want. If you can not come to see, write and tell us as nearly as possible what it is, and we will frankly tell you whether or not we can supply.

John Clancy, Manager. **H. Cargill & Son, Cargill, Ont.**

Tuttle's Elixir

Greatest maker of sound horses in the world. Tested many years, never fails if cure be possible. \$100 reward if it does. For lameness, curb, splint, spavin, ringbone, swellings, etc.

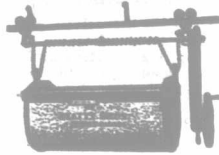
Tuttle's Family Elixir

Liniment for household use. Ask for Tuttle's American Worm and Cestode Powder and Best Ointment. "Veterinary Experience," perfect horse-man's guide free. Symptoms and treatment for all common ailments. Write for it. Postage 2c. TUTTLE'S ELIXIR CO., 66 Beverly St., Boston, Mass. Montreal: H. A. Tuttle, Mgr., 32 St. Gabriel St. Beware of all imitations: only temporary relief, if any. C. H. R. Crocker, South Farmington, Nova Scotia.



A Litter Carrier will

enable you to clean out your stables in half the time, and the manure can be dumped directly into a sleigh or wagon and taken to the field, so that there is no loss of fertilizing material—the land gets it all.



The Beatty Litter Carrier is the simplest and strongest built. Write for circulars showing its many advantages.

BEATTY BROS., FERGUS, ONT.

THE SUNNYSIDE HEREFORDS

To reduce herd will sell:
10 cows at \$100 each
10 heifers at 50 each
10 bulls from \$50 to 100 each
Come and see them or address
M. H. O'NEIL,
Southgate, Ontario.

J. BRYDONE,

Breeder of pure Scotch Short horns. Breeding females imported. Headed by the pure Cruickshank (Duthie-bred) bull, Sittytan Victor (Imp.) =60098= (87397). Young stock from Imp. dams for sale. Prices reasonable. Telegraph, Telephone, R. R. Sta. and P. O., Milverton.

J. Watt & Son

For sale—2 high-class bull calves of the richest breeding; 30 young cows and heifers, a number of which are well gone in calf to Imp. Pride of Scotland. Moderate prices. Correspondence invited.

Salem P.O., Elora Sta. G.T.R. & C.P.R.

SHORTHORNS AND LEICESTERS.

For sale: Young bulls, age 7 to 18 months, by Imp. sire, and from grand milking dams. Leicesters: A number of choice rams and ram lambs, also a choice lot of shearing ewes now bred to a good ram of the finest type and breeding, at easy prices for quick sale. **W. A. DOUGLAS,** Caledonia station, Wabash P. O.

Shorthorns—Sweepstakes herd at

London, Aylmer, Wallace town, Rodney, Ridge town, and Highgate, 1907. We have for sale at reasonable prices 3 choice young bulls, 1 red and 2 roans, of grand type and quality. All sired by the good breeding bull, Ridge-wood Marquis =48935=, a son of the old champion, Spicy Marquis. Also a few young cows and heifers. **JNO. LEE & SONS, Highgate, Ont.**

MAPLE GROVE SHORTHORNS

Scotch and dairy bred; up-to-date in type; prize-winners at the local shows. A number of 1 and 2 year old heifers, 1 year old bull, and one 5 mos. old—the last will make a show bull. Flora bred—will be sold easy. **L. B. POWELL,** Wallenstein P. O. and Stn. C. P. R.

Canadian Beef Cattle at Chicago.

The Medicine Hat News publishes the following interesting despatch sent by ranchers of the district on their way home from a trip to Chicago, where they had sold a large bunch of fat range cattle: "Shipping cattle from the Cypress Hills country to Chicago to find a market is something new to the Hills ranchers. But seeing some move had to be made other than taking them to Winnipeg to give them away, a few decided to try their luck in Chicago. The cattle were trailed from their respective ranches to Willow Creek police post at the International Boundary, where they were held for a few days while one of the party was sent forward to Chinook, Montana, to order cars and make the necessary arrangements for loading. After making the necessary export entry at the police station, the cattle were headed for Chinook and arrived there on the evening of November 4th. We found everything ready—no shortage of cars, and by the evening of the 5th we had forty cars loaded and on our way to Chicago. The Canadians (as we were called) were well treated everywhere. At Minot, N. D., the cattle were unloaded and fed, and they were also fed and watered at St. Paul. The party arrived in Chicago without mishap on the evening of the 10th, the cattle looking fairly well after the long journey. There were all kinds of reports about the bad markets on the way down, and nearly all the boys carried their hearts in their boots. One offering to sell out to the other was the order of the day, but not one was game. However, Monday changed the tune, about noon, when one of the party, Mr. J. Wright, was informed that his bunch was sold for 5c. for steers and 4c. for cows. He wanted to set 'em up right straight. The balance of the party bucked up and worked like slaves, getting the cattle sorted and weighed, and by 4:30 o'clock the whole bunch was sold and weighed at the above prices, with the exception of an old bull with a lumpy jaw, which was sold cheaper. Our cattle brought, on November 11th, the same price as common fed stuff, and were admired by all who saw them. They were talked of as the Canadian Bunch, and they beat all the United States cattle that were on the market on the same date, and the receipts for the above date were 34,000 cattle. But the greatest surprise of all was the weights. Never before have cattle left the Cypress Hills country that weighed so heavy, although in former years they looked just as large. From 1,450 to 1,600 were common weights for steers, and cows went 1,150 to 1,200. The cattle were from the ranches of J. Read, J. Wright, G. Legge, J. Robinson, D. Blue and A. P. Day. The cattle were consigned to Clay, Robinson & Co., who handled them to the entire satisfaction of all. On the whole, the cattlemen were well treated everywhere, especially by Clay, Robinson & Co., and they say that unless the Beef Commission puts matters right on the Canadian side, they will have another trip to Chicago next year, now they know the way."

Guelph Fat-stock Club.

The Guelph Fat-stock Club, on Dec. 9th, elected officers as follows: President, A. W. Tyson, Inspector, W. R. Elliott, Superintendent, Herbert Wright, Assistant Superintendent, Duncan Stewart, Clerk of Sales, J. H. Doughty, Secretary, J. M. Duff, Catalogue Secretary, A. E. Meyer. The live-stock branch of the Ontario Department of Agriculture, through A. P. Westervelt, Director, has promised the usual assistance to the annual sale (see breeds), to be held on March 10th.

TEN CHOICE YOUNG IMP. BULLS

Now in quarantine. They will arrive at our barns about Dec. 26th, and parties requiring herd bulls should make a point of seeing them. They are all young and of good quality, and represent a number of the leading Scotch families. This promises to be one of the best opportunities which the breeders have had for several years for the selection of an imported bull. We have some extra good yearling bulls and bull calves of our own breeding, at a price right in order to make more room for our imported bulls. They are nearly all from imported cows, and are mostly sired by our noted stock bull, Imp. Prime Favorite winner of grand championship at the Canadian National Exhibition at Toronto, and also at New York State Fair at Syracuse. We have a catalogue of them.

We are also offering a number of excellent females suitable for show purposes, or for the foundation of a breeding herd. Our catalogue will convince intending purchasers that we have some of the very best blood that can be obtained. Correspondence solicited. Visitors are always welcome.

Burlington Jct. Station, G. T. R. **W. G. PETTIT & SONS, Freeman, Ont.**
Bell telephone at each farm.

