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THE FARMER'S ADVOCATE

AND HOME MAGAZINE

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* AGRICULTURE, STOCK, DAIRY, POULTRY, HORTICULTURE, VETERINARY, HOME CIRCLE. *

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VOL. XXIX.

LONDON, ONT., AND WINNIPEG, MAN., APRIL 1, 1894.

No. 355.



FIRST PRIZE HERD OF IMP. LARGE YORKSHIRES AT TORONTO INDUSTRIAL, 1893,
AND PREMIUM WINNERS AT THE COLUMBIAN WORLD'S FAIR.
THE PROPERTY OF J. E. BRETHER, BURFORD, ONTARIO.

EDITORIAL.

Oak Lodge Yorkshires.

Our plate page for this issue illustrates a trio of Yorkshire swine, the property of Mr. J. E. Brethour.

The prominent position taken by the Oak Lodge Yorkshires at our principal exhibitions has placed Mr. Brethour in the front ranks as a breeder of Yorkshire swine. The care that has been exercised by this gentleman in endeavouring to give satisfaction when filling orders has won for him the confidence of his numerous customers. In looking through the herd, one is struck by the smoothness of finish, the superiority of the individual animals, and the uniformity of type which pervades the entire herd. It has evidently been the aim of the proprietor to meet the requirements of the breeders and feeders, and yet cater to the demands of the export trade as defined by the bacon curers engaged in the export trade.

Mr. Brethour informs us that he used seven boars in his herd last season, two of which were imported. The first male shown us was Kinicroft Hero, imported by and used in the herd of Mr. Wm. Davies, of Markham, Ont. It was his value as a sire which induced Mr. Brethour to purchase him. Kinicroft Hero was bred by Walker Jones, Chester, England, and although now five years old, he still retains the grand characteristics for which the breed is famous. He possesses great length, deep ribs, heavy, clean bone, capital hair and good masculine character. He stands as well on his legs and feet, and in every way is as fresh as a yearling. Many of Mr. Brethour's best sows are got by this boar. All show enough of the desired type and quality to satisfy the most fastidious.

A younger boar of rather different type is Model Duke, which was sired by a Sanders Spencer boar; his dam is of Walker Jones' breeding. This is a pig of good length, standing on short legs.

Mollington Duke is the grand young boar which won second premium at the World's Fair, Chicago, and at Toronto. He was bred at Oak Lodge. His sire and dam were bred by Walker Jones. Several prize-winning sows at the Columbian World's Fair are in pig by this boar.

Oak Lodge Model is a handsome boar of great length. He stands on short straight legs, and has extra good hams, and particularly deep, well-formed ribs.

Dominion 3rd is an imported boar bred by Walker Jones, which Mr. Brethour has used freely through the late mating season. We have yet to see the Yorkshire boar that fills the eye from the breeder's standpoint, and yet retains all that is desirable in the bacon pig, as perfectly as he does. He has wonderfully deep, well-formed ribs, particularly smooth, fleshy back, straight underline, with flanks full and deep. He is long and very even, and stands particularly wide between the fore-legs, showing immense heart girth, his shoulders are remarkably smooth, the hams thick and deep, retaining their thickness and smoothness down to the hock. His head is well set on and of masculine character, his face short. He possesses a coat of hair that denotes a strong constitution and thrifty, easy feeding qualities. He stands straight on his feet and legs—the latter have plenty of flinty bone, a most necessary quality.

Oak Lodge Diamond, the young boar in the illustration, is a grand type of a Yorkshire. He has wonderful length, good ribs and back. In him all the typical points of the breed exist in perfection. He weighed 308 lbs when ten months old, just previous to the Industrial Exhibition; two sows of the same litter tipped the scales at 404 and 405 lbs, at the same age. One of these won first in the class under twelve months old at Toronto and second at the World's Fair. Oak Lodge Diamond, which was one of a litter of thirteen, won first at Toronto and stood at the head of the first prize herd at the same show. He was again a winner at the Columbian World's Fair, where his dam, imp. Lady Duckering, won first as an aged sow.

Rosebery Belle, the sow portrayed in the right foreground in the illustration, is a sow of beautiful finish, and combines easy feeding qualities with the immense length and depth of side required in a bacon pig. She has exceptionally good hams, great heart girth, and a coat of hair and general appearance that indicate a good constitution. Her sire was bred by Mr. Walker Jones, her dam by Mr. Sanders Spencer. She won third prize in the yearling class at the Columbian World's

Fair, and was one of the sweepstake herd at the same exhibition.

Dominion Belle 2nd, the other sow portrayed in the illustration, is of slightly different type. She does not possess the wonderful length of her companions, but is a remarkably handsome animal. Her head is clean cut, her back well clothed with flesh, hams round, and full heart girth and constitution all that can be desired; she stands well upon short, well-set legs. This sow has the unprecedented record of never having been beaten. At the World's Columbian Exhibition she won first in the yearling class, was one of the sweepstake herd, also won that desirable prize, viz., sweepstakes for the best Yorkshire sow of any age. At the Toronto Industrial she won first in her class as a yearling, made one of the first prize herd, and also carried off the Holywell Challenge Plate, given by Mr. S. Spencer, for the best Yorkshire boar or sow over six months, thus securing a much coveted prize for her owner, which was required to be won twice by the same exhibitor. Mr. Brethour previously won this trophy with imported Mabel—18—, a sister of the famous breeding sow, Marian, which has done so much to distinguish the Oak Lodge herd.

Marian was bred by Walker Jones, Chester, England, and has produced many prize winners. She is very prolific, having already eleven litters to her credit, in all one hundred and twenty-three pigs, and is now sucking a choice brood. So highly does Mr. Brethour think of this strain that he has retained no less than ten breeding sows of this family. Two of his stock boars are grandsons of Marian. The chief characteristics of this sort are their smooth finish, superior feeding qualities and uniformity of type.

Space forbids us to particularize further the good things to be seen at Oak Lodge, but we must mention Princess Isaleigh and two of her daughters—the former is a sister of Rosebery Belle, shown in the engraving. These bid fair to rival the renowned Marian family. All three are due to farrow shortly.

A noticeable feature in the management of the herd is the number of distinct tribes. This, with the wide selection of boars before mentioned, makes it easy to supply the demand of customers who want animals not related.

Among the families are specimens from the following English herds:—F. A. Walker Jones', Sanders Spencer's, C. E. Duckering's, Geo. Char-nock's, and Joseph Ashforth's.

To gain an idea of the volume of business anticipated, it is only necessary to state that no less than fifty pedigreed sows are expected to farrow during the spring of 1894. Already several litters of promising young pigs have arrived. The pens contained a number of choice young sows, but only a few boars, the enormous demand of the past season having nearly exhausted the supply. Two hundred and twenty-three boars and sows have been sold and shipped during the last ten months. Mr. Brethour states that he considers the outlook for future trade even more encouraging. He informs us that advertising in the FARMER'S ADVOCATE has paid him exceedingly well.

Experiments in Feeding Steers.

IMPORTANCE OF A BALANCED RATION.

The Maryland Experiment Station has been conducting a series of experiments with the view of showing the value of a balanced ration in feeding steers. In this test eight steers were purchased, and divided into two as even lots as possible. The average weight of the first lot was 988 pounds, and of lot 2, 985; the average cost at the station was \$38.64.

FEED USED

The feeds used were fine crushed corn and cob meal, cottonseed meal, bran, turnips and cut corn fodder. With both lots the fodder was moistened, and the grain mixed with it one feed ahead; the turnips were chopped fine and mixed in just before feeding, and a sprinkling of salt added. The ration fed to lot one was composed as follows: corn and cob meal, 15 parts; cottonseed meal, 4 parts; bran, 2 parts; while lot two received corn and cob meal alone. Both lots in addition received a small quantity of molasses as a condiment.

RESULTS.

The results show in a very striking manner the great advantage to be reaped by giving more attention to the preparation of a balanced ration, the gain in weight being nearly double in the case of the steers fed the balanced ration, for those in lot one gained 1,002 pounds in 90 days, while lot two, which were fed the corn and cob meal alone, gained but 612 pounds. In order to make this extra gain lot one consumed 800 pounds more grain and 246 pounds more fodder than lot two. The total cost of feed consumed and first cost of steers were, in lot one \$221.85, and lot two \$206.23. The amount of money received was, for lot one \$264.24, and for lot two \$217.37, which will leave a net profit of \$39.39 for lot one, and \$11.14 for lot two.

The above figures are calculated without any account being taken of the manure, which the bulletin states was nearly 50 per cent. greater in quantity, and also better in quality as could be readily understood, when the amount of nitrogenous food in the ration fed to lot No. one is considered.

SUMMARY.

The experimenter sums up the bulletin in the following summary.

1. For fattening steers, a well-balanced ration is very much more profitable than a poorly balanced one.

2. Steers fed a balanced ration made an average daily gain of 2.78 pounds, those given a poorly balanced ration made an average daily gain of 1.70 pounds.

3. The increased profits per steer show a difference of \$7.06 in favor of the well-balanced ration.

4. With a well-balanced ration ninety days is ample time in which to prepare an animal for market.

5. Where nitrogenous food is used, it is believed nearly as good daily gains can be made by mixing the grain with cut corn fodder as though hay were used.

6. The use of cut corn fodder instead of hay in feeding cattle may make the difference of a profit instead of a loss.

7. Fifty per cent. more manure was made from the animals receiving the well-balanced ration than those receiving the poorly-balanced one.

8. The manure is also much richer in plant food.

Health of Canadian Cattle.

We are indebted to the Hon. Mr. Angers, Minister of Agriculture for the Dominion, for a copy of his thorough and painstaking report, which contains accounts of all cases of animal diseases reported to the department, Ottawa, for the years 1880 to 1883, inclusive, during the existence of the cattle quarantine. The information contained in this report is of special interest to all who are engaged either in the shipment or breeding of cattle. That the cattle industry is of such great importance to Canada is shown by the Minister in this report, for he refers to the number of animals in Canada as 4,120,584, and the value of these animals and the products therefrom at \$135,000,000. The export of cheese alone during 1883 was \$13,300,237. These figures show the paramount importance to this country of safeguarding our herds from the inroads of such a fell and insidious disease as contagious pleuropneumonia, which has wrought such widespread ruin in every country in which it has gained a footing. The report also shows the great care which has been exercised in guarding our frontiers from infection by the rigid quarantine of all cattle entering from foreign countries.

The reports from veterinary surgeons in all parts of the country show that there is not at present, nor ever has been, a case of genuine pleuropneumonia in the Dominion of Canada, with the single exception of the outbreak at the quarantine station, where, owing to the thoroughness of the existing regulations, it was effectually stamped out. It is also shown that there was persistent and important conflict of professional opinion among the experts who had charge of the examination as to whether it was contagious pleuropneumonia, so that the name of Canadian lung was given to it to distinguish it from the genuine contagious pleuropneumonia. Prof. McEachran, of McGill University, who was conducting the examination for Canada, points out that "transit pneumonia" would be a more appropriate name by which to define the disease in question than "Canadian lung," seeing that it is not known in Canada, and that it is only found in individual animals carried long distances by railroads or on board steamships; and also seeing that it has never been known to spread in the places where it has been discovered, and where the conditions were in the highest degree favorable to spreading of the disease had it been contagious.

In summing up the evidence, the Minister of Agriculture gives the following conclusive arguments for giving the disease the name of "non-contagious transit pneumonia":—

(a) The conflict of professional opinion between the veterinary advisers of the Board of Agriculture and those called to assist the High Commissioner for Canada, is irreconcilable.

(b) It is not shown that there is any distinct type of contagious pleuropneumonia possessing characteristics different from those which are well-known and accepted as the signs of that disease in the United Kingdom, in the continent of Europe, in Australia and in the United States, where it has been found and diagnosed.

(c) The conclusion of the veterinary advisers of the Board, relating to the contagiousness of the disease they found, is not sustained by the undoubted facts in respect to the animals the subject of this correspondence.

(d) The absence of finding a single case, or even any serious suspicion, of the disease in question, in the Dominion of Canada, is sufficient reason for declaring the fact of its non-existence.

(e) All the known and undoubted facts in relation to the animals, the subject of this correspondence, as well in respect to the conditions in those parts of the Dominion whence they were taken, as those incident to long railway and steamship transit, with close herding, fully account for and agree with the definitions in the reports of examinations by Prof. McEachran and Adams, and establish the fact of the non-contagiousness of the disease with which they were found to be affected.

(f) All the reports of the veterinary officers of the board, and the veterinarians consulted by the High Commissioner, together with the known facts connected with all the cases of disease the subject of this correspondence, are consistent with the definition, non-contagious "transit pneumonia."

The president of the English Board of Agriculture has pledged himself to remove the obnoxious regulations against Canadian cattle as soon as the Dominion authorities proved the non-existence of pleuropneumonia in Canada. This has now been done. If the English pledge was given in good faith the restrictions will at once be removed, and Canadian cattle again allowed free access to English markets.

Farmers' Institutes in Ontario.

Farmers' Institutes in Ontario were founded by Dr. James Mills in November, 1884. Ever since that time Mr. Mills has been the central figure around which all the workers have clustered.

In an able paper read before the last meeting of the Central Institute, Dr. Mills gave a concise history of Institute work in Ontario. In this paper is also given much good advice, which should be put into practice by those interested.

It is doubtless true that many farmers have been instructed and inspired by the work already done, and that the Province at large has been benefitted, for which Mr. Mills and his fellow-workers deserve much credit. The work heretofore accomplished has been almost altogether a sort of college extension. In other words, the Agricultural College and its teachers have been taken to the homes of the farmers; they and their sons have been instructed in scientific and advanced modes of agriculture. In some places the recipients have been willing to sit with their hands clasped, and virtually say to the lecturers: "Go ahead; let us see what you can do, and how you do it." In many districts little discussion has been provoked, and apparently little interest awakened. Frequently the attendance at these meetings is small—so small and so lukewarm that several of the best men engaged as lecturers have been disheartened.

In the issue of the FARMER'S ADVOCATE for Feb. 15th, page 67,

MR. CHAS. RUTLEDGE

writes as follows:—"From personal observation of a number of Farmers' Institute meetings held this winter, I have noticed a great lack of interest in them. At Drumbo, in North Oxford, there were three meetings held on January 3rd, 1894. The average attendance there was about twenty-five, the discussions of little interest; the farmers did not turn out and take an interest in them as they should have done. With such well-known and eminently successful and practical men to address them as Hon. Chas. Drury and Mr. Simpson Rennie, the farmers did not turn out; neither the president nor secretary of the institute was there, and I venture to say not a member of the institute was there either, but the meeting was not allowed to fall through for want of a chairman, as one was chosen.

"At Freeport the meeting was fair, but there was not that depth of interest that there should have been; the farmers did not enter into the discussions with a spirit which would show that they were alive to the importance of the occasion. The great majority were content to sit and listen to the few who tried to make the meeting interesting. And the meeting for the evening would not have been attended by half as many but for the music so ably rendered by the Harris family, which certainly was a drawing card.

"At Milton the meeting in the afternoon did not speak well for the farmers of Halton; they did not turn out in the numbers that they should have, with such an able man as John Dicken for president. It was hard work to keep up the interest. There are many institutes which require the greatest exertion on the part of a few heroic workers to keep alive. I might mention North Waterloo as one. This is one of the best farming districts in Western Ontario, yet North Waterloo Institute has only a membership of about fifty-four, and there is talk of disbanding it; but the heroes will not give up the ship without another struggle, and I see another Scot in harness struggling hard for the life of his institute. In other parts I find that institute meetings are not at all successful; the lecturers sent to them are very capable men, well qualified for the work, and it certainly must try the patience of these gentlemen to take the platform and address a small and half-interested crowd, when the hall should be packed with a live audience who would enter into the spirit of this good work with a will."

Most of the local institutes are visited but once a year, by a staff sent out by Dr. Mills. Enthusiasm, if awakened, soon dies for lack of food, as the attention of the director ceases as soon as this yearly meeting is over. This system does more to advertise the O. A. C. than to keep local institutes in vigorous life.

Mr. J. W. Wheaton, Secretary of the Western Dairymen's Association, and Mr. Robt. Robertson, a brother of Prof. J. W. Robertson, Dominion Dairy Commissioner, have recently been addressing meetings of dairymen in various parts of Western Ontario. After returning from Dunnville, in Monk Co., they reported that they had found their work impeded because the residents of the vicinity thought they were delegates sent to address Farmers' Institutes, which the residents informed the speakers were not successful in that district. Mr. Robertson and Mr. Wheaton found that the lack of interest in institute work had been an actual injury to their cause. These gentlemen report the same conditions existing in Shelburne, Grey Co. Similar reports from other districts reach us. We do not for a moment suppose that there are no institutes doing good work; there are many doing excellent work, yet there are many others simply existing.

WHAT CAUSES THIS DIFFERENCE?

Simply this: the local talent in one section has been developed, and the work has been kept alive throughout the year; in the other it has not. The development of home talent depends almost altogether upon the officers of the local institutes, especially upon the secretary. Lecturers sent from the college will do good; but the hearty co-operation of successful men, residents in the riding, will do more. The man who is a little in advance of his fellows is the one from whom the average farmer will learn most, and who will have the greatest influence over him—not only in instructing him, but in bringing him out. After he has been interested and awakened, then the work of the professor and scientist will tell. The practical man and the professor must go hand in hand; but successful farmers must be always in the majority as instructors, if we wish to interest and instruct the

rank and file, or if we wish to enjoy the support and co-operation of the masses. Unless we can interest the masses we cannot instruct them.

A very able article, written by Mr. Richard Gibson, Delaware, Ont., is published in the issue of the FARMER'S ADVOCATE for March 1st, page 84. The writer fearlessly contrasts institutes in Wisconsin and Ontario, and sums up as follows:—

"On the whole, they beat us, because better organized; are accomplishing more, because they employ men specially fitted for the purpose. They also appear to interest the people locally better than we, or at any rate they succeed better in getting out a larger attendance.

"We depend upon our Principal at Guelph College to arrange our programme and attend to all details, when he has already quite sufficient to do. We also practically close the college at Guelph just when students from the country could most profitably occupy themselves and learn the lessons of most value. Again, the young men sent from college have no weight, and more than one is a drawback.

"To sum up, I would say, that in Wisconsin they are doing a better work than we, for the following reasons:—

"1st. They succeed in bringing out a much better audience.

"2nd. They do this without stopping any of the college machinery.

"3rd. They employ and will pay men specially adapted to the work, fully endorsing what I always maintain, that a low-priced man is always a dear one.

"4th. Better organization, the commander of each corps being assigned to the district to which he is specially adapted—a dairyman to a dairy district, etc.

"I like our system of making members, as it only costs 25 cents; it works no hardship, but at the same time I think the local president ought to make way for the expert."

As conducted at present the Ontario Institute system resembles a cow fed on starvation rations, given enough to keep her alive, but not enough to return to her owner a handsome profit.

The following are the REGULATIONS GOVERNING INSTITUTES AND INSTRUCTIONS TO INSTITUTE PROMOTERS.

"The Ontario Legislature has voted an appropriation of \$2,125 for Farmers' Institutes, for a grant of \$25 to one institute in each electoral district, on condition that an equal sum be granted by the county council, or the municipality in which the institute is organized, and on such further conditions as may be imposed by regulations of the Minister of Agriculture. The grant to each institute is payable subject to the following conditions and regulations approved by the Minister:—

"1. That one institute may be organized in each electoral district of the province, exclusive of cities.

"2. That each institute shall be composed of not less than fifty members, who shall each pay a fee of not less than twenty-five cents annually.

"3. That there shall be an Executive, or Board of Management, consisting of a President, a Vice-President, a Secretary and a Treasurer, and five or more Directors, and the majority of the Board shall be practical farmers.

"4. That the institute shall hold at least two meetings each year, in different municipalities of the electoral district, for the discussion of agricultural subjects.

"5. That a sum not less than the Government grant shall be voted to each institute by the council of the county, or by the municipalities in which the electoral district is situated.

"6. That the institute year shall begin July 1st, and end June 30th.

"7. That a list of officers elected, a list of all paid-up members, with their occupations and post office addresses, and a detailed financial statement, shall be furnished each year to the Department of Agriculture in such form as the Minister of Agriculture may prescribe.

"8. That a written or printed report of all meetings held by the institutes shall be furnished each year to the Department of Agriculture; and also, when so desired, copies of any papers read before the institute, which may be published as the Minister of Agriculture or judges appointed by him may decide.

"The number of meetings of an institute may be as many as the officers and members may see fit to hold during the year, but in order to secure the grant there shall be held at least two meetings for the discussion of agricultural subjects. Communications requesting the attendance of Professors of the Agricultural College at meetings of institutes should be addressed to Dr. James Mills, President, Agricultural College, Guelph.

"The secretaries are particularly requested to send to the Department the names and post office addresses of all members immediately upon receiving their subscriptions. Any changes of address or any failure to receive the bulletins and reports of the Agricultural Department should be immediately reported. The names of all officers and directors should be included in the list of members, and the names should be arranged alphabetically. The list of members may be sent in at any time, the financial statement and reports of meetings at the end of the year (June 30th). In making out reports of meetings, please keep reports of different meetings on separate sheets.

"Blanks for reports of meetings, financial statements, and lists of members, may be had from C. C. James, M. D., Deputy Minister, Toronto, to whom prompt notice of the organization of an institute should be forwarded by the secretary."

PRESENT GOVERNMENT GRANTS TO INSTITUTES.

Grants to eighty-five institutes (\$25 each)..... \$ 2,125 00
Grants to Central Institute..... 1,200 00
Services of lecturers..... 1,336 05
Travelling expenses of lecturers..... 1,854 47
Miscellaneous..... 166 21

To the above should be added the County grants to eighty-five institutes (\$25 each)..... 2,125 00

Which shows the total amount given last year by the Government and County Councils in aid of this work to be..... \$ 8,896 73

According to the Regulations and Instructions reprinted in this article last year, there must have been at least 4,250 members of institutes who paid a yearly fee of 25c. each. This would give \$1,062.50 collected from the people and devoted to institute work; but basing our calculations on the financial statement given in the last Annual Report of Farmers' Institutes of the Province of Ontario, there were last year 21,275 members, whose fees amounted to..... 5,318 75

Add this last sum to the grants given by the Government and the County Councils, and we have the total sum received last year by officers of the Institute..... \$11,125 48

We submit that the results might be materially increased for the money annually expended, and that a progressive step might now be taken. We do not intimate that Dr. Mills has not wrought well. Certainly he has done much good, and laid the foundation of a great future work. With his manifold duties, it is impossible for him to direct

the work better than he has done. Again we repeat: Mr. Mills has rendered noble service, but his time has been divided. The presidency of a college, such as the O. A. C., is enough for one man, to say nothing of the various departments of the Experimental Farm, the Dairy School and the Summer School for Teachers. The duties devolving on him at Guelph should absorb the Doctor's attention; he should not be asked to control other departments.

Past experience at Guelph proves that the President's undivided attention is required there. All who have read the Provincial Press during the last year must be impressed with this fact. Any casual observer can see that Dr. Mills is overtaxed. He is too good a man to sacrifice to the demon overwork, even if he could control both college and institute work, but we are convinced that even he cannot do this. Since the inauguration of institutes, the college has been closed for a month at Christmas. It is true no Easter vacation is now granted. There never should have been one, nor should the college ever have been closed for more than a week at Christmas. It is hoped that the sons of Canadian farmers may continue to fill each room at Guelph. The time of such men is valuable; they can be best spared from home during the winter months. If their college studies occupy no more time than students now spend at Guelph, it would be infinitely better to close the college one month earlier in the spring and teach the entire winter period. In Minnesota and Wisconsin the institutes are more successfully conducted than in Ontario. In neither is the college staff weakened, nor a month of the student's time lost in winter. Heretofore Dr. Mills has been expected to look after the institutes on the score of economy. This has been false economy, for both the college and the institutes have suffered, and Dr. Mills has been overtaxed. We recognize the fact that the President is a master mind, yet we maintain that there is quite enough work at Guelph, or as a director of institutes, to occupy one man's attention. Under existing conditions, part of President Mills' salary is chargeable to institute work, though the college has been charged with it all. If the institutes were charged with their just share of his salary, the total cost to the country would be shown to be about \$14,725.48.

This sum, and probably more, could be wisely spent in developing these institutions in Ontario. But in order to make the system a success,

A CAPABLE MAN SHOULD BE APPOINTED.

who shall give his whole time to the work. There are three ways in which this can be done, viz.:—

1. An Assistant may be given Dr. Mills.

2. It can be handled by a permanent officer in the Department of Agriculture.

3. By the employment of a director, and the appointment of an advisory board, under whose directions he shall work.

With the first suggestion we have already dealt. Dr. Mills should be entirely released from this work, except as hereafter mentioned. By the second proposition it would be possible to develop the work to a considerable extent, especially at such times as the country enjoyed the services of a competent and practical Minister of Agriculture. But the time may come when the Minister of Agriculture at Toronto may know no more of Agriculture than the present incumbent at Ottawa; thus the institute work would be at the mercy of political exigencies. Again, we all know that there are many capital farmers throughout Ontario who will not join or work with the institutes, because they consider them Grit engines. We may say this is an absurd notion, yet it does not alter the fact that there are hundreds of men who stop away and ignore institutes or openly oppose them for no other reason. How much worse would this condition be if the director were a clerk in the Agricultural Department? For this reason, if for no other, the second proposition should be discarded.

No. 3 proposes that a director be appointed, and that he be controlled by a board. This plan has been adopted in several states across the line, and has been found to work admirably. The Western Dairymen's Association last year appointed

A PERMANENT SECRETARY,

who acts under the board of directors. The results have been most satisfactory. We have made full enquiries and have secured the following statements, which are endorsed by Mr. John Geary, ex-president, and one of the present directors, Mr. Andrew Pattullo, president, Mr. John S. Pearce and other officers:—

"We have much pleasure in testifying to the good work done by the Dairymen's Association of Western Ontario since the appointment of a secretary to devote his whole time to the interests of the Association. The new secretary, Mr. J. W. Wheaton, who is a practical dairyman, began his duties on October 20th, 1892. Since that time every department of the work has progressed very favorably. The special work mapped out for the new secretary was attending meetings of dairymen and giving addresses on the best methods of carrying on successful dairying, particular attention being given to information to patrons of cheese factories as would tend to develop and promote the dairy interests of Western Ontario. So important has this work become, that it is difficult during the winter months to supply the demand for speakers at such meetings. Some 120 meetings have been addressed by the secretary and others, under the auspices of the Association, since this new line of work began, and about 8,000 dairymen and farmers were reached in this way.

"The Association itself has become more widely known. A couple of years ago a great many of the dairymen in the outlying districts did not know what the Association was, though it had been in existence twenty-five years; but since the inauguration of this new department, the work of the Association has been kept prominently before the people through the medium of the press, and to-day there are comparatively few dairymen in Western Ontario who do not know of the Association and its work."

THE FARMER'S ADVOCATE & HOME MAGAZINE

THE LEADING AGRICULTURAL JOURNAL IN THE DOMINION.

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Stanchion for Breeding Ewes.

Editor of the FARMER'S ADVOCATE:
We have had some trouble, in common with others, in getting a ewe to take a strange lamb when she had lost her own, and more still to get one that has only one lamb, with milk enough for two, to take an extra one. No doubt every person who has handled breeding sheep to any extent has noticed that if a ewe cannot see or smell the lamb while it is sucking, they are not so much worried about it. We have made a very simple device, which worked so well that in nine cases out of ten proved successful. It is by making a stanchion of boards, well smoothed where ewe's neck works in, and a bit of sheepskin with wool on might be nailed outside to prevent chafing, having close boards for about a foot on each side of her head. She cannot see or smell the lamb while it is sucking, and soon becomes quite used to and contented with it. Generally a day or two is all that is necessary to keep her in the stanchion. This will be seasonable now, as the lambing season is now on with the general farmer.
JAMES BOWMAN, Guelph, Ont.

Our Scottish Letter.

The past three weeks have been the season of the horse carnivals alike in England and in Scotland. The Shire horse fanciers had their week of it in the second last week of February, the Hackney men had their turn on the last days of the month and in the first few days of March, and the hunting men and fanciers of Thoroughbreds were enjoying themselves in London in the week now ended, while yesterday the Scottish Stallion Show was held in Glasgow.

Shires were a good lot this year, but the judging was not quite in Scottish form. The champion, Bury Victor Chief, is a wonderful horse in many ways. He is short in the back, short in the leg, deep in the rib and closely coupled. His feet and legs are not what is wanted in the North, where he would not awaken much enthusiasm. The third prize horse in the big class of aged horses at London, Dunsmore Willington Boy, is a great animal. He, to our view, was far and away the best horse at the Shire Show of 1894, but somehow Englishmen do not take him that way. He is as big as the best of them, and has fine quality of bone, with good feet and good action. There is Clydesdale blood in his veins, both his sire and his dam, we understand, being descended not remotely from the well-known horse Young Lofty 987, which, as the property of Mr. Tagg, travelled for many years in Derbyshire. The feet and limbs of Dunsmore Willington Boy are uncommonly good, and he knows how to use them. His owner is Mr. P. M. Muntz, one of the members of Parliament for Warwickshire. His place is near to Rugby, where also will be found Mr. Parnell's place of Rokeby, the owner of the champion Shire mare at London. She is named Rokeby Fuchsia, and was in the same place a year ago. She is a first-rate Shire, perhaps not so sweet about the feet and limbs as is wanted in Scotland, but a great, solid, massive grey specimen of the draught mare. Mr. Parnell is one of the most successful breeders of Shires in England. He bred the young champion Rokeby Harold, and must have a good selection of mares about him. I do not think, on the whole, that the Shire Show of 1894 revealed much advance on that of 1893, so far as the quality of the stock is concerned. That the breed has been improved within the past ten years, in respect of soundness and superior quality of feet and legs, is, I think, beyond dispute. With it, as with the other breeds, one or two sires eclipse the run of horses in producing high-class show stock. The Calwich stud horse Harold, owned by Mr. Duncombe, at Calwich, Ashbourne, Derby, is the champion of the breed at present. He is sending out many prize winners, and breeding first-rate stock from a Shire judge's point of view.

The Hackney Show was a lively and interesting meeting, and, in their own way, the Hackneys fairly captivate the horseman's fancy. The champion of 1894, Ganymede, and his son Goodmanham Squire, the junior champion, are a pair of remarkable horses. Ganymede is the most handsome Hackney on which we have up to this date cast our eye. He has weight with style and gaiety, and his walking gait is as perfect in its own way as his trotting action, and the latter is faultless. Seldom have we seen a horse of any breed which could walk to match him. The most successful exhibitor at the recent Hackney show was Mr. Harry Livesey, a gentleman who owns a splendid stud at Rotherfield, in Sussex. He owned the champion mare Orange Blossom, and bred her most formidable opponent. He holds a sale during summer, and his phenomenal success at the recent show should help to secure its pre-eminence. Hackney breeding is progressing in Scotland, but much has to be done before it will be at all popular with breeders of horses in general. They are afraid that the Hackney is simply a fancy horse, and that no money is to be made by attempting to breed them in the North. The two largest studs with us are those at Gowbank, owned by Mr. Alex. Morton, and at Gilfoot, Carlisle, owned by Mr. William Scott. The blood in these studs is of the first rank, and Mr. Morton has done more than any other single individual to make the Hackney popular in the West of Scotland. He held a very successful sale last year and is going forward again to another. Mr. Scott has a choice stud. His mares are first-rate examples of the breed, and their beautiful quality and breeding are apparent to the most casual observer. He will hold a sale next year, and if it be not a record it will be surprising. Yorkshire blood is most fancied by the gentlemen whom we have named, and horses and mares with quality are much in request with almost all who fancy Hackneys in Scotland. The champion sire among the nags is Danegelt 174. At London, a week ago, he was the sire of more prize-winners than any other horse. Four first prize winners claimed him as their progenitor, namely, the champion Ganymede, General Gordon, the reserve champion, Saxon, and the brood mare Lady Keyingham. Altogether he was sire of seventeen prize winners, next place on the list of sires being occupied by the famous champion horse Rufus 1343, which had no fewer than eleven prize winners at his credit, but only one was a first, namely, Lady Ulrica, a handsome mare owned by another Scottish fancier, Mr. C. E. Galbraith, Ayton Castle, Ayton. Connaught 1153, another London champion, promises well as a breeding horse. He had four winners, and two of these took first prizes.

Clydesdales are not booming. The gilt is off the gingerbread, and in these times we just contrive to subsist and keep our head above water. The show held yesterday was a fairly good one, and the general quality of the stock was well up to an average. However the numbers were greatly less than they used to be, and we miss the American demand. Horses are as well brought out as ever, and many first-rate animals were found in the cattle market, Glasgow, yesterday afternoon. In the short leet of aged horses was Mr. George Bean's well-built horse Prince Baldwin 9350, a son of Prince Lawrence. He is a sweet, stylish horse with good quality of bone, and was third at the H. & A. S. last year. Of sons of Prince of Wales, there were no fewer than six in the short leet, namely, Prince of Carruchan 8151, owned by the Messrs. Crawford, Eastfield, Dumfries; Prince Romeo 8144, of identical breeding and owned by Mr. Wm. Hood, Chapelton of Borgue, Kirkcubright; Prince of Kyle 7155 and the Royal Prince 9053, owned by Mr. James Kilpatrick, Craigie Mains; Prince of Garthland 9828, owned by Mr. Matthew Marshall, Stranraer, and Gallant Prince, owned by Mr. Riddell. The other horses selected were Mr. William Taylor's Rosedale 8194, a typical Clydesdale which has always been a good one; the Summit 9442, owned by Mr. Spittal, Kenmuir; Tollcrop, a son of Sir Everard 5353; Lord Colmin Edwin 9280, a son of Prince Gallant 6176, and out of the dam of Lord Erskine 1741; Mr. Alex. Scott's Lawrence's Chief 7190, a bay son of Prince Lawrence. He and the last-named competed strongly for the Glasgow travelling premium, and Lawrence Chief won. Both are grand big horses of excellent quality. Mr. Riddell's horse, The Diamond, a son of Bonnie Prince, was also drawn, as were also Mr. John Pollock's horse, Sir John Maxwell 9415, Mr. Walter S. Park's fine horse, Gallant Poteath 9638, a son of Top Gallant, which was first almost everywhere as a three-year-old, and Mr. Dunn's beautiful horse, Master Robin 8040. Prince of Carruchan was placed first, with Prince of Kyle second and Gallant Prince third. The Summit was fourth, Gallant Poteath fifth, Rosedale sixth, Lawrence Chief seventh and Lord Colmin Edwin eighth. The whole of the horses in this leet were above the average in respect of merit, and a powerful lot of animals they were. Some fine horses were found amongst the three-year-olds. Mr. David Mitchell's Prince of Millfield 9650, which stood first as a two-year-old, repeated his performance, and once more was reserve for the Cawdor cup, which was won by Prince of Carruchan. Second place in the class, as well as the Glasgow district premium, were taken by Mr. W. S. Park's handsome and gay young horse, Prince of Erskine 9647, a son of Prince of Albion and a Darnley mare, with the dam of Lord Erskine for his granddam. The third prize horse was Knockovally 9565, a big, solid horse, got by Eastfield Stamp 6723, and out of an Old Times mare. Mr. Alex. Scott was fourth with a promising horse named Prince of Fortune 9820, which stood reserve for the Glasgow premium. The Marquis of Londonderry was fifth with Sir Thomas 9681, a heavy black colt got by Castlereagh, and Colonel Stirling, of Kippendavie, was sixth. Prince of Fife 9648, a son of Prince of Albion, Primrose Prince 9635, another son of Prince of Albion, owned by Mr. Wm. Taylor, Mr. William Renwick's Prince Grandeur 9638, Mr. W. S. Park's Royal Reward, Mr. Wm. Montgomery's Macandrew, a big, solid, imposing horse with grand feet and legs, Mr. R. C. Macfarlane's Goldmine 9540, Mr. Morton's Height o' Fashion, and the Messrs. P. & W. Crawford's Scottish Standard 9674, and Royal Warrant 9664, were also in the short leet. The two-year-olds were a strong class. The first four in order were, Mr. Wm. Clark's Royal Eastly 9844, Mr. Wm. Park's Prince of Brunstane, the Marquis of Londonderry's Carthusian 9722 and Mr. Richard Dunn's Cock Robin 9725.
SCOTLAND YET.

