

20, 1894

TEA
handsome
the finest
by
Winnipeg
45-y-m

S
interest
fore

WN,

RE

y low.
30-2-y-m

S
or send
nearest
apply out-
tes.
ork three

R,
WINNIPEG,
CA,

DEA,
ntities, to
d

ng.
CESS?
pleased
with it.

ENTION I

VED
pout
nts have
the above
the spout
out when
of handle
le spout.
.75.
Record's
up Cans
tured of
orks, of
ut, Ash.
32-d-om

ED
NE
Pure
years.
co.,
REAL.

J. G. Rathford, V.S. Jan 95

MANITOBA AND WESTERN EDITION

THE FARMER'S ADVOCATE

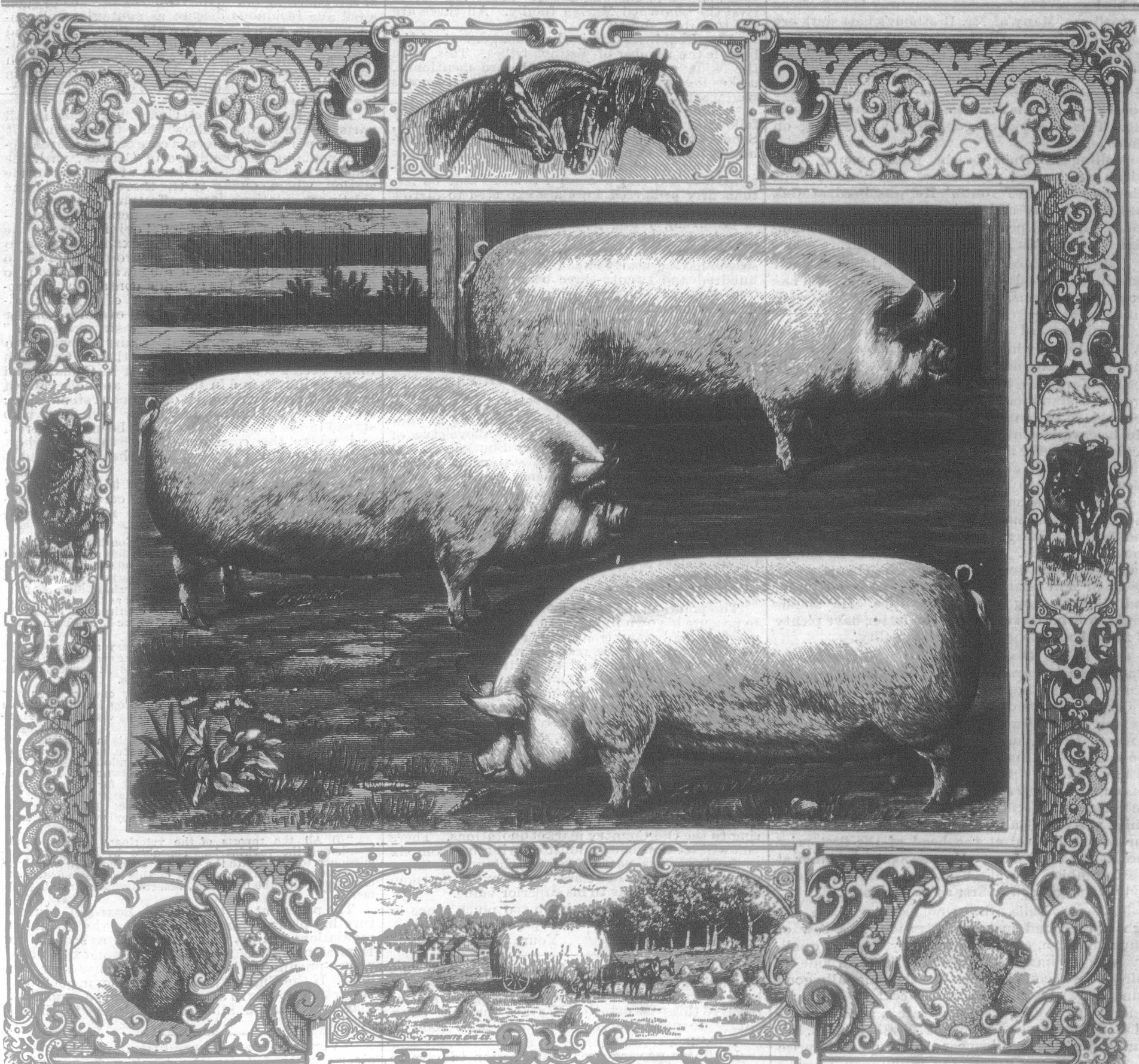
AND HOME MAGAZINE

AGRICULTURE, STOCK, DAIRY, POULTRY, HORTICULTURE, VETERINARY, HOME CIRCLE.
REGISTERED IN ACCORDANCE WITH THE COPYRIGHT ACT OF 1875.

VOL. XXIX.

LONDON, ONT., AND WINNIPEG, MAN., APRIL 5, 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. BRETHOUR, BURFORD ONTARIO.

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 398 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.

A Good Word for Southdown Sheep.

To the Editor of the FARMER'S ADVOCATE:

I was very much interested in reading in your valuable paper a short report on the above class of sheep, and being an Old Country Southdown farmer, I can fully endorse that statement, having had over twenty years' experience.

There is no doubt that in this country the Southdown would, with careful attention, be able to compete with and eventually surpass every other breed, as it does in the Old Country at the present day. A more hardy class of sheep cannot be, nor a class to give larger and more satisfactory returns in consideration of the amount of labor and food expended on it.

The points in his favor are special adaptability to procure his own living. As his home is on hilly pastures, and many times a long distance from the folds, they cannot be reached without a certain amount of endurance and strength, yet you will find him doing well. Again, he has to stand against all weather, particularly wet, without shelter. Now, in this country the winters are certainly colder, but much dryer, which is very much to the animal's advantage, a cold, wet climate being far harder on the animal's constitution than a cold, dry one. And last, but not the least point in his favor, is his rare flesh quality. Independent of his carrying off a greater number of prizes at the cattle show of the world, viz., Smithfield, you will find an everyday proof of this superiority by referring to the Old Country market quotations. There you will see Southdown mutton bringing from six to twelve cents per stone of eight pounds more money than any other class, thus leaving no room for any argument as to his superior value.

Hoping I have not taken up too much space in your very useful and valuable paper,

Yours truly, SUSSEX.

We ask the indulgence of many our contributors for holding over their articles so long. We have been almost buried beneath the deluge of matter received this past month. We are making extra efforts to overtake the work, and hope soon to "catch up."

It affords us very great satisfaction to have so many of our readers take interest enough to swing their own pens in helping along the good work. Keep right on, friends: the more help you give us, the better can we serve your interests.

The Patrons Are in the Field.

The first political action on the part of the Patrons of the Territories was taken at a recent large and enthusiastic meeting of delegates, when Mr. J. M. Douglas, Moosomin, was unanimously chosen as the standard-bearer for the Patrons and farmers of Eastern Assiniboia.

The candidate, Mr. J. M. Douglas, was formerly a Presbyterian minister, having filled the pulpit in both Uxbridge and Cobourg churches, Ontario. He was afterwards sent as a missionary to Central India.

In 1883 he came to Manitoba, where he has labored in Winnipeg, Brandon and Moosomin. Recently Mr. Douglas left the ministry, and is now farming north of Moosomin.

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 1890 to 1893, 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 4,120,534, and the value of these animals and the products therefrom at \$135,000,000. The export of cheese alone during 1893 was \$13,360,237. 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 pleuro-pneumonia, 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 pleuro-pneumonia 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 pleuro-pneumonia, so that the name of Canadian lung was given to it to distinguish it from the genuine contagious pleuro-pneumonia. 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 pleuro-pneumonia 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 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 pleuro-pneumonia 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.

"Very rarely are the conditions such that a scrub steer can be fed for the block with any profit. Most of the farmers who are attempting this cheat themselves by not accurately counting the cost. There is a leak in their system, and they are afraid to find it out."

"INDIANA FARMER."

Timely Notes for April—No. 1.

EXEMPTIONS AGAIN.

I have had a couple of communications given me for comment, one from Arden and the other from Ralplhton. The Arden gentleman takes me to task for advocating doing away with exemptions altogether. Well, I still hold to my opinion, and the reports of institutes and other farmers' meetings show that many good men in various parts of the province hold the same views. There is no method that I have yet heard or read of that will not work disadvantageously to some one. It is true, as this correspondent states, that a person hopelessly involved would be simply ruined and prevented starting again. And, he says, a merchant in a like case would suspend business, pay his creditors fifty cents on the dollar, perhaps—(aye, perhaps 5 cents)—and then start again in a year bigger than ever. Now, is there anything in the present law that prevents a farmer from declaring himself bankrupt? I don't think there is. Again, are there not plenty of judgments registered against merchants, &c., that will hold good as long as they will against any farmer? I quite agree with him, that it takes as much brains to run a farm as a store successfully; but is it not the case that very few farmers use their brains? What proportion of farmers take an agricultural paper? Do one in six take a farm paper? On the other hand, how many business men neglect to take one? Are there ten business men from Winnipeg to Moosomin that do not take a trade journal? Some of his other statements, as to merchants' profits, are rather wide of the mark. I don't know of many, if any, articles (except jewelry), that \$5 cost will bring in \$15 return!