PLEASANT VALLEY SHORTHORNS

For sale: 3 young bulls by Old Lancaster Imp. from Imp. dams, including Lancaster Victor first prize sr bull calf at Dom at Sherbrooke, second at C. N. E., Toronto. Correspondence solicited. Inspection invited.

Geo. Amos & Son, Moffat Stn. & P. O. C. P. R. Farm 11 miles east of City of Guelph.

Valley Home Shorthorns AND BERKSHIRES.

Our herd numbers sixty-five head. We are prepared to give bargains to suit all who wish to buy from one animal up to a carload of females and 12 bulls from 9 to 18 months old. Also 55 Berkshires of prolific strains.

S. J. PEARSON, SON & CO., Meadowdale, Ont. Stations: Meadowdale, C.P.R.; Brampton, G.T.R.

1854 Maple Lodge Stock Farm 1907

An exceptionally choice lot of heifers and young bulls for sale now. Best milking strains.

A. W. Smith, Maple Lodge P.O., Ont.

T. DOUGLAS & SONS STRATHROY, ONT.

Breeders of Short horns and Clydesdales. 15 bulls, 6 cows and heifers. Imp. stallion, Imp. and home-bred allies. Write us what you want or come and see our stock. Farm miles north of town.

SHORTHORNS

For want of stable room will sell cheap 10 heifer calves, 12 yearling heifers, 4 two-year-old heifers in calf, and 3 red bulls about 14 mo. this old. Right good ones. **CLYDESDALES.**—Two-year-old mare in foal, and a good pair 4 and 5 years old. Write, or come and see them.

JAMES McARTHUR, GOBLES, ONTARIO.

Special offering of Scotch and Scotch-topped Shorthorns. Herd Bull British Flag (Im J 50016). Six cows sired by Chief of Stars (Imp.) and Palermo (Imp.) Some with calves at foot and bred again to British Flag. Also heifers and young bulls sired by British Flag and Hot Scotch (champion at London). Prices and terms reasonable for quick sale. **JOHN M. BEKTON, Glencoe, Ont. G.T.R., C.P.R. and Wabash.**

Shorthorn Bulls—Ready for service. One will make a show bull. Also young things from Matchless, Crimson Flower, Miss Ramsden, Rosemary, Diamond and Lady Fanny dams, the get of Chancellor's Model. Prices to suit times. Come and see. **ISRAEL GROFF, Elmira, Ont.**

Shorthorns & Leicesters for sale. Two young bulls for sale from good milking dams. Leicesters—a few females for sale, different ages. **JOHN LISHMAN Hagersville, Ont., P. O. and Stn.**

Brown Lee Shorthorns! Nonpareil Victor =6307= at head of 'erd Young stock for sale at all times. Prices very reasonable. Arr. C. P. R.; Drumbo, G. T. R. **DOUGLAS BROWN, Arr. Ont.**

MAITLAND BANK SCOTCH SHORTHORNS! 7 bulls, superior breeding, 11 to 15 months; 5 high-class bull calves 5 to 8 months; and a number of cows and heifers and heifer calves; at half prices formerly asked. **DAVID MILNE, Ether, Ont.**

GOSSIP.

MAPLE LEAF SHORTHORNS.

Maple Leaf Stock Farm, the model home of Mr. Israel Groff, the well-known breeder of high-class Shorthorn cattle, was, at the time of our visit a few days ago, as we have always found it, in proper good shape, and everything in its place. It is always a pleasure to visit such a farm as Maple Leaf. Mr. Groff is one of the tidiest farmers; everything is kept scrupulously clean, and his noted herd, of something over 25 head, of Shorthorns were, as usual, in prime condition. At the head of the herd is the thick, low-set, splendid-handling bull, Chancellor's Model, a two-year-old red son of that great sire, Imp. Bapton Chancellor, dam Imp. Marchioness 2nd, by Wanderer's Heir. He is a straight-bred Marchioness, and one of the very best sons of his illustrious sire, and his get are of the kind that bid fair to make him as noted a sire as was Bapton Chancellor. The female end of the herd is represented by such fashionable strains as the Crimson Flower, Miss Ramsden-Wenlock, Matchless, Marr Blyth-some, Rosemary and Lady Fanny, among which are some extra high-class animals, notably the cow, Bessie Wenlock (Imp. in dam), sired by that great bull, Villager. This is a show cow of a very high order that, if in proper shape, would be hard to beat. Out of her, sired by Soldier Boy, a grandson of that great bull, Imp. Golden Drop Victor, is an eleven-month-old roan bull, a rare good young bull, thick, even and straight. Another extra good cow, put up on showing lines, is a roan four-year-old Lady Fanny, got by a Duchess of Gloster bull. She is an exceedingly thick, even cow, and a wonderful deer. Joy Belle, sired by Imp. Joy of Morning, dam Vain Belle 2nd (Imp.), by Scottish Archer, is one of the good kind, belonging to the noted Miss Ramsden tribe. These mentioned are samples of the fashionable breeding of the whole herd. In young stuff are several heifers along about a year old, among them being some very choice things that are fit to enter any show-ring. Besides the one mentioned, other young bulls are a red eight months-old, by the stock bull, and out of Violet Beauty, a daughter of Golden Count. Another is a red yearling, Chancellor's Choice, by the stock bull, and out of a Marr Blyth-some dam. Still another is Baron Matchless, a red yearling, by the Stamford-bred bull, Baron Scot, and out of a Matchless-bred cow. Here are a quartette of thick, sappy young bulls, all of them of the short-legged, good-doing kind that will certainly do good wherever they go. This is one of Ontario's most noted herds of Shorthorns, and rightly so, for they are of the right sort.

Scotch Shorthorns

Representing the choicest strains. Young stock of both sexes for sale. **F. W. Ewing, Salem P. O., Elora Stn.**

DR HESS STOCK FOOD

Animal growth and milk production are dependent for full development upon a healthy digestion. The key to the feeder's problem then, is a suitable tonic to prevent derangement of the digestive organs. Dr. Hess Stock Food is such a tonic. By making the greatest promotion of food digestible, it keeps the animal in health, causes rapid growth and a full measure of production.



Professors Quimman, Winslow and Finley Dun endorse the ingredients in Dr. Hess Stock Food. It is the prescription of Dr. Hess, (M. D., D. V. S.) and is sold on a written guarantee.

100 lbs. \$7.00 25 lbs. \$2.00
Smaller quantities at a slight advance.
Duty paid.

Where Dr. Hess Stock Food differs in particular is in the dose—it is small and fed but twice a day, which proves it has the most digestive strength to the pound. Our government recognizes Dr. Hess Stock Food as a medicinal compound, and this paper is back of the guarantee.

If your dealer cannot supply you we will.
DR. HESS & CLARK, ASHLAND, OHIO, U.S.A.
Also Manufacturers of DR. HESS POULTRY PANACEA and INSTANT LOUSE KILLER.

Greengill Herd of High-class SHORTHORNS

We offer for sale choice young bulls from 6 to 12 months old, sired by Imp. Lord Roseberry, also cows and heifers, with calf at foot or bred, either Imp. or Canadian-bred.

R. MITCHELL & SONS,
Nelson P. O., Ont., Burlington Jct. Sta.

Queenston Heights SHORTHORNS

All Scotch. The thick-fleshed, early-maturing sort. Special prices on young stock, either sex. Ask for catalogue with sample pedigrees.

Hudson Usher, Queenston, Ont.
Farm three miles north of Niagara Falls.