Kerosene and Animal Parasites.

I tried an experiment during last August with our ordinary coal oil. I saw a number of my hogs were not doing well. They were continually rubbing against the fences. I put one gallon of oil into my knapsack sprayer and walked out to the pen, and gave them an excellent covering of oil very finely put on by the said sprayer. My neighbors said, "the hair will come off;" others said, "it will blister." I awaited results. Next morning, on examining their backs, I found great, loose scales of dirt and mange, and under these were thousands of dead lice.
Result:—My hogs are smooth and slick, lice all gone.—E. H. KERN, in Insect Life.

The season for breeding your mares will soon be at hand: it will be well to use more than ordinary judgment in mating them, now that horses are so low in value. Bear in mind that good horses, whether heavy or light, are still in demand at living prices, but they must be good. You probably have some mares that have never produced a respectable foal even from a first-class horse: would it not be well not to breed such mares again? Select only your very best mares, and breed them to the very best stallions in your district, of whatever breed you conclude will best "nick" with the mare. Be sure the stallion has a registered pedigree. Don't breed to a "scrub" nor even to a good-looking "grade."

Pine Grove Poland-Chinas.

Pine Grove Stock Farm, the property of Capt. A. W. Young, is situated about two miles from Tupperville, on the Lake Erie and Huron Railroad, about twenty miles north of Chatham. This section of the country is in the great corn belt of Western Ontario. As a consequence, much attention has been paid to the hog crop, which has proved the most paying one. Mr. Young has been engaged in the breeding and feeding of hogs for the block for years, and thoroughly understands the part that good blood plays in the profitable production of pork. He claims that his favorite breed will attain a greater weight upon a given amount of feed than other sorts, and will produce as good side meat and better hams and shoulders.

The foundation of his present herd was laid by the importation of a pair, in the early part of 1892, from the well-known herd of Mr. Levi Arnold, Plainville, Mich. The success of this venture led him to try his fortune still further. Late in the same year he imported the subject of our illustration, Canada Wilkes registered in the U. S. A. as No. 19619, and as No. 502 in Canada. This grand boar was bred by J. H. Beabout, of Rushville, Ind., and is a very fine specimen of the breed, being a pig of good length, with capital hams and very smooth finish. He has never been shown at any of the larger exhibitions, but has proved himself an excellent stock getter. Canada Wilkes is of the famous Tecumseh and Corwin strains of breeding, having been sired by George Wilkes, a son of King Tecumseh, while his dam was Creole, sire Corwin Prince.

From Mr. Young's catalogue we take the following in regard to the Wilkes family:—"George Wilkes was sold in December, 1892, to Cantrall & Hoffman, Wayneville, Ill., for \$750; Guy Wilkes 2nd, No. 17,777, son of George, was bought by same firm to take George Wilkes' place (who died from sun-stroke during the summer of 1893) for the sum of \$950; the sum of \$1,500 was refused for Happy Medium, a brother of George Wilkes, owned by D. C. Miller, Vermillion, S. D., U. S."

Among the sows in Mr. Young's herd are the following:—Rebecca, one of the first pair imported. She has proved herself a very profitable investment. Another choice sow is Cora, bred by Mr. Levi Arnold, Plainville, Mich. With a determination to still further improve his herd and keep abreast of the times, Mr. Young imported

last September the fine young sow, Mugg's Climax, also rich in the blood of the Tecumseh and Corwin families. She was selected from the herd of Lloyd, Mugg & Co., Centre, Ill., U. S. A., and is a half-sister to the boar which took first and sweepstakes in the yearling class at the Columbian Exhibition.

Mr. Young also has a half-interest in the monster boar Nominee, which was bred by Sheppard & Alexander, Charleston, Ill., U. S. A. This hog is so well known that he needs but little comment from us. He won first at the leading exhibitions last fall. When thirty months of age he weighed 1,003 pounds; though much thinner at the present time, he will still tip the beam at about 800 pounds. This boar is of entirely different breeding from Canada Wilkes, having been sired by Nominee 22463, dam Double Beauty, by Bravo.

In the herd are several choice daughters of Rebecca and Cora, some of which have been bred to Nominee and others to Canada Wilkes.

Captain Young now has several litters for sale; other sows will farrow soon.

In poultry this gentleman keeps the following varieties: Plymouth Rocks, Dorkings, Black Spanish, Brown Leghorns and Light Brahmans.

In addition to his other work he is engaged quite extensively in bee-keeping and small fruit culture. He has about five acres set in raspberries, which he finds very profitable. Though he has tested a number of varieties, he has found the four following varieties to pay him best, viz., Greig, Mammoth Cluster in black, and Crimson Beauty and Cuthbert among the red sorts.

The apathy which the majority of farmers exhibit regarding the cultivation of small fruits is shown by the fact that in many cases after selling a farmer a sufficient number of plants, which, if properly cared for, would produce a bountiful supply of fruit, the same man would come back to

him to buy berries, simply because his own plants had been neglected.

Mr. Young predicts a very encouraging trade for the coming season. His advertisement in the FARMER'S ADVOCATE has brought him such good returns that he has decided to order it to appear in each issue, instead of once a month as formerly. He has shipped pigs to all parts of the Province of Ontario, and even as far east as Amherst, N. S. This fact he attributes to a large extent to his advertisement in the ADVOCATE. His experience, like that of many others, proves the large circulation of this leading Canadian agricultural journal. The circulation of the FARMER'S ADVOCATE extends from the Atlantic to the Pacific. In Manitoba and the Northwest it has a larger circulation than any other paper published, not excepting the great political weeklies.

Southdowns.

[Read before the last meeting of the American Southdown Breeders' Association, by W. W. Chapman, Secretary of the English Southdown Sheep Breeders' Association.]

I must first of all thank you for the great honor and compliment that has been paid me in allowing me this privilege of appearing here before you on such an unique and important occasion, as well as being one of the very few Englishmen who have crossed the sea for the purpose of reading a paper on Southdowns, or any other breed of sheep.

I trust that this meeting may result in good in many ways. That it may be the means of warming up your countrymen to the greater necessity of at once largely increasing their sheep, and thus increase their meat and wool supply on one hand, and on the other increase the value of their holding by the excellent manure that sheep always leave behind them. That it may lead to the increase of the number of registered Southdowns imported. That it may be the means of bringing to the

the ears, with no sign of slug or dark pole; eyes large, bright and prominent; ears of medium size, covered with short wool; face full, not too long from eyes to nose, and of an even mouse color, not approaching black or speckled with white, under jaw light, neck wide at base, strong and good; shoulders well put in, the top level with the back; crest wide and deep, "thick through the heart," fore-flanks fully developed, ribs wide sprung and well ribbed up; back level, with wide and flat loin, the whole covered with firm, fine flesh, flanks deep and full; rump wide, long and well turned; tail large, and set on almost level with the thigh, full and well let down, with deep and wide twist, thus ensuring a good leg of mutton; legs mouse color and outside the body, the whole of which should be covered with a fine, close and even fleece down to the hocks and knees, and right up to the cheeks, with a full fore-top, but there should be no wool around the eyes or across the bridge of the nose. The skin should be of a delicate and bright pink, the carriage gentlemanly, and the walk that of the thoroughbred. Having then this type fixed in his mind, every ewe should be carefully picked, so as to come as near as possible to this standard, as well as to match one another. In selecting the ewes, the greatest possible care should be exercised to see that every point of detail is attended to, especially character and wool, which should be of the finest quality, and that the flesh should be firm and to the touch like India rubber, viz., have a firm but springy touch.

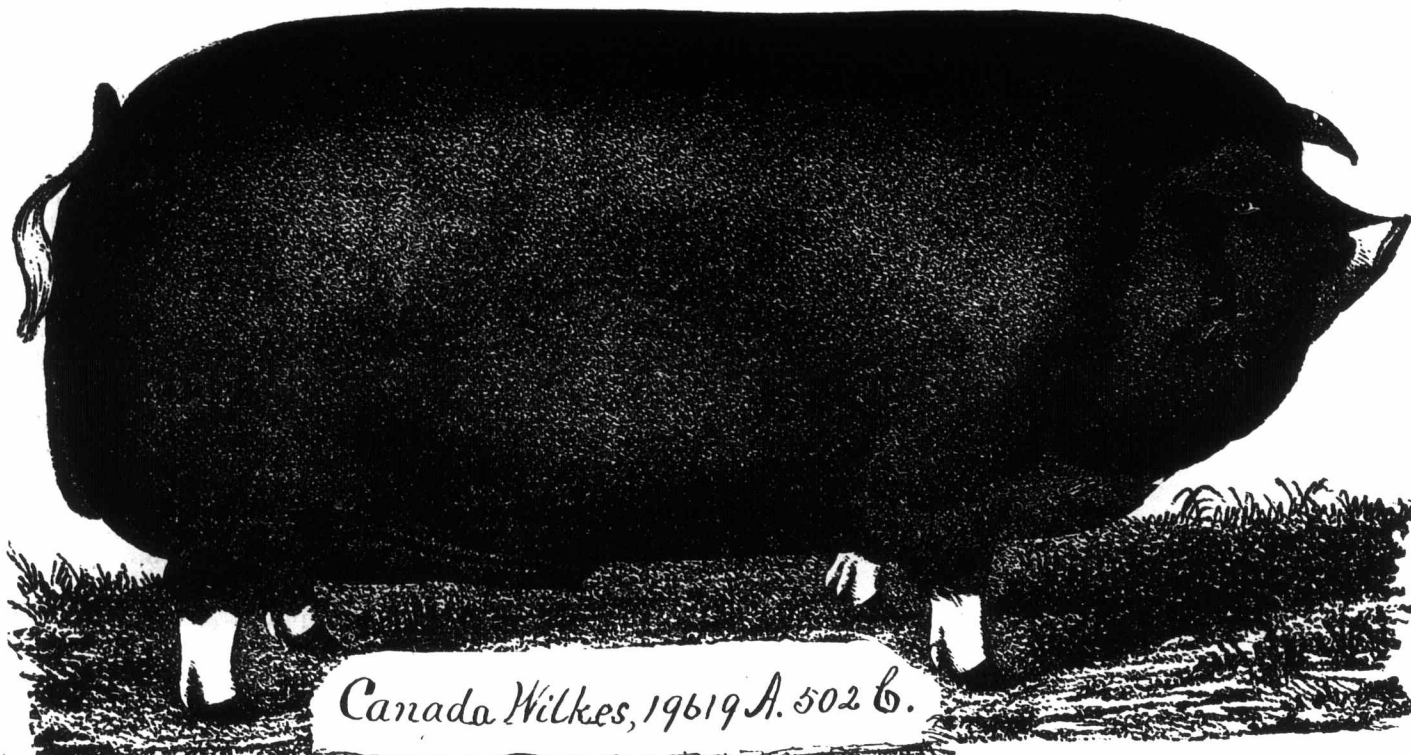
In selecting the rams for service in the flock, we must be, as it were, doubly cautious in doing it, for not only must the fixed type be carried in one's mind, but also the weak points of every sheep should be considered, so that what was lacking or deficient in the ewes should be in excess or prominent in the rams.

MATING.

Ewes should not have the rams turned to them entirely and completely. Mating should be done in either of the following ways:—1st. If the flock is intended for breeding rams and ewes chiefly for breeding purposes, the sires to be used should not be turned loose to the ewes, but teasers should be used, viz., rams with a sack tied round them and their breasts covered with red ochre, or paint. These will mark the ewes as they come in season; the individual ewes should

then be caught, say once a day, or morning and evening, and led to the ram, and after comparing each the most suitable sire should be put to her. 2nd. If the flock is to be used for producing sheep for killing, the ewes should be divided into suitable lots, each lot as nearly as possible matching, and a sire selected as being strong where the ewes are weak, and placed with them, but then only at night, thus leaving him all day for rest and food. After mating, all ewes should at once have put upon them a mark distinctive of the sire that served them, and this, together with their own number, should be duly recorded in a book kept for that purpose, to which the permanent numbers of their produce could be added when they are tattooed, thus making a complete record of their breeding at once.

As regards age at which ewes should be drafted, it is again necessary to divide the flock into two classes: First, breeding rams and ewes for breeding purposes; second, for market. In the first no ewe should be drafted that is breeding good lambs, either male or female, until she fails to breed, for if any particular ewes produce good lambs, they are far better kept than to put young ewes in, about which nothing is known or can be for at least twelve or fifteen months. While in the second division no ewe should be kept after she becomes full mouthed; she should either be sold after she produces her third lot of lambs to a feeder to have one more lamb, and then to be fattened with her lamb, or be fattened and sold to the butcher. When once a ewe gets full mouthed she has reached her prime, and will then, if properly fattened, fetch full value, whereas if kept longer she will depreciate in value. As regards sires, I would strongly recommend that in ram-breeding flocks no ram lamb be used. These are all very well, and can be used without harm in flocks that are breeding for killing, but in ram-breeding flocks they have



Canada Wilkes, 19619 A. 502 B.

notice of your farmers the necessity of keeping a better class of mutton sheep, for depend upon it, until better mutton is sold to the consumer than that I saw in some of the best shops of New York, and that which I have eaten elsewhere, you will never get your countrymen to eat mutton as they ought to do, and as they would do if only once they got a real liking for Southdown meat as we produce it in England, and as you can produce it here. I would here mention that although I am fully convinced that the Southdown sheep are the best sort in the world, and the most profitable ones to keep wherever Down sheep can be kept, I am at the same time certain that other breeds have good qualities, and that there is in both the States and Canada, as in England, room for all breeds. Therefore, I hope and trust that the sheep industry will flourish and increase very largely in every way.

I see by your agenda that my paper is entitled "Southdowns, their treatment, and why preferred to other breeds." Now, I take it that you are all fully aware of the history of the breed, of the great work done for them by Ellman, Jonas Webb, H. H. Penfold, H. P. Hart, Henry Webb, and in more recent times by Messrs. Ellis, Penfold, Pagham Harbor Co., Toop, Heasman, and others. That you are aware that the labors of these men by carefully noting the good points of various animals, and keeping records or what we now call registration of pedigrees, brought the Southdown sheep from being an animal narrow at both ends, with long neck and scrag, to the present symmetrical form in which they are now to be seen and found. Therefore, I will at once pass on to deal with the treatment or management of a Southdown flock.

The first thing a flock owner has to do is to decide upon the type of sheep he wants. A pure-bred registered Southdown sheep should be as near as possible as follows:—Head wide and broad between

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often caused great harm, and I do not believe that their use can be of good, for it certainly is against common sense to breed from immature animals. Therefore I consider, except for a very few ewes, ram lambs ought not to be used at all, and that all sires should be at least yearlings before they are used. In these views I am supported most strongly by Mr. H. Penfold, of Selsey, Chichester, England, one of our best Southdown breeders, who has often told me that the use of ram lambs has caused immense harm to flocks he knows of.

If the rams continue to get good stock, continue to use them so long as they are fit for service, which may be until they are eight, nine or ten years old.

When lambing time comes round, a large, well-sheltered pen should be made, or yard, into which all ewes that are near their time should be brought and carefully watched, and as soon as a ewe lambs, place her in a pen by herself with her lambs until they are three or four days old, then they can be allowed to run with their mothers all together.

Before letting them from their first home carefully mark them on their back or side with the ear number of their mother. This mark will last until the tails are taken off, at which time every ram or ewe lamb should be tattooed in the ear with their private number, which will last, if properly done, as long as they live.

[TO BE CONTINUED.]

Ideas Culled from Sheep Breeders' Annual Report, 1893.

(Continued from page 7.)

John Jackson, Abingdon, contends that "we could

COPY ENGLISH METHODS WITH PROFIT.

The flockmaster should settle on the type of sheep that suits his fancy, and at once aim to produce it, and with proper care the result will be as has been in England; and whether that fancy be for a long or short wool, a white or black face, I would repeat what has been so often said—to keep some one particular breed year after year, always selecting the best to breed from, and the result will be practically a pure-bred stock, notwithstanding the "whims" of those who talk about trouble after the first cross, and a flock running out if kept on the same farm too long. These are theories that have long ago exploded. Another English practice that would be profitable to follow is to castrate all the ram lambs in a mutton flock at an early age. There is a great loss in the country by neglecting this; it is not only when sold to the butcher, but too often some of these cross-bred lambs find their way into other flocks, are used to breed from, and thus cause still greater and almost irreparable loss.

If it would not pay us to fold our sheep on grass in our hot summer weather, it would pay to put more on our pasture, and supplement the pasture by sowing vetches, which are a most excellent food for sheep. This could be fed off by folding the sheep on the land, cutting and feeding in racks the same as in England—by putting them on in the evening, allowing them to remain till morning, then to run in some shady place with a supply of water for the rest of the day. A separate fold with a 'lamb creep' would be a good way to push the lambs forward for the butcher or the show ring. These vetches, if sown early, would be ready to cut about the 1st of July, a time when pasturage is often dry and scarce; and if well manured this land would make a good preparation for wheat, or for turnips or rape to be again fed off in the fall. By sowing the vetches at different times, as they do in England, they will approach a good crop of corn. It is also a most excellent food for sheep and lambs, especially when run through a cutting-box; it is very easily cut, even with a hand box, and when quite green enough can be taken in at a time to last a week by standing it on end to keep from heating. But it must all be cut before frost, and be allowed to partially cure, and then put inside on end; will make the best of feed for sheep right up till winter sets in.

Again, if we cannot feed our roots on the land as they do in England in the winter season, we can grow them (and should grow more of them) and feed them inside, where I believe they will do the sheep more good than if fed on the land as they are in England; for even there they are often more or less frozen, at other times in mud to the knees. Another thing I have noticed when travelling through England, that is temporary building at the corners of two or more fields for shade and shelter. This in many cases would pay in this country. Then there is the dipping to destroy ticks. This is regularly attended to in England, and it would pay every owner of sheep in this country to follow their example. Some neglect this, but I hope not any members of the Sheep Breeders' Association.

QUESTIONS AND ANSWERS.

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

Veterinary.

ANSWERED BY DR. MOLE, 260 ADELAIDE STREET, TORONTO.

MALNUTRITION AND MANGE.

W. C. WATSON:—"I have a pure-bred Holstein heifer, eight months old, and as soon as I put her into the stable she has gone down in flesh. I find that she has got lice on her, for on two or three places the hair has come off, leaving a large sore which itches very badly. Can you advise me what to do for her?"

Your heifer is suffering from chronic indigestion due to the food not being properly digested. Change the food entirely. Give bran, chopped grain, with a little flaxseed mash. Give a slight aperient: Eight ounces of epsom salts; two drachms of Barbadoes aloes; ginger, one ounce, in each drench, allowing four days to intervene between each administration. For the mange and lice, a bottle of Little's Disinfectant, used according to directions, is a most effectual remedy.

SCALY SKIN OR DANDRUFF.

READER:—"I have a black stallion, seven years old, which is affected very much with dandruff. I was advised to apply equal parts of kerosene oil and water, as this mixture was supposed to prevent dandruff from forming, but it failed in helping him any."

This disease is a non-contagious malady, and consists of an abundant secretion of brany scales which are constantly renewed. It is usually dependent on some fault in digestion and an imperfect secretion from the sebaceous glands of the skin, generally obstinate and difficult to cure; sometimes common among horned cattle. Vegetable food, such as carrots, turnips, etc., favor the development of the complaint. For treatment, give a dose of aperient medicine, six to eight drachms of aloes, to be followed by a dozen balls composed of pitch, 3 ounces; linseed meal, 8 ounces; mix and divide into 1 dozen balls; one every morning.

ANSWERED BY W. A. DUNBAR, V. S., WINNIPEG, THOROUGHPIN.

ALEX. MCLEAN, Turtle Lake, Man.:—"My young mare has a lump about half the size of a hen's egg, just in front and above the point of the hock; she does not go lame. What can I do to remove it?"

From the description given, I am of the opinion your mare has an enlarged Bursa, known as Thoroughpin.

For treatment, apply hot fomentation; rest, and the tincture of iodine painted over the enlargement twice a week, will bring about recovery.

EPITHELIAL TUMORS.

Z. LATIMER, Hamiota:—"A year-old calf has lumps that are all round its head and neck, look like large warts, they get rubbed off and become deep ugly sores with bad smell; otherwise calf is fat and doing well. Please prescribe and say if it is contagious?"

The lumps are epithelial tumors. Cut them off close to the skin and apply strong acetic acid to the roots once or twice a week, until they are eradicated.

Legal.

PROVING A WILL.

SUBSCRIBER:—"1. About how much are the regular and usual costs of proving a will in the Surrogate Court where the estate passing under it is say \$12,000 real estate, and \$2,000 personal estate? 2. What is the object of the law in requiring a will to be proved in this way?"

1. The fees payable to the Crown, etc., in such a case would be about \$20, and the costs of your solicitor, assuming it was a straight, regular case without extra work being required, would be about \$20—total, \$40. 2. It is most important that a competent authority such as the Surrogate Court should examine into the will before the executors have power to act in a legal way under it, for otherwise people would not be satisfied that the will in question was the last will of the testator, nor, consequently, whether the executor named in it is the proper executor, etc., and the law requires that there should be some authorized person by whom debts owing by the deceased can be collected, and to whom debts owing to the deceased can be safely paid, etc.

Miscellaneous.

TRANSPLANTING ONIONS.

"Subscriber" asks if it will be safe to transplant onion seedlings which have been grown in a hot-bed before all danger of frost is past. Onions are among our hardiest vegetables, as is shown by the fact that they are frequently sown in the fall, when they will start first thing in the spring. If subscriber will harden his seedlings off by removing the frames gradually, there will be no danger of injury from frost.

APIARY.

Spring Management of Bees.

BY JOHN MYERS, STRATFORD, ONT.

As the time of year is near when we may expect the cold winter winds, with its frost and snow, to give way to the more balmy breezes of spring, beekeepers should lay out their plans as to how they are going to manage their bees during the spring so as to get them in readiness for the honey flow which will surely come later on. If the bees have been wintered on their summer stands, care should be taken to see that the packing over them has not become damp. It is surprising the amount of dampness that will sometimes gather in the covering over the cluster of bees, especially if the packing has been pressed down close so as not to allow the moisture to pass off. If any of the colonies are found to be in this state, it is better to remove the packing at once and replace by some that is fresh and dry. Damp packing at this time of the year is very detrimental to the health and prosperity of the inmates of the hive. After having made the packing all right, I go over all the hives and see that the entrances are all clear of dead bees. I have known colonies to be fastened in by the accumulation of dead bees at the entrances until they were nearly all dead from exhaustion, caused by their attempts to reach the outside of the hive. Bees become very excited when they are shut in and cannot reach the open air; hence the necessity of covering the tops of hives with wire cloths when shipping colonies of bees. I have an instrument which I like very much for clearing the entrances with. It is made of $\frac{1}{4}$ -inch round iron, 18 inches long, about $\frac{3}{4}$ inches of one end being bent at right angles and 2 inches of the other end bent in the opposite direction; the short bend makes a convenient handle, so I can hold it in any position I like. The end with the longest bend is to be inserted in the entrance of hives to rake out the dead bees. This instrument is also very convenient for cleaning the dead bees from the hives in the cellar during winter. If you bend the short end with a sort of curve, nearly making an eye, you will find this very handy to hang it up by. Now drive a good stout nail in some part of the honey house or somewhere around the bee yard to hang the instrument on, and every time you get done using it go and hang it on this nail and you will then know exactly where to find it when you want to use it. Mine hangs on this nail the whole year; the nail is driven into the board fence that surrounds my bee yard. At any time when I am going through the apiary and see any of the entrances that need a little cleaning out, I always know where to find my scraper. I am not very particular about cleaning all the dead bees out of the hives, but just enough so the bees can get out and in freely, and they will soon clean out the remaining ones unless the colony is weak. Having seen that the bees are dry and warm, and that they have free access to and from the interior of the hives, after they have had a few cleansing flights I examine the inside of each hive, taking out the combs and looking to see if there are any eggs or broods. If I see any eggs I am sure the queen is all right and I don't bother looking for her. But if no brood or eggs are to be seen I then look to see if I can find the queen, as I want to be sure she is all right. After having satisfied myself about the queen, I then put back as many combs as I think the bees will be able to cover, selecting those that have the most honey and any that may have brood or eggs. In putting the combs back I place them to the side of the hive that is likely to have the most sun strike it. I then put in a division board, replace the quilt, put on a feeder and pack the top the same as I would for winter. I don't touch this hive again (except to fill the feeder) until I see the bees beginning to hang out of the entrance, which tells me that they are needing more room inside. I then remove the packing and fill the empty space with the combs I took out. You will see the above is all on the management of bees that have been wintered out of doors. Colonies that have been wintered in the cellar will not require much attention, except to see that the entrances are kept clear, so that they do not get too warm and thus become restless and commence flying out on the cellar floor. In such a case I open the cellar door at night and close it in the morning. This plan generally keeps them quiet. I do not set the bees out of cellar until the weather is somewhat settled and warm. I have always found it a good plan to leave them in until they can gather pollen from the soft maple. I would as soon think of going to bed and sleeping without bed-clothes after the maples were in bloom as to think of putting my bees out of the warm cellar at this time and leaving them unpacked. We are sure to get cold and frosty weather after this date, and we should always pack our bees almost as well as for winter after taking them from the cellar. After looking for the queen and arranging the combs as given above and packing them snugly with feeder on top, we are ready to work them so as to get our hives overflowing with bees by the time white clover comes into bloom. As my next will be spring feeding and feeders, also a continuation of spring management, we will leave the bees where they are for the present and imagine a cold storm has come over them. But never mind, they are all snugly packed and it will not hurt them.

POULTRY.

Our Poultry Essays.

We are much pleased to see the interest which our young readers take in the poultry question, as was shown by the large number of essays written in response to Mr. Stevenson's offer of a setting of Wyandotte eggs for the best essay on "The Management of Fowls on the Farm," to be written by a young man or woman under twenty years of age. We were deeply gratified to see how heartily the boys and girls entered into the contest, for a number of good essays were received from children no more than thirteen years of age. The youngest essayist was Francis Reekie, Lyleton P.O., Manitoba, aged seven; while the next in order of age were his sister and brother, aged respectively nine and eleven.

In view of the large number of competitors, Mr. Stevenson has generously offered to give two prizes, one for the boys and the other for the girls. Now, as all could not be first, we cannot fail to disappoint some, but we would say to all such, do not be discouraged, but remember the old adage, "Try, Try Again," and hope for better success next time. Among the girls, we have awarded the first prize to Nora B. Drader, Watford, Ont., who is only fifteen years of age, and hope that in her next essay she will not have to say that Wyandottes "are said to be," but on the contrary can say from practical experience what their good qualities are. The first prize for boys goes to B. H. Garner, of Maxville.

Owing to our having just published a very full poultry number, in which there were three essays on Poultry Raising which covered the ground very thoroughly, we have decided to withhold the publication of the prize essays until a later date. If the successful essayists will write Mr. W. J. Stevenson, Oshawa, Ont., how and where they want the eggs shipped, he will send them out at once.

Poultry on the Farm.

BY MRS. IDA E. TILSON.

A writer in Chambers' Journal says a traveller met, in a remote part of Great Britain, an invalid, who, after fruitlessly trying many doctors, had consulted a so-called wizard. The latter gave a charm which she already felt to be working in her. When the traveller learned it was a new-laid carefully cooked egg every morning, he did not wonder at the wizard's reputation and success.

Eggs, excellent for eating, may not contain strong embryos nor even be fertile, and *vice versa*, those with good vitality for hatching can be so in spite of disagreeable flavors. A shipper in an adjoining county told me grasshoppers were thick enough there one season that hens' eggs had an unpleasant taste and almost blood-red yolks. An acquaintance actually could not eat the eggs of a flock allowed to run over a patch of onions where the small ones lay ungathered. But this bulb, two or three times a week as a liver medicine, is useful, and I continue it right on thus with my little chicks. While preparing onions I have tried holding a piece of bread between my lips, a rather awkward way of arresting the irritating exhalation. My preference is to chop onions outdoors, especially if a little breeze scatters the odor. The helpful suggestion of Mrs. Buckbee, that broken crockery be pounded, covered by a paper as protection for eyes, I find completely successful. Soon, or a little before, we shall all be handling so many broody hens, it may be well we should watch their beaks and have a care for our eyesight. My birds are so tame I get careless. One which was disturbed this morning caught me by my nose, but as she did not try to injure me, I still look upon her action as a joke. After all my directions to carry sitters and other hens under the arm, here comes along a writer in the Germantown Telegraph, who says that way rumples feathers, and hens will not have apoplexy held by the feet, heads down. But why do those thus held squall and make frantic efforts to right themselves? I have occasionally seen a strong fowl whirl herself around upright. As a Scotchman said, "I'll gie up if ye convince me, but ye'll no convince me." My biddies coo sweetly as I carry them in my humane way, and though I never noticed any ruffled plumage, would prefer it to ruffled feelings. Before cleaning my houses I first gently drive the inhabitants out under their sheds. The other day a young man secured for the job was so prompt that ere I could speak to my hens, he had waved his arms like a windmill and sent several out into deep mud, whence he waded and brought them back squalling. One poor creature has been snuffy ever since. As I met him and took each, her cries ceased at once. "I do believe your hens know you," was his surprised comment.

Though crop bound and other slightly diseased fowls sometimes lay a few poor eggs, none but healthy fowls long continue laying. The eggs of mature hens are better for hatching than those from immature pullets. If the latter are used every year, degeneracy must finally come, but the eggs of fat old hens turn out poorly, as I know by trial. After considerable testing, I can see no difference in value between the product of active, prolific hens, and that of strong, precocious pullets. Many things in this world must be judged according to individuals instead of classes. Persistency and precocity are the two things we are seeking in layers. Unless, therefore, you learn the history and quality of your settings, you do not know how small your success really will be, while you are bemoaning how great it may be. Something like a woman who said to the dealer, "There were chick-

ens in those eggs I got last;" and he replied, "As you didn't order spring chickens, ma'am, we will only charge for eggs." I have long been looking among my possessions for a very complete table of egg weights, made by a French savant, and lately found a fragment of it. He rates Plymouth Rock eggs as 27½ ounces of the dozen, about what we found them weighing. Hamburg ones are given as twelve ounces to the dozen. I have no such at hand with which to verify his weight, but think Hamburg pullet eggs would fall much below a pound to the dozen. Pullet eggs of every kind, though smaller than hen's eggs, and producing smaller chicks, apparently give lively ones, as entire small breeds do, in contrast with their larger kin. Keep no superfluous fowls, neither pullets nor roosters, as they are eating without making returns, and are only a torment and waste. One Christmas, an acquaintance, intending me a kindness, put a fine, live Poland rooster within a neat cage on our church tree. A gloom was cast over all in the secret by Sir Top Knot refusing to crow, as had been expected the lights and music would cause him. Not discerning his sex, I said at the presentation that when eggs were 18 cents a dozen no such gift should be despised, and was told to look at his sickle feathers protruding, and that it was not in his nature to be a layer. I shall set my hens as usual on dry, warm sawdust or hay nests. Turf, sprinkling and all that, I know by experience to be fit only for summer's torrid heat. Layers will be kept away from each sitter with my usual device of a wide shingle held before the nest by a brick, a shingle so wide it will push out but not in. I have seen recommended a hinged door opening out. Shingles, however, are cheaper. Discarding all flat or ill-shaped eggs, if any afterwards break, I shall wipe off in warm water only those most soiled and remove cracked ones, unless within a day or two of hatching. I once saved a choice egg at such a stage by court-plaster, but have had no success earlier, when eggs must undergo more wear and tear. Though I have tenderly and successfully helped many a chick out of shell, as an experiment, I do not find a large percentage of such making thrifty growth. I like prompt, wide-awake, self-helpful little creatures. The food for laying hens and growing chicks is very similar, so our winter's experience, if we had it, should have prepared us for chicken raising.

Poultry on the Farm.

[An interesting article from a farmer. Furnished us by Mr. A. G. Gilbert, Poultry Department, Central Experimental Farm, Ottawa.]

As the production of poultry is attracting so much attention at the present time, and the Governments of the Dominion and Province of Ontario are doing good work in trying to encourage the farmer to pay more attention to poultry raising and egg production, I thought I would give a little of my experience with the Barred Plymouth Rocks. There is no doubt but poultry raising is one of the neglected industries on the farm to-day. If fowls were better bred and better cared for, the results would soon be seen. The care of poultry in most cases, where they are allowed to roost in open sheds and cold barns, only goes to show the inhumanity of man. To produce eggs in winter and good chicks in summer should be the farmer's aim. After twenty years' experience with a number of breeds, I have no hesitation in saying that the Plymouth Rock is the farmer's fowl. A Plymouth Rock cockerel will bring as much money at three months as the scrub fowl of the farm will at six months, and they are always ready for market, as they take on fat easily.