I agree with him that implement men and other agents are a nuisance. I have said so in these notes before this. But what about the "drummers" that pester the shopkeeper, etc. Are they an unmixed blessing? And as to buying an article you don't need, just because you are talked into it—more than farmers do that. The correspondent strikes the nail on the head, however, when he says, "recognize us as business men, and give us an equal chance." I believe this will only be done when farmers assert themselves more. They are equal before the law, but they are worse educated, live isolated lives, read less on their own business, consequently are generally prejudiced, and narrow-minded, and ignorant of their strength and importance, and thus allow their more self-assertive brethren of the towns to take the cream while they are left the skim milk.

The Ralplhton gentleman mourns the difference in implements between Ontario and Manitoba, instancing a roller costing \$35, F. O. B. at Seaforth, and costing \$75 here. There is no doubt that the middlemen do fleece the farmers; but the Patrons of Industry are improving this state of affairs, and if we could only do away with the tariff on implements the prices would soon come down. I quite agree with him in desiring to see law costs, especially for mortgages, be reduced to something like a reasonable rate. But how can you hope to reduce law expenses as long as you return so many lawyers to the Legislature, and allow them to form "close corporations" like the "law society," etc.? If farmers will not look after their own interests, especially at election times, they may rest assured the lawyers, veterinary surgeons, grain dealers, storekeepers, etc., certainly will look after their own interests first, and then they may, if they have time, give a "spare hauf-oor," like the Scotch volunteer, to the farmers.

THE POULTRY SHOW.

I went up to Winnipeg to see the Poultry and Dog Show, and was well repaid for the visit. The exhibits were on the whole very good, especially the Plymouth Rocks, Langshans, Cochins, etc. There was one Langshan cockerel that was simply perfect. A good many of the exhibits were rather under weight. With very few exceptions, the birds were all useful sorts. The score cards are a decided success, and the judging could hardly be better. The turkeys were very light in weight, with one exception. The dogs included too many toys and terriers to be very attractive to a farmer, but there were some good collies and cattle-dogs. The deerhounds seemed to be looked upon as the most likely wolf killer, after the bounty and the rifle. A couple of good St. Bernards were there, and some undersized mastiffs and a good pair of foxhounds. One or two decent bull-terriers and a couple of good Newfoundlands include about all that a rural resident would care to own.

GENERAL.

Lots of money in sheep with wool at 7 to 8 cents a pound!

A few hours' work with a spade will make those low-lying fields fit to sow soon. Don't sow any seed until the land is dry enough to work freely. About 20th April is usually early enough for wheat.

Be sure to try and see if you can not put your crop in the ground with more care and skill than usual. You may just as well try for 40 bushels to the acre as be satisfied with 18 or 20. Don't neglect your garden seeds till too late, nor the fodder crops.

INVICTA.

Seasonable Hints:

BY J. DALE, GRUND.

WOOD ASHES FOR PIGS.

As I hear of quite a number of young pigs from three to four months old dying this spring, I will give you some information which I think will be valuable to parties losing pigs, as they all seem to die of the same disease, viz., paralysis. In answer to question No. 2 in the report of the Swine Breeders' Association of Ontario for 1892, we get the following answers:—

C. W. Neville says:—"I have observed that when pigs get paralysis, wood ashes is very beneficial to them, and I think they would never have paralysis if they had been given the ashes from the first."

C. A. Zavitz:—"Prof. Henry, of Madison, Wis., in carrying on an experiment with three lots of pigs in 1890, gave to one lot corn alone, to another lot corn and charcoal, and to the third lot corn and wood ashes. He found that wood ashes and charcoal were about equal in their effects, and that those which received charcoal and wood ashes consumed 28 per cent. less of the corn than the others to produce like results. He also found that the bones of the animals which had received charcoal and wood ashes were about 45 or 50 per cent. stronger than the bones of those which had received corn alone."

Mr. Simmons:—"If you feed heavily on any concentrated food, I care not what kind, even shorts, unless you have wood ashes or coal fed to your hogs, or give them outdoor exercise, they will become diseased in a very short time. If we see that they are becoming diseased, we commence feeding the coal and wood ashes, and they recover."

A CURE FOR FOWLS EATING EGGS IN WINTER.

Mrs. W. A. Card, having hens addicted to this practice, adopted the following expedient, which was quite successful. She took two or three eggs, making an opening in each end, taking all of the egg out. Then she made a medium thin mixture of cayenne pepper and mustard, ran it into the egg, closed up the openings by pasting paper or cotton on them, and put these into the nests. One dose effected a cure.

The Manitoba Poultry Show.

The first annual exhibition held under the auspices of the Manitoba Poultry Association, in Winnipeg, on March 6th, 7th and 8th last, was an unqualified success.

Every department was well arranged and ably managed, considering the short notice from the time it was first decided to hold the show. The entries were numerous, numbering 313, including fowls of all varieties, and 100 entries of dogs, which proved quite an additional attraction.

The poultry entries were all good, and the scoring averaged high. Of course the keenest competition was in Light Brahmas and Barred Plymouth Rocks. Many other popular breeds were represented by birds scoring from 93 to 96 points, and the many visitors were loud in their expressions of delight and surprise that so many beautiful specimens could be got together in Manitoba.

His Honor, Lieutenant-Governor Schultz, officially opened the exhibition on the first evening, and in the course of a very neat speech said:—

"The lesson which this exhibition teaches should be of the greatest value as showing:—(1.) That we have a climate suitable for the raising of the many beautiful varieties of poultry on exhibition here to-day. (2.) That inexpensive sod or sun-dried brick buildings, well lighted, furnish ample and secure winter accommodation. (3.) That cheapness of transportation in proportion to value places us in favorable competition with Ontario and the adjoining States, and almost entire immunity from disease gives our poultry, as our cattle and horses, an advantage which will be more appreciated when our birds and our animals take that rank for excellence which is accorded without question to our butter and cheese, as well as our barley and oats, to say nothing of that bakers' and millers' wonder and delight, our No. 1 hard wheat."

Mr. E. L. Drewry, honorary president of the Association, in conveying the thanks of the Association to His Honor for assisting in the opening of the exhibition, referred to the magnitude of the Canadian poultry and egg industry, and pointed out the stimulus exhibitions of this sort would give the industry in Manitoba.

It is a very common thing to hear it said that no exhibition judge can give entire satisfaction to all, no matter how conscientious he may be in performing his duties. But this does not apply to Mr. Sharp Butterfield, Windsor, Ont., who performed the task of scoring every bird in the show to the perfect satisfaction of every exhibitor. Nothing but praise was heard for him, and Mr. Butterfield seemed never weary of furnishing information as to the scoring, mating, care and feed of birds in order to obtain the best results. He claimed that breeders here need not be discouraged at the long winters, for in several of the classes were birds bred in Manitoba that equalled in every particular any he had seen on the continent, and he should know, as he has been judging at all the leading poultry shows for the past three months, coming here almost direct from Madison Square Garden, New York. From the appearance of many of the birds, he judged that they had been fed too exclusively on a wheat diet, and he recommended more variety,—

oats, barley, vegetables, etc. This was the first time home-bred birds have been properly scored, and the many valuable pointers Mr. Butterfield gave the exhibitors will doubtless be made good use of in future. Many sales were made and orders booked for eggs, and several breeders who did not exhibit regretted it, but availed themselves of the opportunity of studying what others were doing.

Financially, the show was a complete success, the expenditure amounting to about \$600, which was met with the \$300 grant from the Local Government, gate money and subscriptions, leaving a small balance in the treasury.

It would be impossible for us to give a complete report of all the exhibits, but we notice among the principal exhibitors the following:—

H. A. Chadwick, St. James, undoubtedly made the largest and best display, winning besides many class prizes the following specials:—The Lieutenant-Governor's medal for best exhibit, with 55 birds, representing nine or ten varieties; E. L. Drewry's silver cup for three best cocks and three best hens (to be won twice before becoming winner's property); W. B. Scarth's cup, with Partridge Cochins cock scoring 93 points, and which was pronounced by the judge to be equal to anything in America, which remark also applies to his Langshan cockerel, which scored 96 points and won the medal offered by W. J. Hinman, V. S., secretary of the association. A Langshan hen belonging to Mr. Chadwick tied with M. Maw's White Wyandotte, both scoring 95 points, and a Langshan pullet tied with Mr. Lawrence's Silver Wyandotte, scoring 95. In both cases Mr. Chadwick waived his claims, allowing the others to win the medals. Among other high scores made by him were:—A Buff Cochins pullet scored 95, a Barred Plymouth Rock pullet scored 93, and a Dorking hen 94.