Glen Gow Shorthorns

Our present offering is 9 bulls, from 6 to 14 months of age, sired by Imp. Ben Loman and Imp. Joy of Morning, and out of Imp. and Canadian-bred cows. Also a number of very choice heifers. No fancy prices asked. Long-distance phone.

WM. SMITH,
Brooklin & Myrtle Sts., Columbus P. O.

WILLOW BANK Shorthorns and Leicester.

ESTABLISHED 52 YEARS. Have a special good lot of either sex to offer in Shorthorns of various ages. Also a few choice Leicester sheep. Write for prices, or, better, come and see. Choice quality and breeding.

JAMES DOUGLAS, CALEDONIA, ONT.

Shorthorns, Cotswolds, Berkshires

On hand: two yearling bulls and a number under one year, also females of all ages. In Cotswolds, about 30 lambs. Have also a few young Berkshire boars.

CHAS. E. BONNYCASTLE,
P. O. and Station, Campbellford, Ont.

High-class Shorthorns Royal Chief, a son of Mildred's Royal, at head of herd. We are offering a few choice heifers of show-ring form. Pure Scotch. Terms reasonable. **A. DUNCAN & SONS, Carlisle, Ont.**

SCOTCH SHORTHORNS!

We now offer four heifer calves 10 and 11 months old. All reds. Bred from Imp. sire and dams. Will be sold right. **C. RANKIN & SONS,** Wyebridge P. O., Wyevale Sta.

QUESTIONS AND ANSWERS. Miscellaneous.

GROUND PHOSPHATE FOR STABLE ABSORBENT.

In your issue of Nov. 14th I notice rock phosphate advocated as a stable absorbent. Would you kindly give me the address of some dealer from whom this can be procured?

Ans.—The Messrs. W. A. Freeman Co., of Hamilton, Ont., also the Capelton Chemical Co., of Buckingham, Que., keep a supply of ground phosphate rock suitable for an absorbent in stables. We are not quite sure as to the price of the raw ground phosphate, but as the treated superphosphate sells at about \$1 per 100 lbs., the price for the former must be somewhat lower.

VENDOR AND PURCHASER.

1. Who is (by law) deemed to be the owner and carry the risk of goods after they are delivered to a carrying company for delivery, the goods being bought by mail order from samples, as in the ordinary course of trade?

2. When goods on arrival at destination are found to be very inferior to samples, or entirely worthless, what would be the legal proceedings?

3. If purchasing parties made a contract that goods were to be subject to inspection at destination, would that be overruled by other law?

Ontario. SUBSCRIBER.

Ans.—1. This is a matter capable of being regulated by the contract of the parties, and usually found to have been so governed; we have not sufficient information before us to enable us to tell just what the contract on the point is, and we are, therefore, unable to answer this question.

2. The purchaser should refuse acceptance, notify the company and the vendor thereof, and, if the price has been paid, demand return of money. In the even of such demand not being complied with in reasonable time, a suit would be in order.

3. No.

CANADA VS. TEXAS FOR WHEAT.

Could you kindly give me information regarding the comparative yield of wheat in Dominion of Canada and State of Texas in 1906? The question arises from a statement made by a gentleman in Scotland this summer to the effect that Texas produced more wheat last year than the whole Dominion of Canada.

Ans.—The area and yield of wheat in Canada:

	Bushels.	Acres.
In 1906, Northwest Provinces	110,586,824	5,062,493
" " Ontario	22,108,774	959,032
" " New Brunswick	406,853	20,824
Census, 1901, Quebec	1,908,203	139,826
" " Nova Scotia	248,476	10,334
" " British Columbia	359,419	15,967
" " Prince Edward Island	738,079	42,318
Totals	136,357,228	6,256,794

Crop statistics are collected yearly only for the Northwest Provinces, Ontario and New Brunswick. For the other Provinces, therefore, I have given figures according to the census of 1901, which will be sufficient for the purposes of a general comparison with Texas.

The United States Crop Bulletin gives the area and yield of wheat in the State of Texas for the year 1906 as follows: 1,228,364 acres; 14,126,186 bushels.

A. BLUFF,
Ottawa, Chief Census Officer.

1000 MEN

Wanted as Brakemen and Firemen Salary \$75 to \$150.

Study a few hours a day for eight to ten weeks, and we guarantee to assist you in getting a position on any railway in Canada. We teach and qualify you by mail. Write us for booklet and full particulars.

THE DOMINION RAILWAY CORRESPONDENCE SCHOOL
Dept. F
Winnipeg, Manitoba.

Spring Valley Shorthorns

Bulls in service are: **Bapton Chancellor (imp.) = 40359 = (78286), Clipper Chief (imp.) = 64290 =.** Stock for sale at all times.

KYLE BROS., Ayr, Ontario.

John Gardhouse & Sons

Importers and breeders of Scotch Shorthorn cattle, Shire and Clydesdale horses, and Lincoln sheep. Call and see us.

Highfield P. O., Weston Station 2 1/2 Miles. Telephone.

LIVINGSTON'S OIL CAKE MEAL.

OLD PROCESS

Nothing is better for fattening steers quickly and putting them on the market in prime condition than Oil Cake Meal. Thousands of Canadian and English stockmen use Livingston's, and would have no other. It is equally good for milk cows. They give more and better milk when fed Livingston's Oil Cake Meal. Also used for horses, sheep and hogs. Write for information regarding prices, etc., etc., to

DOMINION LINSEED OIL CO., LIMITED
Montreal, Que. Baden, Ont.

Glover Lea Stock Farm SCOTCH SHORTHORNS

Superior breeding and individual excellence. For sale: Bulls and heifers—reds and roans, some from imp. sire and dam. Visitors met at Ripley station, G. T. R.

R. H. REID, PINE RIVER, ONTARIO.

FLETCHER'S SHORTHORNS & YORKSHIRES

Present offering: My \$2,000 stock bull, Imp. Joy of Morning = 89070 =, 8 years old, winner of 1st prize at Dominion Exhibition, Toronto. Quiet, active and sure. Will sell or exchange. Also young stock of either sex. In Yorkshires: choice sows bred, and boars fit for service, from Imp. sire and dam, at your own price. **GEO. D. FLETCHER, Binkham P. O., Ont. Erin station, C. P. R.**

Maple Shade

Winners at the leading shows have been sired by bulls bred here. We can sell you a good bull to head your herd of SHORTHORNS, or for use on your good grade cows. The bull catalogue explains the breeding. Write for it.

John Dryden & Son, Brooklin, Ont.
Stations: Brooklin, G. T. R.; Myrtle, C. P. R.
Long-distance telephones.

SHORTHORNS AND LINCOLN SHEEP.

Two bulls, 11 and 12 months old—a Miss Ramsden and a Bessie, both by the good breeding bull, Proud Gift = 5007 = (imp.), also cows and heifers in calf by him. Inspection solicited. Always have some choice Lincoln sheep for sale at reasonable prices.

J. T. GIBSON, DENFIELD, ONTARIO.

A. EDWARD MEYER, BOX 378, GUELPH, ONT.

BREEDS
Scotch Shorthorns

exclusively. Herd bulls: Scottish Hero (imp.) = 55042 = (90065), a Shethin Rosemary; Gloster King = 6773 = 98804, A. H. B., a Oriskany Duchess of Gloster. Young stock for sale. Long-distance phone in house.

Shorthorns! BELMAR PARC.