As a winter layer from December 1st to March 1st, Plymouth Rocks cannot be surpassed by any breed, if properly fed and housed. A warm, well-ventilated house is the first thing necessary for the production of eggs in winter. The food and the way they get it is an important consideration. Stuffing means certain failure. The food that will give the best results with White Leghorns, in my opinion would be quite unfit for Plymouth Rocks. I find I get the best results by feeding the best quality of oats with all the cabbage they can eat; sixteen hens will eat a medium head every two days. I give meat twice a week, cooked beef liver and plenty of grit (oyster shells and bone.) Egg shells are the best of all. I collect all the egg shells during the summer, dry them and grind them up for winter use. I never have any trouble with egg-eating or feather-eating hens, nor with sickness of any kind. I have not had a case of roup among my fowl for eight years. My hens lay the winter through. I know of nothing on the farm that will produce the same profit for the money invested as poultry raising. A great many of our farmers, I am glad to see, begin to recognize this fact. I kept over twenty-two Plymouth Rock cockerels last winter, which I sold to farmers at \$2.00 each. Five years ago, if I asked the same men that amount for a cockerel, they would leave me in a hurry. Everything goes to show there is steady improvement going on in poultry raising. ALEX. STEWART.

Erratum.

In the report of the Poultry Exhibition, a slight error was made in giving the list of exhibitors, for where it is stated that J. Bell, Amber, showed turkeys and geese, it should have read W. J. Bell, Angus. It was also Mr. W. J. Bell, and not Mr. J. Bell, who brought forward the motion favoring the increase of prizes for geese and turkeys, which was passed unanimously.

FARM.

Remedies for Smut.

In this article we do not intend to go into a long description or life history of the smut plant. This may be obtained from works on the subject, viz., the bulletins which have been issued by the Government stations, or by referring to former issues of the FARMER'S ADVOCATE, and especially those of January, '91, March, '92 or April, '93.

What we will try to do is to show the success which has attended the use of the various remedies for the extermination of this fungus disease, and to impress upon all farmers the need of united action in order to reduce the vast loss amounting to millions annually, and which, by a very small expenditure of time, might be almost entirely prevented.

Smut not only reduces the yield of grain, but makes an unsaleable article of that which is left. In some of the neighboring states this pest has reduced the yield from 50 to 70 per cent., while the remaining grain was about worthless for sale. Very few farmers realize the actual amount of loss due to the prevalence of smut. Just what the exact amount of loss in Canada is will be very hard to estimate, as so far no reliable data can be obtained. Various authorities estimate the loss at from 4 to 25 per cent. of the total crop. The members of the Winnipeg Grain Exchange, after handling the millions of bushels which pass annually through this gateway of the west, in a circular express the belief that the loss through smut is greater than that from frost.

REMEDIES.

All the United States Experimental Farms have given the smut question special attention of late, while our own Experimental Farm authorities have been diligent in the same direction. Experiments in these lines all go to show in the first place that the spores of the smut plant are sown with the grain, and in the next that it is possible to kill these spores without injuring the germinating power or the vitality of the grain to any marked extent.

The substances which have been recommended for use as remedies are:—Sulphate of iron, brine, lime water, sulphate of copper or bluestone, agricultural bluestone, a solution of potash and the Jansen hot water system.

Thorough tests which have been made at the different experimental stations all show that the treatment by means of sulphate of copper has proved the most successful method of combating this pest, and also that it is not necessary to soak the grain in the solution, but merely to sprinkle it, and then stir it so that it is thoroughly moistened with the sulphate of copper. The testimony of our most practical farmers have also endorsed this method, as will be seen later on.

In Indiana the Jansen method of treatment is extensively used. The seed is immersed in water at a temperature of 135 degrees for five minutes. In this treatment it is well to have two tubs of water, one at a little lower temperature than the other, so that the bags of grain will be warmed through before being placed in the hot water. This method, though very successful, has never found favor in the eyes of Canadian farmers.

At the Brandon Experimental Farm the test for smut treatment was very significant. Four plots, each one-ninth of an acre, were treated—the land itself was clean, a great thing in such experiments. One plot was sown with smutty seed untouched in any way; the seed on the next was treated with one pound bluestone dissolved in a pail of hot water and mixed with ten bushels of seed; the next was steeped in salt brine, strong enough to float an egg for a few minutes; and the last lot of seed was treated by Jansen's method, with water at 135 degrees. Handfuls were taken here and there all over the plots till about 300 ears were got from each, and from these 200 of each sort were carefully examined. Of the untreated sort 6½ per cent. of the ears were found smutty. Of the bluestoned and salted not one head was affected; by the hot water treatment 1 per cent. was lost. This is a very clear proof of the value of preventive treatment. The crop from the untreated seed looked badly smutted, and was fully 10 cents a bushel worse than the other; besides this the risk of the land it grew on tainting the next grain crop should be considered.

The next year experiments were made at the same farm with larger plots, which resulted in a saving of a much greater percentage of grain. Mr. Bedford sums up the conclusions arrived at from his experiments as follows:—

1. Bearing in mind the immense losses sustained through smut, it is necessary for me to point out the importance of the subject, as the results of the last season's experiments emphasize this matter. It appears to me almost criminal for a person to neglect so simple, inexpensive and certain a remedy.
2. Sulphate of copper is decidedly the best preventative used, and is remarkably uniform in its action. One pound to ten bushels is as effective as twice that amount.
3. That lime used with sulphate of copper for the means of lessening the injury to the germination of the seed is of no use for this purpose. The tedious and often inconvenient method of soaking the seed in the bluestone liquid has been found quite unnecessary. A liquid composed of one pound of bluestone dissolved in one to one and

a-half pails of water, and simply sprinkled on the seed wheat, is as efficacious, and permits of the seed being drilled before drying. The only care necessary is that the grain be constantly stirred while the liquid is being applied, so that all the kernels are moistened.

Mr. Mackay, of the Indian Head Experimental Farm, reports an experiment in which the yield of wheat was increased from nineteen bushels of unsaleable wheat to twenty-five bushels of good wheat by the use of the bluestone. In a letter he says: "There is no question as to the efficacy of the copper sulphate treatment, and the small percentage of injury to the vitality of the grain is not worth considering, when compared with the crop of good, clean grain reaped. Wheat, oats and barley may be treated by sprinkling with a solution of one pound of sulphate of copper in a pailful of hot water. This amount will do for ten bushels. The grain should be well stirred by shovelling." He is not in favor of the Jansen method of hot water treatment, for he says: "No use in recommending this treatment for the N. W. T.; water is too scarce and the farmers would not take the trouble."

The report of Prof. Shutt gives the results of experiments conducted for the past three years, which go to show that there is a certain loss of germinating power and lessening of the vitality of the

these theories have succeeded when applied by practical men. We give the following as evidence:

GEORGE STEEL, Glenboro:—"Since we started to bluestone, some six years ago, we have had no trouble with smut."

JAS. A. MULLEN, Cypress River:—"I bluestoned it well, and then limed it to dry it. No smut to speak of."

J. DALE, Grund, has arrived at the conclusion that bluestone is the only safe remedy against smut.

JOHN S. THOMPSON, Waskada:—"All in this section who did not bluestone are bad with smut."

J. W. PARKER, Blythfield:—"We have never had smut here, as for twenty years I and nearly all my neighbors have used bluestone. It is a perfect and reliable preventative; never saw it make any difference in germination."

ALEX. T. THOMPSON, Douglas:—"1891 was noted for smutty wheat, very little bluestone used; 1892 nearly all of us used bluestone, results, very little smut. Farmers can draw their own conclusions."

H. NICHOL, Brandon:—"From my experience and observation I am fully convinced that if all the wheat sown here each year was carefully dressed with bluestone the smut trouble would vanish."

R. S. MCBETH, Oak Lake:—"Where wheat was treated with bluestone at the rate of one pound to seven or eight bushels of grain it was free or nearly so from smut."

J. L. RIDOUT, Solsgrith:—"Many farmers in this district used bluestone with very satisfactory results."

THOS. COPELAND, Saskatoon, Sask.:—"No smut, nearly all farmers took the precaution to use bluestone in the proportion of one pound to eight bushels wheat."

G. M. YOEMANS, Alexander:—"I found on looking into the matter that all the best farmers on the Portage Plain used bluestone every year, and found it necessary to do so, although bluestone was 25 to 30 cents per pound, and not always to be had at that. As my wheat was very bad with smut I used it

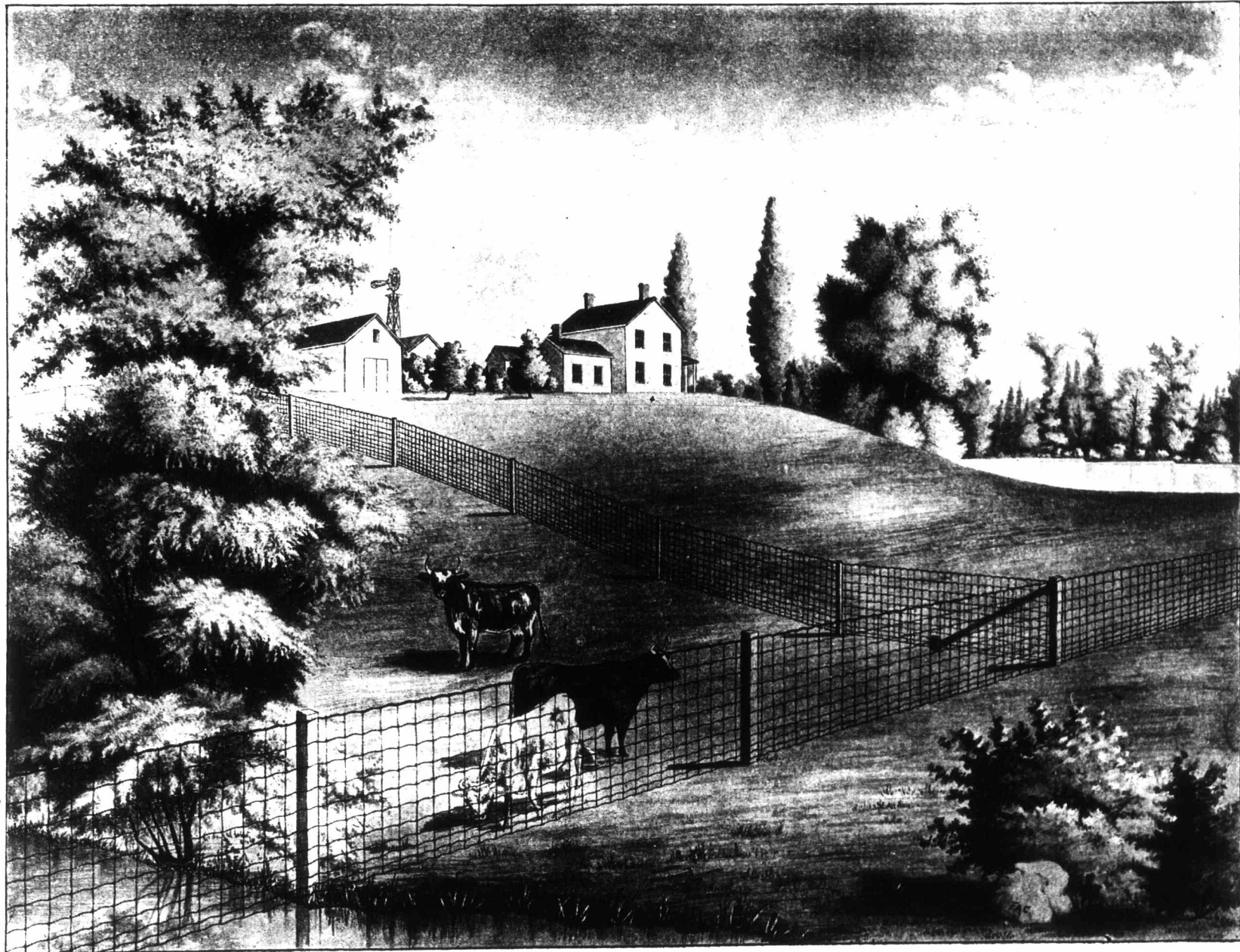
Page Fence.

The accompanying handsome illustration gives a very good idea of the neat appearance presented by the famous Page Fence. This fence is growing very rapidly in popularity. It was invented about nine years ago, by J. Wallace Page, in the state of Michigan. The first fence made was woven by hand. To-day this fence is being manufactured at the rate of twenty miles per day.

Whenever any of our readers have occasion to visit Windsor, Detroit, or Walkerville, we would advise them to call at the Page Fence factory, and see the interesting process of weaving this device by the splendid machinery used.

Fertilizers.

In my letter on this subject in your issue of Jan. 15th, I expressed my intention of giving your readers a few notes on our experience last year with artificial fertilizers. I am free to confess that up to last year I was somewhat of an unbeliever in artificial fertilizers for this soil and climate, more especially as they seemed to me to be too expensive for the ordinary farmer, who as a general thing needs a quick return for what capital he may invest; but when last spring I found myself with a large amount of land to handle, most of which had



A CANADIAN FARM SCENE.

grain due to the effects of the dressing of the bluestone, and that the effect is less in agricultural bluestone than in sulphate of copper. The experiments would seem to show that the deterioration of the vitality was to a certain degree measured by the length of time the seed was allowed to dry after the sprinkling with the copper solutions. In brief, the conclusions summed up are as follows:

1. That sulphate of iron is not efficacious in destroying smut spores.
2. That sulphate of copper treatment is the most efficacious of all in preventing the development of smut.
3. That agricultural bluestone occupies a place between these two salts in reducing the amount of smut.
4. That the subsequent immersion in lime water of the seed treated with copper sulphate and agricultural bluestone lessens the effect of these salts as smut preventatives, and this treatment also lessens the injury to the germinating power and vitality of the grain, but it is doubtful if it is of sufficient good to pay for the trouble.

There is less loss of vitality when the sulphate of copper is sprinkled on the grain than when it is dipped in the solution.

We will here leave the experiments which have been conducted by scientific men, and see how

stronger than usual, one pound to eight bushels of wheat; it cleansed my wheat the first season. In my opinion there can be no question about bluestone being convenient to apply, and thoroughly effective in cleansing wheat of smut if applied as follows, which is the usual way with many good Manitoba farmers, myself included: Special pains are taken to clean out if possible every smut ball with the fanning mill, for no treatment will kill all the spores in an unbroken smut ball. Then a few days before sowing I dissolve one pound of bluestone in three or four quarts of boiling water to every eight bushels of wheat. Spread the seed thinly on the floor, and sprinkle on the solution with an old broom, while an assistant shovels it over till the solution is all taken up and every grain is wet. This small quantity of water will perfectly coat every part of every grain of wheat, and will not swell it or increase the bulk perceptibly. Still I find that it makes it run more slowly through the seeder."

H. NEWMARCH, Strathewen:—"The only successful way of growing grain is to treat with bluestone."

J. H. McCLURE, Balmoral:—"I have never been troubled with smut, as I have used bluestone for a number of years."

E. J. DARROCH, Minnedosa:—"Where wheat has been properly treated with bluestone smut has hurt it very little, but when not bluestoned it is, as a general thing, badly damaged."

W. DRUMMOND, Birtle:—"Used bluestone on all the wheat at the rate of one pound bluestone to seven bushels of seed, dissolved in hot water, and sprinkled on wheat spread out in barn floor, and kept turned until all damped. I think the bluestone a sure preventative."

H. O. AYEARST, De Clare, bluestones his wheat, and is never troubled with smut.

W. A. DOYLE, Baulah, treated his grain in usual manner with bluestone, with the result that he is unable to find one grain of smut in crop.

been cut as meadow for twelve or thirteen consecutive years, during which time it had never known what a coat of manure was, I began to consider the question of fertilizers a little more seriously. In 1892, previous to my coming to the farm, besides what land had been manured, some twenty acres of oats were grown on sod, without manure, and in the fall of the same year I had, in addition to this oat stubble, plowed some fifty acres of the old grass land referred to. My output of farmyard manure amounted to some 700 loads, but as I intended putting in about 35 acres of corn and roots, I knew that I should have very little of it to spare for my grain, and as I wished to plow about forty acres more old sod for oats, and all my neighbors assured me that the land would not grow any crop without a good dressing of manure, I was in somewhat of a quandary. However, I made up my mind that my best course to pursue was to make use of some artificial fertilizer, and by supplementing it with clover on the one hand, and by feeding lambs off on the ground on the other, to endeavor to bring up the fertility of such land as I could not spare manure for. Having come to this conclusion, my next question was, what fertilizer shall I use, and here I had recourse to what is sometimes contemptuously termed book farming, for taking down from the shelf my copy of "Johnston & Cameron's

Agricultural Chemistry and Geology," I began a diligent study of "Artificial Manures," and the conclusion I came to was that as I had a means of procuring nitrogen by my clover crop, the best manure for me to procure would be one rich in potash and phosphoric acid, and this I decided I could obtain most cheaply in some form of mineral phosphates; animal manures, with the exception of bones, treated with sulphuric acid, to form a pure bone superphosphate, I decided not to use, as they as a general thing vary very much in quality and also decompose very slowly. A few inquiries showed me that the only manufacturers of purely mineral fertilizers in Canada were the Nicholls Chemical Co., of Capelton, P. Q., who, in addition to their sulphuric acid works, have a large establishment at Capelton, where they manufacture large quantities of fertilizers from what is known as *Apatite* (Canadian Rock Phosphate) treated with sulphuric acid alone for the pure superphosphates, and combined with a proportion of both sulphate of ammonia and muriate of potash for what are termed complete fertilizers. Procuring a catalogue, I read it over carefully and then wrote for prices. Now, as I was entirely ignorant as far as practical knowledge of these Canadian mineral fertilizers go, and as I was in the position of a man who has over 100 acres to fertilize, which his sympathizing neighbors, somewhat after the manner of Job's comforters, assure him will not grow buckwheat or even the proverbial white beans, unless stimulated by the application of at least fifteen or twenty loads of stable manure to the acre, I concluded that the best thing I could do would be to consult a few of the farmers whom I could find had tried these manures, and then selecting whichever brand I found most popular and use it chiefly. I soon obtained a list of parties who had purchased from the local agent, and selecting a few men whom I knew to be particularly cautious about experimenting with anything that cost money, I began my inquiries, and as this is not supposed to be a free advertisement for any fertilizer company, but simply one man's experience, given in the hope of benefitting others, I will say no more about the answers I got than that they were in every case satisfactory, and that for a general fertilizer I found the Victor brand in most request. A glance back at the catalogue showed me the following guaranteed analysis for this brand:

Ammonia (N. H ₃)	2 to 3 per cent.
Available phosphoric acid (P ₂ O ₅)	7 to 9 per cent.
Potash (K ₂ O)	3 to 4 per cent.

This is apparently a complete plant food, containing, however, a very large amount of phosphoric acid and potash in proportion to the amount of nitrogen in the form of ammonia, a fact, however, which made it all the more suitable for my purpose, as I intended sowing clover seed on most of the land along with the oat crop, and clover being a plant that abstracts a large amount of its nitrogen from the atmosphere, I supposed it, as I said before, more necessary to secure a supply of potash and phosphoric acid than of nitrogen, my ideas being strengthened by my finding in the work I have referred to on agricultural chemistry a statement that old meadow hay removes a very large proportion of both potash and phosphoric acid from the soil. Whether I was right in these deductions, I leave it to more experienced heads than mine to say. I am simply giving my reasons as I worked them out for myself, and shall be only too glad to be corrected if wrong. However, *revenue nos moultis*, I invested in a supply of this brand, ordering also a couple of tons of soluble bone phosphate for use on turnips, as I wished to test the two side by side. J. Y. O.

(TO BE CONTINUED.)

Errata.

Two typographical errors occurred in the article entitled "Farmers' Institutes in Ontario and Wisconsin Compared," by R. Gibson, which was published on page 81 of our March 1st issue.

The sixth line should read, "think in twenty-seven languages like Prof. Lee, will be more sought after." The seventh line should read, "For every word spoken is vain," etc.

DAIRY.

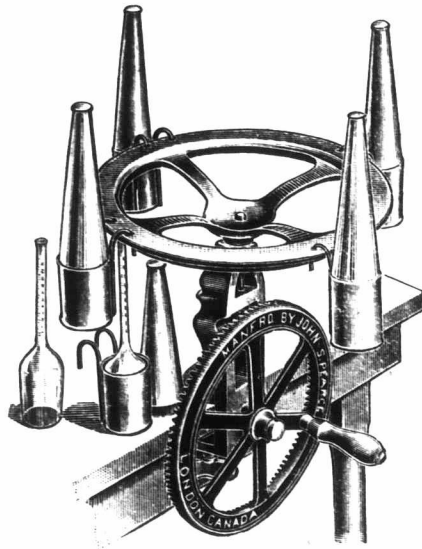
Inspector Millar's Programme for April and May.

Instead of having instruction given in a few factories in making early spring cheese, as carried out last year, the Dairymen's Association of Western Ontario have arranged for Inspector Millar to give instruction to cheesemakers for two or three days at a number of factories, covering the whole of Western Ontario. The list of factories selected and dates fixed are as follows:

Brownsville	April 10 to 11
Mapleton	" 16 to 21
Nilestown	" 23 to 25
West Oxford	" 26 to 28
Victoria	" 1 and 2
Attercliffe Station	" 3 to 5
North Brant	" 7 to 9
Burr	" 10 to 12
Batchelor's (Brimo)	" 14 and 15
Leitch's (Mt. Carmel)	" 16 and 17
Apsin	" 18 and 19
Dutton	" 21 to 23
Harrow	" 24 and 25
Huron (near Ripley)	" 28 and 29
Dunkeld	" 30 and 31
Harriston	June 1 and 2
Flesherton	" 1 and 2
Avening	" 6 and 7
Wyebridge	" 8 and 9

A Babcock Tester for the Farm.

With the introduction of the test system in cheese factories, as well as in creameries, the farmer is bound to take into account both the quality and the quantity of milk given by his herd. To sort out the worthless ones from a dairy standpoint, he must not only weigh their milk separately from time to time, but test it for butterfat. Then multiply the pounds of milk by the per cent. of butterfat, and the product will be the total number of pounds of fat. Retain the cows yielding the largest number of pounds of fat in the season. They will be the money-makers. Furthermore, they will be the cows to raise heifers from. As the Tester is going to spread, patrons should begin sorting out at once. Most farmers have scales, but what they lack is a small Babcock Test at a reasonable price. Up to this time the average dairyman has considered Testers too high in price. Ever on the alert to furnish the very latest appliances that the requirements of the times demand, John S. Pearce & Co., of London, have devised a handy four-bottle tester expressly for farmers' use, an illustration of which we give.



It is made to fasten with a screw on a table or bench while in use, and is called the "Farmer's Favorite Babcock Milk Tester." In order to enable any one to obtain one of these Testers easily and cheaply, we have arranged to offer them as premiums. One will be given for a club of eight new subscribers to the FARMER'S ADVOCATE. The names must be accompanied by \$8.00 in cash. Freight or express must be paid by the receiver, but this will be only a trifle. The cash price of this Tester is \$6. As arrangements have been made to make dairying especially prominent in the ADVOCATE, there should be no trouble in securing eight new subscribers in any good dairy district.

Dairymen's Convention at Huntingdon, P. Q.

BY OUR OWN CORRESPONDENT.

The annual meeting of the Huntingdon Dairymen's Association, which, by the way, is the oldest association of its kind in the Eastern Townships, was held in the village of Huntingdon on February 16th. The meeting was called to order at 11 a. m. by the President, Robt. Ness, Esq., Howick, P. Q., a very large number of members being present notwithstanding the fact that the weather was rough and the roads bad. In his opening address, which was practical and to the point, the President touched on the benefit of winter dairying, for the proper carrying out of which he urged the necessity of good stables and good feeding, more especially pointing out the advantage of having water in the stables and not turning the cattle out at all.

The Secretary, Mr. Wm. Walker, gave a satisfactory statement of the finances of the society, after which letters of regret for their non-attendance were read from the Hon. John McIntosh, Prof. Barnard, Prof. Robertson, and Mr. S. Fisher. Mr. Walker stated that although this was the first year that they had offered prizes for butter and ensilage, there were no less than 27 entries of butter and 12 of ensilage.

Mr. D. M. MacPherson, of Lancaster, Ont., congratulated the Association on the success achieved by the Province at Chicago, urging further efforts towards keeping up the present standard of excellence and at the same time increasing the output. In conclusion he pointed out that the income per acre from the farms of Canada is decreasing, while living expenses are increasing.

Prof. Dean, of the Guelph Agricultural College, gave the meeting some very valuable hints founded on experience gained during the past year, among which the necessity for providing green food during the hot, dry months of the summer and the fact that there is still room for improvement, more especially in butter-making, were especially touched on.

Mr. Thos. Dillon, of the Ottawa Experimental Farm, who has for two years had charge of the Government factories in Prince Edward Island, gave a short account of dairying on the Island, in which he paid a tribute to the intelligence of the Islanders; after which the meeting adjourned till 2 p. m., after appointing Messrs. Dean and Dillon judges on butter, and Messrs. Tylee and Macpherson judges on ensilage. The afternoon session was opened by the election of directors, after which the

report of the judges on ensilage was made, in which they declared the samples submitted for competition to be of uncommon excellence, the prizes being awarded as follows:—First, Joseph Gamble; second, Arthur W. Rowe; third, Thos. Drysdale; a special being awarded to R. Robertson for his exhibit of ensilage made from the Robertson mixture of corn, beans and sunflowers. Mr. Tylee, in making this report, touched on the special need for silos by small farmers, and also stated that he considered three-quarters of an inch quite long enough to cut ensilage, and one-half inch better still.

The Hon. Louis Beaubien, Minister of Agriculture for the Province, gave a brief address, in which he stated that two prominent bankers in Montreal had told him that the Province of Quebec business men had met their obligations more fully and promptly than those of any other province during the winter. (A statement which met with great applause.) A fact which, he pointed out, was due largely to the amount of money brought into the country by the dairy industry.

Mr. D. M. Macpherson followed with a few remarks on the ensilage exhibited, which he agreed with Mr. Tylee was of the very highest order. He then went on to point out the advantages of the silo, and urged any farmer who was without one to delay no longer, but to make preparations at once for putting one up.

Prof. Dean gave an address on "Composite Testing of Milk." First of all, however, he extended greeting from the dairymen of Ontario to those of the sister province and assured them of their sympathy. In the course of his address, which was most interesting and instructive, the Professor strongly advised paying for milk at cheese factories by the Babcock test, declaring that by the most exhaustive tests made it has been found that as the percentage of fat in milk varies so does the percentage of casein. He pointed out that by using the test system all danger of watering and skimming milk was done away with. After drawing attention to the amount of labor involved in testing every day, the Professor showed how this labor might be very much lightened by taking samples every day, treating them with bi-chromate of potash and testing once a month. In conclusion he urged his hearers not to be too confident, but to be very careful in any fresh work they undertook.

Mr. J. Y. Ormsby, V. S., manager of the Isaleigh Grange Farm, Danville, P. Q., gave a short address on "Pigs and Pig Breeding." He called attention especially to the fact that there was no animal on the farm that gave a better return for dairy refuse than the pig. He urged the use of none but pure-bred males, and gave it as his opinion that a cross between two pure-breds made the best feeding pig, and after describing the points most to be sought after in a bacon-pig, he concluded by stating that in his experience he found the pig a very intelligent animal when properly handled.

The evening session was opened by Mr. Thos. Dillon, who made a few remarks on the butter exhibit, which he pronounced very good. Then proceeding to his subject, "Dairy Farming," he gave a most interesting address, in which he touched principally on the following points: The necessity of providing plenty of cheap succulent food for our cows, and carrying on winter as well as summer dairying, at the same time giving it as his opinion that with proper management milk could be produced as cheaply in winter as in summer; the need of more study on the part of dairymen, so that they may profit by the experience of others. The necessity of breeding more especially for milk was emphasized, and using every possible means for developing the dairy qualities. In conclusion he stated that although we hear so much about hard times, prices are better than they were before the Crimean War. Mr. Dillon's address was followed by a discussion, in which the audience declared themselves to a man in favor of silos and ensilage.

Addresses by Mr. G. W. Stephens, M. L. A. for Huntingdon County, and Mr. Grey, M. L. A. for Chateauguay County, followed, with music at intervals, and then Prof. Dean was again called and responded by giving an account of his experiments by which he argued to his satisfaction that we cannot increase the fat in milk by feeding. This statement was challenged by some of those present and an animated discussion followed, in which a number of gentlemen took part.

The Hon. Louis Beaubien said a few words, and a hearty vote of thanks to those who had contributed to the programme terminated a very successful convention.

The following is the list of those who were awarded prizes for butter and the points:

Prizes.—First, Mrs. G. Murphy, 92 points; second, J. G. Mair, 91 points; third, J. Y. Currie, 81 points.

Rolls.—First, Neil Sangster, 95 points; second, Jno. Lockerby, 93 points; third, Jno. Cottingham, 91 points.

Factory.—First, Elgin Creamery, 91 points; second, Jno. Boyd (St. Chrystostome), 85 points.

Everyone interested in dairying should not only read, but study that instructive little book, "Dairying for Profit, or the Poor Man's Cow," which may be obtained from the authoress, Mrs. E. M. Jones, Brockville, Ont. Price, 30 cents. Over 62,000 copies have been sold, and in order to further stimulate its circulation, we will give two copies to every old subscriber sending in his own name (renewal), and that of one new yearly subscriber, accompanied by two dollars.

Weekly or Monthly Tests?

In factories where the Babcock Test has been used in conjunction with the scales to apportion the proceeds to the patrons, the more general plan has been to take a small sample of milk each day. A small jar is provided for each patron, and into these the samples are put daily along with a little preservative to keep the whole sweet. At the end of the week, after careful mixing, a "composite" sample is taken for the test. At the Ingersoll Dairy Convention Prof. Dean, of the Ontario Agricultural College, reported having been successful in keeping samples for a month and proposed monthly tests. It would involve less labor and expense, but we would caution makers, especially those adopting the test for the first time, to hasten slowly. Try weekly tests first, then, if everything works satisfactorily, perhaps fortnightly, or even still longer. With a monthly test it would be a serious matter if a sample were lost through the jar breaking or the milk being spilled in handling, etc. Should that happen with a weekly test the results of the tests the weeks immediately before and after would afford a pretty fair idea of the quality of the milk for the intervening time, but in a monthly test the guess might easily be very far astray. This is too serious a matter for the patron to admit of any guess work. In the next place, while the Babcock will not show more fat than the milk contains, in various ways, such as by using weak acid, water not sufficiently hot, insufficient whirling, etc., less might be shown in the test tube, and any error of that sort would be against the patron always. Even a fraction of a per cent. less fat for a whole month would mean a very considerable sum of money out of the pocket of the patron. In adopting any new scheme it is wise to be on the safe side. Let makers and factory-men by practical experience make themselves sure of each step before taking another.

Practical Experience with the Babcock Tester.

In our last issue we published the following series of questions to factories regarding the actual working (no fine spun theories) of the Babcock Test, and now we submit the first batch of replies. They are practical, to the point, and will be helpful to others. We are obliged to the writers for their promptness in writing and the care taken. Where fairly tried the Test is giving good satisfaction. One thing is evident, however, no one should undertake to run a factory by the new system without first (either at the dairy school or with some competent man) learning thoroughly how to handle the Tester and to explain all the "ins and outs" of the system to any patron who may be doubtful or in the dark on the subject.

Mr. Bell's replies to question 4 are very explicit.

QUESTIONS.

1. Do you find the test an improvement on the "pooling" system, and if so, for what reason?
2. Will you continue it this season, and if not, for what reason?
3. What method do you follow in taking and preserving samples of milk?
4. How often do you test, and what points do you deem needful of special care in making the tests?
5. By whom is the expense borne, and what would you say is a fair estimate of the expenses per patron for materials, extra labor, etc.
6. Do you prefer having the maker do the testing, or would you favor one man doing the testing for a group of factories?

A. T. BELL, ONTARIO AGRICULTURAL COLLEGE, GUELPH.

1. We find the test an improvement, the milk arrives in better condition at the factory for cheese, less gas, etc. Also, it relieves us of all suspicion as to patrons tampering with their milk.
2. We are going to continue it this season.
3. We use what is known as the composite test, taking sample of milk from weighing can immediately after being dumped in (1 oz.), placing in pint jar, using a little Bicromate Potash for preserving.
4. We test once a week, and we deem needful of special care the following:— Shake jars but very little when adding milk. Place jars in hot water just a little before making the test, to loosen cream from sides of jar. Add acid to milk, carefully letting it run down side of test bottle, mix acid and milk thoroughly before placing in machine; give machine the required number of revolutions; add the water twice, and when the whirling is completed place bottles in hot water bath, and read percentages immediately on taking out of bath.

[Is not special care needed also in reading the percentage off the graduated neck of the Test bottle?—Ed.]

5. Expense is borne by the patrons, and a fair estimate would be from 75c. to \$1 per patron.
6. I would favor one man doing the testing for a group of factories.

WM. DICKSON, SALESMAN, ELMA CHEESE CO., ATWOOD.

It is with pleasure that I will try to answer the questions that you desire. In the first place, allow me to say that the Elma Company was the first in Western Ontario to pay according to the Babcock Test. We have run on that system for the past two seasons, and we are going to continue the same during the ensuing season.

1. We consider the test quite an improvement on the old system. The milk comes in better condition. Then it has been proved beyond a doubt that rich milk makes more cheese, consequently under the old plan it is clear the man who sends the richest milk is robbed. The new system does away with all persecutions and heartburnings, which I think is a very strong reason in its favor. Might state others, but I think these will do at present.
2. We will continue paying by the test during the coming season.
- 3 and 4. As soon as each patron's milk is dumped into the weigh can, a small cup full is taken every morning and placed in a covered glass jar and is tested once each week. We generally test on Saturdays. The greatest care must be exercised in making the test, so as to give justice to all concerned. I would strongly urge all cheesemakers to learn this testing business thoroughly, as I believe this system will be adopted sooner or later by a large majority of the cheese factories of Ontario.