M. Maw, North Main street, Winnipeg, exhibited many varieties of fowls, winning: On Bronzed turkeys 1st on a cockerel weighing 20½ pounds, 1st on a hen weighing 19½ pounds, and 2nd on a pullet weighing 16½ pounds. Also first on Pekin ducks, young and old pairs. He also owned the sensational Barred Plymouth Rock cockerel, Hero, scoring 93½ points. Also winning F. W. Sprado's cup for highest scoring hen, with a 95-point White Wyandotte. Mr. Maw's White Wyandottes are bred from birds imported a few years ago by the FARMER'S ADVOCATE.

S. Ling, Fort Rouge, Winnipeg, made 13 entries and captured 13 prizes, among which was one of the most important on the list, being a medal given by F. W. Drewry for the best breeding pen. This was won by a pen of White Wyandottes, all raised by Mr. Ling in Manitoba.

Thomas Reid, Lizzie street, Winnipeg, also had some high-scoring birds—a Golden and also a White Wyandotte cock each scored 92½, besides winning prizes with Black Minorcas (hen 92½) and Light Brahmas.

W. D. Lawrence, Morden, showed Silver Laced Wyandottes, and they are a grand lot, imported from Dr. Beckett, New Jersey, and the 95½-point pullet, winner of the association's medal, could not have been beaten at the New York show, according to Butterfield. His first and second prize cockerels scored 92½ points each.

W. Rutherford, Garry street, Winnipeg, carried off eight firsts, his Light Brahma cock proving invincible; he scored 91½. Also first on pullets; first on Barred Plymouth Rock cock Octimus 2nd, 91 points, and on breeding pen; first on White Plymouth Rock cock, 91 points, and also on pullet; 2nd on Silver Wyandotte breeding pen.

Andrew Ourlie, Fort Rouge, Winnipeg, exhibited some Bronze turkeys, Light Brahmas and Black Minorcas, all his own breeding, and all worthy specimens of which he may well feel proud. His first prize Minorca cockerel scored 92½ points.

C. M. Richardson, of the FARMER'S ADVOCATE, had the first prize pen of Light Brahmas, scoring an average of 90 points, and headed by a Manitoba-bred cockerel.

S. Wise, Winnipeg, showed Golden Wyandottes, winning firsts on cockerel, hen and pullet, cockerel scoring 94 and hen 93½. These are wonderfully high scores for Golden Wyandottes, and all the more credit is due to Mr. Wise as they are all home-bred birds, but he has got the birds.

W. Pettit, Winnipeg, showed high-scoring single-comb White Leghorns, two scoring 92 and 91, pullet 90½.

J. Lemon exhibited fine Indian and Black Red Games.

Geo. Deitz, Bronze turkeys, 1st on cock weighing 34½ pounds; 1st on pullet, 17½ pounds; 2nd on hen, 19 pounds. Also showed prize-winning Plymouth Rocks and 1st prize pair of Embden geese.

D. F. Wilson, Brandon, Brown China geese, 1st prize.

George and Jackson Hanby showed Light Brahmas, Brown Leghorns, White Leghorns and Black Red Game Bantams.

A. Williams, Black Spanish and Brown Leghorns. A pullet of the former scored 94 points.

R. Dolbear showed some good Light Brahmas, taking 2nd on cock and on breeding pen.

We must not forget to mention the cocky pair of Pile Game Bantams that came all the way from Nanimo, B. C., to the show.

Mr. Chadwick also exhibited some very handsome English Golden Pheasants, which were much admired. The display of pigeons was excellent, and the dog show fairly good; some very fine Coolies, one owned by A. Smith, Winnipeg, being a particularly beautiful dog.

The Institutes.

Messrs. Bedford and Leech had a very successful trip during March along the South-Western branch, organizing Institutes at Kildonan and Neapawa on their way home. The first meeting was held at

NAPINKA.

It was largely attended, and Mr. Bedford's address thoroughly appreciated. It was decided to organize an Institute immediately. Next meeting was at

DELORAINÉ.

a report of which we clip from the Times:—

"Delorainé Farmers' Institute was successfully inaugurated in Chapin's Hall. There was a large attendance of farmers. Mr. Bedford, of the Experimental Farm, Brandon, and Mr. Leech, Secretary of the Central Farmers' Institute, were present for the purpose of organizing. Mr. Bedford delivered a splendid address upon mixed farming, which was listened to with great attention and lasted about two hours. Afterwards various questions were asked, and it almost seemed as if the farmers would never grow tired of asking Mr. Bedford questions, for the meeting lasted about four hours, and then reluctantly dispersed. Nothing but praise was heard of Mr. Bedford's address. Mr. Leech confined himself to organizing. About fifty farmers joined, and the election of officers resulted in:—President, J. B. Stewart; Vice-President, P. F. Johnstone; Secretary-Treasurer, W. H. Daubney. Directors—Messrs. Lynn, M. D. Wright, J. Renton, sen., M. Holladay, J. Urie, and H. Turner. Auditors—J. Morrison and A. Estlin. Interest was kept up throughout the whole afternoon, many agriculturalists asking questions and giving information, among these being the Fleming Bros., Mr. Kavanaugh, Mr. Lacy, Mr. Wright, Mr. Lynn, Mr. Morrison, Mr. Cockell, Cap. Keller, and many others. An interesting collection of grasses and grains were shown by Mr. Bedford, and the whole meeting may be described as being most interesting and instructive."

BOISSEVAIN.

A most enthusiastic meeting was held, the building being far too small, many being unable to get in. Mr. Wm. Millar (Reeve of Morton) occupied the chair, with Wm. Gordon Secretary. Mr. Leech spoke briefly of the objects of Farmers' Institutes, and Mr. Bedford spoke on grains, fodders, etc. A lively and interesting discussion followed, and before the close there was a largely signed petition for the formation of an Institute.

MANITOU.

A crowded house again met the speakers, and all seemed to enjoy Mr. Bedford's capital address. There has been a very successful Farmers' Club existing here for a considerable time. After seeing the advantages offered by the Institutes, it is very likely the Club will resolve itself into an Institute.

MORDEN.

Another good meeting was held at Morden. It was largely attended by the best farmers of the neighborhood. Messrs. Bedford and Leech delivered very interesting and instructive addresses, and were heartily thanked. It was not definitely settled to form an Institute.

ROSSER.

A very well attended meeting was held at Rosser, and after hearing Messrs. Bedford, Leech and others, it was determined to organize an Institute at once, a petition being got up and Mr. Wm. Styles appointed Secretary-Treasurer *pro tem*.

KILDONAN.

A meeting for the purpose of organizing above Institute was held in Kildonan East school-house on 12th March. Secretary R. E. A. Leech, of the Central Institute (organizer), after stating the object of meeting, called for election of officers, which resulted as follows:—President, Robt. McBeth; Vice-President, Jno. H. Gunn; Secretary-Treasurer, D. W. McFord. Directors—Jas. Penrose, Wm. McNaughton, H. C. Whellams, Magnus Harper, Hector Sutherland, S. R. Henderson. Auditors—Geo. F. Munroe, Alex. Matheson. Mr. McBeth, the newly-elected President, called on Mr. S. A. Bedford, of the Brandon Experimental Farm, who delivered an address on trees, small fruits, flowers and vegetables, naming many varieties which from results of tests made at the Experimental Farm proved to be suitable to Manitoba climate—in trees recommending, spruce, tamarac and birch for the beautifying of the home, in fruits (smaller varieties), gooseberry, raspberry, currants and native plums—in all strongly advising the desirability of keeping the land entirely free from weeds or profitable and encouraging results could not be expected. Mr. Leech followed with an address to women (many of whom were in attendance), showing forth her capabilities to accomplish good, and also the valuable assistance they would be in forwarding Institute work in the Province if they attended and took an active part in the meetings. Rev. Mr. McKinley and others followed, citing instances of the benefits derived from union. Subject for next meeting, "Seeds and Seeding."

BRANDON.