Calves for sale by our grand quartette of breeding and show bulls:

Nonpareil Archer, Imp. Proud Gift, Imp. Marigold Sailer, Nonpareil Seltman.

Females. Imported and from imported stock in calf to these bulls.

John Douglas, Manager, Peter White, Pembroke, Ont.
An unsurpassed lot of yearling heifers.

Maple Grove Shorthorns

Herd headed by the grand show bull, Starry Morning. Present offering: Imported and home-bred cows and heifers, also a few young bulls. Terms and prices to suit the times. **C. D. WAGAR,** Enterprise Stn. and P. O. Addington Co.

SHORTHORNS

One roan Shorthorn bull highly bred—will sell at a great bargain. One pure white, two months old, cheap for quick sale. Cows and heifers all ages. Also a number of Chester White pigs that I will sell cheap if sold at once, as I have not the room to winter them.

D. ALLAN BLAOK, Kingston, Ont.

Scotch Shorthorns

Our breeding females are very heavy milkers, also good individuals. For sale are a few young bulls and a few choice heifers, all from imported sires, and a number from imported dams. The imported Bruce Mayflower bull, Royal Bruce 55088, heads the herd.

R. J. DOYLE, Box 464 OWEN SOUND, ONT.

ROSE COTTAGE STOCK FARM

2 Shorthorn bulls for sale—14 and 20 months—one red and one roan. The red a Matchless. The roan, sired by Royal Prince, is a full brother to Fair Queen and Queen Ideal, the two champion females of two continents. **H. K. Fairbairn, Thedford, Ont.**

HIGH GROVE A. J. C. C. JERSEYS

Arthur H. Tufts, Tweed, Ont. (Successor to Robt. Tufts & Son.) On account of scarcity of winter feed herd must be reduced. Males and females, all ages, for sale cheap, quality considered.

BRAMPTON JERSEYS

CANADA'S PREMIER HERD.—Strengthened regularly by importations from United States, England and the Island of Jersey. We have animals of all ages and both sexes for sale, and the largest herd in Canada to choose from. Write for prices and particulars. Long-distance phone at farm.

B. H. BULL & SON, BRAMPTON, ONT.

SUBSCRIBE FOR "THE FARMER'S ADVOCATE AND HOME MAGAZINE."

ZAM-BUK CURES CATARRH

A Young Lady's Testimony.

Miss Ruth V. Carr, of Grantley, Ont., says: "We have known for some time how good Zam-Buk is for skin sores and diseases. For these I believe it to be the best healer made. Recently, however, I proved its value in another connection. I had a sore on the inside of my nostril, and at the same time was suffering with catarrh. I put some Zam-Buk inside my nose to cure the sore, and was surprised how the evaporating healing essences gave me ease from the catarrh. So I continued to use Zam-Buk for both purposes, and it answered splendidly, effecting a complete cure. In the winter time I suffer very much with chapped hands. They crack and bleed and are very painful. Zam-Buk I find gives me quick relief, and heals the cracks and sores better than anything I have ever used." Zam-Buk also cures cuts, chapped hands, ulcers, burns, sore legs, abscesses, poisoned wounds, boils, eczema and all skin troubles. Rubbed well in, it is a splendid embrocation for rheumatism, neuralgia and sciatica, etc. 50c. a box, of all druggists and stores, or postpaid on receipt of price from the Zam-Buk Co., Toronto; three boxes for \$1.25.

The Cream of Cream Separators

The Sharples Dairy Tubular is the cream of cream separators—the pick of the whole bunch. Supply can wait low, you can fill it with one hand. All gears enclosed, dirt free, absolutely self-oiling—no oil holes, no bother—needs only a spoonful of oil once or twice a week—uses same oil over and over. Has twice the skimming force of any other separator—skims twice as clean. Holds world's record for clean skimming.



Bowl so simple you can wash it in 3 minutes—much lighter than others—easier handled. Bowl hung from a single frictionless ball bearing—runs so light you can sit while turning. Only one Tubular—the Sharples. It's modern. Others are old style. Every exclusive Tubular feature an advantage to you and fully patented. Every Tubular thoroughly tested in factory and sold under unlimited guaranty. Write immediately for catalog J-198 and ask for free copy of our valuable book, "Business Dairying."

The Sharples Separator Co.,
West Chester, Pa.
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ROCK SALT
for horses and cattle, in ton and car lots.



TORONTO SALT WORKS, TORONTO.

STOCK FOR SALE—At Springburn Stock Farm, Williamsburg, Ont. 5 1-year-old Ayrshire bulls. Females any age. 12 Oxford Down ram lambs and a number of young ewes. Prices reasonable.

H. J. WHITTEKER & SONS, Prods.

AYRSHIRES Young bulls from producing dams and same sire, from 7 months up to 2 years. Rare good ones and will speak for themselves. **N. DYMENT, Hickory Hill Stock Farm, Clappison, Ont. Dundas Station and Telegraph.**

SHANNONBANK Ayrshires and Yorkshires—Am now offering 2 young bulls 10 months old, and half a dozen heifers from 6 to 12 months of age bred from producing, show sire and dams. Yorkshires, both sexes, imp. in dam, sire and dam different ages. **W. H. TRAN, Cedar Grove P. O., Locust Hill Sta., C. P. R.**

WHEN WRITING ADVERTISERS PLEASE MENTION THIS PAPER

GOSSIP.

Several years ago a rivalry in the production of large hogs sprang up among the farmers in Kansas. A sign that seldom failed to attract the attention of passersby read, "Anyone wishing to see the biggest hog in Kansas call at my farm and inquire for me.—Silas Lowe."

GOING TO TOWN TO LIVE.

The old, worn-out farmers—the farmers who have rented their "places," the farmers who have sold out to the boys—have ceased to go to town to live.

It was a species of insanity in the first place, but at any time could be diagnosed as a big mistake. They are out of place in town.

There are no chores to do. There are no pigs to chase out of the orchard, and their cattle never get into the oats. There is no sheep-washing time, no threshing days, no seeding, no haying, no hog-killing, no cider-making time.

They have to wear unaccustomed clothes, and they long for the comfortable overalls and smock, the big roomy boots, and the great skin cap or straw hat. They begin to waste and fade because they don't feed as well as they did back on the farm.

They lived like lords out on the "place," because their food practically cost them nothing. A smoke-house full of hams, shoulders and side meat was a matter of course. Eggs could be had for the going to the barn for them; a chicken on state occasions was never missed from the flock, and butter only cost a strenuous quart of an hour churning it.

But now, when they have got to buy 'most everything, it is awfully different. Then stint themselves on butter at 35 cents a pound—that's too ridiculous a price altogether.

They never see a fresh egg, for it would be a sin to pay 40 cents a dozen for them. And do you know what that means? All the nice dishes on the farm, in which fresh eggs were the living principal, are seen no more. For it takes eggs to make the batter-cakes, and the johnnycake, and the custard, and the like—real nice things, but you can't make 'em without eggs.

The aged and misguided farmer buys a little, teeny-weeny rag of cheap meat once a week and nibbles at it warily like a starved rat who dreads that the bait is poisoned. And to pay 10 cents for a small portion of anæmic milk—ten cents! when he used to carry it out by the pailful and throw it to the hogs.

Pretty soon he wants to go home—when he has no home to go to. Every evening he feels like hitching up, but there is no horse nor buggy. He haunts the market places and the farmers' hotels, in the hope of meeting some old neighbors from "back home." They are glad to meet even their ancient enemies: the men who beat them for council, who defeated them for reeve, who moved their line fences in on them, who backed water on them, who put their steers in the pound, who humiliated them doing road work—they are glad to see them, and they wonder why they quarrelled out yonder and spoiled the good time they might have had.