5. The Company pays for the acid used. Our maker gets at the rate of about two cents per hundred lbs. of cheese for testing. We will average yearly about 170 tons of cheese. We have about 100 patrons. Perhaps it would be fairer for each patron to pay an equal sum.
6. I think if the cheesemaker is up to his business there is nothing to hinder him from doing what is right. But I don't see why a thoroughly competent man could not test a number of factories and give entire satisfaction. It should work admirably.

Now, to say that the new system has given entire satisfaction in our company would not be quite correct, but I do say that I believe it has given general satisfaction. I don't say that the new system is perfect, as I don't claim to be an authority, but I do claim that it is much superior to the old plan.

J. W. SCOTT, SPARTA.

1. Yes; we do find the Test an improvement on the pooling system for the following reasons:—
(a) It prevents patrons from tampering with the milk to any great extent without immediate detection.
(b) It makes them take better care of the milk in order to get a good test.
(c) It makes them more careful in the selection of cows. All this means better cheese and more money to the producer.
(d) It gives justice to all.
2. I cannot say at present if the Test will be continued this season or not. At our annual meeting only about one-half of the patrons were present, and it was voted out by a majority of one. The principal objection against the Test was, that it was not understood. Some patrons not present at that meeting are anxious that I should call another.
3. We adopt the following method in taking and preserving the samples of milk:—
We have a glass can (a pint fruit can answers the purpose) for each patron, with his name labelled on it. Each morning a sample of the milk is taken immediately after it is dumped in the weighing can. Bicromate of Potash is used to preserve it.
4. During the first three months we tested once a week, during the next two months we tested three times a month, during the last month only twice—and all with equally satisfactory results. *The utmost care* should be used throughout. All points are of equal importance, for if any one be neglected the test is unreliable.
5. The expense is borne by the patrons. After the machine is bought I should consider 50c. per patron a fair estimate of expenses.
6. I prefer having the cheesemaker do the testing, as he has charge of the milk until it is ready to test, and so should finish it. Any cheesemaker of ordinary ability, in a week's time can learn to successfully handle the machine. Another qualification is absolutely necessary: he must have well-established principles of fair play and honesty, else he has no business with a testing machine.

THOS. A. GOOD, EX-SECY. N. B. D. ASSO., BRANTFORD.
Mr. W. S. Campbell, who is suffering from a severe illness, handed me a letter from you re testing milk and paying for same according to quality at cheese factories.

1. Yes; it gives every patron justice according to the real value of his milk. It induces patrons to take better care of the milk by stirring and airing, because he gets a better test by doing so. It takes away all temptation to water, skim or tamper with the milk, as a patron may put half water in his can and gain nothing. Our factory made more cheese to 100 lbs. milk last season than ever before. None, or very few gassy curds, and I think our cheese is of better quality and commands a better price than before.
2. Yes.
3. Our cheesemaker takes one ounce of milk out of the weigh can immediately after it is turned in from the wagon and before it has time to settle. These samples are taken every day and kept in glass jars, air-tight, made for the purpose, until the next milk is in.
4. Once a week. The latter part of this question had better be answered by an expert.
5. Last year we had not decided upon testing the milk till after our maker was engaged, and we had to pay him \$1 per patron (which the patrons were assessed for), and find the acid and other material, which we estimated at about 25c. each. This year our maker is engaged to do the testing, supply material, &c., without any extra pay above the price named for making, &c., &c., which he is to do by the 100 lbs.
6. We prefer the maker doing the testing, as we consider he is the right person to be responsible for its correctness.

A. W. EDWARDS, EMPIRE.
I tested the milk for two hundred and thirty patrons sending milk to our factories last season. On the whole it proved very satisfactory, considering the fact that our patrons were not previously educated as to the working of the system. I am sorry to say it, but cheesemakers of neighboring factories did all they could to poison the minds of our patrons against the system. This year a few of our patrons are going to a neighboring factory run on the old system. Their dissatisfaction in every case is, their milk did not test up to the average last season, consequently they will receive more for their milk than it is worth this season.

1. I prefer the new system to the old, because:—
(a) Every man receives the just value of his milk, for the buterfat determines the quantity and quality of the cheese.
(b) It has a tendency to improve the quality of the cows. The cow that gives a small quantity of rich milk is no longer unprofitable for cheesemaking, but will pay her owner as well in summer as in winter.
[NOTE.—Providing the quantity is not too small.—Ed.]
(c) It encourages patrons to produce better milk and also to take better care of it, because milk that has been neglected and not aired gets a thick leathery cream on it that will not dissolve again, consequently will not test so high. Patrons realizing this will take better care of their milk. Ninety pounds of nice, wholesome milk is worth more for cheesemaking than 100 lbs. of tainted, gassy milk.
2. Yes; our patrons are almost unanimous for it.
3. The samples are taken from the weigh can immediately after emptying, by means of a long handled dipper holding two or three ounces, the dipper being about 1 in. in diameter. The samples are taken every morning and kept in a glass jar for the purpose, into which has been put as much pulverized Bicromate of Potash as will lay on a ten-cent piece; in warm weather a little more will not hurt.
[NOTE.—Some makers take the sample for test from the trough running into the vat when the weigh can is about half emptied.—Ed.]
4. I have run the composite sample test from one to six weeks, and if the samples are properly shaken daily I consider a monthly test quite reliable. After taking the samples carefully from the jar the acid should be added in quantity, according to its strength. I use enough so that when the fat is brought up it has a rich butter color. I always use water at or above scalding heat. The machine should be given as rapid a motion as it will stand. If a sample tests unusually high or low, I take another sample and test it to be sure there has been no mistake, but if first sample is carefully taken the tester never lies.
5. In order to introduce the system we found all appliances the first season, the patrons agreeing to buy and use faithfully an aerator. After the necessary appliances are procured, the chemicals and extra labor are worth from 40c. to 50c. per patron for season running a monthly test; for a weekly test it would be worth more.

6. I would prefer having the maker do the testing, if he is interested in the success of the system; if he is not in favor of it, some other person would give better satisfaction. If one man could be engaged to do the testing for a group of factories it might work satisfactorily.

JOHN T. TAYLOR, WEST LORNE CHEESE FACTORY CO.

1. We consider the Test vastly superior to the old pooling system, so much so that we would not care to go back to it.
2. We will use the Test this year again in both of our factories, as we find it a complete check against dishonesty in sending in milk on the part of the patrons.
3. We take a small sample every morning from each patron's milk, and put away in a self-sealing bottle labelled with the patron's name. And on Saturday afternoon each week, sufficient milk is taken from each bottle to make a test.
4. We test once a week, taking care to bring milk to a like condition by "Potash" or "Lye," and taking great care in shaking up and measuring milk, sulphuric acid, &c. Also, careful reading of percentages.
5. We charged the patrons 5c. per test last year. Have reduced the amount to 3c. for this season, and think this is not far out of the way.
6. We are satisfied so far with the maker's doing the testing, but at the same time we could easily conceive of circumstances that would make it preferable to have an expert do the testing for a group of factories.

The Cash Return.

Occasionally some one with a herd of ill-selected, ill-cared for and ill-fed cows raises the stereotyped cry that there is "no money in dairying." Possibly not—for such a man—and we doubt if there would be in any line of special purpose farming or "general purpose" farming either. He has probably settled down in despair to the conviction that there is no money in anything on his farm. But there is money in dairying, as the prosperity of good dairy districts and individual dairymen amply proves. Take an example. Mr. Facey, of the Harrietsville cheese factory, in the Township of North Dorchester, East Middlesex, which last season turned out over 247 tons of cheese, furnishes the following list, which very clearly indicates what farmers can do who give their attention to the cow business. These men do not set themselves up as fancy or gilt-edged dairy farmers at all, and the results may be taken as a fair sample of what can be accomplished under ordinary conditions—with well-fed, carefully selected cows. In fact, last season was not one of average excellence, because it was practically shortened nearly a month by the long continued and severe drought. As will be noticed, the following includes small as well as large patrons:

Names of Patrons.	Number cows.	Cash Received.
Stephen Yorke.....	35	\$1501 22
Angus Yorke.....	20	905 72
Fred Garton.....	26	1021 24
Henry Jackson.....	30	1244 19
Sam'l Archer.....	30	1220 19
Sam'l Leaman.....	20	808 92
John Barr.....	14	640 30
P. Abbott.....	10	444 92
R. Tooley, M. P.....	7	383 25
Thos. Rodway.....	3	139 40
Total.....	195	\$8309 33

These 195 cows, owned by these ten patrons, brought their owners an average of nearly \$43 per head for the summer season, which, as we have already pointed out, was not a very favorable one. Besides this, milk was used at home, and a very considerable sum additional was realized for butter made in winter; some of the farmers mentioned, we understand, being patrons of the Gladstone factory when run as a winter creamery. It would not be excessive to put the total yearly return from some of these herds at an average of over \$50 per cow. For the whole province the average is probably not yet much more than half that sum. The example of these Dorchester farmers should stimulate others to go and do likewise.

VETERINARY.

Azoturia.

[Read before the Students of the Ontario Veterinary Medical Society, by Walter N. Armstrong, Honorary Graduate of the Ontario Veterinary College of Toronto.]

The subject of my essay is more commonly known as Azoturia, yet it has been described under various names, as Hysteria, Hæmoglobinæmia, Hæmoglobinuria, Hæmoglobinæmia, Sprain of the Psoæ Muscles (Dick). The term which we use, I think, is preferable, for in the meaning of the word we get a faint idea of the nature of the disease under consideration.

Although such differences of opinion are held as to the naming of the disease, yet in the main points all agree that it is some poison or excess of effete material existing in the blood, interfering with its functions in such a manner as to produce derangement of the motor nerves, particularly of the extremities, the apparent cause of this poison or effete material being enforced rest and feeding on a highly nutritious diet.

Prof. Williams describes the disease very nicely when he says it is a hypernitrogenous condition of the blood and system, generally due to over-feeding and want of exercise. The excessive secretion of urine and excretion of urea, being physiological results, are due to the presence of effete materials in the blood, this being due to metamorphoses of nitrogenous food.

The same writer also says that during enforced rest and feeding on a stimulating diet, the amount of nitrogenous material is in excess of that required for the maintenance of the system, the surplus being stored up in the blood in the form of albumen;

and when the animal is put to severe exertion, circulation and respiration being increased, it induces a rapid oxidation of the super-abundant albumen, with the result that it becomes converted into uric and hippuric acid. The kidneys being unable to excrete them, they give rise to the symptoms manifested in the disease. I do not wish to contradict such authority as Prof. Williams, but he does not show us that he finds excess of the uric and hippuric acids in the urine or blood; and of the chemical analysis that I have had an opportunity of reading none of them show an increase in the acids above what might be normally expected in animals fed in the same way as those affected, but they all do show a decided increase in the amount of urea.

Prof. Peters, in giving the chemical composition of urine, said that in twenty-four hours eight and a-half pints of fluid was secreted. Of this amount five ounces were solids or organic matters, urea alone forming three and three-quarter ounces. He also gave us the formation of urea; it was all the waste proteids and excess of nitrogenous food and metabolism of nitrogenous tissues of the body. He also stated that practically there was little or no uric or hippuric acid seen in the urine, except in colts and starving animals. In cases where the urine became acid, it was due to acid sodium phosphate and not due to the acids before mentioned.

So, taking as authority our present teachers, and we believe them to be second to none on this continent or on any other, as far as veterinary colleges are concerned, also Prof. Williams being unable to show excess in sufficient quantity of the acids he gives as being the causes of the symptoms, we must look at the cause from our present knowledge as urea in excess, this being caused by the enforced rest and stimulating diet, especially if the animal be in a plethoric condition. The system during this state of quietude requires a much less amount of nutritious material, the extra amount being converted into urea. We must now account for the disease manifesting itself most frequently upon violent exertion, although it is not absolutely necessary for exercise to produce the disease, as it occurs during rest. Upon the animal being put to exertion, circulation and respiration are increased. Tissue metamorphoses is increased, throwing its waste products into the already impure blood, with the result that the blood becomes so loaded with impurities that it is unable to perform its functions in carrying oxygen to the different tissues of the body, with the result that the blood so affected poisons the tissues, especially the nerves, giving rise to the characteristic symptoms of the disease. The kidneys at this time endeavor to get rid of the effete material, but it being in such an excessive amount, they are unable to excrete it; if they were able no symptoms would be manifested.

Prof. Robertson, in describing this disease, says it is a complex morbid condition or assemblage of symptoms, the most characteristic features of which are certain musculo-nervous phenomena, particularly clonic or tonic spasms and paralysis of the muscles of the posterior part of the trunk and limbs, and the discharge of a dark colored urine containing considerable quantities of Hæmoglobin; but in his analysis of the urine he fails to give Hæmoglobin as one of its constituents; also that in looking over the different analyses, I did not find any of them mention Hæmoglobin as being found in the urine of animals suffering from Azoturia.

It has been given by various authorities that this disease affects mares only, and during the period of œstrum, but such is not the case, as the disease affects both the gelding and stallion; and, according to some of our authorities, is more difficult to treat, and, if occurring in an entire horse, is nearly always fatal. As to it occurring at the period of œstrum only is wrong, although it may be noticed more in mares at that time. Owing to the intense excitement during that period rendering them unpleasant and perhaps unfit for work, they are left in the stable and subjected to the exciting causes of the disease, this probably being the reason of the assertion. It has also been noticed in pregnant mares, so the period of œstrum could have nothing to do with it in such cases.

CAUSE.

It is not necessary to waste much time upon the causes, as they have already been mentioned, the principal being enforced rest and stimulating diet, perhaps assisted by functional inactivity of the different excretory channels of the body. Prof. Robertson says horses fed on over ripe tares are more predisposed than animals fed on other descriptions of food.

SYMPTOMS.

Those noticed are often of an extremely sudden and urgent character; the attendant has noticed no warning or premonitory symptoms of either disturbed digestion or innervation, the animal immediately preceding the attack being regarded as in the very best of health and spirits. Advancing knowledge of the true pathology of the condition suggests that certain changes are recognizable previous to the more urgent, but, from the usual amount of disturbance, it is overlooked, although it often occurs upon exertion; it may also occur while standing in the stable, and give rise to certain symptoms which may tend to mislead, but if the practitioner is careful and observant the true character of the disease soon manifests itself. At first the animal may evince considerable pain and uneasiness, sweats profusely, stamps, more or less twitching of the muscles, but does not attempt to lie down, although it appears as if it would like to,

pulse full and bounding or quick and weak, temperature increased, and, as the disease advances, the animal will begin to sway sideways or exhibit signs of falling; these symptoms may continue, and finally the animal loses control of himself and falls. The urine, if drawn off, will be symptomatic of Azoturia.

On the other hand, the animal taken from the stable is quite gay and gives every appearance of being able to stand a severe test or hard journey, but may only go a few hundred rods, or may go miles, when he suddenly gets stiff, then lame, great difficulty in moving the limb or limbs, usually the hind ones, but it may affect the fore ones; it is with difficulty he is moved along at all, and finally falls, losing all power of the hind extremities, the pulse is increased in frequency and temperature is elevated; partial sweats may be present; the urine if examined will exhibit the well-marked changes; the muscles of the back and loins, also the gluteal muscles, in a state of rigid contraction. The animal may now show symptoms of brain lesions, first restlessness and attempts to rise, and finally coma and death.

Many of these very sudden attacks, unless we think of the possible occurrence of this disease and know the history of the case, might at first be mistaken for some lesion of the spine or muscles of the loins and back. It is also quite possible for a horse standing in the stable for a few days to become affected with colic; the exertion caused by the pain may be quite sufficient to induce the appearance of this disease, hence the importance of, in treating any case, to keep a sharp look out for complications or terminations.

The terminations of this disease are somewhat varied. Cases which resemble each other in the commencement may have a very different course and termination. For instance, one case may appear as if struck with apoplexy, struggle violently for a few hours, become comatose and die. Others, after the abatement of the more severe symptoms, make no further progress, may be perfectly conscious, have a fair appetite, but never regain the use of their limbs, and either remain down until destroyed or carried off by some other disease. Others, under proper treatment, the urine regains its natural condition, the muscular spasms are relieved, motor power is restored, and the animal finally recovers.

TREATMENT.

In those cases where the loss of muscular power is so great and so suddenly developed that the animal is unable to move or maintain the standing posture, the prognosis is unfavorable; but where the animal is able to stand or exert any movement whatever, such cases are attended with success.

The animal should be placed in a stall, it being preferable to a box in this case, all of which should be done quietly and not excite the animal, as excitement tends to aggravate the symptoms: the catheter should be passed and the urine drawn off, which will be of a coffee color, and should be repeated every two or three hours; the other excretory organs should be stimulated into action by purgatives and diaphoretics, a ball composed of aloes perhaps being the best, perspiration being induced by warm clothing and medicines. Tonics and antiseptics are to be recommended to ward off the result of the uranic poisoning, the different preparations of soda being advisable, possessing diuretic and antiseptic properties. Quinine has also been recommended; spirits of nitre, etc., possessing stimulant and diuretic actions, is useful; iron is to be given as a tonic. When after three or four days and the more acute symptoms have passed off, and the animal still unable to rise, slings may be advisable, also friction to the muscles, and the use of nuxvomica may be tried. During convalescence great care must be exercised in feeding, so as not to disturb the digestive organs, also the injudicious use of medicines to restore the healthy action of the entire system.

POST MORTEM APPEARANCES.

Blood darker than usual and containing pigment granules. Rigor mortis, if at all, is very sudden, and lasts but for a short time. The affected muscles are sodden with apparently effused or dissolved dusky material, lighter in color, and on microscopic examination exhibit irregular striation and degenerative changes; kidneys generally dark in color and congested; epithelium of tubes often absent or swollen. Hemorrhages in various parts have been noticed: the serous membranes and viscera sometimes show small blood markings; bladder partakes of similar changes, but, if containing urine, is coffee-colored and of a nature as follows: The very obvious changes which the urinary secretion has undergone has constituted it a diagnostic feature, so much so as to have warranted the founding upon this peculiar condition the name by which this generally disordered state is recognized. The urine must be examined as soon as possible after it is obtained from the animal, as it quickly becomes ammoniacal; in every case its specific gravity is increased. It is coffee-colored and of an ammoniacal odor. Boiled, it gives no reaction, except liberating ammonia gas; treated with nitric acid it becomes solid almost, the solidity being due to the preparation of the crystals of the nitrate of urea. At first the addition of acids causes much effervescence, the urine being strongly alkaline, containing carbonate of ammonia. Crystals of the nitrate of urea may be seen in the serum of the blood.



THE QUIET HOUR.

"Take Heart of Grace."

Hast thou not seen how, for some precious treasure,
Men beat of purest gold, a goodly case?
Or cut for fragrant odours, at their pleasure,
Out of rough stone, a rare and polish'd vase?
O thou short-sighted one, take heart of grace.
Like them, when for myself I am preparing,
Out of the soul, a fit abiding-place;
I hew thee, beat thee, till I see thee bearing
My image; and my perfect likeness trace:
Therefore, thou chosen one, take heart of grace.
Oh, then, be of good courage! for I love thee;
Gladly and cheerfully each cross embrace,
And bear it manfully; for soon above thee,
Light from my throne each cloud away shall chase:
Therefore, afflicted one, take heart of grace,
And soon life's sorest trials past forever,
Faultless before my Father's face,
I will present thee joyfully; and never
Need to say to thee in that resting place,
O weary fainting soul, take heart of grace.

For Reading to the Sick.

SHAPING THE STONES.

Most of us have been into a stonemason's workshop and seen stones of every shape and description lying about, some rough, just as they came from the quarry, others squared, smooth, and even, fit for the builder's hand. Now these latter did not become so of themselves, a great deal of time and labor had been spent upon them, and a great number of sharp tools had been used to bring them into proper order. We can all see the necessity and propriety of this, so we will study it as being a figure of God's dealings with us. St. Peter tell us that Christians are "living stones," built by God into the spiritual house of which Jesus Christ is "the chief corner-stone." But to make us "living stones" our Heavenly Father takes us out from the quarry, that is the world, and puts us into His workshop, the church, from which He chooses those best fitted to be built into His spiritual temple. We therefore are naturally no more fit to be used in such a glorious work than are the stones just taken from the quarry ready for building; but we have been selected, cut out, severed, and brought away to be prepared. It is not for any goodness of our own, but the Father's free mercy and love through the Son, which has brought us into a state of salvation. God has chosen us, and as we are but clumsy, ill-shaped fragments, we must be wrought upon and prepared, we must be shaped and fashioned anew, our rough tempers polished off so that we may not disfigure the building.

Sometimes the Master Mason smites sharply with the hammer of anguish and pain, at others with the cold chisel of sorrow and affliction, till our hard stony hearts take the form which God wills. Shall we blindly fret at these gracious dealings and willfully choose rather to be cast on one side as unprofitable stones, than thus to be the subject of a chastening, purifying love? No, a thousand times no. Let the great Architect be busy with us, even though the work be painful and grievous, for the more we suffer the fitter we shall be for a place of honor and usefulness in his temple. Which is the fairest stone in a beautiful church? That which has been longest under the carver's hand, that which has been patiently wrought on with many a sharp biting tool, hollowed out here, shaped away there, till it has become the crowning beauty of the whole. We may rest in hope that we are being perfected in varied Christian graces by our sharp sufferings and stern chastisements, till we are the choicest work of the great Master Mason's hand. "Long and painful sickness," says a pious writer, "is often blest to the attainment of such patience and humility and meekness and thankfulness as is rarely won by those in health." Of such it may be said,

"Many a blow and biting sculpture,
Polished well those stones elect."

Then never murmur at the dealings of God, even if His hand presses heavily on us. We will rather say, "As Thou wilt, O my Father, only let my sickness be to thy glory." If Jesus, "the chief corner-stone," was made perfect through suffering, the stone that is shaped and moulded by suffering is most fit to be placed near Him.

"We Glory in Tribulation Also."

Within this leaf, to every eye
So little worth, doth hidden lie
Most rare and subtle fragrant,
Wouldst thou its secret strength unbind?
Crush it, and thou shalt perfume find
Sweet as Arabia's spicy wind.
In this dull stone so poor and bare
Of shape or lustre, patient care
Will find for thee a jewel rare!
But first must skillful hands essay
With file and flint, to clear away
The film which hides its fire from day.
This leaf! this stone! it is thy heart;
It must be crushed by pain and smart;
It must be cleansed by sorrow's art,
Ere it will yield a fragrance sweet,
Ere it will shine a jewel meet
To lay before thy dear Lord's feet.

FAMILY CIRCLE.

The Adventure of the Engineer's Thumb.
BY A. CONAN DOYLE.

Of all the problems which have been submitted to my friend Mr. Sherlock Holmes for solution during the years of our intimacy, there were only two which I was the means of introducing to his notice, that of Mr. Hatherley's thumb and that of Colonel Warburton's madness. Of these the latter may have afforded a finer field for an acute and original observer, but the other was so strange in its inception and so dramatic in its details, that it may be the more worthy of being placed upon record, even if it gave my friend fewer openings for those deductive methods of reasoning by which he achieved such remarkable results. The story has, I believe, been told more than once in the newspapers, but, like all such narratives, its effect is much less striking when set forth *en bloc* in a single half-column of print than when the facts slowly evolve before your own eyes and the mystery clears gradually away as each new discovery furnishes a step which leads on to the complete truth. At the time the circumstances made a deep impression upon me, and the lapse of two years has hardly served to weaken the effect.

It was in the summer of '89, not long after my marriage, that the events occurred which I am now about to summarise. I had returned to civil practice, and had finally abandoned Holmes in his Baker street rooms, although I continually visited him, and occasionally even persuaded him to forego his Bohemian habits so far as to come and visit us. My practice had steadily increased, and as I happened to live at no very great distance from Paddington Station, I got a few patients from among the officials. One of these whom I had cured of a painful and lingering disease was never weary of advertising my virtues, and of endeavouring to send me on every sufferer over whom he might have any influence.

One morning, at a little before seven o'clock, I was awakened by the maid tapping at the door, to announce that two men had come from Paddington, and were waiting in the consulting room. I dressed hurriedly, for I knew by experience that railway cases were seldom trivial, and hastened downstairs. As I descended, my old ally, the guard, came out of the room, and closed the door tightly behind him.

"I've got him here," he whispered, jerking his thumb over his shoulder; "he's all right."

"What is it, then?" I asked, for his manner suggested that it was some strange creature which he had caged up in my room.

"It's a new patient," he whispered. "I thought I'd bring him round myself; then he couldn't slip away. There he is, all safe and sound. I must go now, doctor, I have my dooties, just the same as you." And off he went, this trusty tout, without even giving me time to thank him.

I entered my consulting room, and found a gentleman seated by the table. He was quietly dressed in a suit of heather tweed, with a soft cloth cap, which he had laid down upon my books. Round one of his hands he held a handkerchief wrapped, which was mottled all over with bloodstains. He was young, not more than five-and-twenty, I should say, with a strong masculine face; but he was exceedingly pale, and gave me the impression of a man who was suffering from some strong agitation, which it took all his strength of mind to control.

"I am sorry to knock you up so early, doctor," said he. "But I have had a very serious accident during the night. I came in by train this morning, and on inquiring at Paddington as to where I might find a doctor a worthy fellow very kindly escorted me here. I gave the maid a card, but I see that she has left it upon the side table."

I took it up and glanced at it. "Mr. Victor Hatherley, hydraulic engineer, 16a, Victoria street (3rd floor)." That was the name, style and abode of my morning visitor. "I regret that I have kept you waiting," said I, sitting down in my library chair. "You are fresh from a night journey, I understand, which is in itself a monotonous occupation."

"Oh, my night could not be called monotonous," said he, and laughed. He laughed very heartily, with a high ringing note, leaning back in his chair, and shaking his sides. All my medical instincts rose up against that laugh.

"Stop it!" I cried. "Pull yourself together!" and I poured out some water from a carafe.

It was useless, however. He was off in one of those hysterical outbursts which come upon a strong nature when some great crisis is over and gone. Presently he came to himself once more, very weary and blushing hotly.

"I have been making a fool of myself," he gasped. "Not at all. Drink this." I dashed some brandy into the water, and the color began to come back to his bloodless cheeks.

"That's better!" said he. "And now, doctor, perhaps you would kindly attend to my thumb, or rather to the place where my thumb used to be."

He unwound the handkerchief and held out his hand. It gave even my hardened nerves a shudder to look at it. There were four protruding fingers and a horrid red spongy surface where the thumb should have been. It had been hacked or torn right out from the roots.

"Good heavens!" I cried, "this is a terrible injury. It must have bled considerably."

"Yes, it did. I fainted when it was done; and I think that I must have been senseless for a long time. When I came to, I found that it was still bleeding, so I tied one end of my handkerchief very tightly round the wrist and braced it up with a twig."

"Excellent! You should have been a surgeon."

"It is a question of hydraulics, you see, and came within my own province."

"This has been done," said I, examining the wound. "By a very heavy and sharp instrument."

"A thing like a cleaver," said he.

"An accident, I presume?"

"By no means."

"What a murderous attack!"

"Very murderous indeed."

"You horrify me."

I sponged the wound, cleaned it, dressed it; and, finally, covered it over with cotton wadding and carbolic bandages. He lay back without wincing, though he bit his lip from time to time.

"How is that?" I asked, when I had finished.

"Capital! Between your brandy and your bandage, I feel a new man. I was very weak, but I have had a good deal to go through."

"Perhaps you had better not speak of the matter. It is evidently trying to your nerves."

"Oh, no; not now. I shall have to tell my tale to the police; but, between ourselves, if it were not for the convincing evidence of this wound of mine, I should be surprised if they believed my statement, for it is a very extraordinary one, and I have not much in the way of proof with which to back it up. And even if they believe me, the clues which I can give them are so vague that it is a question whether justice will be done."

"Ha!" cried I; "if it is anything in the nature of a problem which you desire to see solved, I should strongly recommend you to come to my friend Mr. Sherlock Holmes before you go to the official police."

"Oh, I have heard of that fellow," answered my visitor, "and I should be very glad if he would take the matter in hand; of course I must use the official police as well. Would you give me an introduction to him?"

"I'll do better. I'll take you round to him myself."

"I should be immensely obliged to you."

"We'll call a cab, and go together. We shall just be in time to have a little breakfast with him. Do you feel equal to it?"

"Yes, I shall not feel easy until I have told my story."

"Then my servant will call a cab, and I shall be with you

in an instant." I rushed upstairs, explained the matter shortly to my wife, and in five minutes was inside a hansom, driving with my new acquaintance to Baker street.

Sherlock Holmes was, as I expected, lounging about his sitting-room in his dressing gown, reading the agony column of *The Times*, and smoking his before breakfast pipe, which was composed of all the plugs and dottels left from his smokes of the day before, all carefully dried and collected on the corner of the mantel-piece. He received us in his quietly genial fashion, ordered fresh rashers and eggs, and joined us in a hearty breakfast. When it was concluded he settled our new acquaintance upon the sofa, placed a pillow beneath his head, and laid a glass of brandy and water within his reach.

"It is easy to see that your experience has been no common one, Mr. Hatherley," said he. "Pray lie down there and make yourself absolutely at home. Tell us what you can, but stop when you are tired, and keep up your strength with a little stimulant."

"Thank you," said my patient. "but I have felt another man since the doctor bandaged me, and I think that your breakfast has completed the cure. I shall take up as little of your valuable time as possible, so I shall start at once upon my peculiar experiences."

Holmes said in his big armchair with the weary, heavy-lidded expression which veiled his keen and eager nature, while I sat opposite to him, and we listened in silence to the strange story which our visitor detailed to us.

"You must know," said he, "that I am an orphan and a bachelor, residing alone in lodgings in London. By profession I am a hydraulic engineer, and I have had considerable experience of my work during the seven years that I was apprenticed to Venner and Matheson, the well-known firm at Greenwich. Two years ago, having served my time, and having also come into a fair sum of money through my poor father's death, I determined to start in business for myself, and took professional chambers in Victoria street."

I suppose that everyone finds his first independent start in business a dreary experience. To me it has been exceptionally so. During two years I have had three consultations and one small job, and that is absolutely all that my profession has brought me. My gross takings amount to twenty-seven pounds ten. Every day, from nine in the morning until four in the afternoon, I waited in my little den, until at last my heart began to sink, and I came to believe that I should never have any practice at all.

Yesterday, however, just as I was thinking of leaving the office, my clerk entered to say there was a gentleman waiting who wished to see me upon business. He brought up a card, too, with the name of "Colonel Lysander Stark" engraved upon it. Close at his heels came the Colonel himself, a man rather over the middle size but of an exceeding thinness. I do not think that I have ever seen so thin a man. His whole face sharpened away into nose and chin, and the skin of his cheeks was drawn quite taut over his outstanding bones. Yet this emaciation seemed to be his natural habit, and due to no disease, for his eye was bright, his step brisk, and his bearing assured. He was plainly but neatly dressed, and his age, I should judge, would be nearer forty than thirty.

"Mr. Hatherley?" said he, with something of a German accent. "You have been recommended to me, Mr. Hatherley, as being a man who is not only proficient in his profession, but is also discreet and capable of preserving a secret."

I bowed, feeling as flattered as any young man would at such an address. "May I ask who it was who gave me so good a character?" I asked.

"Well, perhaps it is better that I should not tell you that just at this moment. I have it from the same source that you are both an orphan and a bachelor, and are residing alone in London."

"That is quite correct," I answered, "but you will excuse me if I say that I cannot see how all this bears upon my professional qualifications. I understood that it was on a professional matter that you wished to speak to me?"

"Undoubtedly so. But you will find that all I say is really to the point. I have a professional commission for you, but absolute secrecy is quite essential—absolute secrecy, you understand, and of course we may expect that more from a man who is alone than from one who lives in the bosom of his family."

"If I promise to keep a secret," said I, "you may absolutely depend upon my doing so."

"He looked very hard at me as I spoke, and it seemed to me that I had never seen so suspicious and questioning an eye."

"You do promise, then?" said he at last.

"Yes, I promise."

"Absolute and complete silence, before, during and after? No reference to the matter at all, either in word or writing?"

"I have already given you my word."

"Very good. He suddenly sprang up, and darting like lightning across the room he flung open the door. The passage outside was empty."

"That's all right," said he, coming back. "I know that clerks are sometimes curious as to their master's affairs. Now we can talk in safety." He drew up his chair very close to mine, and began to stare at me again with the same questioning and thoughtful look.

A feeling of repulsion, and of something akin to fear had begun to rise within me at the strange antics of this fleshless man. Even my dread of losing a client could not restrain me from showing my impatience.

"I beg that you will state your business, sir," said I; "my time is of value." Heaven forgive me for that last sentence, but the words came to my lips.

"How would fifty guineas for a night's work suit you?" he asked.

"Most admirably."

"I say a night's work, but an hour's would be nearer the mark. I simply want your opinion about a hydraulic stamping machine which has got out of gear. If you show us what is wrong we shall soon set it right ourselves. What do you think of such a commission as that?"

"A thing like a cleaver," said he, and the play multifidement.

"Precisely so. We shall want you to come to-night by the last train."

"Where to?"

"To Eyford, in Berkshire. It is a little place near the borders of Oxfordshire, and within seven miles of Reading. There is a train from Paddington which would bring you in there at about eleven fifteen."

"Very good."

"I shall come down in a carriage to meet you."

"There is a drive, then?"

"Yes, our little place is quite out in the country. It is a good seven miles from Eyford Station."

"Then we can hardly get there before midnight. I suppose there would be no chance of a train back. I should be compelled to stop the night."

"Yes, we could easily give you a shakedown."

"That is very awkward. Could I not come at some more convenient hour?"

"We have judged it best that you should come late. It is to recompense you for any inconvenience that we are paying to you, a young and unknown man, a fee which would buy an opinion from the very heads of your profession. Still, of course, if you would like to draw out of the business, there is plenty of time to do so."

"I thought of the fifty guineas, and of how very useful they would be to me. Not at all, said I. I shall be very happy to accommodate myself to your wishes. I should like, however, to understand a little more clearly what it is that you wish me to do."

"Quite so. It is very natural that the pledge of secrecy which we have exacted from you should have aroused your curiosity. I have no wish to commit you to anything without your having it all laid before you. I suppose that we are absolutely safe from eavesdroppers?"

"Entirely."

TO BE CONTINUED.

MINNIE MAY'S DEPARTMENT.

Fashion Notes.