Mr. Postlethwaite read report of the committee on railway rates, which was adopted. Mr. Elder, President of the Central Institute, being present, he was called on to explain why the executive of the Central Institute had not met the railway commission when invited to do so. Mr. Elder explained very fully the causes why it had not been done. Mr. F. Smith said he was quite satisfied with Mr. Elder's explanation. Mr. Elder then read his paper on the subject of the day, "Seed

and Seeding". In answer to questions, he said that in ploughing in oats it was better to do so as light as possible. That by growing wheat on the summer-fallow, sowing half a bushel to the acre and turning stock on it in the fall, good feed was produced for the stock and the soil was well packed and manured, which helped very materially in the early ripening of wheat. He had been troubled with smut in both barley and oats and had bluestoned the seed, which had quite as good an effect on these grains as on wheat. Mr. Middleton said that bluestone would also prevent scab on potatoes. Mr. Young had at one time been troubled with smut in oats, but had bluestoned his seed for the last five years and during that time has only had smut one year. H. Nicol had for the last few years back sown wheat on wheat stubble, without ploughing, and it had been his most profitable crop. It had yielded as well as any, being the best sample and ripe the earliest. Some of his oldest land he had sown in this way, which was one year from summer-fallow, and it had yielded better than his new land. He had not been able to see any great difference in the crop between broad-casting and drilling. He had got best returns from oats on spring ploughing, and was not altogether in favor of ploughing them in. Mr. Elder explained that he was very much in favor of sowing on the stubble, but had given up talking about it as it was inclined to set some men astray, numbers of farmers having treated stubble in this way that was not fit for it. He had given it up in practice, as Couch grass was making great headway in the Viriden district, and this system was not suitable where this had a hold.

BELMONT.

One of the best meetings held this winter was on March 5th. Jas. Dale, Grund, read an excellent paper on "Economic Farming." (Space would not permit of its publication in this issue.) Following this there was a lively discussion. The Hon. J. H. Standing graphically described his methods and success in farming, especially with potatoes, promising to give at some future date results of experiments with trees, shrubs and vegetables. Mr. Nicholson said that from his experience manuring was a failure, growing chiefly weeds. Mr. Williamson said that he had found manuring very beneficial, both rotted and fresh from the stables. He grew no weeds, and so had none in the manure. Messrs. Spring and J. T. Smith testified to good results from manuring. The former stated that one field manured 7 years ago still showed the benefits. Mr. Dale told of a case where a man had top-dressed a native meadow and got an increase of 1½ tons per acre the first year. Mr. McDonaghy claimed that manure should be piled in narrow piles 3 feet high to let sun and rain penetrate, so as to germinate all weed seeds. Mr. Nicholson did not think there was much money in beef, but there was in milk cows, his having averaged him \$15 to \$20 last summer. The following were then appointed a committee to discuss advisability of holding a fall show at Belmont:—J. C. Smith, F. Williamson, Walter Moscrip, H. Sparks, S. J. Pridham, W. Spring, Jos. Matchett, J. H. Standing and W. Glass.

That Mixed Farmer.

To the Editor of the FARMER'S ADVOCATE:—

I think that the "Mixed Farmer's" ideas on "Mixed Farming" are all "Twaddle," with a big "T." However can a man with an ounce of common sense think he can keep on moving his farm to "pastures new" every few years? Does the man think he will always be able to get land for from \$2.50 to \$5 per acre? And does he think there will be *always* virgin land to be bought? Will not our country in a few years be as thickly settled as the Eastern Provinces?

I think the article of A. D.'s will do a lot of harm among farmers who are just wavering on the balance between "mixed" and wheat farming, especially among men who only read THE ADVOCATE once in six months, or thereabouts, and who will not see the answering letters with regard to this question.

GEORGE PATTERSON, Calgary.

A Protest Against "A Mixed Farmer's Views."

A contributor, signing himself "Mixed Farmer," Chater, Man., makes a very vigorous protest against the article in our February 5th issue by "A Mixed Farmer on Mixed Farming." He wonders if the writer of the article referred to has his buildings on wheels, so that they can be easily moved onto new land. The idea of it not paying to manure land is, he says, preposterous in the extreme, but he fears there are too many farmers that practice, even if do not preach, "A Mixed Farmer's" views. He strongly urges the keeping of as much stock as possible, and the application of all the manure to the land, and the adoption of a system of rotation of crops. He is himself feeding some seventy hogs, and expects to make a good big profit if pork keeps its present price.

Prize Essay.

Mr. Jas. Beer, of Brantford, asks for directions for building an ice house with a cold chamber attached, suitable for storing fowls, butter and eggs, etc. In order to obtain the most practical plans from farmers who are using such buildings, we will give a prize of five dollars for the best plan and directions for building such a house, suitable for general farm use. Plans must be in this office not later than June 1.

Chatty Stock Letter from the States.

FROM OUR CHICAGO CORRESPONDENT.

Top prices lately: Beeves, \$4.50; hogs, \$4.75; sheep, \$4; lambs, \$4.75. These prices are decidedly lower than were current a year ago, but compare well yet with the prices for grain and other farm products.

The export movement in live cattle is again on the increase, and it is much heavier now than a year ago. Prices on both sides of the water are considerably lower, and the shippers are complaining of losses; but as one was never known to complain or admit anything else, there is nothing very sensational about that state of affairs. The fact remains that the vessel room from the chief United States ports has been engaged far in advance, and the cattle of fair quality seem to be offered freely at prices that are as low as were ever paid here for export cattle. The bulk of the 1400-pound cattle bought lately in Chicago cost \$4 to \$4.25, and at the present time the bulk of the cattle being used by exporters are selling at \$3.75 to \$3.90. The large cattle feeders in the far west are also beginning to take a hand in the matter, and several shipments have been made direct from Kansas and Nebraska. As a rule, however, those who experiment in this way are at a disadvantage and are apt to get very much the worst of it.

There certainly is a great deal of merit in the contention of Canadian cattle shippers that they should have as low ocean rates as are granted by the ships leaving the United States ports. Perhaps when the Canadian cattle had the advantage of free entry to the interior of England and Scotland, and for that reason, if for no other, were worth more, there may have been some show of reason for the Canadian steamship companies exacting higher rates, but no such show now exists. It looks as if it were merely a matter of charging "all the traffic will bear," as the railroads do out west. Having a lack of competition, they simply put on the price as much as they dare so as not to stop the traffic.

The tuberculosis bugaboo is creating a good deal of excitement. There is doubtless enough of it along the Atlantic seaboard, but the sensation mongers are never satisfied without greatly magnifying such matters. The people who favor an entire suspension of the live stock ocean traffic are adding the talk of tuberculosis to their arguments, claiming to be based on humanitarian grounds.

While the writer is inclined to think it would be wise for Canada to adopt a dressed meat system, it would seem unfortunate for either country to abandon shipments of live stock.

The recent revival of shipments to Europe of United States sheep has assumed surprising proportions. Numerous lots of 125 to 140-pound western corn-fed wethers, valued here at \$3.75 to \$4, have been forwarded; nearly 5,000 went from Chicago in one week. One lot of lambs attracted a great deal of attention. There were 523 head in the lot, and they were high-grade Shropshires and Southdowns. D. C. Earl, of Fairbury, was the shipper. The lot averaged 117 pounds and sold at \$4.75 per 100 pounds. They were pronounced the finest, considering number, ever seen in these yards. They were bought by R. F. Quick for export to Liverpool, and were bred, raised and fed by Earl, Myers & Grubb, of Fairbury, Neb. Same grade of lambs sold in 1891 at \$6.85 to \$7; 1892, \$6.65 to \$6.75; 1893, \$6.40 to 6.50.

The following ruinous prices for sheep on the western ranges show that the sheep industry very badly needs all the stimulus that the present brisk export movement in fat muttons can give it. Sun River Sheep Co., 4,000 head at 25c; Charles Severance, 10,000 head at 50c; another outfit, 50c. to 70c. It is also stated that the Sun River Sheep Co. have offered their band of 7,000 head at \$1.25 each before shearing. To show how wool-growers are getting it in the neck, it is only necessary to state that the season before last Mr. Cook realized \$3.25 per head for the very class of sheep which now net him but 87c.

R. E. Norman, of Burlington, Ont., was at market with cattle and hogs from his 1,000-acre farm at Baird, Iowa. His cattle, averaging 1261 lbs., sold at \$3.75, and hogs, 360 lbs., at \$4.50. He marketed a year ago a load of hogs which sold at \$7.85 per 100 lbs., realizing nearly as much as the car load each of cattle and hogs combined did on the late shipment. But it must be remembered that last year was a boom time for hogs, and that values now for everything are on a lower level. Mr. Norman comes over three or four times a year to look after his western farm.

The horse situation seems to be picking up to some extent. The winter being over, there is the usual spring demand from those who consider it wise to sell rather than to winter their horses. Clearly there is an over-production of all common to fair horses, and prices even for good ones are low, but the really well-bred horses are selling quite as well in proportion as any kind of live stock.

The general business situation is improving, and as soon as the factories get to working full time, the live stock business will gradually mend.

THE FARMER'S ADVOCATE & HOME MAGAZINE

THE LEADING AGRICULTURAL JOURNAL IN THE DOMINION.

PUBLISHED BY THE WILLIAM WELD COMPANY (LIMITED), LONDON, ONT., and WINNIPEG, MAN.