Everybody will be gainers all round. The town authorities have come to dread the retired farmer. As long as there is a pump or a pond within half a mile, what does he want with water-works? The sidewalks are good enough, the streets are all right, and if anybody suggests a park he roars like a bull of Bashan, "What? A park! You can hear him all over town. He is a source of anxiety without the equivalent income to the church he joins. And when they get him on the voters' list he has a way of voting any way he darn pleases, which fills the ward boss with weariness and woe.

The old codgers should stay at home. At any rate, the nearest village is far enough away.

It's a poor ending to a busy life on a farm to go off to town in your old age and pine to death, or freeze to death, or starve to death.—The Khan, in Toronto Star.

STONEYGROFT STOCK FARM, St. Anne de Bellevue, Quebec.

(Adjoining the new Macdonald College.)
Breeder and Importers of High-class
Ayrshire Cattle, Clydesdale Horses, Yorkshire Swine and Collie Dogs
Anything for sale. We offer especially a few select young bulls to clear cheap. Orders booked for spring pigs.
HAROLD M. MORGAN, Prop. **E. BJORKELAND, Manager.**
Bell 'Phone connection.



D. M. Watt, St. Louis Station, Quebec,
breeder of
HIGH-CLASS AYRSHIRES
Canadian and Scotch-bred. All of deep milking qualities.

AYRSHIRES FROM A PRIZEWINNING HERD
Have some nice bull and heifer calves for sale at reasonable prices. For particulars, etc., write to **W.M. STEWART & SON,** Campbellford Sta. **Menie P.O., Ont.**


Hillview Herd of Prizewinning AYRSHIRE CATTLE.

All animals bred and carefully selected for size, constitution, long teats and deep-milking qualities. Select animals of both sexes for sale at reasonable prices. For further information and prices write

A. KENNEDY & SON,
Hillview Stock Farm, Vernon, Ont.
Winchester Station, C. P. R.

AYRSHIRES! SEE STOCK NOTES.

To dairymen:—We offer cheap 3 young bull calves, bred from large, heavy-milking cows with good teats.
To breeders:—We have several very choicely-bred young bull calves, combining showing and dairy qualities; 2 young bulls fit for service; spring females, any age, either milking or dry. Orders taken for importing in 1938. Our J. Reison is now in Scotland.
'Phone Campbellford. **ALEX. HUME & CO., Menie, Ont.**



Holsteins and Yorkshires.
R. HONEY, Brickley, Ontario,
offers a very choice lot of young bulls also boars and sows fit to mate.

EVERGREEN HOLSTEINS—For sale are some richly-bred young bulls, with official backing; also a few females of almost any age. All officially bred and choice individuals. **F. O. Pettit & Son, Burgessville P. O. and Stn.** Long-distance phone.

Grove Hill Holstein Herd
Offers high-class stock at reasonable prices. Only a few youngsters left. Pairs not akin **F. R. MALLORY, Frankford, Ontario.** G. T. R. and C. O. Railway connections

Holstein Bulls For sale: One three-year-old; active, sure and perfectly quiet. Also bull calf two months old. Prices right for this class of stock. **JAS. M. BOYD, Grey Gables Stock Farm, Lynden, Ont.**

SPRING BROOK HOLSTEINS AND TAMWORTHS—If you want a choice-bred, high-class Holstein or Tamworth, secure your stock at Spring Brook. Holsteins of richest breeding and highest production. Tamworths of best British blood and ideal bacon type. Herd headed by prizewinning Imp. Knowle King David. Stock of all ages and both sexes for sale. Young sows bred to imp. boar. Write or come and see. **A. C. HALLMAN, Breslau, Waterloo Co., Ont.**

"THE MAPLES" HOLSTEIN HERD

is made up of Record of Merit cows and heifers with large records, and headed by Lord Wayne Meckthilde Calamity. Bull calves from one to five months old for sale.

Walburn Rivers, Falden's, Ont.

Homestead Holsteins Yearling bulls for sale, out of cows with records from 16 to 21 lbs., and sired by Retlie Bros' famous bulls, Cornellius Posch and Count Mercena Posch. Write for prices. **G. & F. Griffin, Box 43, Burgessville, Ont.**

HOLSTEINS

We must sell at least 25 cows and heifers at once in order to make room for the increase of our large herd. This is a chance of a lifetime to buy good cattle at bargain prices. The best way to arrange to come and look the herd over. If you cannot, we will do our best for you by correspondence. Also a few young bulls, 100 head to select from. Imported **Pontiac Hermes**, son of Hengerveld De Kol, world's greatest sire, head of herd. All leading breeds represented. **H. E. GEORGE, Crampton, Ont.** Putnam station, near Ingersoll.




Lyndale Holsteins
Bull calves for sale out of cows with records of from 18 to 20 lbs., and sired by a grandson of Pieterje Hengerveld's Count De Kol.
BROWN BROS., LYN, ONTARIO.

HILTON STOCK FARM—Holsteins, Oxtewolds and Tamworths—Present offering: Some young cows; a nice lot of young pigs; few boars six months old, and sows in pig. **R. O. MORROW & SON, Hilton P. O., Brighton Tel. and Stn.**

QUEEN CITY HOLSTEINS—For sale: seven bulls from twelve months down; good individuals; some have record of merit dams; several of them have full sisters in record of merit. **R. F. HICKS, Newton Brook P. O.**

STEVENS DAIRY FARM HOLSTEINS
I have now for sale two bull calves 6 months old, sired by a grandson of Pieterje Hengerveld's Count De Kol; also four choice young cows due to calve in February.
W. C. STEVENS,
PHILLIPSVILLE P. O., DELTA STATION.




MAPLE GLEN HOLSTEINS

Herd of 35 head with A. R. O. breeding, backed up by butter tests of over 16 lbs. as a two-year-old to over 26 lbs. as a cow. A good herd to select from. Two spring bull calves on hand. A R. O. test of one is over 26 lbs. for dam and g. dam. Come and inspect the herd. Any animal will be offered for sale.
G. A. GILROY, GLEN BUELL, ONT.

Annandale Great Dairy Herd
ONLY BULLS, 4 to 10 months old, for sale at present. Bred from great producing ancestors. Bred right. Fed right.
Holsteins and Ayrshires
GEO. RICE, Tillsonburg, Ont.

RECORD OF MERIT HOLSTEINS
Herd 110 strong. Over 40 head now in the Record of Merit. Two of the richest-bred bulls in Canada at head of the herd. For sale: 18 bulls, from 2 months to 1 year of age, all out of Record of Merit cows and sired by the stock bulls.
P. D. HDE, Oxford Centre P. O., Woodstock Station.



RIVERSIDE HOLSTEINS
For sale: Eight young bulls from 3 to 8 months old, out of Record of Merit cows, sired by Johanna Rue 4th's Lad and Sir Pieterje Posch DeBoer, whose dam and sire's dam average in official test 25.87 lbs. butter in 7 days, and 87.6 lbs. milk 1 day.
J. W. RICHARDSON, Caledonia, Ont.