The effect of the many-gored skirt is the same as the old bell skirt, but many costumes show a polonaise producing a rippling effect. Some skirts are elaborately trimmed to the waist, while others have only bands of braid, velvet or moire ribbon, laid on. Flat flounces of lace are favorites for summer suits, and groups of small flowers made of the material continue in fashion. The cool and comfortable blouse-waist, made of washing material, comes made up in all materials and all prices, but the dexterous needle-woman can make her own at half the cost, and quite as pretty as imported ones. Basques are round, pointed, long and short, trimmed and plain, with vests or without, just as the purse and fancy of the wearer dictates. Bretelles are very improving to most shoulders, giving every costume a dressy effect. Sleeves are wider, if possible, than before, and puff, leg-o-mutton and gigot sleeves are equally favorite patterns. None of these sleeves are trimmed, only a small cuff at the wrist or a few rows of whatever trims the skirt.

Hats and bonnets are bewildering in their beauty and variety. Flowers and lace are seen on



all of them, and huge bows of ribbon—if black, moire is used, but silk, satin and fancy ribbon, the brighter the better—adorns the crown and brim. Bonnets are small as they can be made, but very becoming, and one of these dressy affairs imparts a smartness to the plainest toilet, and the large bow under the chin is again the favorite.

Sashes promise to become popular, tied in large bows at the back, the ends finished with fringe or lace. "Choker" collars are the approved finish for woolen gowns.

Recipes.

MAPLE SUGAR CARAMELS.

Maple and yellow sugar, of each 1 1/2 lbs.; boil until it snaps when tested, and slowly add 1/2 pint cream; boil until brittle; add 1/2 lb. butter and boil again until brittle. Pour into greased tins, and when nearly cold cut into squares.

GRAHAM PUDDING.

Take 1 1/2 cups of Graham flour, 1 cup sweet milk, 1 cup molasses, 1 cup stoned raisins, 1/2 teaspoonful salt, 1 teaspoon saleratus. Steam three hours. Eat with sauce. Excellent.

FRIED CAKES.

Two eggs, 1 cup sugar, 3 tablespoons melted butter, 1 teaspoon soda dissolved in 1 cup sour milk, 1 heaping teaspoon baking powder, sifted in enough flour to roll out smoothly. Season with nutmeg or cinnamon. Roll them and fry in moderately hot lard.

EGG OMELET.

Take 6 eggs, 1 cup cream, 1 tablespoon flour and a little salt. Butter a hot skillet and pour in the batter.

In the Berkshire hills there was a funeral, and, as they gathered in the little parlor, there came the typical New England female, who mingles curiosity with her sympathy, and, as she glanced about the darkened room, she said to the bereaved widow, "When did you get that new eight-day clock?" "When did you get that new eight-day clock?" "We ain't got no new eight-day clock," was the reply. "You ain't? What's that in the corner there?" "Why, no; that's not an eight-day clock; that's the deceased; we stood him on end to make room for the mourners."

UNCLE TOM'S DEPARTMENT.

MY DEAR NEPHEWS AND NIECES:—

At length we may safely say "the ice bonds of winter are broken;" the only vestige that remains is here and there a tiny bit of snow and ice, hiding in out-of-the-way fence corners. Ere this letter reaches you, you will have gathered the little hepaticas that so bravely creep out as soon as the snow is gone, and when it is time to write you again, the woods, with their freshly budding trees and carpets of mayflowers, will be indeed marvels of beauty. How invigorating the air now feels! A walk on one of these bright April mornings seems to give one a new lease of life—that is, a walk in the country. Here in the city it is already almost as dry and dusty as in summer, yet never a pale sweet flower lifts its tiny face, never a lay from a wild song bird have we, to remind us that spring, the beautiful, is really here.

Long ago on the farm, we used to be very busy sugar-making at this time of the year, and a jovial time we had. I presume there are few country children who do not know all about it, perhaps better than I could tell them. And at school, about this time, too, we used to construct rafts (from the logs and pieces of boards that the spring flood washed away), and have a fine time sailing. Boys and girls joined indiscriminately in this sport, and the dips we got were also very impartially distributed. I, for one, got my own share, but in those days I did not mind it. Now, however, I fear such a wetting would give me an attack of rheumatism.

Let poets call April fickle if they will. Her smiles and tears may come at rather unexpected moments, but when we remember the promises she holds forth, we can forgive her everything else. "Promises, indeed!" I fancy some of my girls are contemptuously saying, "it is easy to see that Uncle Tom does not know what house-cleaning means, or he would not value April's promises so highly." But really, my dear girls, even a boy may be very useful at such a time, at least so my mother and sisters evidently thought, for they generally contrived to keep me occupied while that all-important performance was in progress.

One occupation that should be of equal interest to my nephews and nieces is gardening. Suppose you make a bargain, and the boys attend to the vegetable garden and leave the flower garden to their sisters. Even those who have not an elaborately designed lawn and garden may have an abundant supply of sweet flowers all summer by cultivating a small plot of sweet peas, pansies, mignonette and phlox. These I mention particularly, because they are so easy to raise, bloom so long, and are all general favorites. I assure you if you were cooped up in a large city for a few years, you would better appreciate the blessings of country life. In the city there are, of course, some very fine gardens, but those belong to the fortunate few, while the poorer and even the middle classes enjoy no such luxuries. Indeed it is almost pitiful to see the efforts of some of these to induce a few spindling plants to drag out an existence in the narrow back yards into which, not infrequently, it is impossible to coax a ray of sunshine. The dime novels rarely show this side of city life, but it is nevertheless too true.

I am very sorry to see our list of solvers remaining so small, although I have tried to offer greater inducements by giving prizes every three months instead of only once a year. Now I hope to hear from all our old and a great number of new friends during April, May and June. I have so little space to devote to the puzzles that I am often forced to reject some very good ones. But if your first effort is not successful do not stop short, but try again. One of our contributors offers a special prize of a cloth-bound book to the boy or girl under eighteen years of age sending the best list of answers to puzzles during these three months, the winners of the regular prizes for that time to be excluded.

I have received complaints from solvers that their names do not appear sometimes when they have sent correct answers. This is due to the fact that many of their letters do not reach me until after the list has gone to press, but they receive credit for them just the same. I regret that I am unable to give a prize to each, but I strive to distribute those I have as impartially as possible.

UNCLE TOM.

Useful Table.

The following table will be useful to those readers who may at any time deal in the articles enumerated. Every farmer should paste this in his scrap book.

Table with 2 columns: Item and Weight. Items include Firkin of Butter, Barrel of Flour, Pork, Potatoes, Fish, Onions, Beef, Gallon of Honey, Chest Tea, Cord of dry Maple, Hickory, Bushel of Charcoal, and Quinnet of Fish.

The World's Fair Cook Book.

We would draw our readers' attention to the very best cook book that the combined skill and ingenuity of 200 of America's foremost women could devise. It contains two thousand choice recipes, and almost every recipe is over the autograph signature of a lady manager or the wife of a governor, and representing the different States, and contains as well about 100 photogravure portraits of the lady managers and other choice contributors.

The book contains over 600 large octavo pages handsomely printed and bound in white oilcloth. In it are included almost every conceivable dish for the table, besides useful hints upon various things such as Setting the Table, Table Etiquette, Party Suppers, How to Carve, etc., etc.

The price of this book is \$2.50, but we present a copy free for three new subscribers to the Farmer's Advocate at \$1.00 each.

This excellent cook book can only be obtained in Canada from us, as we have bought the sole right of the sale of it.

The International Office and Family Atlas of the World.

- 1. This work contains maps of all foreign countries and divisions of the world.
2. Elegantly engraved maps of all the States and Territories.
3. Many miscellaneous maps and charts of an interesting character.
4. Voluminous reference tables of History, Finance, Politics, Agriculture, Commerce, Education, Manufacturing, and general information.

A fine, large, cloth-bound volume replete with valuable information, and a book that will be constantly referred to in any intelligent household.

Price, \$4.50. This fine Atlas will be sent Free, furnished postage paid to any one sending us in the names of four new paid subscribers.

Do You Know

- That eggs covered when frying will cook much more even?
That if you heat your knife you can cut hot bread as smoothly as cold?
That camphor menthol is an excellent inhalant if one is suffering from catarrh?
That a little flour dredged over the top of a cake will keep the icing from running?
That the white of an egg, with a little sugar and water, is good for a child with an irritable stomach?
That clear, black coffee, diluted with water and containing a little ammonia, will cleanse and restore black clothes?
That a large slice of raw potato in the fat when frying doughnuts will prevent the black specks from appearing on their surface?

The Yankee stops a panic or restores confidence by going like a rifle ball straight at the mark. "Where was Starvation Camp located?" said a Hartford man through his nose to the great explorer, Stanley. "On the banks of the Congo," answered the traveler. "Waal, then," said the Yankee, "why didn't you fish?"

An old mule cart used to haul up the currency from the Printing Bureau to the door of the Treasury Department. Every morning, as regularly as the morning came, that old mule would back up and dump a cartload of the sinews of war at the Treasury. A patriotic son of Columbia, who lived opposite, was sitting on the doorstep of his house one morning, looking mournfully in the direction of the mule. A friend came along, and, seeing that the man did not look as pleasant as usual, said to him, "What is the matter? It seems to me you look kind o' disconsolate this morning." "I was just thinking," he replied, "what would become of this government if that old mule was to break down."

Puzzles.

PRIZE PUZZLE.

1-CHARADE.

It's round and square, it's short and long, of many shapes and sizes.
In it, you'll sit to hear a song, it guards the richest prizes;
It makes your garden trim and neat, no house can be without it.
On railway journeys you'll it meet, and porters never scout it:
I gave it to a man one day, he thanked me fair and roundly.
Then gave it to a friend in play, who forthwith thrashed him soundly;
It screens the soldier in a storm, it holds the soldier's kit,
Behind four horses, when 'tis warm, I like on it to sit.
ELIZA STEVENSON.

2-CONUNDRUMS.

Why is the ADVOCATE like (1) Ottawa City; (2) an educated person; (3) a perpendicular line; (4) Christmas?
ADA ARMAND.

3-CHARADE.

A bell was hung in the market place.
It was made by men excelled ONE TWO galore.
And it caused much joy for the populace.
For of SIX they had often wished it to FOUR.
The Mayor of the town and the Counsellors all,
Turned out in the front of the crowd so great;
THREE was there, and went to the Town Hall,
Where five speeches followed at a great rate.
And FIVE cannot conceive what loyalty was shown,
As the bell tinkled out its shrill TOTAL song;
And many a good citizen expressed the wish,
That it would fill its post both well and long.
THOS. W. BANKS.

4-SQUARE WORD.

If on the sea you ever sail,
And leave the dear old land,
You'll find you are surrounded by
My FIRST on every hand.
MY SECOND, "apart from others,"
Looks rather glum and dull,
And, like me too, it is "single,"
But that's not wonderful.
MY THIRD in every house is found,
A-hanging on the wall,
It may be in the kitchen, but
It's seldom in the hall.
The soldiers, in yon fort upon
The rocky dizzy height,
Are watching, calm and steadily
My FOURTH both day and night.
The poor and needy of our land,
In numbers growing vast
"Depend on" others for support,
And now this is my LAST.
GEO. W. BLYTH.

Answers to March 1st Puzzles.

- 1-A person's eyes. I F R A M E
2-Sup-er-a-bun-dance. R A V E N
3-There-in. A V E R T
M E R L E
E N T E R

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

A. R. Borrowman, Henry Reeve, Geo. W. Blyth, Addison Snider, Lena Richardson, Jacob Mueller, Joshua Umbach.

Domestic Arts.

IOTA.

In the earlier ages, it was not inconsistent with dignity to act in what would now be accounted the meanest of menial employments. Among the ancient Egyptians, the women were occupied abroad in trade, merchandise and agriculture; and descending to periods less remote, we find that in Lesser Asia, where it would seem that women were far from being so much neglected as in many other parts of the world, even those of the first quality were not ashamed to perform the office of a washerwoman; and a similar practice afterwards prevailed in Greece.

In the heroic ages, the Grecian wives and daughters, of whatever quality, were not brought up to idleness. Penelope, queen of the famous Ulysses, is so frequently introduced by Homer at her loom, that almost every one has heard the story of Penelope's web. The famous Helen, while confined by the besiegers of Troy, employed herself on embroidery, which represented most of the battles fought between the Greeks and the Trojans; and Andromache, when she heard of the death of Hector, embroidered a representation of that tragic scene, and adorned it with flowers.

But such employments and works were not the sole occupation of the women. The same Andromache, who with her needle painted the fall of the hero of her country, was not ashamed to feed and take care of the horses of that hero, when living.

Besides the arts of weaving and embroidery, which were not unknown to the women in the patriarchal ages, the Grecian fair ones employed themselves in spinning which they performed standing—and in every other branch of the manufacture of cloth, a custom which continued during the most polished periods of Grecian history.

Alexander the Great, and many other heroes and statesmen, wore garments spun and woven by their wives and sisters. During the chivalrous ages in Europe, various kinds of needlework formed a material part of female employment; and many women of the first rank were themselves taught, and instructed their daughters in the art of flower-ing and embroidery, which they practiced to such an extent that much of the furniture of their houses was decorated in this manner with their own hands.

Patrons of Industry.

We want to mail our price lists to each Patron Lodge in Canada, and to do so we must have the secretary's name. Now we can afford to pay for everything we want, and to the person who first sends us the name of the secretary of their local lodge of Patrons and his post-office address, we will at once mail them an article taken from our stock which will well repay you for your trouble.

Our New Spring Illustrated Price Lists are free to all to ask for them. You can save money by buying your supplies from the Wholesale House. Try shopping by mail. We pay the freight.

STANLEY MILLS & CO Wholesale Merchants, HAMILTON, ONTARIO.

TORONTO NURSERIES: Spring 1894. Greeting: A goodly thing that all should know - LESLIE'S TREES ARE SURE TO GROW.

THE TROTTER STALLION MORELIGHT 9337, record 2:30, will stand for service. Includes a photograph of the horse.

OLDENBURGH COACH HORSES. I have always on hand choice stallions and mares. All horses registered. Includes a photograph of a horse.

FOUR IMPORTED CLEVELAND BAY STALLION FOR SALE. He is 7 years old, good stock getter, and he took fifth prize at the World's Fair, Chicago.

HEREFORDS. F. A. FLEMING, 5y-om. Weston, Ont. FOR SALE Two choice Shorthorn Bull Calves, 10 & 13 months old.

IMPORTED SHORTHORNS. D. D. WILSON, Ingleside Farm, SEAFORTH, Ont. IMPORTER AND BREEDER OF SCOTCH SHORTHORNS.

Imported stock from the herds of Wm. Duthie and W. S. Marr for sale; also Canadian-bred from imported bulls and out of imported dams.

H. CARGILL & SON, Cargill, Ont. SHORTHORNS. Two imported bulls are now at the head of our herd.

VALENTINE FIGHT, Maple Leaf Farm, Oriol, Ontario. Offers for sale at reasonable figures and on liberal terms, 30 head of well-bred Shorthorn bulls and heifers, yearlings, and two-year-olds.

SHOW BULL FOR SALE. Includes a photograph of a bull.

WESTRUTHER PARK. Herd of Bates Shorthorns, consisting of Oxford, Barrington, Waterloo, Gwynne, Darlington, and other families.

JOHN IDINGTON, Stratford. JOHN RACEY, JR., BREEDER OF Shorthorn Cattle and Berkshire Pigs.

SHORTHORNS. I have for sale two Shorthorn heifers and two bull calves of fine breeding, fine colors, fine form and carriage.

LINDEN STOCK FARM. At the head of my herd is the Kinnell bull imp. Royal George, while my cows and heifers are principally of the Wimple and Rosedale, also of Kinnellar breeding.

JOHN GILLSON, London, Ont. SHORTHORN: BULLS. An extra good lot now for sale of the following Scotch families: Village Blossom, Duchess of Gloster, Mina and others.

MEADOW-LAWN SHORTHORNS. I will sell bull calves from my stock bull Royal Sovereign at prices to suit the times.

SHROPSHIRE EWES. And their lambs for sale by car lots; also a very choice Short-horn Bull calf, ten months old.

"MAUD S" Powders are given with great advantage to an animal affected with worms, loss of appetite, roughness of hair or coat, stoppage of water and bowels, with coughs and colds, inflammation of lungs and bowels, recent foundlers, swelling of glands of throat, horse distemper, hide bound, botts, scurvy, loss of cud, horn distemper, black tongue, etc., and also will backen the heaves, and in recent cases effect a cure.

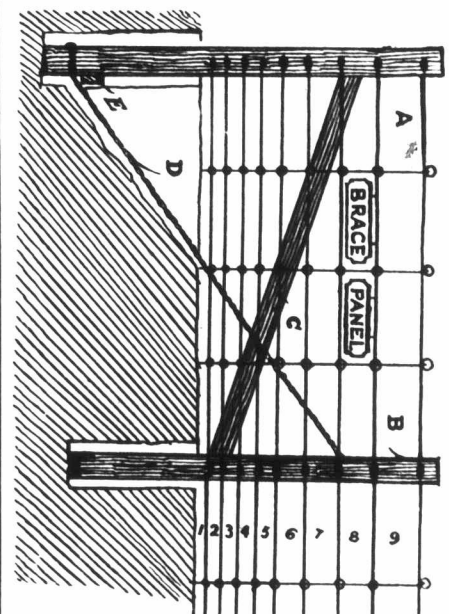
WE OFFER TO MAIL For 10 Cents, a Regular 25c. Package To anyone who wishes to try them before purchasing a supply.

DAVIS & LAWRENCE CO., Ltd., Montreal. M. I. ELLIOTT, Riverview Farm, Danville, P. Q. Breeder of Scotch Shorthorns.

STOCKMEN USE LEAVITT'S DEHORNING CLIPPER

It makes perfect mulies; cuts all around the horn; can be used by anyone and on any aged animal. It is positively the BEST! Endorsed by every V. S. and S. P. C. A. that have seen it.

S. S. KIMBALL, Manager for the Dominion, 577 Craig Street, 7-10 MONTREAL, P. Q.



THE UPRIGHT STAYS ARE CRIMPED MAKING Double Lock. ADDRESS H. A. STRINGER, 141 King-St., London, 7-a-o

IT PAYS TO ADVERTISE: FARMER'S ADVOCATE AND HOME MAGAZINE. Leading Agricultural Journal of the Dominion. The William Weld Company LONDON, ONTARIO.

NOTICES.

Hon. M. H. Cochrane, of Hillhurst, P. Q., recently sold seven grade lambs about six weeks old for \$12.00. There is money in it.

John E. Lenton, Oshawa, Ont., has been appointed Canadian agent for Webster & Hampham's green bone, meat and vegetable cutter. This is an excellent device, and every poultry keeper should own one.

Nothing demonstrates the prosperity of a township more than to see the general use of improved machinery, and this is just as true of dairy districts as others. This year will witness a great extension of the dairy business, and many improvements are contemplated in cheese factories and creameries.

We have just received the catalogue of the Farmers' Harness Supply Co., wholesale manufacturers of harness, saddles, shoes, etc., whose advertisement appears in this issue.

100 WORLD'S FAIR PHOTOS FOR \$1. These beautiful pictures are now ready for delivery in ten complete parts—16 pictures comprising each part—and the whole set can be secured by the payment of One Dollar.

Mr. T. Irving's name has long been associated with this farm, but a large proportion of it has been sold off for building lots, he will soon be forced to secure other property.

A VERMIN EXTERMINATOR. From a large number of similar letters regarding Little's excellent preparation for destroying vermin, we select the following from John Small & Sons, Willow Lodge Stock Farm, Edmonton, Ont.:

The Mutual Life Insurance Company of New York celebrated the Fiftieth Year of its existence in 1893, and the event will be memorable as being one of the most successful in a business point of view that the company has ever experienced.

BOOKS RECEIVED. We have received a copy of a very practical little work from the pen of the well-known potato grower, T. B. Terry, Hudson, Ohio. It is indeed what he calls it, 'The Art of Potato Culture'.

STOCK GOSSIP.

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

H. J. Davis, Woodstock, Ont., reports that his sales of Yorkshire and Berkshire pigs have been very numerous, and enquiries very plentiful. He also states that his advertisement in the FARMER'S ADVOCATE has been a very profitable investment.

E. Gaunt & Sons, St. Helens, Ont., send the following note:—"Our Leicesters have been doubling up at a terrible rate the last two weeks. We have, from 22 ewes, 45 lambs, with some ewes to lamb yet. We have four sets of triplets. Can the Shrops beat this for prolificacy? In Shorthorns, recent sales have been made to M. McKay, Ripley; Jno. Shortreed, Walton; Jas. Tabb, Auburn; D. Farrish, Lanos; John Perdue, Wingham, who each got an excellent young bull. Prices were fair."

ASHTON GRANGE FARM.

This farm is situated at St. Laurent, about six miles from Montreal, the property of Wm. Tait. His father, Mr. Alexander Tait, came from Scotland over fifty years ago, and soon after located there, and, by industry and careful management, has accumulated considerable property. For many years they have kept a large herd of milch cows and delivered milk in the city of Montreal. About eighteen months ago Mr. Wm. Tait purchased a number of Large Yorkshire and Berkshire pigs. The foundation of the Yorkshires are Walker Jones and Sanders Spencer's stock. Ashton Hero, his stock hog, secured first prize last fall in Montreal; he also got first, second and third on sows, namely, Jessie, Village Girl and Ashton Pride. In another pen we noticed two good young sows, Markham Beauty and Markham Daisy; they carried off first and third prizes in the class under six months. These he purchased from John Pike & Sons, of Locust Hill. He has ten Yorkshire breeding sows and two Berkshires, fifty young Yorkshires varying in age from ten days to two months. Among them are some promising things for the fall exhibitions.

MEADOWSIDE AYRSHIRES.

Meadowside Stock Farm, the property of Messrs. Joseph Yuill & Sons, Carleton Place, Ont. This farm comprises six hundred acres; it is splendidly adapted to dairying, having abundance of good spring water. Mr. Joseph Yuill has been a breeder of Ayrshires for over twenty-five years; the herd number sixty-four head, twenty-seven milch cows. The herd is headed by MacNeil No. 771, sired by Roger 3rd; bred by Mr. John Newman. This bull was placed sixth in Chicago in a class of fourteen. They also took first and sixth on bull calves, second and fifth on two-year-old heifers, fourth and sixth on heifer calves. They have several good young bulls for sale, including the prize-winners at Chicago. They are also breeding Berkshire pigs and Shropshire sheep. Parties requiring young Ayrshire bulls will do well to write them at once. Mrs. Yuill is well known as a successful butter-maker; she oversees this part of the business herself. They always have a good demand for all they can make at several cents per pound over the market price. For a number of years they have used the deep setting system, but are now contemplating purchasing a Separator.

JAS. DRUMMOND & SONS AYRSHIRES.

A noted Ayrshire herd is owned by Messrs. James Drummond & Sons, Petite Coe, Montreal. We believe this is the largest herd of Ayrshires in Canada. Victor of Park Hill is at the head of the herd. He is sired by Rob Roy, dam Victoria, who has a record of over 10,000 lbs. of milk in one year. This bull has taken twelve first prizes in his class, and captured the sweepstakes prize three times last year. Viola 3rd is twelve years old, she has been a splendid breeder and the dam of a large number of prize-winners. She has a good milk vessel, but her teats are rather short. She is in calf again this year. Viola 5th is also a good one, having a good shaped udder, fine sharp shoulder and well-sprung ribs. She took first prize and sweepstakes last fall in Montreal, second at Toronto and first at London. Lilly of Hardington has a milk record of sixty-two pounds in one day. She is fine in the shoulder, with extra deep, well-sprung barrel; was awarded first prize in Toronto last fall for cow and two of her get. Bait Gate Lass is a promising young cow with exceptionally fine Ayrshire points. Kate of Parkhill is a neat one, and will make a mark for herself in the show ring. Lack of space will only permit mentioning a few of them. The demand for stock has been good from all parts of the Dominion. It is seldom there will be found such a large number of choice two-year-old heifers in one stable as may be found on this farm.

Caldwell Bros., Briery Bank Farm, Orchard, Ont.—"Our stock have wintered nicely, and in the next two months we have more than a dozen handsome Ayrshire cows and heifers due to calve to Albion Chief 868, a son of Maggie Brown of Barmoorhill, undoubtedly one of the best cows ever imported into Canada. We desire to reduce our stock, and are asking low prices for quick sale. We have made the following sales of Ayrshires since last report: 1 bull to Geo. Bush, Jordan, Ont.; 1 bull and 1 cow to R. Tiffin, Lucknow, Ont.; 1 heifer calf to Jas. White, Perth, Ont.; 1 bull to R. Ewins, Chatsworth, Ont.; 1 cow to C. L. Grant, Durham, Ont.; 1 bull to M. Ballantyne, St. Mary's, Ont. We have found a brisk demand for Red Tamworth and Yorkshire pigs. We have already 20 young pigs on hand, and 1 more Tamworth sow to follow. The following are our sales recently in pure-bred pigs: Yorkshires—1 boar, R. Tiffin, Lucknow, Ont.; 1 boar, W. J. Ritchie, Greenock, Ont.; 1 boar, W. J. Mason, Oliphant, Ont.; 1 boar, J. H. Rhodes, Uxbridge, Ont.; 2 sows, Chas. Mitchell, jr., Port Elgin, Ont.; 1 sow, A. Aitkens, Holstein, Ont.; 1 sow, Wm. Pinder, Orchard, Ont.; 1 sow, J. Haeflin, Orchard, Ont.; 1 sow, A. McGillivray, Glen Eden, Ont.; 1 boar, James G. Wilson, Merritt, Ont.; 1 boar, C. Durham, Ont.; Tamworths—1 boar and 2 sows, T. L. Savles, Paris, Ont.; 1 boar and 1 sow, T. D. Box, Thornedale, Ont.; 1 boar, T. H. Clark, Watford, Ont.; 1 boar, Thos. Haddock, Hollen, Ont.; 1 boar, G. E. Crosswell, Seaford, Ont.; 1 boar, Elias B. Kolb, Berlin, Ont.; 1 boar, Davies & Co., Lachine, Ont.; 2 sows, A. C. Hallman, New Dundee, Ont.; 1 sow, Hooper & Co., Cresskill, Ont.

TREES AND PLANTS.

UPON our 250 acres of nursery we have every class of hardy Trees and Plants; Fruit, Ornamental, Nut and Flowering. **Mary and Henry Ward Beecher** Strawberries and **Lovett's Best Blackberry** are among the most valuable novelties. In our catalogues named below which are the most complete, comprehensive and elaborate published by any nursery establishment in the world; all are accurately described and offered at one-half the price of tree agents.

LOVETT'S GUIDE TO FRUIT CULTURE tells all about fruits, their merits and defects; how to plant, prune, cultivate, etc. Richly illustrated. Several colored plates. Price 10c.

LOVETT'S MANUAL OF ORNAMENTAL TREES AND PLANTS is an authoritative as well as instructive; a model of excellence in printing and illustration. Gives points and plans for ornamental planting. Price, with colored plates, 15 cents.

Established 40 years. We successfully ship to all parts of the World.

All who order either of the above and name this paper will receive an ounce of Flower Seeds free.

J. T. LOVETT & CO. LITTLE SILVER, N.J.

GREAT CLOSING-OUT SALE

—O—F—C—

SHORTHORNS

: From the Bow Park Herd, :

WEDNESDAY, APRIL 25

This sale, which will be held at Bow Park, BRANTFORD, ONT., will include all the animals now on the farm, which, with the exception of four cows, are all young. The heifers, a beautiful lot, are in calf to Lord Outhwaite (a son of the celebrated cow Lady Isabel) and one of the best show bulls on the continent. The young bulls are very promising, being thick, low down and full of hair. Sale will commence at 1 o'clock p. m. Conveyances for intending purchasers will meet trains at Brantford on morning of the sale. Catalogues may be had after April 10th on application to the undersigned, and at the Globe office, Toronto.

TERMS—3 and 6 months' credit on approved endorsed notes, or cash with discount at 6 per cent. per annum.

JAMES SMITH, MOWAT, DOWNEY & LANGTON,
Manager Bow Park, Solicitors for Vendors,
BRANTFORD, ONT. TORONTO.

FOR SALE.

A choice lot of Shorthorn—bulls and heifers, of good quality and of the most approved breeding. Show animals a specialty. The accompanying cut represents one of the animals now offered for sale. Come and see us, or write for particulars.

JOHN MORGAN & SONS,
7-1 y-om KERWOOD, ONT.

SHORTHORNS AND SHROPSHIRE.

For sale, seven young Shorthorn bulls, from 8 to 12 months old, got by Grand Fashion—15404—; also a choice lot of Yearling Ewes due to lamb in March. All Stock Registered.

W. G. PETTIT,
13 y-om Freeman P.O., Burlington Stn., G.T.R.

HOLSTEIN BULL FOR SALE

To avoid in-breeding I must sell my stock bull, Netherland Romulus. This is one of the best Holstein bulls in Canada. He won second premium at the Industrial this year in the longest class ever shown there. Warranted right every way, perfectly quiet, and as good as when he was a two-year-old. Price very low. R. S. STEVENSON, Ancaster P. O., Ont. 13-1 y-om

LARGE IMP. YORKSHIRE PIGS AND HOLSTEIN CATTLE.

We breed nothing but the best, and sell cheap and guarantee satisfaction, or ask no pay. Come and see us, or write for prices and be convinced.

FLETCHER BROS.,
Oxford Mills P. O., Ont.,
Kemptonville Station, C. P. R.
5-1 y-om

JERSEY COWS

If you want the choicest of the breed, then write or visit Maple Grove. Only the very best are kept and bred here. No culls sold from my herd, they go to the butcher. Choice young things from the great Colanthus A. becker now for sale at living prices. Also some extra fine Berkshire pigs. Address,

H. BOLLERT,
3-1 y-om CASSEL, ONT.

JERSEY CATTLE

Of the heaviest milking strains. One of the largest herds in Canada; bred closely to the great dairy cow at Chicago, also the famous two-year-old. Sires of both were sold from this herd. Also Welsh Blood Ponies for ladies' and children's driving. Stock for sale always on hand. GEO. SMITH & SON, Grimsby, Ontario. 3 y-om

FIRST PRIZE JERSEY HERD.

Two young bulls from first prize cows and first prize bull at Toronto. (Several heifers to calve shortly, suitable for family cows. 3-1 y-om J. H. SMITH, Highfield, Ont.

BARCHESKIE HERD OF AYRSHIRES

Andrew Mitchell,

the largest breeder and exporter of Ayrshire cattle in Scotland, has always on hand and for sale bulls, cows and heifers of the choicest breeding and quality. Inspection invited. Prices on application. Apply to

ANDREW MITCHELL,
3-1 y-om Barcheskie, Kirkcudbright, Scotland.

WOODROFFE STOCK AND DAIRY FARM.

Ayrshire Cattle. A choice lot of young Bulls and Heifers of the richest milking strain now on hand. Correspondence solicited. Address, J. G. CLARK, Ottawa, Ont. 19-L-om

J. YUILL & SONS,
Meadowside Farm, Ontario

Carleton Place, Ontario

Our herd is composed of seventy-five head. Leonard Meadowside—122—, first prize at World's Fair, heads the herd. Cows of the deepest milking strain, having won several medals at provincial tests. Shropshire sheep and Berkshire pigs. Young stock of both sexes for sale. Visitors welcome; met at train. Give us a call. 7 y-om

PURE-BRED AYRSHIRES

NICOL & SON,
Catarqui, - - Ontario.

6-4-om Some young bulls for sale.

AYRSHIRE BULL CALVES FOR SALE

Imported in a dam from Scotland in 1893. Two choice ones from the most noted sweep-stake dairy breed strains procurable in Scotland. For milk, butter and cheese records they are second to none, having competed successfully at all large contests in Scotland and England which were open to the world. Make no mistake. Head your herd with this noted strain, which were purchased regardless of expense. For further particulars, write or come and see R. G. STEACY, Importer and Breeder of Ayrshires, Maple Grove Ayrshire Stock Farm, line G. T. R., LYN, Ont. 7-0

CHAMPION DAIRY HERD OF AYRSHIRES

at various government tests. Prize winners at the World's Columbian Exposition, Chicago. Write R. ROBERTSON, Howick, Que. 19 y-om

AYRSHIRE BULLS.

THREE Ayrshire Bulls for sale—18, 13, and 12 months old. M. BALLANTYNE, St. Mary's P. O., Ont. 7-om

THE GLEN STOCK FARM

AYRSHIRES AND BERKSHIRES.

A few good Ayrshire bull calves and heifers, Berkshire boars and sows. For particulars write

Whiteside Bros.,
7 y-om INNERKIP, ONT.

A. McCALLUM & SON,
Sprucehill Farm, Danville, Que.

Pure-Bred Ayrshire & 6-f-om Berkshire Pigs.

Imported and Home-bred LINCOLNS

The first Royal winner, Royal Chester, at the head of the flock. Ewes from the best English flocks, such as those of Dudding, Bailes, Wright and Clark. Rams to head flocks a specialty.

R. W. STEVENS,
LAMBETH, ONT.
London Station.

PETER ARKELL, Teeswater, Breeder & Imp.
of Registered Oxford-Down Sheep. 22 y-om



W. C. EDWARDS AND COY

IMPORTERS AND BREEDERS.



PINE GROVE STOCK FARM, Rockland, Ont.

SCOTCH SHORTHORNS.

The imported Cruickshank bull Grandeur is at the head of this herd of Imported and Home-bred Cows and Heifers of the most approved Scotch families.

ALEX. NORRIE, Manager.

ELMHURST STOCK AND DAIRY FARM

CLARENCE, ONT.

Shorthorns, Shropshires and Berkshires

Our flock is from the choicest English flocks, headed by the ram sent out by Mr. Thos. Dyke; also milking Shorthorns, with imported bull Pioneer at the head of the herd.

HENRY SMITH, Manager.

Laurentian Stock AND Dairy Farm

NORTH NATION MILLS, P. Q.

Ayrshires, Jerseys and Berkshires.

Imported Emperor at the head of a grand lot of Imported and Canadian-bred Ayrshires; also St. Lambert Jerseys and Imported Berkshires.

STOCK GOSSIP.

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

At a recent sale in New York by Mr. W. D. Grand, seventeen Canadian horses were disposed of for a total of \$4,682, an average of \$276. The lot were well thought of by the American buyers.

Messrs. Peter Lamarsh & Bro., Wheatley, Ont., state that they expect a lot of extra good pigs for the spring trade, and are now booking orders, including some from the United States, for May and June delivery.