- 1. The Farmer's Advocate is published on the fifth and twentieth of each month. It is impartial and independent of all cliques or parties, handsomely illustrated with original engravings, and furnishes the most profitable, practical and reliable information for farmers, dairymen, gardeners and stockmen, of any publication in Canada. 2. Terms of Subscription—\$1.00 per year in advance; \$1.25 if in arrears; sample copy free. European subscription, 6s. or \$1.50. New subscriptions can commence with any month. 3. Advertising Rates—Single insertion 15 cents per line. Contractors furnished on application. 4. Discontinuances—Remember that the publisher must be notified by letter or post card when a subscriber wishes his paper stopped. All arrears must be paid. Returning your paper will not enable us to discontinue it, as we cannot find your name on our books unless your Post Office address is given. 5. The Law is, that all subscribers to newspapers are held responsible until all arrears are paid, and their paper ordered to be discontinued. 6. Remittances should be made direct to this office, either by Registered Letter or Money Order, which will be at our risk. When made otherwise we cannot be responsible. 7. The Advocate is sent to subscribers until an explicit order is received for its discontinuance. All payments of arrears must be made as required by law. 8. Always give the Name of the Post Office to which your paper is sent. Your name cannot be found on our books unless this is done. 9. The Date on your Label shows to what time your subscription is paid. 10. Subscribers failing to receive their paper promptly and regularly will confer a favor by reporting the fact at once. We are always pleased to receive practical articles. For such as we consider valuable we will pay ten cents per inch printed matter. Criticisms of Articles, Suggestions How to Improve the Advocate, Descriptions of New Grains, Roots or Vegetables not generally known, Particulars of Experiments Tried, or Improved Methods of Cultivation are each and all welcome. Contributions sent us must not be furnished other papers until after they have appeared in our columns. Rejected matter will be returned on receipt of postage. 12. Replies to circulars and letters of enquiry sent from this office will not be paid for as provided above. 13. No anonymous communications or enquiries will receive attention. 14. Letters intended for publication should be written on one side of the paper only. 15. All communications in reference to any matter connected with this paper should be addressed as below, and not to any individual connected with the paper. Address—

THE FARMER'S ADVOCATE, or THE WILLIAM WELD CO., WINNIPEG, MAN.

CONTENTS.

- 125—Illustration. 126—Oak Lodge Yorkshires; A Good Word for Southdown Sheep; The Patrons are in the Field; Health of Canadian Cattle. 127—Timely Notes for April—No. 1; Seasonable Hints; The Manitoba Poultry Show. 128—The Institutes; That Mixed Farmer; A Protest Against "A Mixed Farmer's Views"; Prize Essay; Chatty Stock Letter from the States. 129—Stanchion for Breeding Ewes; Our Scottish Letter; Kerosene and Animal Parasites. 130—Southdowns; Tuberculosis; Errata; Questions and Answers—Veterinary. 131—Legal; Miscellaneous: The Farmer's Garden; Alkaline Soils; Spring Management of Bees. 132—Our Poultry Essays; Poultry on the Farm; Poultry on the Farm; Remedies for Smut. 133—Farming for Profit; Elm Creek District; Pine Grove Poland-Chinas. 134—Seed and Seeding; Prize List of Manitoba Poultry Show. 135—Weekly or Monthly Tests? Practical Experience with the Babcock Tester; The Cash Return; Azoturia. THE QUIET HOUR:—136. FAMILY CIRCLE:—137. MINNIE MAY:—137. UNCLE TOM:—138. STOCK GOSSIP:—140 and 141. NOTICE:—140. ADVERTISEMENTS:—139 to 148.

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.

We are constantly in receipt of enquiries for the veterinary, legal or other columns, signed only by initial letters or non de plume. We cannot answer such. ENQUIRERS MUST IN ALL CASES ATTACH THEIR NAME AND ADDRESS IN FULL, THOUGH NOT NECESSARILY FOR PUBLICATION.

Our Scottish Letter.

The past three weeks have been the season of the horse carnivals like 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 Gowanhank, 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 1453, 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 list of aged horses was Mr. George Bean's well-built horse Prince Baldwin 9359, 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 list, 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, Kirkcudbright; 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 1744; 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 Potteath 8638, 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 Potteath fifth, Rosedale sixth, Lawrence Chief seventh and Lord Colmin Edwin eighth. The whole of the horses in this list 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 9665, 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 9826, 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 Benwick'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. O. Macfarlane's Goldmine 9640, Mr. Morton's Height o' Fashion, and the Messrs. P. & W. Crawford's Scottish Standard 9674, and Royal Warrant 9694, were also in the short list. 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."

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 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, Paghman 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 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 chine, 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 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.]

Tuberculosis.

At a recent meeting of live-stock salesmen and others interested in cattle sales, Inverness, Scotland, the following resolution was unanimously adopted, and it was resolved to forward it to Parliament:—

"That this meeting is of opinion that tuberculosis in cattle has become so prevalent as to seriously affect the food supply of the country, and resolves to urge upon the government the necessity of giving compensation out of public funds for cattle compulsorily slaughtered, and also for carcasses condemned by the inspectors as being affected with tuberculosis."

A bulletin has just been issued by the Central Experimental Farm, Ottawa, on Tuberculosis; it contains 36 pages, giving complete report of results of the tests made at the farm with tuberculosis in cattle there. The bulletin concludes with the following paragraph:—"In view of the prevalence of this disease, and the possibility of its being communicated from animals to man, there is no doubt that its prevention and control are among the most important sanitary questions before the public at the present time, and are deserving of the most careful attention and earliest effort."

The Country Gentleman says:—"Apropos of our remark when speaking of the communicability of the disease from persons as well as bovines affected by it, that 'the time will surely arrive, in the progress of civilization, when pains will be taken, if not to isolate human consumptives, at least to guard in some manner against their spreading the disease,' we are informed that the Michigan Board of Health has declared tuberculosis to be one of the 'diseases dangerous to public health,' and requires notification and registration of cases. The Pennsylvania Board is said to be considering the advisability of taking similar action."

Errata.

Two typographical errors occurred in the article entitled Farmers' Institutes in Ontario and Wisconsin Compared, by R. Gibson, which was published on page 84 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.

QUESTIONS AND ANSWERS.

Veterinary.

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.

RINGBONE.

SAMUEL BISHOP, Sintaluta, Man.:—"My mule, for which you prescribed a blister for ringbone in the ADVOCATE, November 20th, 1898, is still lame. I repeated blister five times, greasing it well for two weeks between each application; have since been applying Kendall's Spavin Cure, which makes it very sore, so much so that I stopped it. I drove mule twelve miles lately, and he was very lame after it. Would you advise any different treatment now?"

If the lump is the seat of lameness, there is no better application than the biniodide of mercury ointment: Biniodide of mercury, one drachm; vaseline or lard, six drachms; mix. Rub the ointment well into the part, let it remain for forty-eight hours, wash off and apply vaseline to the blistered surface. Repeat every two weeks until the lameness disappears. If this treatment does not have the desired effect, after four or five applications, the part should be fired by a competent person. Rest is very essential.

INJURY TO HORSE'S SPINE.

JOSEPH LOW, Roland, Man.:—"I have a horse that about six weeks or two months ago got hurt or sprained across the kidneys or the coupling of his back. We were moving a building on sleighs, and while drawing it one of the traces came unhooked. I think it was then he got wrenched, as he took a pretty stiff pull on it; he also seemed to have a touch of diabetes for a while, but is all right that way now. When standing in the stable for a while, he does not seem to be in any pain, but as soon as moved half a mile or so, he has no use of his hind parts—will even fall over, and is in great pain till rested again. I have not moved him but twice since he was hurt, except to walk around the barnyard now and then. I have blistered him lightly over kidneys, but it don't seem to help him much. He is in very fine order, and is only eight or nine years old."

The symptoms indicate an injury of the spine. Place the horse in a roomy and well-bedded box stall. Feed exclusively on light bran mashes for sixteen hours, and then give a purgative ball composed as follows: Barbadoes aloes, seven drachms; calomel, one drachm; ginger, two drachms; syrup, a sufficient quantity. Continue the mash diet until the physic has ceased to operate. After this, give morning and evening for ten days: Nux vomica and iodide of potassium, of each forty grains. Rub in along the course of the spine, from the withers to root of the tail, once a day for a week the following liniment: Tincture of cantharides, soap liniment and spirits of camphor, of each four ounces; fluid extract of belladonna, two ounces; mix. The animal will require a long rest.

BLINDNESS IN HORSE.

SUBSCRIBER, Morris, Man.:—"I have a horse which has become blind in one eye. A sort of bluish yellow scum has come over the centre of the eye—more central thicker and yellow—a dirty yellow, but yet clean, with a number of small blood vessels visible, towards the inner corner of the eye. This trouble has apparently come on of itself, as there has been no sign of anything having got into the eye, or inflammation, or watering or swelling; nor is the horse in any way amiss otherwise, only it can not see with that eye. Is in good condition; has done nothing all winter but remain idle. Stable is not without light; somewhat dark, as the windows are small. What is the disease, and what is best to be done in the case?"