FAIRVIEW HERD is the place to buy your next bull. I can furnish you with a bull sired by our great herd bull, **PONTIAC KORNDYKE**, who has 19 daughters in the last year's report that made official records from 12 pounds at less than two years old to over 31 1/2 pounds at four years, and the whole number averaged over 4 1/2% fat. No other bull in the world has ever made such a showing in one year. I have just tested another of his daughters that made 26.40 pounds butter in seven days with second calf. I have over 50 cows and heifers in calf to him. Come and look my herd over before making your selections elsewhere. **E. H. Doljar, Havelton, St. Law. Co., N. Y., near Prescott**

Maple Hill Holstein-Friesians
Bull calves from No. 1 dams, sired by bulls with great official backing. Write for prices.
G. W. Clemons, St. George, Ont.

WEAK TIRED WOMEN

How many women there are that get no refreshment from sleep. They wake in the morning and feel tired than when they went to bed.

They have a dizzy sensation in the head, the heart palpitates; they are irritable and nervous, weak and worn out, and the lightest household duties during the day seem to be a drag and a burden.

MILBURN'S HEART AND NERVE PILLS

are the very remedy that weak, nervous, tired out, sickly women need to restore them the blessings of good health.

They give sound, restful sleep, tone up the nerves, strengthen the heart, and make rich blood. Mrs. C. McDonald, Portage la Prairie, Man., writes: "I was troubled with shortness of breath, palpitation of the heart and weak spells. I got four boxes of Milburn's Heart and Nerve Pills, and after taking them I was completely cured."

Price 50 cents per box or three boxes for \$1.25, all dealers or the The T. Milburn Co., Limited, Toronto, Ont.

Try Dorset Ram on your GRADE FLOCK.

They produce the very choicest butcher's lamb. I have several on hand at very reasonable prices. For particulars apply to:

R. H. HARDING, Mapleview Farm, Telephone connection. Thorndale, Ont.

Sheep Breeders' Associations.

American Shropshire Registry Association, the largest live-stock organisation in the world. G. Howard Davidson, Pres., Millbrook, N. Y. Address correspondence to MORTIMER LEVY BRING, Secretary, Lafayette, Indiana.

FAIRVIEW SHROPSHIRE.—Now offering: Ewes bred to our champion rams at St. Louis World's Fair and the International. Also a limited number of ewe lambs, sired by above and other choice rams. Show shearings in prospect among ewe lambs. J. & D. J. CAMPBELL, FAIRVIEW FARM, WOODVILLE, ONT.

SPRINGBANK OXFORDS. A number of select ram and ewe lambs and shearing rams by an Imp. Hobbs Royal winner. Prices reasonable.

WM. BARNET, Living Springs P.O. Fergus, G.T.R. and C.P.R.

SHROPSHIRE. Can sell about 90 Ram Lambs. Mostly by an Imp. Butlar-bred ram. GEO. HINDMARSH, Alisa Craig, On

Lelcesters. A few choice ram lambs and ewes of various ages. Also DUROC JERSEY SWINE. MAC, CAMPBELL & SONS, Harwich, Ontario.

A Southern farmer asked a negro farm hand the cause of his worried and harassed expression. "De trubblin' boss," said the negro, "is mah wife. She is de 'stravagantes' pussion I knows. She is alwus after money. Money dis, en money dat, en mo' money. She comes ter me fer one dollar, en den she wants two dollars, en so hit goes." "But, Joe," inquired the boss, "what does she do with all this money?" "Well, de fac' is, boss," explained Joe, "I ain't give 'er none yit!"

DODD'S KIDNEY PILLS. CURES RHEUMATISM, BRIGHT'S DISEASE, DIABETES, BACKACHE. FOR ALL KIDNEY DISEASES. The public may rely on the original package. Sold only in boxes.

QUESTIONS AND ANSWERS. Veterinary.

TUMOR.

Twelve-year-old dog has had a hard tumor, the size of three hens' eggs, inside his hind leg for two years. The lump can be moved a little. J. S. B.

Ans.—This growth can be dissected out. As the dog is so old, it might not be safe to give him chloroform or ether, but he must be held, or tied, securely, and the tumor carefully dissected out, the skin stitched, with the exception of an opening at the lowest part of the wound for the escape of pus. Then he will keep it clean by licking it, and it will require no dressing. It requires a person who has skill in such matters to operate; but, if skillfully performed, the operation should not prove serious, unless some complication sets in. V.

LAME MARE.

Two months ago my mare stumbled and skinned both knees. In a week, she went lame in right fore leg, and seemed sore in back tendon. I applied a liniment, and she got all right. In a few days she went lame in the other fore leg, and has been lame ever since. After a rest, she will drive sound for a few miles, and then commence to go lame and get worse the further she goes.

W. A. M.

Ans.—I am of the opinion there is inflammation of the knee joint. Give her rest. Clip the hair off the joint all around, and blister. Take two drams each biniodide of mercury and cantharides and mix with two ounces vaseline. Tie so that she cannot bite the part. Rub well with the blister once daily for two days. On the third day wash off and apply sweet oil. Turn loose in box stall, and oil every day. If the lameness has not disappeared in a month, blister again. V.

Miscellaneous.

A MISREPRESENTED STALLION

Owner of an entire horse gets out bills and advertises his horse to be pure-bred Clydesdale. Said horse proves to be not eligible for registration.

1. Is there any recourse for those using him in faith that he was as bills stated. Bills have number of horse and pedigree, which are all fictitious.

2. Can he collect his fee from patrons? Ontario. M. O. D.

Ans.—1. We think they have a good cause of action against the stallion-owner for damages.

2. We consider that they are in a position to successfully resist any legal proceedings on his part to collect.

CEMENT ROOT-HOUSE.

1. I intend building root-house 16 x 30 feet, 8 feet high; intend building above ground. Would one foot thick, without air spaces, save roots, or would it require air spaces?

2. How deep would I have to sink foundation?

3. What size would I have to start wall?

4. I would like to roof with cement. How would I start roof?

5. How many yards of gravel and broken stones, and how many barrels of cement would I need to build the above? G. McF.

Ans.—1. An air space, we think, would be necessary.

2. Below the frost line. Two feet should do in most localities.

3. The wall does not need to be any thicker at the surface of the ground than it is right up to the eaves.

4. A false roof, a temporary structure of old boards, strongly supported, will have to be built, on which the cement concrete for roof can be spread.

5. Allowing one foot for thickness of wall and roof, exclusive of air space in wall, and having concrete mixed one to eight, there would be needed about 44 cubic yards of broken stone and gravel, and 52 barrels of cement. T.

Farnham Farm Oxford Downs

We are now offering a number of select yearling rams and ram lambs, sired by imported ram, for flock headers; also yearling ewes and ewe lambs. Price reasonable.

Henry Arkell & Son, Arkell, Ontario. Arkell C. P. R.; Guelph, G. T. R.

Southdowns

FOR SALE: 9 imported prizewinning rams, and 60 home-bred and imported ewes. COLLIES.—Puppies by champion sire, and out of prizewinning dam.

Robt. McEwen, Byron, Ont.

71 Years

WITHOUT CHANGE MEANS

that in 1836 we made an importation of sheep, that Shorthorns followed very soon, that we have been importing and breeding them ever since, and that this year I have made an importation of Shorthorns, Shropshires, Clydesdales and Welsh Ponies as good as could be bought. They, with high-class home-bred ones, are for sale, write me. ROBERT MILLER, STOUFFVILLE, ONTARIO.

Shropshires and Cotswolds

I am now offering 35 shearing rams and 60 shearing ewes, also an extra good lot of ram and ewe lambs from imported Minton ewes and Buttar ram.