The Woodbine Driving Club, Toronto, at a recent meeting elected the following officers for the coming year: George R. Hogaboom, President; H. P. Kerr, Vice President; John Sheridan, Treasurer; H. J. Hill, Secretary.

The spring meeting of the Ontario Jockey Club, Toronto, will take place May 22 to 26, both days inclusive, and the card will have six races each day. The purses will be greatly increased over those offered last year. Mr. L. Ogden is the secretary.

C. T. Garbutt, Claremont, Ont., offers in this issue ten Cotswold shearling rams, the get of Chancellor (imp) 5835-14, second winner at the World's Fair, and choice Berkshires of the highest merit. His stock has won the only three silver medals ever offered at Ontario Central and diploma at North and South Ontario Fairs. See advertisement.

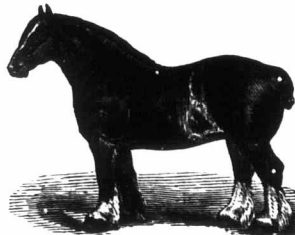
Capt. A. W. Young, Tupperville, writes us as follows: "I herewith enclose a list of names of customers who have bought stock from me through the introduction (mainly) of the FARMER'S ADVOCATE. I have still on hand a few Wilkes sows about seven or eight months of age, and also a few boars of the same strain that are old enough for service. Chas. Lattimer, Dresden, Ont., boar; Wm. Howell, Thornhurst, Ont., boar; G. Truempour, Tupperville, Ont., sow; G. Hopper, Tupperville, Ont., boar; Wm. Willis, Newmarket, Ont., pair; Ashton Lloyd, Newmarket, Ont., boar; J. J. Payne, Chatham, Ont., 5 boars; John Highwater, Dover Centre, sow; Wm. Speck, Brinkwater, boar; Thos. Desmond, Dresden, sow; W. W. Fisher, Benmiller, sow; Jas. Stanton, Singleton, pair; J. I. Holmes, Tupperville, Ont., sow; W. C. Henry, Thornton, boar; A. Denhardt, Tupperville, Ont., sow.

H. Bollert, Maple Grove Stock Farm, Cassel, Ont., writes under date of March 17th: "Yesterday I had a bull calf dropped which does more than a passing notice. He is the richest bred youngster that ever breathed Canada's bracing air. His seven nearest female ancestors (excluding his dam, who is only two years old), have an average butter record of 31 lbs. 3 ozs. in seven days. The cows in his pedigree are: Albert 2nd's Beau, 24 lbs. 10 ozs. in seven days; Alberta Abbecker 2nd, 24 lbs. butter in seven days; at three years old Alberta Abbecker, 20 lbs. 6 ozs. butter in seven days, and twice winner of sweepstakes for producing most butter in twenty-four hours, in competition with all breeds; Tiranna, 36 lbs. 11 ozs. in seven days; she won gold medal and \$100 in cash for producing the most butter in twenty-four hours ever made in a public test; Mechtchilde, 39 lbs. 10 ozs. butter in seven days, and 292 lbs. 6 ozs. in sixty days; she also has a milk record of 112 1/2 lbs. in one day; Pietertje 3rd, 27 lbs. 8 ozs. butter in seven days; 64 ozs. in thirty days, and at four years old gave 24.126 lbs. milk in a year; Pietertje 2nd, who holds the world's year's milk record with 30,318 lbs. The bulls in his pedigree are Sir Abbecker, Tiranna's Sir Mechtchilde, Mechtchilde's Sir Henry, Sir Henry of Maplewood, Mills' Pietertje, Netherland, Netherland Duke and Netherland Prince. I would ask, Where can you find his equal? If he is in Canada, I should like to be informed of it, as I would like to own him."

MR. McALLISTER'S BERKSHIRES.

The farm on which Mr. McAllister, of Varna, P. O., has started his breeding establishment, is situated near Varna, in the County of Huron, his railway station being at Brucefield. He has laid the foundation of a very superior herd of Berkshires. It is evident that he has aimed high in founding this herd, and in making his selections he has been careful only to purchase the best animals, and to give these the best of attention. We know that when these requirements have been carried out success is sure to follow, and this case is no exception to the rule. When we were informed by Mr. McAllister that he had won thirty-five prizes during the last season, we were not surprised, for an inspection of this herd cannot fail to convince a visitor that the proprietor is determined to have nothing but the best. A large number of excellent young sows had been bred during last November and December to supply customers with young pigs, or with brood sows due to farrow in early spring. These have been mated with three different boars, by which pairs or trios which are not related may be sent to customers. Two of these boars are still retained in the herd, the older of which is Morton 287, a three-year old pig, bred by J. C. Snell & Bro., Edmonton. He was sired by imported Royal Star, and out of the same dam as Messrs. Snell's sweepstakes barrow at the last Guelph Fat Show. Morton is a superior pig, possessing plenty of clean flinty bone. The younger boar retained for service in the herd, though only farrowed in July, 1893, has made rapid growth and is well developed. He was bred by Messrs. Snell. This pig was sired by Prince Regent, Ewe's dam, Moulford-1483, of the celebrated family of that name, bred in the herd of Mr. J. P. King, Moulford, England. This is an extraordinarily good young pig. A very superior sow is Lady Stanley 2nd, dam, Lady Stanley; bred by Mr. George Green, Fairview. Then there is a grand yearling sow, sired by Huron Chief, also of Mr. George's breeding. The three-year old sow Cynthia, sired by imported Perry Lad, her dam being a descendant of Swanswick Sallys, has done good service in the herd. She is a right good sort, with plenty of length and depth and thickness of hams - features which all breeders are aiming to combine; she has an exceptionally good face, and is altogether a handsome pig. Many other good ones were to be seen, but want of space forbids further description. Mr. McAllister has recently built a commodious pigery that is at once roomy and convenient, and, as he is quite favorably situated, he hopes to be in a position to supply his share of the demand for Berkshires.

THORNCLIFFE STOCK FARM!



Montrose, The Ruler, Carruchan Stamp, Knight Errant and other celebrities. My stock in the above lines were very successful at all the large shows last year. Call and examine our stock before purchasing elsewhere. Terms reasonable.

19-1-y-om

ROBERT DAVIES, Proprietor. P. O., Toronto.

SHROPSHIRES.

Orders can now be booked for Shearling Rams, Ram Lambs and Ewes, sired by the celebrated prize-winning English ram, Bar None. Also Rams and Ewes of this year's importation.



SHORTHORNS!

CHOICE YOUNG HEIFERS and BULLS

by the celebrated Cruickshank bulls

NORTHERN LIGHT

—AND— VICE CONSUL



HENRY ARKELL, Arkell P. O., Ont.

Importer and breeder of Oxford-down sheep, winner of nine prizes out of ten entries at World's Fair. Fifty rams and ewes for sale, both imported and Canadian-bred; 100 ram and ewe lambs for 1894, from Royal and World's Fair winning rams. Prices reasonable. Guelph, G. T. R., Arkell, C. P. R.; Telephone, Guelph; Telephone, Arkell. 7-1-y-om

BOULDER GRANGE FLOCK

REGISTERED SHROPSHIRES. Imported and home-bred stock of the finest quality and most fashionable breeding, with prices to suit the times. Inspection invited.

C. W. GURNEY, 7-1-1-om Paris, Ont.

SHROPSHIRES - FOR - SALE

My whole flock of 60 head of Imported Rams and Ewes, a few home-bred Shearling Rams, and a choice lot of lambs of both sexes. Also a choice lot of young Yorkshire Pigs. T. H. MEDCRAFT, Sparta, Ont. 19-y-om

JOHN DRYDEN, BROOKLIN, ONT.

Makes a specialty of breeding choice

SHROPSHIRE SHEEP

AND:—

Cruickshank Shorthorns

Low down, heavy weights, thick fleshed and easy feeders. A few choice young bulls, good colors and good quality, are ready for immediate shipment. PRICES MODERATE. 3-1-y-om

COTSWOLD RIDGE FARM

The largest breeding flock of pure-bred Cotswold Sheep in Ontario. Shearling Rams and Ewes from imported sires and dams. A grand lot of Ram and Ewe lambs also from imported sires & dams. Sheep are either bred or imported by myself. I also breed Durham Cattle and Berkshire Swine. Can supply pairs not akin of my own breeding. JOSEPH WARD, Marsh Hill P. O., Uxbridge Station. 9-1-y-om

Imported Cotswold Ewes

In lamb to an English royal winner that has proved himself a great stock sire. Ram lambs and ewe lambs from imported stock, which will make good show sheep, for sale at hard times prices.

WM. THOMPSON,

MT. PLEASANT, Uxbridge Station, G. T. R. 9-1-y-om



T. W. HECTOR,

Importer and Breeder of Dorset Horn Sheep. The oldest flock in Canada. P. O.: Springfield on-the-Credit. Stations: Springfield and Cooksville, C. P. R.; Port Credit, G. T. R. 5-1-y-om

SPRINGBROOK SHORTHORNS FOR SALE

Seven Red Shorthorn bulls, age ten to eighteen months—price \$75 to \$125 each—also a red and roan exhibited at Chicago, age fourteen to eighteen months. These bulls are all bred from prize-winning sires and dams. Our herd was awarded seven first prizes and two medals, including three first prize herds, out of five offered for competition; sweepstakes for bull, heifer and herd of bull and four females, all under two years, against all beef breeds, winning more money and first prizes than any herd at Chicago. Our herd is headed by Prince Royal and Lord Stanley. The latter was awarded first in his class, sweepstakes and medal by age, and headed three first herds, winning more money and first prizes than any bull shown at Chicago. The report circulated regarding the color of our herd is untrue. We have, in seventy-five head, three white, all shown in the \$600 sweepstakes herd at Chicago. There has been one white dropped on the farm in two years, or one in the last fifty calves.

J. & W. RUSSELL, Richmond Hill.

Richmond Hill is 16 miles north of Toronto, a station on the Northern Division of the Grand Trunk Railway. 6-b-0

ISALEIGH GRANGE FARM, DANVILLE, P. Q.

SOLD AGAIN! Three of the four Guernsey bulls advertised by us are sold and delivered. We still have one more, the 3rd prize calf at the World's Fair, now fourteen months old—a dandy. Lowest price, \$200.

IMPROVED YORKSHIRES.—We claim to have the longest, deepest and most typical LARGE YORKSHIRES in AMERICA, and the reason why is that we have imported more pigs from the best herds in England than any two Yorkshire breeders on the continent. Orders booked now for spring pigs. Two very handsome COLLIE BITCHES, seven months old, \$10 each. Address, J. Y. ORMSBY, Manager. 9-y-om

JERSEY CATTLE FOR SALE

Bred for butter. G. sons and g. daughters of "Massena," the greatest cow of her age in the world, —8,000 lbs. milk and 654 lbs. butter in her 16th year; also stock from "Signal of Belvedere," whose dam made 20 lbs. 6 ozs. butter in one week on second calf. Also stock from the greatest living prize bull, Canada's Sir George, whose dam made 26 1/2 lbs. butter a week and 57 lbs. milk a day. Splendid bulls, six months old and registered, \$100 each.

MRS. E. M. JONES, Brockville, Ont., Can.

Mrs. Jones' great book, Dairying for Profit, 30c. by mail. Address, ROBT. Y. BROWN, Agent, Box 324, Brockville, Ontario, Canada. 8-y-om

The Most Celebrated Stud of Clydesdales and Hackneys in Canada is owned by

GRAHAM BROS., CLAREMONT, ONT.



The choicest animals that money and experience can buy, and well qualified to maintain the reputation of our stud for importing. More first prize and sweepstakes winners at the leading shows in Canada and the United States than all other establishments of its kind in the Dominion. The Clydesdales have immense size, large flat bone, with style, quality and choice breeding combined. The Hackneys have fine colors, style, quality, high knee action and choicest breeding. The home of the Champion Clydesdale Stallion, Queen's Own, and the Champion Hackney Stallion, Firefly. Parties wishing the best animals at reasonable prices are cordially invited to examine our stock. Catalogues free.

GRAHAM BROS., CLAREMONT, ONT.

25 miles east of Toronto, on C. P. R. 7-b-om

GERMAN COACH HORSES

We have added to our stables the entire lot of the German Government World's Fair exhibit of German Coach Stallions and Mares, and now have the greatest show in America or Europe. These stallions will sire the grandest Coach and Carriage Teams ever seen. We have the only horse that sires the 16 to 16 1/2 hand sellers. We also handle Trotting and Pacing stock. Send for Catalogue.

LAFAYETTE STOCK FARM,

J. CROUCH & SON, Proprietors, LaFayette, Ind., U. S. A. 6-d-om

JOHN A. MCGILLIVRAY,

Jerseydale Farm, Uxbridge, Ont., Midland Div.

C. T. R., importer and breeder of

Dorset Horned Sheep 19-1-y-om

BERKSHIRES

Of the best strains not connected from a number of grand sows and three different boars. Fifty eight prizes won last season. All ages for sale, including sows in farrow. 3-1-y-om

WM. McALLISTER, Varna, Ont.

STOCK GOSSIP.

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

Capt. A. W. Young, of Tupperville, advises us that he has a few pairs of good Poland-China pigs, unrelated, still for sale. Has also about 500 lbs. of extracted white clover honey, which he will sell at a bargain. Send for copy of his swine catalogue.

In this issue will be found a special advertisement of R. G. Steacy, Brockville, Ont., in which he offers several very choice Ayrshire bull calves imported in dam. Mr. Steacy has a most excellent herd of Ayrshires, and a strain of blood from this herd would be a great improvement to many carefully bred herds.

The gaited saddle horse has come to the front on the other side, and is creating a great sensation. The directors of the National Saddle Horse Breeders' Association were authorized to offer \$1,000 of the Association's surplus funds in special prizes at shows where the exhibitions of the gaited saddle horse would be productive of the best results.

Mr. D. D. Wilson, Seaforth, Ont., makes a change of advertisement in this issue, as he has disposed of all the bulls of his own breeding. He still has Prime Minister, which he will sell at a reasonable figure and on easy terms. He reports his imported stock as doing very well. The roan yearling bull is growing very fast and weighs about 1,400 pounds.

We take pleasure in calling our readers' attention to Mr. Ed. Lubben's advt. of Oldenburg Coach horses. Mr. Lubben is one of the leading breeders of this class of horses in Germany. A large number of horses exhibited by this firm were shown at Chicago Exhibition, and attracted a great deal of attention. We would advise any of our readers desiring this class of horse to correspond with him.

The English Live Stock Journal has the following comments on the resolution of the American Clydesdale Horse Society to exclude whites and greys from their stud book after next year: "This action shows that the breeders on the other side of the Atlantic intend to act in future very independently of the home Society. Had greys been kept out thirty years ago we would have had no Prince of Wales, as both of his granddams were grey in color. Many of the more remote ancestors were also greys, and in later times we had a roan grey, though of a very dark shade, in Lord Lyon. Two of the best mares when the Knockdon stud was in its prime, were also whitish grey mares. The celebrated Merry Tom, said to be one of the handomest horses which ever travelled the Glasgow district of Scotland, was also a grey horse. The Americans would seem to wish the breed restricted to bays and browns."

LINDEN SHORTHORNS.

Mr. John Gillson, the proprietor of this herd, has for a number of years been identified with fine stock breeding. He has at different times owned some of the very best imported specimens of Clydesdale horses and Shorthorn cattle. Linden Stock Farm is quite convenient for visitors, as it may be reached by a short drive from the city of London. The farm was equipped as a Shorthorn breeding establishment by Mr. James Thompson, from whom Mr. Gillson purchased it, and, in times gone by, some right good ones have been turned out by both these gentlemen. The herd now quartered there has but recently been reworked together, but with the energy and enterprise for which Mr. Gillson has ever been distinguished, much has been accomplished. The animals belong to some of the most popular families. The bull at the head of the herd is Royal George, bred at Kinnellar and imported by Mr. Arthur Johnson, Greenwood. This animal was sired by Royal James, a son of Cumberland, so highly prized as a sire at Sittlyton. The dam of Royal George is Maid of Promise that won no less than three champion cups, the last being at the Highland Societies' Show in 1882. From such illustrious parentage one would expect to find a superior animal, and such is indeed the case, for Royal George is a wonderfully developed young bull of good red color and with capital hair. He is such a lusty, well-grown fellow that we feel we can scarcely say sufficient in his favor. He gives promise to be a large bull, has plenty of length, while he is particularly good in the quarters which are both long and level; for heart girth and well filled crops he scores high. He possesses all the essentials of a successful sire.

The females in the herd are also of a high order, and have evidently been selected with a view of establishing a herd of Shorthorns that will take a foremost position in the future. There are four of the highly-prized Kinnellar Wimples, three of which are daughters of (imp.) Wimple by Golden Prince, a cow which has proved a most satisfactory breeder, having produced some very successful show-yard winners as well as breeders of note. It was doubtless with a view of topping out the family with a good one that induced Mr. Gillson to purchase Wimple Birdie, the heifer that was greatly admired at the dispersion sale of Mr. Cockburn's Shorthorns on January 8th last. Wimple Birdie was considered by many good judges to have been the best heifer of Northumberland, and imported Buchan Lassie. Wimple Daisy is a lengthy cow of smooth finish, and is the type that can be depended upon to produce the right sort of feeding cattle. There are also a number of Rosedales—a family that has always been held in esteem by admirers of Kinnellar cattle, which have had the advantage of having been crossed with imported bulls of the best sorts. In their top crosses we find such imported bulls as Enterprise (1853), Baron Camperdown (1389), and other good ones. Mr. Gillson has a few right useful young bulls of the above families that are worth looking after.

To Stockmen & Breeders.

LITTLE'S PATENT FLUID NON-POISONOUS SHEEP DIP AND CATTLE WASH.

For the destruction of Ticks, Lice, and all Insects upon Sheep, Horses, Cattle, Pigs, Dogs, etc. Superior to Carbolic Acid for Ulcers, Wounds, Sores, etc.

Removes Scurf, Roughness and Irritation of the Skin, making the coat soft, glossy and healthy.

The following letter from the Hon. John Dryden, Minister of Agriculture, should be read and carefully noted by all persons interested in Live Stock.

"MAPLE SHADE" HERDS AND FLOCKS. BROOKLIN, ONT., Sept. 4th, 1890. DEAR SIR, I cannot afford to be without your "Little's Sheep Dip and Cattle Wash." It is not merely useful for Sheep, but it is invaluable as a wash for Cattle, etc. It has proved the surest destroyer of lice, with which so many of our stables are infested, I have ever tried; it is also an effectual remedy for foul in the feet of Cattle. I can heartily recommend it to all farmers and breeders. JOHN DRYDEN.

Seventeen Gold, Silver and other Prize Medals have been awarded to "Little's Patent Fluid Dip" in all parts of the world. Sold in large tins at \$1.00. Special terms to Breeders, Ranchmen and others requiring large quantities. Ask your nearest druggist to obtain it for you; or write for it, with pamphlets, etc. to ROBERT WIGHTMAN, DRUGGIST, OWEN SOUND, ONT.

Sole Agent for the Dominion. 7-1-y-om



TO FARMERS, STOCK DEALERS & WOOL CROWERS

FOR SHEEP, CATTLE AND HORSES. LEICESTERSHIRE TICK & VERMIN DESTROYER. It effectually destroys Ticks, Lice, Worms or Grub, to which sheep, horses and cattle are subject, and enables the animal to thrive. It will be found far superior to other preparations used for the similar purpose. The proprietors will guarantee perfect success when used according to directions, as will be found on each box. It prevents scurf and scab, and renders the wool bright & clear. It is put up in tin boxes, price 30 cents each. One box is sufficient for twenty ordinary sized sheep. It only requires to be tried to prove itself all that is claimed for it. Sold by Druggists and Grocers. Manufactured by G. C. BRIGGS & SONS, 31 King St. West, Hamilton, Ont. 5-1-o

IMPROVED LARGE YORKSHIRES

The largest herd and the most profitable type of Yorkshires from the feeder's standpoint in America. Over fifty sows bred to seven different stock boars for the spring trade. Pigs for exhibitors purposes a specialty. Stock shipped to order are guaranteed to be as described. Personal inspection solicited. J. E. BRETHOUR, Burford, Brant Co., Ont. 3-y-om

O. J. GILROY & SON

Glenn Buel, Ont., Have for sale some Holstein Cows, one good young Bull, also a number of Improved Large Yorkshire and Berkshire Pigs. 7-y-0

LARGE (WHITE) IMPROVED YORKSHIRES AND ENGLISH BERKSHIRES.

The undersigned offer for sale this month a few Yorkshire sows in farrow, June and July pigs, bred from imported stock, also some very fine young boars and sows, October and November pigs; also one Berkshire and one Yorkshire boar ready for service at once. Prices reasonable, and satisfaction guaranteed. Apply to WM. GOODGER & SON, Box 160, Woodstock, Ont. 11-1-y-om

THE MARKHAM HERD

Farm at Louest Hill Station, C.P.R. Registered Improved Large Yorkshire and Berkshire pigs. As we do not intend to exhibit, we will now sell a choice lot of show pigs of each breed. 17-y-om JOHN PIKE & SONS.

YORKSHIRE PIGS

Of the best type and breeding. Pairs not akin for sale at all seasons. J. M. HURLEY & SON, Belleville, Ont. Box 112. 1-y-0

ADVERTISE IN THE ADVOCATE

S. COXWORTH, CLAREMONT, ONT.,

Breeder and Importer of Berkshire Hogs.

Twenty young sows for sale, bred to my three stock boars, Highclere Prince, King Lee, and Champion Duke, Imp. Write for prices or come and see my stock. Station and Telegraph Office—CLAREMONT, C. P. R. 8-y-om

H. J. DAVIS, Woodstock, Ont.,

Breeder of High-class Large Berkshire and Imp. Large White Yorkshire Swine, Short-horn Cattle.—A grand lot of young pigs ready for shipment of both breeds; also boars fit for service from prize-winning stock. Stock shipped to order. Satisfaction guaranteed. Young Bulls generally on hand. 8-y-om

THE HOME OF THE BERKSHIRES.

J. G. SNELL & BRO.,

Edmonton, Ontario.

Now is a good time to order pigs from litters farrowed this year. We never had so many fine sows to breed from as at present. Can supply a few pigs from litters farrowed in January and February. These will be right for the fall exhibitions where prizes are given for pigs of this year. We have also for sale some young boars fit for service. Write for descriptions and prices. 2-y-om

ISRAEL GRESSMAN, New Dundee,

Large - English - Berkshires

4-y-om

IMPROVED CHESTER WHITE SWINE

DORSET-HORNED SHEEP

A SPECIALTY.

Write for particulars or call and inspect the stock. You will find a well known name, R. H. HARDING, Mapleview Farm, Thorndale, Ont., Middlesex Co. 7-1-y-om

E. D. GEORGE

PUTNAM, ONT.

Importer and Breeder of Ohio Improved Chester White Swine

The largest and oldest established registered herd in Canada. I make this breed a specialty, and furnish a good pig at a fair price. Write for prices. 9-1-y-om

GREAT SWEEPSTAKES HERD OF OHIO IMP. CHESTER WHITE SWINE.

Our herd won more first prizes and sweepstakes than all others combined, including Toronto, Montreal, London, Thirty imported and home-bred sows for the spring trade. Orders booked for spring pigs in pairs or trios not akin. Stock for exhibition a specialty. Pedigrees furnished. Reduced rates by express. Write for particulars. M. GEORGE & SONS, Crampton, Middlesex County, Ont. 7-y-om

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Our herd of Improved Poland-Chinas won 36 first, 18 second and 6 third prizes in 1893, including the Herd prize at Montreal and Toronto, for best boar and two sows, any age. Stock, both sexes and all ages. Pairs and trios not akin for sale at all times. Correspondence solicited or inspection of herd invited. 15-y-om W. & H. JONES, Mount Elgin, Ont.

CANADIAN BLACK BESS HERD

Of Registered Poland-Chinas—A choice lot of young pigs for sale. Elected =448=, the great ribbon winner, at the head of herd, assisted by Ribb's Chief, who weighs 1,000 pounds. Correspondence or inspection of herd solicited. J. J. PAYNE, Chatham, Ont. 8-y-om

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Have a few litters of pure Polands, unaltered, set for sale. Best of the lot just out for near 100 lbs. Spring litters. CAPT. A. W. AUSTIN, 1-y-om

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Now booking orders for young pigs to ship April and May. Bargains in Ayrshire cows and heifers, due in April and May. Two nice bulls, 12 months old. Stock registered and guaranteed as described. CALDWELL BROS., Briery Bank Farm, Orchard, Ont. 23-1-f-om

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PALMETTO, CONOVER'S COLOSSAL and GIANT. Two years old, fine. PRICES BY MAIL—50c. for 25 roots, 75c. for 50, \$1 for 100. BY RAIL—50c. for 50, 75c. for 100, \$2.50 for 500, \$3.50 for 1,000. Free on cars.

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I have some fine young birds for sale. Eggs, \$2.00 for 15. I have carefully bred for utility as well as other points. Write me, I will answer. W. J. STEVENSON, Box 204, OSHAWA, ONT. 7-c-0

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For the year ending December 31, 1893

Income
Received for Premiums - \$33,594,337 98
From all other sources - 8,358,907 70
\$41,953,245 68

Disbursements
To Policy-holders - \$20,885,472 40
For all other accounts - 9,484,567 47
\$30,370,039 87

Assets
United States Bonds and other Securities - \$72,936,322 41
First Lien Loans on Bond and Mortgage - 70,729,938 93
Loans on Stocks and Bonds - 7,497,200 00
Real Estate - 18,089,918 69
Cash in Banks and Trust Companies - 10,844,691 73
Accrued Interest, Deferred Premiums, &c. - 6,609,608 89
\$186,707,680 14
Reserve for Policies and other Liabilities - 168,755,071 23
Surplus - \$17,952,608 91

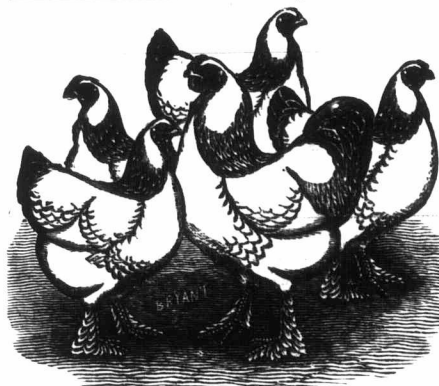
Insurance and Annuities assumed and renewed \$708,692,552 40
NOTE—Insurance merely written is discarded from this Statement as wholly misleading, and only insurance actually issued and paid for in cash is included.

I have carefully examined the foregoing Statement and find the same to be correct.
CHARLES A. PRELLER, Auditor

From the Surplus a dividend will be apportioned as usual.

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7-a om



PRICE LIST OF EGGS.—Lt. B., 15, \$2.; Golden W., \$3.; Silver W., \$2.; Blk. Lang., \$2.; Houdans, \$1.50; Blk. Hamburg, \$1.50; B. P. Rock, \$1.; Brown and White Leg., \$1.; Silver Gray Dorkings, \$1.50.
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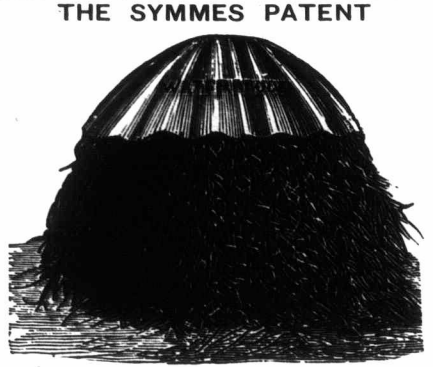
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Fowls and Eggs For Sale at all times. Pairs, Trios and Breeding-Pens Mated for Best Results.
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With Unbreakable Axles and Unbreakable Arms.

THE BEST MADE ON EARTH. So said the Judges or Vehicles at the
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Who awarded us a
GOLD MEDAL AND DIPLOMA

Over the heads of numerous old and extensive builders in the United States and Canada. The axles are unbreakable, because
Van Allen's Patent Giant Arms

Throw all the load directly on the arms, and the arms are also unbreakable, because they are the best refined
MALLEABLE IRON,

Warranted as strong, more durable and lighter running than Steel Skeins. These Giant Arms completely revolutionize the building of wagons. Our 3-inch Malleable Giant Arm Wagon is
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Though less in price, than any ordinary 3 1/2 to 3 3/4-inch cast-iron arm wagon, and our 2 1/2-inch Malleable Giant Arm Wagon is warranted stronger than any ordinary 3-inch cast iron arm wagon, and less in price.

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Which Mr. Zavitz, of the O. A. C. Farm, Guelph, claims to have headed the list of one hundred and seventy-five varieties. (See report in Farmer's Advocate, January 15, page 25.) In lots under five bushels, per bush., 75c.; in lots over five bushels, per bush., 65c. Bags, 20c.
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Concord.
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After an experience of 4 years in growing this variety, we unhesitatingly pronounce them the best potato grown. A strong, vigorous grower, medium late, very prolific, fine, large tubers, very few small. Dry and mealy when cooked. Price per Bus., \$1.00, f. o. b. We have 3 Shorthorn bulls yet for sale; good ones.
E. GAUNT & SONS,
Ampleside Stock Farm, St. Helens, Ont.
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Established 1882.

There is no place in Canada where the season is longer than here. Hence we get trees brought to the fullest maturity, capable of withstanding the severest cold. Having one hundred acres in fruit, from which cuttings, buds, scions, etc., are taken, I can safely guarantee the purity of my stock to be equal, if not superior, to any other nursery. The soil is specially adapted to produce vigorous, hardy trees, a grand lot of which are now growing and for sale. All the leading sorts of both old and new varieties deemed worthy of propagation. Catalogues free on application. Agents wanted in every township.
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SEND 10 cents to J. T. LOVETT CO., LITTLE SILVER, N. J., for their GUIDE TO FRUIT CULTURE. Several Colored Plates. Richly illustrated. 7-b o

STOCK GOSSIP.

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

John Racey, jr., Lennoxville, Que., makes change in his advertisement of Shorthorns and Berkshire pigs this issue.

Mr. D. A. Campbell, Mayfair, Ont., has just shipped three of his Lincolns to Mr. Wm. Grogans, Swan Lake, Man. As an evidence of the breeding of the sheep, and of the prompt, honest business character of the man, we need only say that this is the third time that Mr. Campbell has shipped sheep to the same person, and each time they have given the best of satisfaction.
We wish to again call attention to Mr. Gibson's auction sale of Shorthorn cattle, which will take place at Denfield on the fourth of April. We have just received the catalogue, which gives a full description of each animal to be offered for sale. Owing to the rapid increase in numbers, Mr. Gibson has found it necessary to reduce his herd somewhat, and with this object will offer for sale twenty useful animals. The stock is all in good breeding condition. The young things are mostly got by Jocelyn = 17438 =, while the cows offered for sale are also in calf to this bull. Jocelyn was bred by Mr. John Miller, Broughton, Ont., and is one of the best Scottish families, his sire being the imported bull, Vice-Consul (60112). He is a very superior animal, and one which was chosen by the commissioners to go to the World's Fair. Among the cows there are a number of first-class animals. For catalogues address Mr. J. F. Gibson, Denfield, Ont.
S. J. PIERSON'S SHORTHORNS.

The original Valley Home herd was dispersed at auction last April, but the Messrs. Pierson are not the men to rest on their oars. Last summer and autumn they again purchased quite extensively, and now have quite a select stock of some of the most desirable families. This firm are strong believers in the Aberdeen-shire early maturing sorts, and it is among these that they have selected their recent purchases. To head the herd they have purchased of Mr. John Isaac, Markham, the imported yearling Kinnellar bull, British Statesman. He is a dark rich roan, a son of Royal James. His dam is of the Kinnellar Bessie family. He was imported the autumn of 1892, and now promises to become a very superior bull; he has plenty of length, good long level quarters, handsome finish, and displays plenty of natural flesh. The cows comprise a number of the most popular families, and are descendants of cattle imported quite recently from the Kinnellar herd, and topped out with Cruickshank and Campbell bulls. Of the families at present in the Valley Home herd there are five Cecillias, got by such bulls as imported Baron Lenton and imported Liddesdale. There are five Nonpareils; these are all descended from Nonpareil 31st, by Sir Christopher; the top crosses are such imported bulls as Golden Brown, Comet and General Booth. Several of these cows have proved to be good milkers. Nonpareil 40th, which calved last June, when tested on grass the same month, her milk yielded over nine pounds of butter per week. There are also two Minas and two Jilts, the whole forming a foundation upon which should be built up a herd that shall cut a figure in the near future. Mina Lad, sold to Capt. Maloy, of Paris, has left his mark on two particularly neat youngsters, one of which is a young bull, recently purchased, the other is about a month old, from a Jilt cow. Another good young Nonpareil bull is also on hand.

MR. COXWORTH'S BERKSHIRES.
The breeding problem has always been considered a difficult one to solve. He who would enter the list as a champion of improved stock requires courage and energy, together with success in the breeding herd; pigs sired by judgment. Breeding Berkshires is no exception to this rule. The success that has attended the efforts of Mr. Coxworth since this department of live stock breeding became a part of his established business, proves that he must have been well endowed with these qualifications.

He has met the requirements of modern trade, he has duly considered each phase of the question. Having paid strict attention both to the needs of the farmers and the requirements of the bacon-curer, by combining these conditions his efforts have met with great success. He is now breeding a class of swine that will always be in demand. Only the best will pay for production when prices rule low, while in time of scarcity those fill the bill best which come to maturity at an early age. Four boars have been in use during the past season; of these Highclere Prince holds premier position at the head of the herd. A grand specimen of this breed he is. He has all the length and depth of side required; his back and shoulders are good; his hams are deep and full; he has never been beaten since coming into Mr. Coxworth's possession; he was sired by imported Parry Lad; imported Highclere, his dam, was a very notable sow. The boar is proving a great success in the breeding herd; pigs sired by him are noted for their smooth finish and superior quality, fine hard bone, and good feet and legs. King Lee is by the celebrated imported prize-winning boar, Enterprise. Oxford, his dam, was sired by imported Gladstone. King Lee is a smooth, well-finished pig, of extra length, and promises to grow to a great weight. In depth of side and thickness of ham he is exceptionally good; he stands well on his legs and has particularly good bone, while his remarkably short-dished face lends finish to the picture. Champion Duke, the youngest boar in use, was bred by Mr. N. H. Gentry, of Sedalia, Mo., and was sired by that gentleman's famous boar, Victor Duke, which was sold for \$750. His dam is of Mr. Gentry's noted Charmer family, which are prized so highly among the swine breeders of the west. Champion Duke is a pig of wonderful length, very smooth, and has a good head. He has great depth of side and stands well upon his legs. Running about the yard we saw a grand lot of aged matrons, possessing character and quality which should be reproduced in their offspring. We were also shown a superior lot of young sows by Highclere Prince, which have been bred to Champion Duke. We were told some of these are for sale. Mr. Coxworth has paid attention to properly shaped legs, size and quality of bone—essentials too often lost sight of, and as a result, none of his pigs have ever gone off their feet when being pushed for show purposes.