It is a non-inflammatory affection of the aqueous humor, or of the anterior chamber of the cornea. If you had mentioned how long the eye has been in its present condition, it would have materially assisted us in our prognosis of the case. Feed your horse exclusively on bran mash for sixteen hours, and then give purgative ball as follows: Barbadoes aloes, one ounce; ginger, two drachms; soap or syrup sufficient to form a ball. After the physic has operated, give morning and evening, in food, for one week: Iodide of potassium, one drachm. Apply to the eye once a day, with camel's hair brush or end of a soft feather, the following lotion: Nitrate of silver, twenty grains; soft water, five ounces.

DISEASE OF HORSE'S LUNGS.

H. E. CHURCH, Dewdney P. O.:—"I have a three-year-old colt that has been ailing for a year; the last three months he has been very well fed and stabled, but he does not seem to thrive; there is no sign of worms. He is very short in the wind, and seems slightly worse on damp days, and is a little pot-bellied. Eats moderately, but not very well. The tips of the ears are cold, and he grunts a little when startled. The nostrils are dirty, but there is no actual running from them, and the membrane looks slightly inflamed. I steamed him with hot bran every day for about a month, and he seemed slightly easier in the wind. His food has been good upland hay, green feed, boiled grain and bran and oats, with a little boiled flax."

There is evidently partial hepatization or some other organic disease of the lungs, the result of previous inflammatory action, which is always serious and very often fatal. The pot-bellied condition probably proceeds from serious effusion produced from debility. From the length of time the animal has been ill, we judge the case to be of a very grave nature, if not altogether hopeless. Without a personal examination we do not feel justified in prescribing a remedy. If you are within reach of a qualified veterinary surgeon, we would advise you to have him examine the case.

DISEASE IN HOGS.

J. K. SMITH, Baldur, Man.:—"What is the matter with my hogs? They are lame in feet and back, some are almost helpless in their hind parts, two of them will drop down, kick and squeal and act very much as having fits. I have been feeding them mostly on chopped wheat, and I have given them charcoal and mineral coal, salt and ashes, sulphur and sulphate of iron; not much of the two last items. They have been in rather small pens, are about eight months old, and are now out of doors."

You did well to set your hogs at liberty, for doubtless the smallness and, necessarily, unsanitary condition of your pens contributed in a large measure in bringing about their diseased state. You will find it advantageous to make an entire change in their diet. Give, instead of the chopped wheat, moderate rations of chopped barley, oats and bran, equal parts. Boiled or steamed potatoes, carrots or turnips, given occasionally, will also be beneficial. Give to those that are sick from two to six ounces of castor oil, according to the age of the pig, and follow this up by giving daily in food from half a teaspoonful to one teaspoonful of bi-carbonate of potassium; this to be continued for one week. Medical treatment will, however, be of little value, unless the above directions regarding food are strictly followed.

ANSWERED BY DR. MOLE, 200 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.

Legal.

PROVING A WILL.

SUBSCRIBER:—"I. 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 other-

wise 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.

The Farmer's Garden.

BY BOB. BARCLAY, BALMORAL.

As "it's a long lane that has nae turnin'," so it is a long winter that is not followed by a spring. The time will soon arrive again when garden work ought to be in full swing. It is with great pleasure, Mr. Editor, that I can report an increase in vegetable and flower culture throughout the province during last season. Many farmers who over and over again said they had no time to spare for this sort of work, and many who professed their ignorance upon the subject, not only had a full supply of beautiful vegetables for their own families, but also put money into their pockets. Some of them told me that they had made from twenty to thirty dollars off their small patch, with very little extra labor, and others reported having derived as much as seventy to eighty dollars from this source.

Now is the time to look up your catalogues and send for your seeds; therefore, I take the liberty of recommending a list of the most easily raised, and at the same time most useful vegetables, for the guidance of beginners and such as only wish to cultivate a small piece of ground:—

Tomatoes (large)—Atlantic Prize or Ruby, for early crop; New Stone or Dwarf Champion, medium early. Tomatoes (small)—Red Cherry or Yellow Plum and Strawberry (the husk variety).

Cabbage—Henderson's Early Summer or Jersey Wakefield. Cabbage (for pickling)—Mammoth Red Rock.

Cauliflower—Henderson's Snowball.

Celery—White Plume.

Carrots—Scarlet Horn or Guerande and Intermediate.

Beet—Turnip.

Peas—Bliss' American Wonder, sown in succession throughout the season.

Beans (English)—Broad Windsor, sown as soon as there is sufficient soil thawed to cover them.

Beans (Wax)—Bird's Egg, or Golden Wax; I prefer the first mentioned, when I can get it.

Corn—Early Minnesota or Moore's Concord.

Kale—Tall Green Curled Scotch; do not be without it.

Lettuce—Ferry's Early Prize Head and White Paris Cos.

Onions (seed)—Yellow Danvers and Red Flat Dutch. Onions (sets)—Potato.

Parsley—Covent Garden or Myatts.

Parsnip—Hollow Crown or Student.

Radish (summer)—French Breakfast. Radish (winter)—Long Black Spanish.

Salsify—Long White.

Turnip—Early White Flat Dutch, for first crop; Robertson's Golden Ball, for main crop.

Cucumber—Boston Pickling and Early White Spine.

Melons—Citron.

Squash—Boston Marrow or Hubbard.

Pumpkins—Large Yellow and Japanese.

Herbs—Suit your own palates.

Alkaline Soils.

Prof. Shutt has been carrying on experiments with the view to finding some treatment which would render soils impregnated with "alkali" fertile. The experiments showed that an application of lime was of great service in changing the alkali into an insoluble salt, and thus causing a great improvement in the productiveness of the soil. This treatment should be carried out in conjunction with drainage, which must always be resorted to wherever possible. For soils impregnated with alkali in which sodium sulphate largely predominates, drainage, deep ploughing, thorough cultivation and high manuring are the only remedies that can now be recommended with confidence.

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.

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 1/4-inch round iron, 18 inches long, about 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 take 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.

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 imagining 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 to 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.

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, '01, March, '02 or April, '03.

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 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 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 lined 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 preventive; 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, Solgirth:—"Many farmers in this district used bluestone with very satisfactory results."

THOS. COPELAND, Saskatchewan, 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 stronger than usual, one pound to eight bushels of wheat; it cleaned 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 preventive."

H. O. AYERST, De Clare, bluestones his wheat, and I never troubled with smut.

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

Farming for Profit.

BY "A FARMER," NIVERVILLE, MAN.

I consider that it takes 20 bushels of wheat per acre at 45 cents per bushel to leave any money to the farmer for growing wheat.

Of the many varieties of wheat, I prefer Red and White Fyfe. Ladoga ripens 5 days earlier than the Fyfes, but the straw is soft and lodges badly, very liable to rust, and the berry is lean. I have tried it 3 years in succession—once on potato ground, once on summerfallow—so it had a good chance. Have now given it up. Have also tried Golden Drop; it is too soft, and not satisfactory. The six-rowed barley has given best results with me, as the two-rowed is weak in straw and invariably lodges. In oats, the Banner is the best oat every time.

For a number of years, I have sowed, each year, 100 bushels of wheat, and obtained, one year, 2,700 bushels, that being the highest yield, while the lowest was 450 bushels.

While much is said now about the extremely low price of wheat, many forget that when wheat was high, other things were also high. Binders were \$300; twine, 18 and 20 cents per lb.; sugar, only 11 lbs. for the dollar, and so on.

It would be a blessing if the credit system were done away with; if farmers would not buy machines till they can pay for them, and if they would not deal with travelling agents of any kind, but go to headquarters when they wish to buy.

Major Bell, Indian Head, writes that he can grow wheat for \$4.50 per acre, and that any farmer who goes into mixed farming has not brains enough to grow wheat profitably. Well, we will have to allow, I suppose, that he has more brains than we have. Anyway, I believe in mixed farming—in having work for 12 months instead of 8.

A farmer can milk 8 cows, raise 6 calves, 8 pigs and 80 chickens. The 8 cows will make butter enough to keep the house in groceries, etc., all the year. Pork enough should be made for all requirements. And poultry bring in a good revenue with little outlay.

Perhaps all sections of the country are not so well adapted for mixed farming as we are here. We seldom have to go off our own farm for hay, and have excellent pasture and water.

Elm Creek District.

BY AN OLD RESIDENTER.