JOHN MILLER,

Brougham P.O. Claremont Stn., C.P.R.

SHROPSHIRE

Choice breeding ewes for sale at reasonable prices. White Wyandottes at all times.

W. D. MONKMAN, BONDHEAD, ONT.

Elmfield Yorkshires.

60 young pigs of both sexes, from 4 weeks to 4 months. Also some young sows, bred in August to imp. boar. Prices to suit the times.

G. B. MUMF, Ayr, Ont.

100 BERKSHIRES 100

Catalogues Ready Dec. 1st.

Dispersion Sale of the Elmhurst Herd on

Write for one.

Sale under cover.

H. M. VANDERLIP,

Importer and Breeder,

Cainville, Brant Co., Ont., Can.

EAST BANK HERDS

Large English Yorkshire and Berkshire Swine, Shorthorn Cattle and Barred Rock Poultry. If you want individual quality, coupled with breeding, in any or all of the above breeds, try me with an order.

Am offering snags in young sows bred and ready to breed. Boars fit for service. Suckers either breed or sex. Also cows and calves; some prizewinners. Barred Rock cockerels, 75c. and \$1. For description and breeding, see Gossip, Xmas number. Satisfaction guaranteed. Write, call or 'phone. Iva L. Howlett, Keldon P. O. Sheburne station, C. P. R.

Willowdale Berkshires

are unsurpassed for quality and breeding. My stock is bred from the best imported and Canadian-bred dams, and imported sires of the richest breeding to be found in England. Young stock all ages for sale reasonable. Young sows bred and ready to breed. Young boars 3 and 4 months old. Satisfaction guaranteed. Long-distance telephone in residence. J. J. WILSON, Importer and Breeder, Milton P. O. and Station, G. T. R. and C. P. R.

DUNROBIN STOCK FARM. Clydesdales, YORKSHIRES, Shorthorns. We are booking orders for breeding stock from our grandly-bred Yorkshire sows. Twenty five sows to farrow in the next few weeks. Unrelated pairs a specialty. Write for prices and particulars. DONALD GUNN & SON, Beaver-ton, Ontario. Inspection invited. G. T. R., C. N. O. R. stations 1 1/2 miles from farm. Customers met on notification.

Large White Yorkshires! Am offering at the present time a choice lot of boars ready for service, from imported stock; also young pigs of both sexes, not akin. Prices right, and quality of breeding unexcelled. Write or call on H. J. DAVIS, WOODSTOCK, ONT.

MONKLAND Yorkshires Imported & Canadian-bred. We keep 35 brood sows, and have constantly on hand between 100 and 200 to choose from. Can supply pairs and trios not akin. Quality and type unsurpassed. Prices right. JAS. WILSON & SONS, FERGUS, ONT. G. T. R. and C. P. R. Long-distance 'Phone

LARGE ENGLISH YORKSHIRES.—We have a limited number of choice young pigs for sale, bred from our choicest sows and got by the imported boars, Dalmeny Joe 13577 and Broomhouse Beau 14514. Pigs from the latter won all the first prizes at the Ottawa Fat Stock Show last March for the best dressed carcasses, and sweepstakes over all breeds or grades. We guarantee satisfaction in all mail orders. JOSEPH FEATHERTON & SON, STRATFORD, ONT.

FAIRVIEW BERKSHIRES are second to none. Have now for sale some sows bred, and boars fit for service, also younger ones from two to four months old, bred from show stock. Also Leicester shearing rams, ram and ewe lambs of finest type. John S. Cowan, Donegal P. O. Atwood and Milverton stations.

Glenburn Herd of Yorkshires. Winner of gold medal three years in succession. 6 young boars from 6 to 9 months; also 75 young sows, from 6 to 12 weeks old. David Barr, Jr., Box 3, Renfrew, Ont.

FAIRVIEW BERKSHIRES Bred from imported and Canadian-bred sires and dams, and bred on prizewinning lines. My brood sows are large, choice animals. Young stock of both sexes. Some sows bred to imp. boars. HENRY MASON, SCARBORO P. O. Street cars pass the door.

SUNNYMOUNT BERKSHIRES! Boars fit for service. Sows bred and safely in pig. Sows fit to be bred. Young pigs just weaned. JOHN McLEOD, Milton P. O. and Stn. C. P. R. & G. T. R.

MAPLE GROVE YORKSHIRES Imported and Canadian-bred boars and sows of the best possible breeding, with lots of size and quality. We are winning at the leading Canadian shows. A fine lot of both sexes and all ages. Everything guaranteed & represented. Prices reasonable. H. B. McDIARMID, Fingal P. O., Shedden Stn.

For Sale—Ohio Improved Chester Whites, the largest strain, oldest established registered herd in Canada; young sows in farrow choice young pigs, six weeks to six months old, pairs not akin; express charges prepaid; ped. green and safe delivery guaranteed. Address W. D. GEORGE Putnam, Ont.

Yorkshires—Boars ready for service; sows ready to breed, and bred; young pigs just weaned and ready to wean. Cotswold and Shropshire rams, yearlings and lambs, registered. GEO. M. SMITH, Haysville, Ont.

Subscribe for "Farmer's Advocate"

Large English Berkshires FOR SALE from imported stock. Sows with pig and pigs for sale. All ages. At reasonable prices. Guarantee satisfaction. Boars and sows delivered at Woodstock station. C. P. R. or G. T. R. JOSHUA LAWRENCE, Oxford Centre, Ont.

PINE GROVE BERKSHIRES!

Bred on aristocratic lines and from high-class show stuff, sired by the Toronto winner, Willow Lodge Leader. For sale both sexes—4 and 6 months of age; of choice bacon type and showing form. **W. W. BROWN RIDGE, Ashgrove P. O., Milton Sta.**

NEWCASTLE TAMWORTHS.

Oldest established herd in Canada. For sale 19 young sows sired by Colwell's Choice and Newcastle Warrior, both Toronto champions, and bred to Imp. Cholderton Golden Secret; also younger ones, both sexes, by him, and out of dams by above Cha. sires. Several boars fit for service. Will sell right for quick sales. **E. A. COLWELL, NEWCASTLE, ONT.**

Mount Pleasant Tamworths and Holsteins.

Head of For Sale: Pigs of either sexes, from 6 weeks to 1 month; pairs not akin; also bull and heifer calves under 6 months. Phone in residence. **BERTRAM HOSKIN, The Gully P. O.**

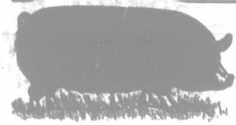
YORKSHIRES of Choicest Type and Breeding.