STOCK GOSSIP.

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

MEETING OF THE DIRECTORS OF THE SHORT-HORN BREEDERS' ASSOCIATION, HELD ON SATURDAY, MARCH 24TH, 1894.

Members present: Richard Gibson, Delaware, president, in the chair; Messrs. John Isaac, Markham; John I. Hobson, Mosboro; Jas. Russell, Richmond Hill; Wm. Linton, Aurora; A. Johnston, Greenwood; W. G. Pettit, Freeman; W. J. Biggins, Clinton; C. M. Simmons, Ivan; W. W. Ballantyne, St. Marys, and H. Wade, Secretary. The president's address given at the annual meeting was reported on, and the suggestions contained in it were recommended.

On motion of Mr. Hobson, seconded by Mr. Johnston, it was resolved that an executive committee, consisting of four members of the board, be appointed to act as a finance committee, to deal with any matters that the full board may consider to be properly within the province of such sub-committee, and that they be paid the actual amount of their expenses. Carried.

The finance report of last year was read by Mr. Johnston, and some clauses were slightly amended.

Moved by Mr. Russell, seconded by A. Johnston, that the sum of \$200 be divided equally amongst the gentlemen who so kindly allowed their cows to be sent to the Shorthorn dairy test in Chicago in equal proportion. Carried. A letter was read from Mr. G. A. Savage, Chartered Accountant, severing his connection with the Association, as he was going to live in Quebec.

A resolution was passed allowing owners of winning cattle at the late Columbian Exposition to have cuts of their cattle printed in the next volume of the Herd Book. It was also resolved that the prize-winners at Toronto, Montreal and Winnipeg Exhibitions for the last five years be also printed, with Herd Book references, in the coming volumes of the Herd Book.

Complaints were made of the harsh rule now in vogue by the railways, in demanding that when an animal is shipped it is required that a man shall accompany the animal and pay his fare also.

It was resolved that the Minister of Customs at Ottawa be requested not to charge duty on foreign Herd Books used as references, and that they are not to be sold.

At a preliminary meeting of the new Finance Committee, A. Johnston was elected chairman, and John I. Hobson, secretary.

MR. THOS. TEASDALE'S BERKSHIRES.

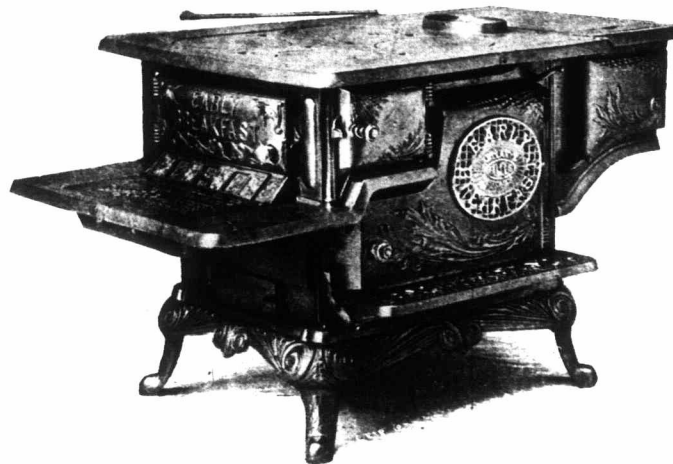
Within a stone's throw of the Thornhill station, on the Northern Branch of the G. T. R., and some fourteen miles north of Toronto, is the farm of Mr. Thos. Teasdale, Concord P. O. Away down in the seventies Mr. Teasdale was well known in sheep breeding circles as a keen judge and careful feeder, and his farm was the headquarters for finely developed Cotswold lambs, and showmen from the different parts of Canada and the United States were wont to pay him annual visits in order to obtain lambs good enough to carry winning colors at the fall exhibitions. There were those who had the opinion that extra care and forced feeding was the secret of Mr. Teasdale's success in this line of production, as he had never exhibited any of the older specimens of his flock, but those who imagined that such lambs could be produced from anything except superior breeding stock reckoned far wide of the mark. The fact was that Mr. Teasdale never allowed an opportunity to slip of purchasing almost regardless of cost, the best imported ewes in breeding condition. With such material to work upon, combined with skill in breeding and feeding, he gained a name which still clings to him, though in an entirely different line. It is in breeding Berkshire pigs that Mr. Teasdale now employs his time and talents, and he still adheres to the same principles, which he contends are as correct in breeding Berkshires as in producing Cotswolds. We found our old friend just as enthusiastic in talking Berkshires as he formerly was when speaking of long woolled lambs, and in viewing the herd we could see that in making his selections for breeding he has been as hard to please as ever. It was also apparent when inspecting the array of breeding sows that only the best individuals had been retained. To mate with these Mr. Teasdale purchased last autumn the grand yearling boar, Royal Hubert, which has been chiefly used upon the herd. This is a beautiful specimen of a Berkshire, from whose blood lines the very best results should be expected. Royal Hubert was sired by a famous prize-winner, his dam being an imported sow, Lady Shaftsbury 3rd. He is certainly a wonderfully well-formed pig. He stands on short, straight, well-shaped legs, with plenty of bone of the right quality, that should bear any weight that forced feeding may impose. He has exceptionally deep, thick hams which carry his width of body well back. His ribs, fore and back flanks are well let down, while in length and quality he is all that one could desire. Oxford Girl, a splendid type of the modern Berkshire, is a wonderfully smooth, lengthy pig. She is transmitting these characteristics to her progeny in a remarkable degree. Oxford Girl was sired by (Imp) Gladstone, dam by Lord Castlewood—716—and goes back to (Imp) Ruth, a very handsome sow bred by Mr. Edwards, Tombs, Gloucester, England. A two-year-old daughter of Oxford Girl, named Oxford Lady, was sired by (Imp) Royal Winner, a boar which Mr. Teasdale considers among the best he ever saw. It has a prize in Oxford Lady, as she is to our mind very near to perfection. She has slightly more bone than her dam, stands remarkably well on her feet and legs, and is quite as smooth and well finished. Several other matrons of capital quality and size and similar breeding were in the yard; there were also three very handsome young sons from a last spring's farrow of Oxford Girl, and sired by Royal Crown, a son of (Imp) Enterprise. These were quite the equal of their dam, thus showing that the latter generations are not losing ground. There were also a beautiful thirty lot of fall pigs sired by (Imp) Enterprise. Last season pigs bred in this herd won no less than seven prizes at Toronto, four at Montreal, and at other places honoree in like proportion. In filling orders Mr. Teasdale invariably sends out pigs of his own breeding, and claims that by this means he is able to give satisfaction to all customers.

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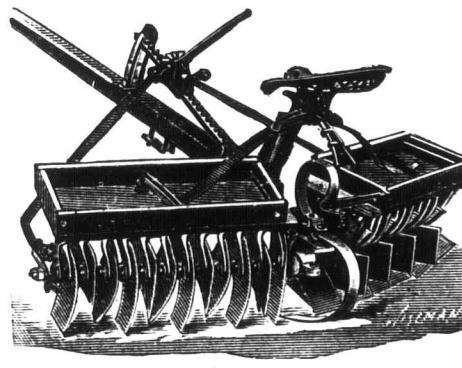
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THE WORTMAN & WARD MANUFACTURING CO.'S SPADE HARROW

The Best Pulverizer! The Best Cultivator! And The Best Harrow Ever Made.



It has no equal for pulverizing hard clay lumps. It is beyond question the best machine for making a seed bed on inverted sod. For preparing fall plowing for spring seeding, especially in heavy clay soil, where the land is baked or become hard and difficult to move. For cutting up and pulverizing any kind of stubble land, either for the purpose of starting foul seeds or fitting for seeding. It is unquestionably far superior to anything in the market for cultivating any kind of land that is very difficult to subdue. Where every other tool has failed the Spade Harrow will be found to be just the machine needed. We also manufacture the "Daisy" Barrel Churn, Cistern, Well, Force and Wind Mill Pumps, Horse Hay Forks, McKay's Patent Combination Sling. Prices and terms given on application.

THE WORTMAN & WARD MFG. CO.
LONDON, ONTARIO.

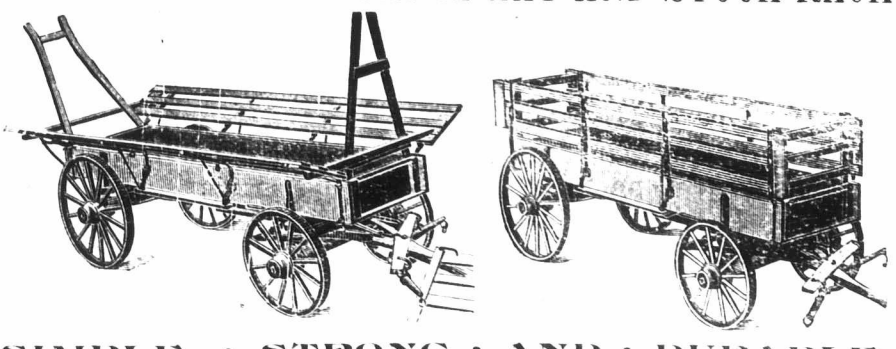
YOU NEVER HEARD OF THE LIKE BEFORE—BARAINS BEYOND RECORD.

We have a 14-inch ensilage cutter with 10 feet of carriers; all complete, for \$45 00
A Mercer Binder, complete, for 85 00
A Wind Mill, complete to pump, not including derrick, for 30 00
A Thomas Organ, Woodstock, with 9 stops, 3 sets reeds (2 in treble, 1 in bass), with divided octave couplers, knee swell and grand expression, perfectly new, cased ready to ship, for 50 00
A Karn Organ, Woodstock, with 11 stops, 1 set reeds, grand organ and knee swell, perfectly new, cased ready for shipping, for 75 00
A Little Giant Thresher and 2-horse tread power, complete, for 250 00
We can send you a 2-horse tread power separately.

GALVANIZED STEEL.			PAINTED STEEL.		
Quality.	Weight.	Price per Sq.	Quality.	Weight.	Price per Sq.
XXX	90 lbs.	\$6.00	XXX	90 lbs.	\$4.10
XX	80 "	5.50	XX	80 "	3.85
X	80 "	5.00	X	80 "	3.45

Please don't quote these prices to agents and then complain because they can't give them at same price. We do not expect to repeat these prices again. Order quick whatever you want. These are no second-hand inferior goods, but are right in every respect. Cash with order for these goods. Soliciting your hearty co-operation, we are, yours respectfully,
GRANGE WHOLESALE SUPPLY COMPANY (Ltd.),
R. Y. MANNING, Manager. 126 King St. East, Toronto.

BAIN BROS.' ADJUSTABLE HAY AND STOCK RACK

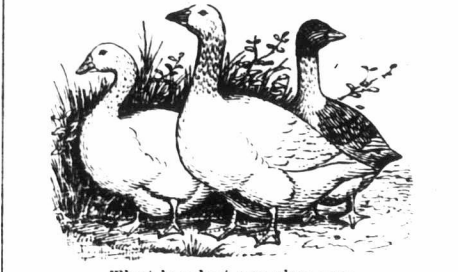


SIMPLE, : STRONG : AND : DURABLE.

Rack as adjusted for hauling stock, grain, wood, etc. A boy can readily adjust or remove the wings. Call on our agents. For further particulars, address

BAIN BROS. MANUFACTURING CO. (LTD.)
Brantford, Ontario.

CASH FOR FEATHERS



That is what we give you. Goose, Duck, Hen and Turkey. Write us what you have, or send samples.

Alaska Feather & Down Co., L'd.,
10 ST. SACRAMENT STREET, Montreal.

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FOR PARTICULARS ABOUT THE SETTLERS' TRAINS TO MANITOBA AND THE NORTH-WEST

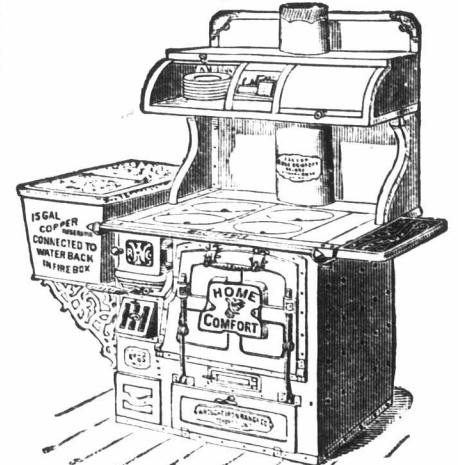
FARMS & SLEEPERS

See your nearest Railroad Agent, and get a copy of "Free Facts, Farms and Sleepers"

THE HIGHEST AWARDS

Were received at **WORLD'S COLUMBIAN EXPOSITION** BY THE **WROUGHT IRON RANGE CO.** ON **HOME COMFORT STEEL HOTEL AND FAMILY RANGES.**

CARVING AND STEAM TABLES, BROILERS, MALLEABLE WATERBACKS, ETC., ETC.



Above Style Family Range is sold only by our Traveling Salesmen from our own wagons at one uniform price throughout Canada and the United States.

Made of **MALLEABLE IRON** and **WROUGHT STEEL** and will **LAST A LIFETIME** if properly used.

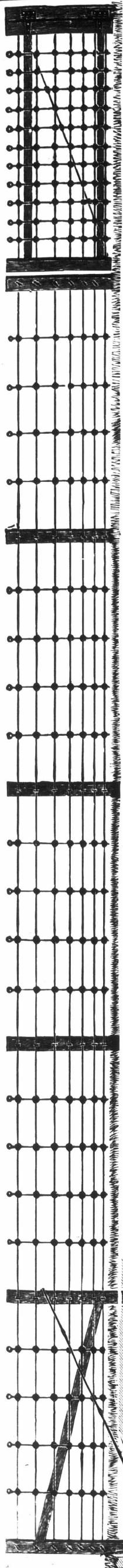
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MADE ONLY BY **WROUGHT IRON RANGE CO.** MANUFACTURERS OF HOTEL STEEL RANGES, KITCHEN OUTFITTINGS, AND "Home Comfort" Hot-Air Steel Furnaces.

OFFICE, SALESROOM AND FACTORY, 70 to 76 Pearl Street, TORONTO, ONT.

Washington Ave., 19th to 20th Streets, ST. LOUIS, MO., U. S. A.

Founded 1864. Paid up Capital, \$1,000,000.



**THE
LOCKED-WIRE
FENCE CO.,
INGERSOLL,
ONT.**

The accompanying Cut represents five panels of fence and gate of the LOCKED WIRE FENCE.

Each panel represents one rod (16 1/2 feet), 7 wires, 4 steel stays. The crimp in the wire, in combination with steel clamp, when locked acts as a spring, adjusting the fence to heat or cold.

—PERFECTLY—
**Safe, Stronger, Better
AND CHEAPER**

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

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

We desire to inform the farmers and public generally that we are prepared to supply the material or erect this fence throughout the Dominion of Canada.

**THE BEST
FENCE
MADE FOR
Farms and
Railroads.**

**FARM RIGHTS
FOR SALE.**
Agents
Wanted
In every
Township.
Send for circulars and particulars.
Address
—THE—
**LOCKED-WIRE
FENCE CO.,
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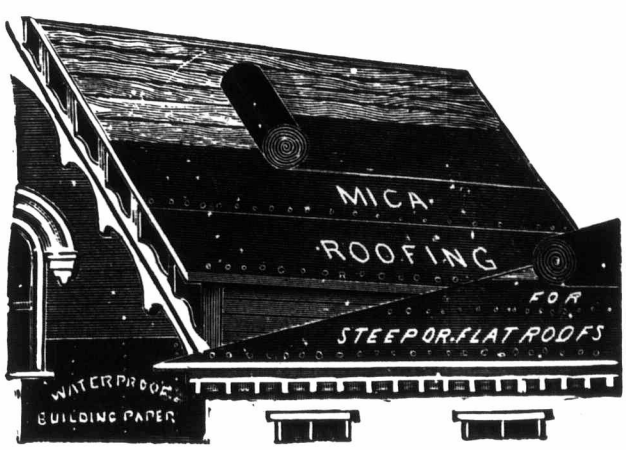
FEED THE PLANT AND THE PLANT WILL FEED YOU

Feed your plants on Freeman's High-grade Manures and you can depend upon your plants feeding you. Freeman's High-grade Manures contain plant-food in a soluble form, and in such proportions as will nourish your crops from beginning to finish. Send for catalogue for 1894, giving experience of leading Canadian and American farmers with fertilizers. Remember, Freeman's Manures head the list. Buy them. Have no other.

W. A. FREEMAN, 317-om Hamilton, Ont.

MICA ROOFING

Use Mica Roofing on all your buildings. It is cheaper than shingles. Water Proof and Fire Proof.



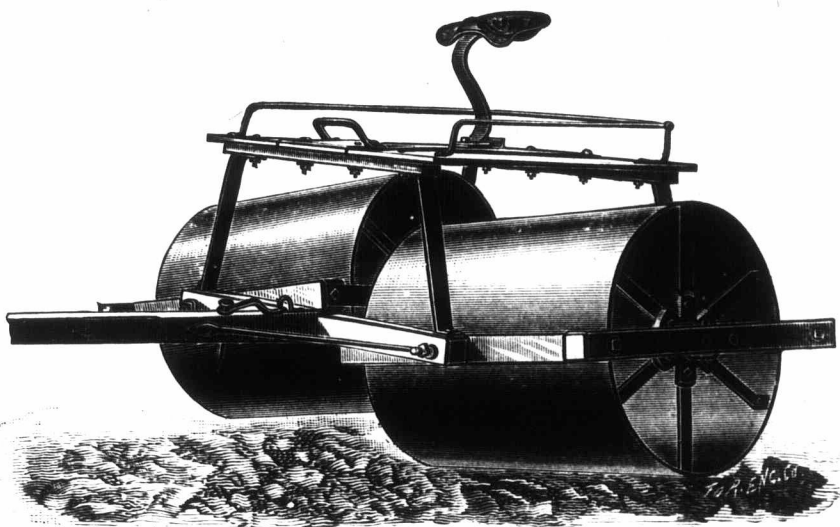
Use Mica Paint To Repair Leaky Roofs. Shingle, Iron or Tin Roofs painted with it will last twice as long.

RAPIDLY TAKING THE PLACE OF SHINGLES.

Is put up in rolls of 108 square feet each, 36 feet long by 3 feet wide, and cost 2 1/2c. per square foot, thus affording a light, durable and inexpensive roofing suitable for buildings of every description, and can be laid by ordinary workmen. One man will lay ten square in a day, which brings the cost of Mica Roofing about 75c. per square cheaper than shingles. Special terms to dealers who buy our Mica Roofing to sell again. Orders and correspondence answered promptly.

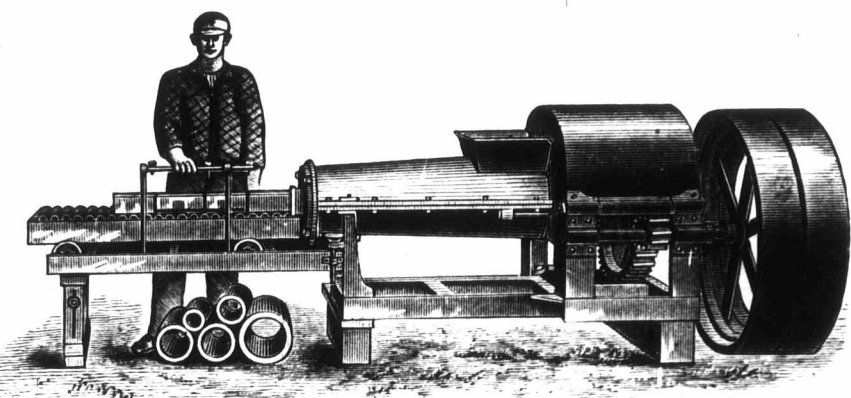
HAMILTON MICA ROOFING CO.,
17-1-y-om Office—101 Rebecca Street, HAMILTON, ONT.

The DALE PIVOTED LAND ROLLER (Patented)



It is unanimously recommended by those farmers who have used it. Orders are now being booked for the spring trade. Description and price furnished on application to 341-om **T. T. COLEMAN, SOLE MANUFACTURER, SEAFORTH, ONTARIO.**

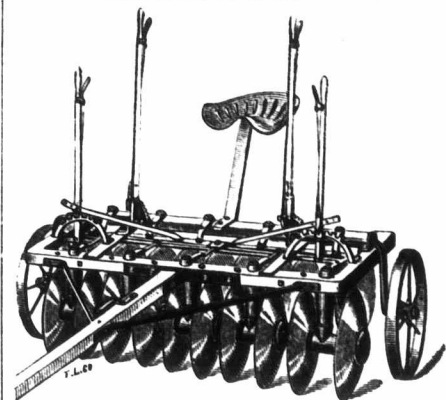
THE OLD RELIABLE TIME-TRIED AND TRUE KELL'S PAT. COMBINED BRICK AND TILE MACHINE.



No. 2 machine makes tile from two and a-half to eight inches. No. 1 machine makes tile from two and a-half to twelve inches. Both sold on approval. Satisfaction guaranteed. A full line of Brick and Tile Machinery and Supplies, Kiln Bands, Kiln Doors, Grates, everything necessary for a first class outfit. For full particulars address **H. C. BAIRD & SON, Parichill, Ont.** 2-h-om

Many Old Farms Won't Produce a Profit. The rich, loamy soil of Michigan Farms produces a fine crop without this expense. The poor market, general healthfulness of climate and freedom from cyclones, hizzards, together with good society, churches, etc., make Michigan Farms the best in the world. Write to me and I will tell you how to get the best farms on long time; low rate of interest. **O. M. BARNES, Land Commissioner, Lansing, Mich.**

PATENT IMPROVED DOUBLE DISC HARROW
Patented Oct. 17, 1893.



Manufactured at Beamsville Agricultural Implement, Engine and Boiler Works. Write for Prices, Circulars, etc., to **H. TALLMAN, 4-f-om Beamsville.**

ULCERKURE

A new Chemical Compound discovered by Dr. Warnock, Member of Royal College of Veterinary Surgeons, England; Fellow of the Glasgow Veterinary Medical Society.

A NEW DISCOVERY,
With a specific chemical action, for the immediate cure of wounds and ulcerated sores on Horses, Cattle, Dogs, etc., such as Barb Wire Cuts, Collar and Saddle Galls, Cracked Heels, Frost Bites, Foot Rot, Rope Burns, Mallenders, Sallenders, Broken Knees, Ring Worm, Scratches, Scalds, Cuts, Burns, and all foul and putrid sores of all descriptions. Recommended by the largest stock owners in Canada.

A. E. WALDON & CO., Chemist, Calgary, Alta. 5-y-o-m

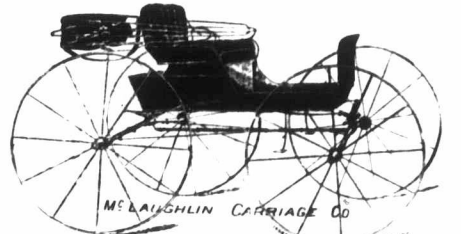


CRADLE CHURN.
PAT. NOV. 28, 1892.
Address: CHAS. BOECKH & SONS, Toronto, or to WATSON MANUFACTURING CO., Ayl. Ont. 13-y-om

WEAKNESS OF MEN

Quickly, Thoroughly, Forever Cured
by a new perfected scientific method that cannot fail unless the case is beyond human aid. You feel improved the first day, feel a benefit every day; soon know yourself a king among men in body, mind and heart. Drains and losses ended. Every obstacle to happy married life removed. Nerve force, will, energy, brain power, when failing or lost, are restored by this treatment. All small and weak portions of the body enlarged and strengthened. Victims of abuses and excesses, reclaim your manhood! Sufferers from folly, overwork, early errors, ill health, regain your vigor! Don't despair, even if in the last stages. Don't be disheartened if quacks have robbed you. Let us show you that medical science and business honor still exist; here go hand in hand. Write for our book with explanations and proofs. Sent sealed, free. Over 2,000 references.

ERIE MEDICAL CO., Buffalo, N.Y. 9-y-om



THE McLAUGHLIN CARRIAGE CO.,
Oshawa, Ont.,
Manufacturers of every description of Carriages, Demos, Carts and Cutters, suitable for farms and others.
"One Cradle of work only, and that the Best."
Write for Catalogues and prices.

ADVERTISE IN ADVOCATE

STOCK GOSSIP.

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

The Chicago Herald of Feb. 28 gives an account of Messrs. Newgrass & Sons' sale of coachy geldings and mares at the stock yards, Chicago, Tuesday, February 27. The Herald states that 191 head were sold at an average of \$357.36 each, a number going to Scotland and French buyers. The following are a few of the prices realized: Fair chestnut, Mr. Walker, \$1,625; pair browns, F. S. Austin, \$900; brown gelding, J. Martin, \$500; chestnut gelding, De Grand, \$415. These prices prove that it still pays farmers to raise coachy, stylish carriage horses.

William Goodger & Son report the demand for breeding stock (swine) never better, and that they never had a finer lot of pigs than at present. Their sales of late are: Berkshire boar to D. A. McCabe, Napanee, Ont.; Berkshire boar to John Linton, Mitchell, Ont.; Berkshire boar to W. A. Currie, Glencoe, Ont.; Berkshire sow to James Elliott, Elliott's Corners, Ont.; Berkshire sow and Yorkshire sow to Thos. Scott, Tilsonburg, Ont.; Berkshire and Yorkshire sow to Thos. A. Crane, Point Claire, Quebec; Yorkshire sow to K. E. Lanes, Lanes, Ont.; Yorkshire boar to Henry A. Smith, New Hamburg, Ont.; Yorkshire boar to Joseph Lawrence, Clearwater, Manitoba; Yorkshire boar to John Ferguson, Adamston, Ont.; T. W. Laine, Walkerton, Ont.; Yorkshire boar to R. H. John, Hord & Son, Parkhill, Ont.; Yorkshire boar to R. H. Smith, Cairngorm, Ont.

THE DENNOCH STOCK FARM.

The Dennoch Stock Farm, the property of R. Reford, Esq., the well-known shipping agent of Montreal, is located within two minutes' walk of the St. Annes station, P. Q. The handsome buildings on this farm are constructed on a most magnificent scale, and we doubt if there are any other farms on the American continent more elaborate or complete in their construction. The interior of the stables is of hardwood, oil finished, while the passages are of the best cement. The stock consists of Ayrshire cattle, Yorkshire and Berkshire hogs, Bronze turkeys, Silver Laced and Golden Wyandottes, and Brown Leghorns. The herd is headed by Tom Brown, the sweepstakes bull at the Chicago Exhibition, a portrait of which appears in our subscription picture, "Canada's Columbian Victoria." Last fall he imported an exceptionally good two-year-old bull, Glencairn 3rd. This bull shows the Ayrshire points to perfection, and, barring accidents, we think will stand a good show on carrying of the sweepstakes at our leading shows next fall. The cows are a good lot, part of which were imported, the balance having been selected from good herds in the vicinity of Montreal. Among the cows are a number of well-known prize-winners, of which White Floss carried off the first prize in the two-year-old class in Chicago. We hope to give a full description of both this herd and the buildings at an early date. Mr. Reford has been fortunate in securing an excellent manager in the person of Mr. James Boden, who had charge of the late Thos. Brown's excellent herd at Petite Cote for some time previous to the dispersion sale. He is well up in the breeding and caring of dairy stock, a very careful breeder and a hard worker.

A. C. Hallman & Co., New Dundee, write as follows:— "We again take pleasure in reporting our Holstein-Friesians and Tamworth pigs as doing very well, although the latter are a new departure in our business, and we find it very pleasant and profitable. We have cheering hopes for the future of our herd and the Holstein-Friesians. Since our reputation for handling only the choicest animals of exceptionally rich breeding, we have no trouble in selling our stock. Many of our sales are made where the purchaser never sees the stock, and it arrives, and without an exception we always get very complimentary replies. Our sales since and including the Toronto Industrial last fall numbered fifteen, including cattle and nine pigs. We give list of names of purchasers, but cannot begin to describe the rich breeding as space does not permit. We will only say that the Ayrshire sire by our highly-bred, first prize, sweepstakes, silver medal bulls, bred from such old-established milk and butter families as Nethland and Nethland. A large number of the females are granddaughters and great granddaughters of the old butter king, Nethland Prince. A very handsome heifer bred by Ellis Bros., Bedford Park, Toronto. She took first prize in Toronto in 1892, and second in 1893. Royal Canadian Nethland went to strengthen the herd of E. Stevens, Amsterdam. He was a repeated prize-winner and a noble stock getter. Nethland Rinker, third prize calf at Toronto, went to Thos. Hoskin, Grafton. A handsome trio was selected by Jas. Chambers, Meigen, Ont.—three females, including the first prize heifer calf, and the second prize yearling. He also secured a choice pair of Tamworths—one imported boar and a Canadian-bred sow. A beautiful heifer calf we shipped to Thos. Kennedy, Omenee, Ont. A rich-bred bull to J. N. Warren, Eganville, Ont., also a nice Berkshire boar, six very rich first females and one calf (three two-year-olds, one four-year-old and two five-year-olds) and one imported Tamworth boar went to J. M. Ledbridge, Esq., Hamilton, Ont. Mr. Ledbridge is a thorough business man and as a beginner he is to be congratulated in securing such a handsome lot of females of the very richest breeding, but we forbids to describe. A very nice imported Tamworth boar to J. Bell, Amber, (a pioneer breeder; a pregnant sow to L. Master, Hayesville, Ont., an imported Tamworth boar to E. Bowman, Bloomington, Ont.; and a fine pair of imported Yorkshires to J. F. Master, New Dundee, Ont. We have a grand lot of young bulls ready for service—prize-winners and their equals, also females of all ages for sale, reasonable. We are now ready to book orders for March litters of Tamworths of the very best quality and breeding, bred from our imported and first prize boars and extra fine sows.

NOTICE.

J. W. Fleming, one of Chatham's enterprising and progressive farmers, called on us on his way home from the Patron convention in Toronto. He is an enthusiastic Patron, and says that the order was never in a more flourishing condition than it is at the present time. Mr. Fleming has been a reader of the Advocate for many years, and feels that he could not get along without it. He has the back numbers all carefully preserved, so that they can be turned to at any time for reference.

One of the finest catalogues, and one of the most expensive publications issued to the general public, is that of "Bonnie's Illustrated Guide," published by Wm. Kenne, the well-known seed firm of Toronto. Besides being beautifully illustrated, it contains a vast amount of practical and valuable information concerning the garden, which can be secured in no other way. Every reader of this paper who uses seeds, plants, etc., would do well to secure a copy of this work before placing their order for the coming season. Address, Wm. Kenne, Toronto.

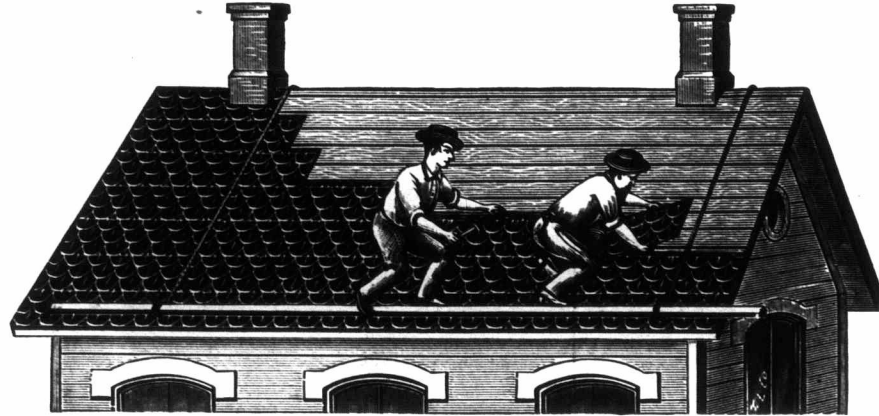
Who are the most famous writers and artists of both continents? The Cosmopolitan Magazine is endeavoring to answer this inquiry by printing a list from month to month in its contents pages. This magazine claims that notwithstanding its extraordinary reduction in price, it is bringing the most famous writers and artists of Europe and America to interest its readers, and in proof of this claim, submits the following list of contributors for the five months ending with February: Voltaire, Horace, Paul Heyse, Francessque Sarcey, Robert Grant, John J. Ingalls, Lyman Abbott, Frederick Mass. n., Agnes Repplier, J. G. Whittier, (posthumous), Walter Besant, Mark Twain, St. George Mivart, Paul Bourget, Louise Chandler Moulton, Flammarion, Tissandier, F. Douper-Shriman, Adam Badeau, Capt. King, Arthur Schomburgk Hardy, George Elers, De Maupassant, Sir E. Van Wood, Spielhagen, Andrew Lang, Berthelot, H. H. Boyer, Hopkinson Smith, Lyman J. Gaze, Daniel C. Gilman, Louis Von Lentbach, Thomas A. Janvier. How this is done for a year the editors of the Cosmopolitan alone know.

The Reliable Incubator and Brooder, manufactured by the Reliable Incubator and Brooder Co., of Quincy, Ill., stands to-day in the front rank of similar achievements. Their success has been due very largely to the enterprise and push of the men in charge. This, however, would not have won for them the honors of which they are now enjoying the possession, were it not for the fact that the incubator itself is one of the best made. The attractive display made at the World's Fair by the Reliable people will be remembered by those who had the pleasure of visiting the Incubator Building. The proprietors of this firm seldom allow a good advertisement to pass, and was the only firm who displayed a brooder alive with young, downy chicks, bedecked in all the bright colors—red, green, blue, yellow, purple, pink and lavender, which proved so great an attraction to sight-seers. The real worth of the "Reliable" could not be proven better than to state that Mr. A. J. H. of the Agricultural Water-tower, S. D., one of the judges on the Agricultural Department, made his selection of an egg hatcher and purchased the "Reliable." The new catalogue, which is cut as one of the finest published and contains many features on poultry raising, which may be had for the asking.