This district seems to have been overlooked by intending settlers, perhaps for the same reason as I had at one time myself, viz.:—That I believed there was nothing but marshes and sloughs to be found in that locality, but my belief was at fault, and my mind is now thoroughly changed upon that point after having spent a good portion of last season in tilling and cropping the soil about a mile or so west of the railway junction, where instead of my supposed marshes I found some of the best dry arable land in the province. I examined the country all around very carefully and came across thousands of acres of as fine land as any one could wish; along the regular trail from the creek going to Portage la Prairie there is splendid ridge land for some miles, which has very little bush upon it and is very easily broken. The soil is a black loam with a sprinkling of gritty sand through, and resembles very much a mixture between what one finds along the Assiniboine river, in the neighborhood of St. Frances Xavier, and that upon the Portage Plains. It drinks in the rain and dries up on the surface quickly, while it retains the damp underneath, is not easily affected by drought and does not blow about when dry. I can thoroughly recommend the land as a good crop carrier and early ripener. This place is well situated, and should make one of the finest little settlements in Manitoba. Of course some will find fault with it on account of no school, church or market being near by, but there are some settlers in there now, and it only requires a few more families to secure a school, and once it was there the church will soon follow, and as for a market there is no difficulty about that, as the land lies right along and within easy distance of the railroad, and in close proximity to Elm Creek Station, which is also a junction on one of the principal C.P.R. lines (the Glenborough section) where you can have anything from a pound of butter to a car-load of grain, cattle or wood shipped when and where you please. There is an express train calls from Winnipeg every alternate day, and to the city every other day, which leaves and lifts the mail three times a week; there is also a regular freight train three times a week both ways. Carman is only some twelve miles distant, where there is always a good market for anything a farmer can produce. In my opinion, there is no better district to be found for mixed farming, as there is no scarcity of creeks of the very best water, while the grazing is excellent, and to the east there is no end of the finest of hay, and wood, both dry and green, is plentiful for miles along the west side of the ridge. In short, I have travelled for years all through the province over and over again, and I have not seen a place better calculated for a man to do well in, more especially at the figure which is asked for the land, which can be bought for about five dollars an acre.

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 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, Waynesville, 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 1,008 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 Brahmas.

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 the 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.

Seed and Seeding.

READ BEFORE THE BRANDON INSTITUTE BY JAS. ELDER, VIRDEN.

"Preparation of seed and seeding are the primary operations of the season. They are the beginning of the season's work, and as you all know, it is very important to begin well. It has been said that 'all is well that ends well,' and someone has quaintly added 'especially if it has a good beginning.' And I would say that in order to end well, it is most important to begin well. Someone else has said that in order to have a good man he must have a good mother to begin with.

The same principle applies to seed and seeding. The seed should be of unquestionable pedigree, pure, sound and clean, and mother's soil to secure the best results should retain her virgin purity and vigor.

Now what about the seed of Manitoba. The breed of our wheat (Manitoba Red Fyfe) stands first in the world; but I am afraid that the pedigree of it is in danger of being called in question. On account of a great many of our farmers growing the earlier ripening varieties, which are inferior in quality, a great deal of our so-called No. 1 hard is not worthy of registration. This arises from three causes:—1st. The difficulty of keeping the different varieties apart on account of insufficient granary accommodation. 2nd. Carelessness on the part of many to even attempt to keep them apart. 3rd. Systematic deception in selling these inferior varieties as red Fyfe.

Now what is to be the result of this? Our No. 1 hard will lose its reputation in the foreign market. Manitoba wheat will lose its character. The character, the reputation of our wheat is what enables us to compete with the world, with countries which can produce wheat much more cheaply than we can. Therefore the character of our wheat lost, and as wheat producers our all is lost.

A British statesman, when defeated, said, "All is lost, save honor," but in our case we will not be able to say as much. In selling our Russian, Eureka and Ladoga wheat for Red Fyfe, we are "selling our birth-right for a mess of pottage."

I am sorry to say that I have met with men (?) who attempt to defend this course. They say, "That is the buyers' outlook." Fit antitype of old Cain when he said, "Am I my brother's keeper?" No, it is not a question between me and the buyer, it is a question between me and my Maker. Such men in effect say, "It is not my duty to be honest unless the sharpness of the dealer compels me to be honest." Shame! Shame!

But apart altogether from this view of the dishonest act, it is a sin against the wheat producer of the province—a sin against a man's neighbors, because by this means the standard of our wheat is lowered and its value lessened, and honest men are made to suffer for the greedy dishonesty of others. I believe that in selecting our seed we should get pure Red Fyfe; or if we prefer some other variety let us as honest men and as patriots sell it under its true name.

In soundness, I believe that our wheat is as a rule very satisfactory this year; although even this year I would recommend thorough cleaning in order to throw out all the lighter grains, because (with grain as with stock) I believe in breeding from the best of the best. There is certainly little excuse for not cleaning our seed wheat this year, because it is worth its market price for feed.

In the case of oats and barley we have this year a very large proportion of light grain, or rather empty hulls, and the man who fails to thoroughly clean his seed must either sow a larger quantity of seed than usual, or be sadly disappointed in results. Next, cleanliness; we have reason to deplore the mixture of weed seeds to be found among our seed grain. Why should this seed of the bond woman be allowed to dispute the inheritance with the seed of promise, upon which we depend for our resources. No, let us cast it out. I am very much in favor of changing seed occasionally from light to heavy soil, and vice versa, but the great difficulty I meet with is to get clean seed. I find it much easier to grow clean grain from clean seed and clean soil than to make foul seed clean by the fanning mill process.

The alarmingly rapid spread of noxious weeds in this province makes it imperative upon us to see that our seed is clean, and in buying seed we cannot be too cautious from whom or from what district we buy. Our weeds, like our boys, are acting upon the advice of Horace Greely, "Go west, young man, and grow up with the country."

So much about the pedigree, the soundness and the cleanness of our seed.

Dr. Drummond says that the character of man depends upon two things, viz.: Heredity and environment. We have spoken about the heredity of our seed. Now, a word about an environment which is apt to contaminate the young plant and destroy its character. I refer to smut. I know that we have a great many theories about smut and how it affects the growing plant. I know, too, that it is a sound principle to first find out the cause of trouble, and then apply the remedy. But in the case of smut, although our theories about the cause are many, we know of but one remedy, viz.: pickling the seed.

I know that there are some who say that pickling is not a preventive, and they will give instances of failure. Well, there is an old saying, "Seeing is

believing," and I can say this much: My father was a first-class Ontario farmer, and I am proud to say so. My father often pickled his seed, and his testimony was that it was an effective and never-failing preventive of smut.

I, following his example at a distance however great, always pickled my barley in Ontario, and for the last eight years have pickled my wheat here; and I have this to say: although I have sometimes had my wheat frosted I have never had smut in it. During the last five years, however, till last year, we have been troubled with smut in our oats, but last year we pickled the oats as well, with the result that we have no smut. If I knew of as sure a preventive of frost I would try it. These personal experiences, corroborated by the testimony of such eminent authorities as friend Bedford, Mr. McKay and others, have brought me to the determination to pickle my seed always.

Now with regard to the mode. I need not say anything about wheat; I think every person is familiar with the process. I may say, however, that whilst I am satisfied with the Presbyterian mode of sprinkling the wheat, I immersed the oats. The thick skin of the subject demanded a more thorough application. I use a pound of bluestone to seven or eight bushels of seed, in either case, but as in the case of oats the same water is used several times, one must add water and bluestone in relative quantities to keep up the proper proportions.

In pickling the oats, I used two coal oil barrels, each having three-quarter-inch hole at one edge of the bottom with a plug to fit. These barrels I set upon a platform about a foot high, the hole projecting over the edge of the platform. I then poured one bag full of oats into one barrel, then poured over them enough pickle to cover them, stirred to get all wet, then placing a pail under the hole pulled out the plug and let the oats drain, whilst we filled three other barrels. This process takes longer time than sprinkling, but it is necessary on account of the rough skin which covers the kernel.

So much about the seed then; it must be pure, sound, clean and guarded from evil environment. Now about "Seeding."

As I said before, we want a good mother to begin with. Oh, for the virgin purity and vigor of our prairie soil! Alas! we never prize our blessings till they are gone.

Oh, I think if some of us could get back our virgin soil, we would prize it more highly and guard it more carefully.

That was a delusive song we listened to a few years ago. The deceptive little bird sang us to sleep, and while we have been sleeping our soil has been wearing out, and its virgin purity has departed. The garden of roses has become a bed of thorns, and the waving wheat field of 40 bushels has declined to 10 or 15.

Some will say, Oh! it is on account of unfavorable seasons that our crops have failed. I admit that the seasons have been unfavorable, but is it not a fact that those fields which have been well cultivated and whose fertility has been preserved, have given much better results in these unfavorable seasons than those which have been badly managed? It is the bad season which tests the farmer's capacity, and shows the difference between good cultivation or bad. Still we have a great deal of good land, and quite a few have, in a measure, preserved its fertility and cleanness. With those who have not, the sooner the work of restoration and reclamation is begun, the better.

The first step towards good seeding, then, is to secure a clean, well-prepared seed-bed, and the only means of securing a clean seed-bed is, I believe, a good summerfallow. As to what constitutes a good summerfallow, opinions differ. My own opinion has changed somewhat in the last few years. But we can all agree as to the effects sought. These may be said to be three, viz., enrichment, cleaning and compacting of the soil. These three objects attained, and we have a good seed-bed.