I have on hand 75 brood sows of Princess Fame, Cinderella, Clara, Minnie, Lady Frost and Queen Bess strains. My stock boars are true to type and richest breeding. For sale are a large number of sows bred and ready to breed, boars fit for service, and younger ones of both sexes. Pairs and trios not akin. **J. W. BOYLE, P. O. Box 563, Woodstock, Ont.**

Yorkshires and Tamworths—Either breed any age, both sexes; sows bred and ready to breed. Yorkshires bred from imp. sire and dam. Tamworths from Toronto winners. Pairs not akin. As good as the breeds produce. **CHAS. CURRIE, Schaw Sta., O.P.E., Morrisston P.O.**



Meadowbrook Yorkshires. Young stock of both sexes. A number of sows old enough to breed, all sired by Imp. Damsen Topman. Everything guaranteed as represented. **J. H. SNELL, Hagersville P.O. & Station.**



OAKDALE BERKSHIRES Largest Berkshire herd in Ontario. Stock boars and several brood sows imported. For sale: Sows bred and ready to breed, boars ready for service, and younger ones, all ages, richly bred on prizewinning lines and true to type. Everything guaranteed as represented. Long distance 'phone. **L. E. MORGAN, Milliken P.O., Co. of York.**

QUESTIONS AND ANSWERS. Miscellaneous.**SCRATCHES.**

My horse was bothered all summer with scratches on his front feet, and now he has them on one hind foot. He is four years old, good driver, and in good condition. His hind legs swell. I have used carbolic and castor oil. It seems to help, but does not cure. What should I do for him? **A SUBSCRIBER.**

Ans.—Purge him with a ball, consisting of nine drams of aloes and two drams ginger, after feeding a bran mash or two. Follow up with three drams hypsulphate of soda, night and morning, in damp food for a week. Apply, three times daily, a lotion composed of one ounce each of sulphate of zinc and acetate of lead, two drams carbolic acid, and one pint water. Do not wash, but remove dirt with brush.

TO BALANCE RATION OF ROOTS AND CORN FODDER.

On page 1850, issue of Nov. 28th, there is an article on feeding cattle on roughage, etc., which I consider very good, but, as it does not meet my conditions, I would thank you for instructions. I have clover hay and corn stover, but I also have sugar beets and Swedish turnips. Can I make a ration of stover, corn, turnips and sugar beets equal to the combination of clover and stover, without grain, in section five, under paragraph "comparison of various coarse fodders fed without grain," which is spoken of so highly? To what extent do sugar beets and turnips supply the deficiency of protein in corn stover? As I am negotiating for the purchase of cattle, I would thank you for a reply at your earliest convenience. **A. G. M.**

Ans.—Except in point of succulence, roots and corn stover are similar in composition, both being much richer in starchy elements than in protein. A good ration could be made by adding to the corn fodder a liberal daily feed of two of clover hay and half a pound of oil meal, mixed with a little bran. If no clover or alfalfa hay were available, it would pay to use a pound of oil meal. At present prices, oil meal and cottonseed meal are by far the most economical sources of protein on the market. The special value of roots lies in their succulence, and a peck per animal is relatively more economical than a bushel.

FAULTY MACHINES.

I bought three pieces of machinery from the _____ company, through their agent and general agent. The men made a great many claims that the order will not bear them up in. One of them was the rake was to rake two five-foot swaths right along. It only measures a trifle over eight feet between the wheels. I wanted a ten-foot rake. They told me this one was just as good, and would do the same work. Of course, it can not. The seeder was to be the latest design and up-to-date in every way. Now, it is the same seeder the company built fifteen years ago, and the only old make I know of them putting out that year, and was, I believe, broken in two places the first time I saw it? The other piece was a binder, which they left me to set up, and it cost me delay, but does not work so badly. There was no one here at starting of these machines, and I saw nothing more of the agents till they wanted a settlement, which I did not give at that time. It was the general agent who was here for settlement. When I would not sign the notes, he took the number of pieces that were broken and missing, and said he would make them good. In a few days, I got a letter from the company, containing notes, asking me to sign and return and they would make everything right—repair all broken pieces. This was over a year ago. Nothing has been done, and the notes are due. They want their cash, and the machines are out of repair so badly I have to borrow pieces. I have called on the agent twice. He said there are no repairs for me. What would you advise me to do? **Ontario. A READER.**

Ans.—We consider you liable on the notes, but entitled to damages from the company in respect of their failure to repair. You should see and instruct a solicitor at once in the matter. He will probably be able to bring about, by your presence, a suitable settlement.

**HELP FOR THE OVERWORKED!
THE BROKEN DOWN!**

In thunderous tones to-day the world calls for **Men of Action—Producers!**

In the business world, in mine and mill, in the factory, in the field, new and swifter methods have supplanted the old and worn-out systems, and competitive zeal demands the Men of Action—the Men able to "do things."

Rush! Hurry! Strive from morning till night! Clang and hammer! Hammer and clang!

No wonder men break down! No wonder the world is full of Dyspeptics, Nervous Wrecks! No wonder that "Doctors" are at their wits' end to relieve the thousands of cases of Nervous Disorders, Nervous Prostration and kindred diseases that daily confront them. No wonder that they call this the "Age of Nervousness."



An Army of Human Wrecks Cured Every Year. No Drugs. No Medicines.

No time for the Dreamer! Rip Van Winkle was no business man.

In a big establishment I visited recently, where several hundred men are employed, I saw a big sign with just these words: "Get busy! Do it now!"

Short shift to the laggard. "Make good or get out," that's the advice he gets. They want men who can "deliver the goods."

No matter how big the results to-day, to-morrow's must be bigger. Hence, greater and ever greater the demand upon body and brain.

All this effort, this tremendous wear and tear is concentrated upon the Nervous System, and when the Nervous System is overstrained, down goes the man, the organs of his body refuse to work, its normal functions become impaired, and he's ready for the scrap heap.

Overworked, broken-down men and women, do not despair! There's help for you in my Dr. McLaughlin Electric Belt! It has made thousands of vigorous and healthy men and women out of Mental and Physical Wrecks! Its glowing current of Electric Life, fed into your tired and aching body, will succor every weakened nerve, every debilitated organ! Use it, and get back your Strength and Energy.

The "Drug Doctor" has not kept pace with the times! He's like Rip Van Winkle, only worse, for he's been asleep for more than twenty years. Electricity is the "up-to-date" remedy—the remedy for you!

The Dr. McLaughlin Electric Belt is a cure for all signs of Break-down in Men and Women. The Vitality of the body is Electricity—the force in the Nerve Cells. My Electric Belt will give you back this power and enable you to fight on in the Battle of Life!

The Dr. McLaughlin Electric Belt cures Neurasthenia, Hypochondria, Nervous Prostration or Nervous Weakness, Headaches, Sleeplessness, Stomach Trouble, Indigestion, Constipation, Weakness of the Kidneys, Lame Back, Rheumatism, Lumbago, Sciatica, Neuralgia, Poor Circulation, Urinal Trouble, Weakness of the Organs, Night Losses, all evidences of Premature Decay.

If you are skeptical, all I ask is reasonable security for the price of the Belt, and

PAY WHEN YOU ARE CURED.

I can give you the PROOF in abundance. Here I give you a few samples of the kind of letters that I receive every day by the score:

I received the Belt all right, and am very pleased with it. It has done me a lot of good, and I would not be without it now. I only wish I could have got it before. **E. MAJOR, Port Dalhousie, Ont.**

Your Belt cured me of Sciatica in exactly three months. I do not now feel an ache or a pain.

MRS. JOHN FLETCHY, North Bay, Ont.

I am writing to let you know that your Belt that I bought from you a year ago, did all that you claimed for it. It cured me of all my troubles. **LEON RALFE, Lime Ridge, Que.**

Free to All—My Beautiful Book.

Weak Men, Broken-down Women, I want to see you all at my office! Call on me if you can do so; if not, cut out this Coupon, mail me your address, and I'll send you my elegantly-illustrated 80 page Book, which points out the Road to Health. Don't put it off. I have a book for Men; one for Women, too. Send to-day.

DR. M. S. McLAUGHLIN,
112 Yonge St., Toronto, Can.

Please send me your book, free.

NAME _____

ADDRESS _____