A Long Row

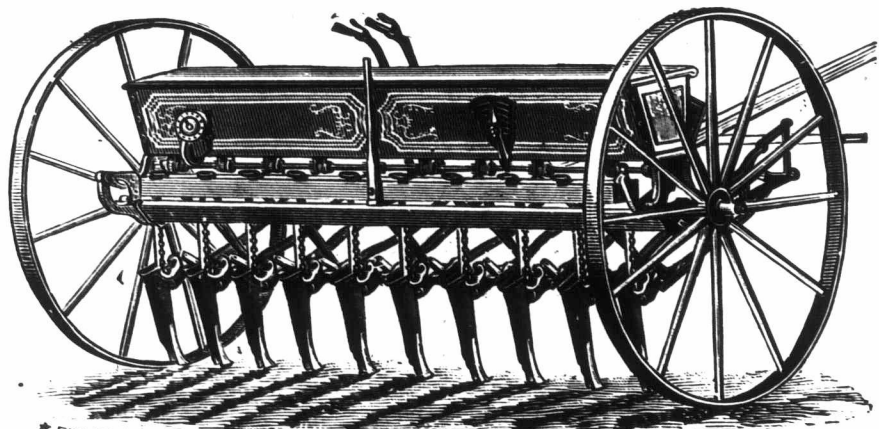
to hoe with an old-fashioned hoe means a back-breaking task. With a **PLANET JR. Double Wheel Hoe, Cultivator, Rake and Plow**, you can hoe it, rake it, plow it, or cultivate it—whichever you wish—almost without an effort. There are 20 other **PLANET JR.** implements equally helpful to the farmer. You can learn all about them by sending for the **PLANET JR.** Book for 1894. It's worth its weight in gold, but costs you nothing. **S. L. ALLEN & CO., 1107 Market St., Philada.**

THE - PEDLAR - PATENT - STEEL - SHINGLE
WILL LAST A LIFETIME.



FIRE-PROOF, LIGHTNING-PROOF, WATER-PROOF. Nearly as Cheap as Wooden Shingles. Send for Illustrated Catalogue. Reliable Agents wanted in every vicinity.
ADDRESS—**THE PEDLAR METAL ROOFING CO., OSHAWA, ONT.**

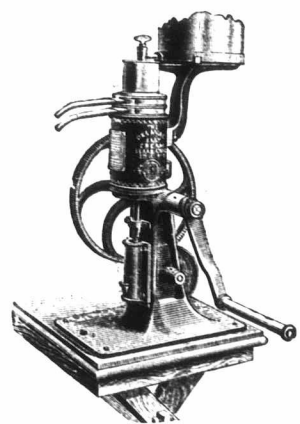
WHY NOT BUY THE BEST?
HOOSIER STEEL FRAME GRAIN DRILL



IS GUARANTEED THE BEST DRILL MADE.

Over 30,000 Hoosier Drills and Seeders of our manufacture in use in Canada
The only Drill made with Lever for Instant and Perfect Regulation of Depth of Hoes in all kinds of soil while team is in motion. Sows absolutely correct to scale. Saves seed, as every kernel is deposited at proper depth to grow. Purchase only the best, and you will be satisfied. We also manufacture the celebrated Cord-Saving Binder, Reapers, Mowers, Rakes, and the best Spring Tooth Cultivator in the world. Send for Illustrated Catalogue. 4-d-0

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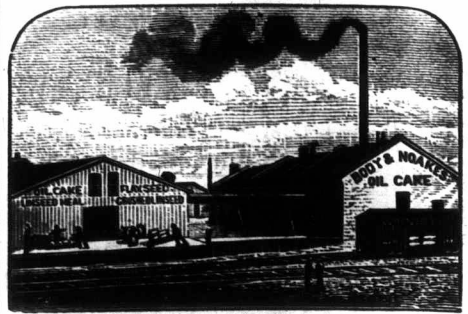


- DELAVAL -
CREAM SEPARATORS

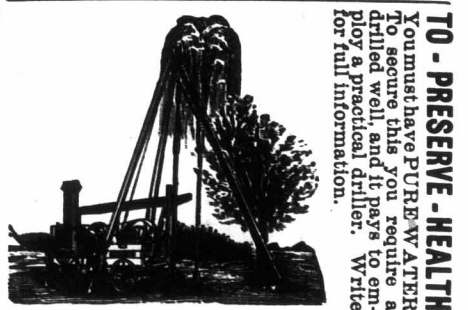
STEAM AND HAND-POWER.
For Catalogues, Circulars and Testimonials, address
FRANK WILSON,
SOLE CANADIAN AGENT,
33 St. Peter Street, - MONTREAL, P. Q.

Land for Everybody.

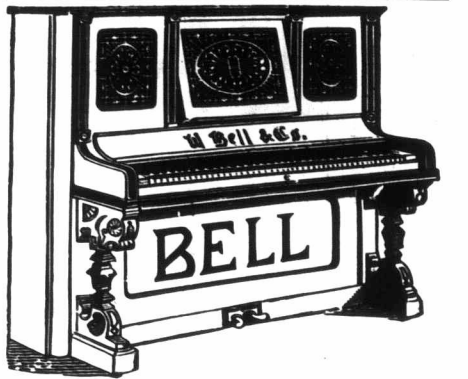
FREE GRANTS OF GOVERNMENT LAND. -- CHEAP RAILWAY LANDS FOR SALE ON EASY TERMS.
GOOD SOIL! PURE WATER!! AMPLE FUEL!!!
The construction of the Calgary and Edmonton Railway, and the Qu'Appelle, Long Lake and Saskatchewan Ry. has opened up for settlement two new districts of magnificent farming land, viz., that between the North and South Saskatchewan Rivers, and that between Calgary and Red Deer.
Full information concerning these districts, maps, pamphlets, etc., free. Apply to
OSLER, HAMMOND & NANTON,
LAND OFFICE, 381 Main St., WINNIPEG.
Calgary and Edmonton Railway, Qu'Appelle, Long Lake and Saskatchewan Railway Company.
17-1-y-om



LINSEED - OIL - CAKE
Whole, nutted or meal. Car lots delivered at any point. Write for prices. **BODY & NOAKES,** Winnipeg Linseed Oil Mills, Winnipeg, Man. 19-1-f-0



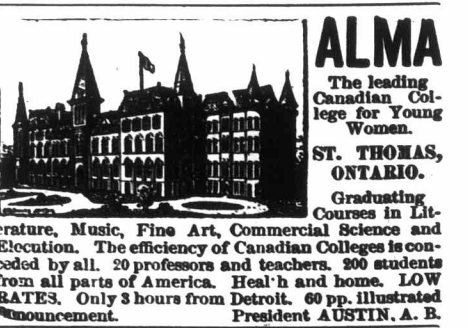
TO - PRESERVE - HEALTH
You must have PURE WATER. To secure this you require a good well-drill. Write for full information.
WM. SHARP, Practical Well Driller, 184 Hamburg Ave., TORONTO, - ONT.



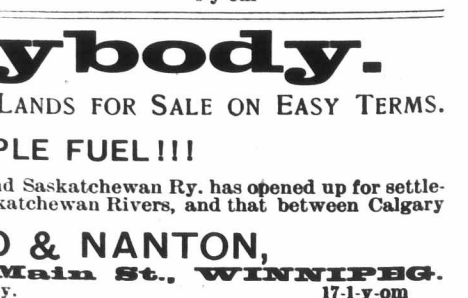
PIANOS, REED ORGANS & CHURCH PIPE ORGANS
THE STANDARD INSTRUMENTS OF THE WORLD.
Send for Catalogue.
BELL ORGAN AND PIANO CO., Guelph, Ont. 17-1-y-0



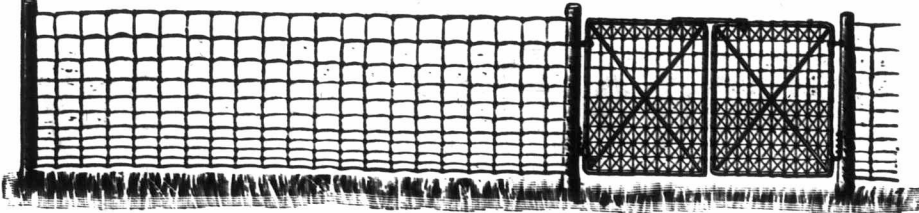
THE LATEST!
A MUCH NEEDED INVENTION.
THE Fly Horn Trap
WORKS COMPLETE.
Guaranteed to remove and secure nine-tenths of the flies on a herd of cattle at a single stroke, 15 minutes for 20 cows. Township and County rights for sale.
H. GUTHRIE, PATENTEE,
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ST. THOMAS, ONTARIO.
Graduating Courses in Literature, Music, Fine Art, Commercial Science and Education. The efficiency of Canadian Colleges is conceded by all 20 professors and teachers. 300 students from all parts of America. Health and home. **LOW RATES.** Only \$ hours from Detroit. 60 pp. Illustrated Announcement. President **AUSTIN, A. B.**



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MANUFACTURED BY
METALLIC ROOFING CO.
TORONTO
ILLUSTRATED CATALOGUE FREE
STEEL SHINGLES
5-y-om



A Page Fence Paper.

A free copy of our illustrated monthly paper will be sent to anyone asking for it. As a sample of the matter to be found in this paper we give below three articles taken from the March 15th number. This number also contains the illustration shown in the reading columns of the ADVOCATE, an article telling of some of the Ontario farmers who sell Page Fence, and many other articles of interest to every landowner. Send us your name on a postal card and we will be glad to send you the paper, together with descriptive circulars of our fencing.

Do You See the Coil?

A great many users, and sometimes dealers, do not thoroughly understand the main point of superiority of Page fence over the other wire fences on the market. They do not realize that the little wavy appearance, or, as some describe it, "a sort of crookedness," is the most important principle ever applied to a wire fence. As the dealer or canvasser often complains of the great amount of time he has to spend in explaining this principle to prospective customers, I will try to give a short explanation of the idea and the way it is applied to the fence. As the wires pass from the "spools" into the loom, and before the cross wires are woven in, these horizontal wires are passed spirally around round steel rods. As they unwind from the rods they are left with a wavy appearance their entire length. Any person can easily demonstrate this principle for themselves, and get a very clear idea of it, by taking a coil from an old-fashioned bed spring, or, better yet, a coil spring from some old piece of machinery, and, by fastening one end of the spring to a hook and getting a firm hold on the other, pull it out as straight as possible. Perhaps it can be pulled perfectly straight, but when the strain is removed it will gather up a considerable quantity of its coil, and one can see that it is impossible to get the wire to stay perfectly straight, unless a great strain is kept on it all the time. One can readily see that a fence built of wire woven in this way, and stretched with our powerful stretching tools by which about three fourths of this coil in the eleven or more horizontal wires is drawn out, there is reserved elasticity enough in these wires to "pull itself together" after any shock it may receive from animals running into it, the contraction caused by cold weather, or snowbanks forming on it and pulling it down.

There are one or two instances on record where persons have complained to the manufacturers of the Page fence that they could not see any coil in the wire, and would insinuate that it was "in someone's mind." The complaints were made by persons who had never seen the fence in use, and received their first introduction to it while the fence was in the roll. It is a fact that the coil does not show as nicely when the fence is in the roll as it does when being unwound. In the roll the wires are in a circle, and of course one cannot sight along them and see the coil so plainly.

If one of these coiled wires was taken out of the fence and stretched tightly on posts two rods apart, it could then be pulled four feet out of line in the centre, and on being released would fly back to place as straight and tight as before.

This wire, in order to make the coil effective, is spring steel, and so drawn and tempered as to be very tough. There are only two wire mills on this continent that have been able to manufacture a wire possessing these qualities, and they did so only after years of experience. Of course, wire of this quality costs more than that used in barbed wire and other styles of wire fences, but one cannot expect to get a first-class article made from an inferior quality of material.

President Palmer's Fence.

As has been stated, the Page was not exhibited at the World's Fair. We knew that farmers did not as a rule go to the Fair to learn what kind of a fence to build, and that no matter how many gold medals were captured, they would mistrust that the manufacturer had a "pull," and would prefer testing for themselves to find what would best answer their purpose.

From the great jury of the farmers our awards are coming thick and fast, as shown by shipments of one hundred and twenty-five miles in January, and the hundreds of miles of orders being entered each week for spring delivery. And now to add to our triumph is a sale of 500 rods at regular rates to the President of the World's Fair, although plenty of the fences, "just as good" or "medal winners," were offered at cut prices.

Our agent, Mr. W. D. Withington, gives the following account of the sale: "I was driving in from the country, where I had been erecting fence. In passing a large farm I noticed a gentleman craning his neck to read the lettering on my wagon, 'Page Woven Wire Fence' in big gilt letters on the side. I stopped and asked him if there was anything I could do for him in the fence line. He answered, 'Yes, I want two miles of that fence.' Well, said I, I will come out and see you to-morrow, as I am in something of a hurry just now. He replied that I could just as well see him in the city, and gave me the street and number, where I found him the next day. On calling there he informed me that the agent of the fence, also the had both been after him and were very anxious to secure his order. I judged by his talk, however, that he was as well satisfied with the superiority of the Page Fence as I was myself, and learning that he would want but little short of two miles, I proposed taking his order for 500 rods, and when I went to put it up I could furnish whatever was needed additional. I handed him a blank order to fill out; he stated that he never allowed himself to sign a printed order, but would write one himself. This he did, and for the first time I learned that the fence was for Hon. Thos. W. Palmer, for whom I had erected fence years ago on his home farm. He then stated that the fence could be shipped immediately, and on delivery the money was ready, as he wished to secure the cash discount. So the 500 rods lies in his yard, and I am ready to put it up whenever he is, and furnish as much more as he wants." All of which goes to show that a soldier might take first prize on dress parade and run like a "whitehead" on the appearance of the enemy.

How a Black Sheep Sold 200 Rods of Page Fence.

(This is another Withington experience). A year ago or more, he was asked to figure on 200 rods of Page Fence, to be erected just out of Detroit, he to furnish posts and do all the work. He named the lowest price at which he thought he could afford to furnish it and supposed he was to have the contract, but just before it was completed, a man turned up claiming to have the "missing link" scheme, and underbid him by 10 cents a rod. The gentleman who was buying the fence did not seem to have perfect faith in the missing link scheme, as he told Mr. W. if he would furnish Page Fence at the same price, he could have the contract; but the offer was respectfully declined.

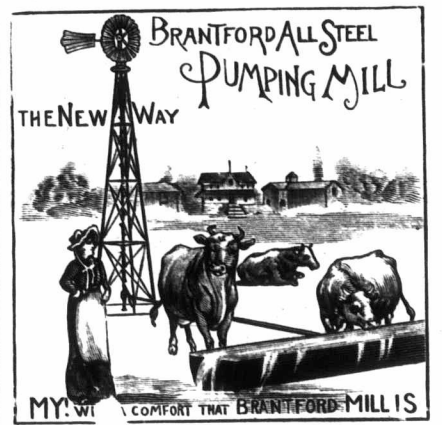
Last fall Mr. Withington was driving in that vicinity, and called to see what satisfaction the other fence was giving. He was informed by a small boy, a nephew of the proprietor, that he did not like it at all, as one old black sheep went through it every day, and he had to go down the road a long way to drive her back and through the gate every night after school.

Later on he called again, when the proprietor was at home, and the boy's statement was fully confirmed. He said more than that, that being determined to break the "colored sister" of her wandering habits, he tied her securely with a three-foot rope to another sheep, but was greatly surprised to find that she had not only strayed away, but had taught the other sheep how to squeeze through.

This satisfied him that no fence made of smooth wire, with stays several feet apart, could be depended on to hold sheep or hogs, and as he needed about 200 rods more of fence, he would then and there give his order for that amount. Thus, said Mr. Withington, that old black sheep was the means of my selling 200 rods of fence.

Address—THE PAGE WIRE FENCE COMPANY (Limited), WALKERVILLE, ONT.

ALL-STEEL



SEE NEXT ISSUE. WIND MILLS

Our Sectional Power Mill is a Wonder!

Write for particulars. Mention this paper.

GOULD, SHAPLEY & MUIR COMPANY, LTD.

BRANTFORD, - CANADA.



12-y-om

VIOLINS GUITARS ACCORDEONS

FLUTES, FIFES, PICCOLOS, AND OTHER MUSICAL INSTRUMENTS

We send them everywhere. We guarantee prices lower than any local dealer can give—(Violins from \$1.00 each up). We ship them with privilege of examination before paying for them. Send your name and address on a postal card, and we will send FREE our wholesale price list of Musical Instruments. Address THE SUPPLY CO., NIAGARA FALLS, ONTARIO

THE SUPPLY CO., NIAGARA FALLS, ONTARIO



A Bright Lad,

Ten years of age, but who declines to give his name to the public, makes this authorized, confidential statement to us:

"When I was one year old, my mamma died of consumption. The doctor said that I, too, would soon die, and all our neighbors thought that even if I did not die, I would never be able to walk, because I was so weak and puny. A gathering formed and broke under my arm. I hurt my finger and it gathered and threw out pieces of bone. If I hurt myself so as to break the skin, it was sure to become a running sore. I had to take lots of medicine, but nothing has done me so much good as Ayer's Sarsaparilla. It has made me well and strong."—T. D. M., Norcatur, Kans.

AYER'S Sarsaparilla

Prepared by Dr. J. C. Ayer & Co., Lowell, Mass.

Cures others, will cure you

GODERICH ORGAN

High grade, fine tone. Send for Catalogue. Made at Goderich, Ontario. 1-y-om

ADVERTISE IN THE ADVOCATE

STOCK GOSSIP.

Mr. Joseph Lawrence, of Clearwater, Manitoba, has been visiting his old home in Ontario, and while here he has busied himself in looking up a carload of choice Shorthorns, Oxfordshire and Yorkshires. Among the cattle was the noted bull Indian Warrior, that won the sweepstakes at Chicago, and two cows from the well-known herd of W. B. Cockburn, Aberfoyle, Ont. Each of the cows had a fine bull calf by her side. From Messrs. R. & S. Nicholson he obtained a draft of three animals—Vacuna 23rd, by Nonpareil Chief, first at both Toronto and London, a two-year-old heifer which formed one of the herd that won third in Chicago, and the yearling bull, Crown Jewel 10th, sired by Nonpareil Chief. This animal headed the herd that took second at Toronto and first at London, and was purchased for Mr. W. E. Baldwin, of Maniton, Manitoba. He also obtained seven-year-old cow, Maudie, Lansdowne, and heifer calf from Francis Wetter, of Pottersburg, and the three-year-old heifer that won the silver medal for best female at Toronto from Mr. Chas. Simmons, Ivan. The Oxfordshire consisted of twenty lambs from the flock of W. B. Cockburn, Aberfoyle, while the herd of Wm. Goodger & Sons, Woodstock, contributed two Yorkshire boars to this choice lot of stock, which, comprising as it does the pick of the best herds in Ontario, should be of great benefit to Manitoba farmers in improving their stock. Mr. Lawrence deserves much credit for his business push and enterprise which led him to make the purchases, and we wish him every success in his undertakings.

BOW PARK SHORTHORNS.

All Shorthorn breeders will regret to learn that this famous herd is about to be dispersed by public auction. Its phenomenal success at the various exhibitions, both in this province and in the United States, together with the excellence of the breeding, will make this sale one of the most attractive of late years. Though the Bow Park Shorthorns will be lost to Canada as a whole, still there is no reason why the animals composing the herd should not stay in the country, and this sale affords an opportunity which should not be neglected by Canadian farmers. The entire herd will be offered for sale without reserve. The animals, with the exception of four cows, are all young. The heifers, a beautiful lot, are in calf to Lord Outhwaite, a son of the celebrated cow, Lady Isabel, and one of the most noted show bulls on the continent. The young bulls are a very promising lot. The manager, Mr. Smith, in writing us says: "The sale will include descendants of all our prize-winning cows; the animals to be sold are a really choice lot, and are all in thrifty breeding condition." Catalogues may be had after April 10th on application to Mowat, Downey & Langton, Toronto, The Globe Office, or to Mr. Jas. Smith, Manager Bow Park Farm, Brantford. The sale will commence at 1 o'clock, April 25th, 1894. Conveyances will meet trains at Brantford on the morning of sale. See advertisement in this paper.

CHERRY GROVE SHORTHORNS.

The stock farm of Messrs. John Morgan & Sons, Kerwood, Ont., which is about five miles west of Strathroy, is in as fine an agricultural district as Ontario can boast of. Although grain can be produced here as bountifully as anywhere in the province, still stock breeding and dairying have always received a share of attention, and consequently farming is a better condition from a financial standpoint than in localities where exclusive grain growing is followed. Cherry Grove has done its share of the good work by precept as well as example, and for many years a capital herd of Shorthorns have been kept. Pure-bred sheep and registered Berkshire swine have also received a good share of attention at the hands of the proprietor. The Shorthorn herd have not only been useful in causing a vast amount of improvement in the herds of the neighborhood, but many a good one has been shipped to distant points, and stock bulls from Cherry Grove are doing duty at the head of several of the best herds not only in the province, but also in the adjoining states. Royal Lancaster, sired by Mr. A. Johnston's Indian Chief, is at present at the head of the herd. His dam is Mary Ann of Lancaster 14th, imported by Mr. Johnston, and of the best Aberdeenshire breeding. Royal Lancaster is a right good bull, and is in much the same pattern as several of his illustrious brothers, which have gained such celebrity through their achievements in the show yard. He has plenty of length, good deep ribs, long level quarters and lots of quality. Several good young bulls bred at Cherry Grove are also on hand. One of these, named Goldfinder, is a particularly promising young bull, which was exhibited at Chicago World's Fair. This bull is not only an exceedingly good one individually, but is of the most approved breeding, as his blood lines contain the most popular strains. He is well worthy a place at the head of some good herd. Goldfinder was sired by Diadem, bred by Hon. John Dryden, while his dam belongs to the famous Kinnellar family known as Fair Queens. Other good animals are also to be seen at Cherry Grove that should not be long in finding customers, for they are the sort that the market demands. The cows and heifers in this herd embrace four distinct families. The descendants of Fair Queen 2nd, of straight Kinnellar breeding, are the most numerous. Queen 2nd is by imp. Inkermann and out of imp. Fair Queen, both bred at Kinnellar. This branch of the family has been crossed with bulls of orthodox breeding, such as Diadem, before mentioned, imported Rob Roy and imp. British Statesman. The Crimson Flowers are next on the list; these have also been carefully bred. This branch of the family is descended from imp. Crimson Flower, by Refiner, and in their pedigrees the names of some of the best imported bulls appear, such as Scotsman 2nd, Royal Barmpton, and later Golden Brown, sired by imp. Scottish Rose, his dam being a straight bred Kinnellar Golden Drop. Among this family is the beautiful heifer, Sussex Maid, that was exhibited at Chicago, and doubtless one of the best of her age. A right good family, with more Booth blood, is represented by Fanny B., imp. by Mr. J. Redmond, of Peterborough. She is by Jumbo, a son of the celebrated prize-winning bull, Goldfinder. Fanny B. has several good ones in this herd, which should lay the foundation for a really good sort. The Messrs. Morgan have some thirty head of Shorthorns in the herd. They belong to the easy feeding kind that carry plenty of natural flesh.

Do Not Insure

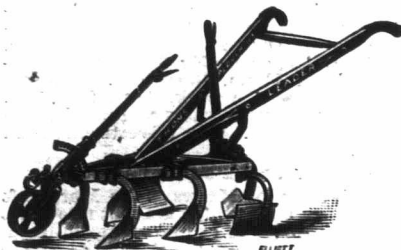
Until you have seen the Double Maturity Policy of the Manufacturers' Life. Ordinary prudence suggests that you should carry some life insurance, if ever so little, and it is as well to know where the best is to be had, both for security and profit. Life insurance creates an immediate capital at a trifling outlay, which returns, as a rich and ample investment, to a man's family or himself at its period of maturity. You should find out about this Double Maturity we speak of.

MANUFACTURERS' Life Insurance

COMPANY,
63 Yonge Street, Cor. Colborne,
Toronto, Ont.

13-1-37-om

CORN AND ROOT CULTIVATORS FOR 1894



We were the first to manufacture the Lever Extension Cultivator in Canada. We claim to be leading the trade in this particular line of goods. Every enterprising farmer and dealer wants to handle the best tools. We make a specialty of Cultivators, and keep ahead of the times. Those desiring to handle the Famous Watford Cultivators for 1894 please correspond now and secure the right of sale. One of our other specialties is Riding Plows. Who has not heard of the famous Watford Riding Plows? Patented in Canada and the U. S. We are right on deck again with some more valuable improvements. Send for circular. We manufacture the Ripper Feed Cutter.

THOMAS IMPLEMENT WORKS, - WATFORD, ONT.
Established 1875. 23-1-f-o

ALLAN LINES

THREE DISTINCT SERVICES FROM MONTREAL WEEKLY.

Mail Service to Liverpool, via Quebec, Rimouski and Derry, or via Portland & Halifax in Winter.

DIRECT SERVICE MONTREAL TO GLASGOW

Direct Service Montreal to London.

These steamers are of most recent construction; are of the highest class, and their record for the safe carriage of cattle is unexcelled. Special attention paid to the best methods of stowing and carrying cheese, apples and other farm produce. For schedule of sailings, rates of passage or other information, apply to

18-y-om H. & A. ALLAN, Montreal.

PILES Radically Cured.

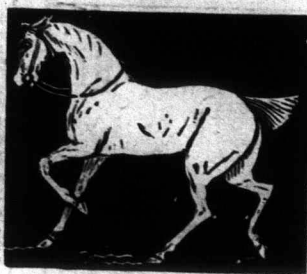
W. E. BESSEY, M.D., C.M.,
OFFICE: 133 CHURCH STREET, TORONTO.
SPECIALTY: Official Treatment of Piles and Rectal Diseases, Stomach and Intestinal Disorders, Chronic, Nervous, Sectional and Wasting Diseases, Genito-Urinary Affections, and Diseases of Women. 5-y-om

LIVE STOCK AUCTION SALES

Conducted in all parts of the country. Pedigree stock a specialty. Write for terms. References: J. C. Snel, Edmonton; Hon. M. H. Cochrane, Compton, P. Q., or this office. JOHN SMITH, Brampton. 9-1-y-o

AGE 18. **MATRIMONIAL!**
Package of Cabinet Size Pictures
Also full written descriptions (including residences) of respectable ladies who want to correspond for fun or matrimony, sent in plain sealed envelope, only 10 cts. 7,000 lady members, all ages and nationalities; many are beautiful and wealthy. We can suit you. Address LOCK DRAWER 697, CHICAGO, ILL. 6-f-om

SEE THAT HORSE?



He has a smooth and glossy coat and feels in good enough condition to win the "DERBY" and so would any horse if its owner used

DICK'S BLOOD PURIFIER.

It renews the system, enriches the blood and gives nature a fair chance, is also an unfailing eradicator of bots and worms. It is just as good for cattle as for horses. Try a 50c. package if your horses or cattle are not thriving. For a spavin, curb, ringbone or splint, use Dick's Blister, 50c.—Dick's Liniment for sprains, swellings, bruises, etc., 25c.—Dick's Ointment for scratches, old sores, saddle galls, etc., 25c., mailed on receipt of price.

DICK & CO., P. O. Box 482, Montreal.

SOUTH SASKATCHEWAN LANDS FOR SALE.

All choice selections, near SASKATOON, at the gateway of the Great Saskatchewan Country, equal to anything on the Continent for farming purposes. The homesteads are mostly taken up by a good class of settlers. The district produces magnificent crops, and is a good stock country. A branch of the C. P. R. runs through the tract. Every farm within easy distance of a railway station.

GENERAL PRICE, \$3.00 AN ACRE

Title Indisputable. No Restrictions.
OSLER, HAMMOND & NANTON,
Winnipeg,
Or C. POWELL,
21-y-om 6 Victoria-St., TORONTO.

W. & F. P. CURRIE & Co.

Wholesale General Merchants,
100 GREY NUN ST., MONTREAL
IMPORTERS OF
Scotch Glazed Drain Pipes, Chimney Tops,
Vent Linings, Flue Covers, Fire Bricks,
Fire Clay, Portland Cement, Roman
Cement, Canada Cement, Water
Lime, Whiting, Plaster of Paris,
Borax, China Clay, etc., etc.

MANUFACTURERS OF BESSEMER STEEL
SOFA, - CHAIR - AND - BED - SPRINGS
A LARGE STOCK ALWAYS ON HAND.
WM. CURRIE. 7-y-o F. P. CURRIE.

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your house with
UNICORN
READY MIXED PAINT.
None better in the world. Every tin guaranteed pure. Tell your dealer you must have them.
MANUFACTURED ONLY BY
A. RAMSAY & SON, - MONTREAL.

Established 1842.
Leads, Colors, Varnishes, etc. 7-y-om

A PLEASANT TONIC

Which will strengthen unnerved tired people and invalids, and quickly restore their appetites, is
CAMPBELL'S QUININE WINE.
Prepared only by K. CAMPBELL & Co.,
Beware of Imitations. MONTREAL.
9-1-y-om

BOYS FOR FARM HELP

The managers of Dr. Barnardo's Homes will be glad to receive applications from farmers or others for the boys whom it is proposed to send out from England in several parties during the coming season. All the young immigrants will have passed through a period of training in the English Homes, and will be carefully selected with a view to their moral and physical suitability for Canadian life. Full particulars, as to the terms and conditions upon which the boys are placed, may be obtained on application to MR. ALFRED B. OWEN, Agent, Dr. Barnardo's Homes, 214 Farley Ave., Toronto. 4-y-o

Hudson's Bay Company

FARMING AND GRASS LANDS

In every Surveyed Township in Manitoba and N. W. Territories.
Under its agreement with the Crown, the Company are entitled to Sections 8 and 26 in each township. These Sections comprise some of the best

FARMING, STOCK-RAISING and COAL LANDS

in the country. They are now offered for sale at MODERATE PRICES, on EASY TERMS OF PAYMENT, and WITHOUT ANY CONDITIONS OF SETTLEMENT.

Winnipeg, Portage la Prairie, Prince Albert,
Fort William, Fort Qu'Appelle, Rosemount,
Rat Portage, Edmonton,

If you contemplate moving west and have a little money, it will pay you to purchase a farm from the Company at reasonable prices in well-settled districts, convenient to churches, railways and schools, rather than to take up homestead land in outlying parts of the country. Full and accurate descriptions of Company's lands will be furnished to intending purchasers on application to the undersigned, either by letter or personally, at the offices of the Company, Main and York Streets, Winnipeg.

The Company also have GENERAL STORES at

Baie Des Peres, Battleford, Calgary, Chapleau, Dauphin, Deloraine, Edmonton, Fort William, Kamloops, Keewatin, Langley, Lethbridge, Lower Fort Garry, Macleod, Manitou, Mattawa, Morden, Nelson, Pincher Creek, Portage la Prairie, Prince Albert, Qu'Appelle, Rat Portage, Riding Mountain, Russell, Shoal Lake, Sudbury, Touchwood Hills, Vancouver, Victoria, Vernon, Whitewood, Winnipeg.

On your arrival in the country go direct to one of them for anything you require; you will find there the best goods at moderate prices, imported direct from all the principal markets of the world.

C. C. CHIPMAN, Commissioner, Hudson's Bay Company, WINNIPEG. 1-1-d-o

ULCERKURE

Messrs. A. E. Waldon & Co.
Gentlemen.—I have had several opportunities of observing the wonderful curative properties of Warnock's Veterinary Ulcerkure. Last year a valuable mare that I was breaking to harness ran into a wire fence and had the muscles of the forearm of one leg cut through to the bone. The wound was so deep and the lips so wide apart that it was impossible to stitch it, so I applied Ulcerkure as directed and the wound rapidly healed. There was almost no scar left, the animal regained perfect use of her leg, and I sold her a short time afterwards for a good price. Another of my mares sustained an ugly tear in front of one of her hocks, almost laying the joint open. A few days rest and the application of Ulcerkure caused the wound to heal quickly, without leaving any stiffness of the joint. I have seen the medicine used in numerous other cases in this district, and always with the same satisfactory results. WM. C. McDOUGALL, Rancher.

PRICE \$1, OR SIX FOR \$5. Each bottle contains two hundred applications. Sold by all dealers in medicine, or sent to any part of Canada on receipt of price. A single trial will prove the wonderful curative properties of Ulcerkure. Samples free. Send for Dr. Warnock's pamphlet on the treatment of wounds in domestic animals. Address,
A. E. WALDON & CO., Chemists, Calgary, Alta. 5-y-om

LAND PLASTER

FRESH MINED and ground fine. The only Gray Plaster Mines in Ontario. Acts quickly on the crops. Make your order for 12 tons, and write us for prices and freight rates.

PARIS PLASTER MILLS,
7-d-om PARIS, ONTARIO.

EXCELSIOR LIFE Insurance Company.

Incorporated 1889. Head Office, TORONTO. Issues the most attractive policies in existence. Foremost in features conducive to success. Largest surplus security for policyholders. RELIABLE AGENTS WANTED. E. F. CLARKE, 5-1-f-o MANAGING-DIRECTOR.



Box Combined. Runs 8 days, keeps perfect time & furnishes constantly all the most charming & popular tunes. Plays anything from a simple song to a difficult waltz or operatic selection. To introduce it, one in every county or town furnished it to the most respectable persons (either sex) who will promise to show it. Sent at once. Inventor's Co., New York City, P. O. Box 2253. 65-b-om

GRANGE

The following Report has been sent us from the Dominion Grange. It speaks for itself:—

We, your Committee, beg leave to report that, according to your instructions, we inspected the Grange Wholesale Supply Company, and we can fully endorse the report of your Committee of one year ago. The advance the Company has made during the past year is far ahead of anything we expected to see. We have all confidence in the management of the Company, and we would heartily recommend all farmers giving this Company their united support.

Signed by Committee of Dominion Grange, Feb. 23, 1894.
D. G. MACKENZIE,
JOHN CUMMINGS,
M. SCHILTZ,
ROBERT MILIKEN,
M. CONNELL.

OUR SPRING CATALOGUE

Is now ready, and will be sent to any Farmer on application. Send for one and co-operate with us.

The Grange Wholesale Supply Co.,

R. Y. MANNING, Manager.
13-1-y-om 126 King St., Toronto.

WANTED!

A competent buttermaker who is willing to build and operate a factory at Greenridge, Man., the farmers guaranteeing a sufficient number of COWS.
COMMITTEE JOHN OATWAY, FRED POST, R. K. MILLAR. 65-b-om