As to the time of sowing. We start just as soon as we can drive right through the mile without encountering wet spots, but not till then. We sow at the rate of 1½ bushels per acre. This may seem thick seeding, and certainly it is; my reason for adopting it is to hasten ripening, and I believe it has that effect.

As to the mode. Till last year I had not seen any implement which suited my farm better than the Wisner drill re-modelled. But last spring one of my neighbors, Mr. William Whiteford, purchased a shoe or press drill which pleased me. We borrowed it for a couple of hours in order to test it alongside of our own. We sowed two rounds with each, side by side, using the same quantity of seed. The difference was most marked in favor of the shoe drill from the very start, and became more and more apparent as the grain approached maturity, and when harvest came I am quite sure that I would have had five bushels per acre more if I had used the shoe drill over the whole field; or in other words I would have had the price of two drills in extra crop, even at the present low prices.

I may say that I would not expect such a marked difference every year. Conditions will be different. 1892 being my first experience in sowing wheat in July on the summer-fallow for fall pasture, I made the mistake of allowing it to become too rank before putting the stock on it, and consequently quite a tussac was left in each row, which prevented the hoes of the common drill from running at a uniform depth which was the real cause of irregular growth. The pressure of the shoe drill maintained uniformity.

Oats will usually be sowed upon stubble, and I prefer spring plowing, partly because if sowed immediately after plowing the seed has a moister bed, and partly because spring plowing seems to have a greater tendency to kill the couch-grass, which in the Virden district is our greatest weed enemy. For my own part I prefer sowing the oats before plowing and then plowing them under a shallow furrow with the three moulded gang.

With barley I have not had much experience in Manitoba, although it was one of our staple crops in Ontario. What experience I have had has not been very satisfactory.

Peas I have sowed several times, but the yield has never been as good as we used to have in Ontario.

Mangels have done well with me. I sow them on the level with the ordinary drill.

For grass I have always used timothy with most satisfactory results. We have never missed either a catch or a crop in seven years. We sow from eight to twelve pounds per acre on the wheat land, using the grass seed attachment on drill.

And now gentlemen I admit that it savors a good deal of presumption for me to undertake to lecture the farmers around the Wheat City upon seed and seeding, but it was not in that spirit that I came. I do not pretend to be a better farmer than many of those before me. Nay, there are men in this house who could teach me a great deal about farming. Neither do I claim to be a better farmer than many others in the Virden district. There is a friendly rivalry among us there as I trust there is here. I do not claim to lead in the race, but if I am left far behind, it will be because I can't help it. If you cannot learn anything from me, I trust I will learn something from you, so that my trip may not be a total loss.

Let us in the coming spring do our best to sow well. Let us do our part and trust in a bountiful Father to give the blessings which in His wisdom He thinks best for us.

Prize List of Manitoba Poultry Show.

Light Brahma—Cock, W Rutherford, 138 Garry street, Winnipeg, 1; R Dolbear, 1235 Main street, Winnipeg, 2; T Reid, 263 Lizzie street, Winnipeg, 3. Hen, H A Chadwick, St. James, 1 and 2; S Ling, Fort Rouge, 3. Cockerel, H A Chadwick, 1; Jackson Hanby, Winnipeg, 3; A Curie, Fort Rouge, 2. Pullet, W Rutherford, 1; A Curie, 2; S Ling, 3. Breeding pen, O M Richardson, FARMER'S ADVOCATE, Winnipeg, 1; R Dolbear, 2.

Dark Brahma—Cock, H A Chadwick, 1. Hen, H A Chadwick, 1. Pullet, H A Chadwick, 1, 2 and 3.

Golden Wyandotte—Cock, Thomas Reid, 1. Hen, S Wise, 633 Ross avenue, Winnipeg, 1; Thomas Reid, 2. Cockerel, S Wise, 1 and 3; Ling, 2. Pullet, Wise, 1 and 2. Breeding pen, S Ling, 1.

Silver Wyandotte—Cock, S Ling, 1; W D Lawrence, Morden, 2 and 3. Hen, S Ling, 1. Cockerel, W D Lawrence, 1 and 2; S Ling, 3. Pullet, W D Lawrence, 1, 2 and 3. Breeding pen, W D Lawrence, 1; W Rutherford, 2.

White Wyandotte—Cock, T Reid, 1 and 2; M Maw, Main street, north, Winnipeg, 3. Hen, M Maw, 1 and 2. Cockerel, R H Kerr, Winnipeg, 1 and 2. Pullet, R H Kerr, 1. Breeding pen, S Ling, 1; M Maw, 2.

Barred Plymouth Rock—Cock, W Rutherford, 1. Hen, H A Chadwick, 1 and 3; Geo Ditz, St. James, 2. Cockerel, M Maw, 1; H A Chadwick, 2 and 3. Pullet, H A Chadwick, 1 and 2; John Todd, Winnipeg, 3. Breeding pen, W Rutherford, 1; Thos Heaman, Winnipeg, 2; S Ling, 2.

White Plymouth Rock—Cock, W Rutherford, 1; S Ling, 2. Pullet, W Rutherford, 1.

Langshan—Cock, E H White, Brandon, 1; S Ling, 2. Hen, H A Chadwick, 1; A Monkman, Winnipeg, 1. Cockerel, H A Chadwick, 1. Pullet, H A Chadwick, 1, 2 and 3.

Partridge Cochins—Cockerel, Chadwick, 1. Pullet, Chadwick, 1. Cock, Chadwick, 1. Hen, Chadwick, 1 and 2.

Buff Cochins—Cock, Chadwick, 1 and 2. Hen, Chadwick, 1, 2 and 3. Pullet, Chadwick, 1.

Black Cochins—Hen, S Ling, 1.

Dorking—Hen, H A Chadwick, 1, 2 and 3. Cockerel, H A Chadwick, 1. Pullet, H A Chadwick, 1.

Black Spanish—Cock, H A Chadwick, 1; R M Willoughby, Winnipeg, 2. Hen, H A Chadwick, 1, 2 and 3. Pullet, A Williams, Winnipeg, 1; H A Chadwick, 2; R M Willoughby, 3.

Black Minorca—Hen, Thomas Reid, 1; E H White, 2 and 3. Cockerel, A Curie, 1 and 2; T Reid, 3. Pullet, E H White, 1; A Curie, 2; T Reid, 3.

White Leghorn—Cock, George Wood, 1; R N Willoughby, 1. Hen, W A Pettit, Boyd avenue, Winnipeg, 1; George Wood, 2. Cockerel, Jackson Hanby, 1; W A Pettit, 2; Wood, 3. Pullet, John Fox, Winnipeg, 1 and 3; W A Pettit, 2. Breeding pen, George Wood, 1; W A Pettit, 2.

Brown Leghorn—Hen, Geo Hanby, 1; R N Willoughby, 2. Cockerel, E Stevenson, Winnipeg, 1; John Todd, 1. Pullet, E Stevenson, 1; Jackson Hanby, 2; R N Willoughby, 3. Breeding pen, A Williams, 1.

Black Red Game—Cock, J Lemon, Winnipeg, 1; John Hazel, Winnipeg, 2. Hen, J Lemon, 1. Pullet, J Lemon, 1; John Hazel, 2. Breeding pen, T Reid, 1.

Pile Game—Hen, F J Davis, Winnipeg.

Indian Game—Hen, J Lemon, 1; R N Willoughby, 2; J H Dobson, Dom. Exp. Co., Winnipeg, 3. Pullet, J Lemon, 1. Breeding pen, J H Dobson, 1; R N Willoughby, 2.

Any other variety game—Cock, H A Chadwick, 1, 2 and 3. Hen, F J Davis, 1. Breeding pen, F J Davis, 1.

Houdan—Hen, J E Wright.

Black red Game Bantam—Hen, Geo Hanby, 1 and 2. Cockerel, D Roy Logan, 1 and 2. Pullet, Geo Hanby, 1; D R Logan, 2. Breeding pen, A Campbell, Winnipeg, 1.

Pile Game Bantam—Cock, S W Labb, Nanton, B. C. Pullet, S W Labb. Rose comb black Bantam—Cock, H A Chadwick, 1 and 2. Cockerel, H A Chadwick, 1. Hen, H A Chadwick, 1 and 2. Pullet, H A Chadwick, 1.

Fair Brown China Geese (old)—D F Wilson, Brandon, 1.

Fair Embden Turkey—Geo Ditz, 1.

Fair Toulouse Geese (old)—Roy Logan, 1 and 2.

Bronze Turkey Pullet—George Ditz, 1; M Maw, 2. Cockerel—M Maw, 1; A Curie, 2. Hen, M Maw, 1; Geo Ditz, 2. Cock, Geo Ditz, 1; A McBean, Springfield, 2.

Fair Pekin Ducks (old)—M Maw, 1; (young)—M Maw, 1; S Ling, 2.

Pearl Guinea Fowl—H A Chadwick, 1.

White Guinea Fowl—H A Chadwick, 1.

Pigeons—Black Cheek Homers—Allan & Taylor, 1; F G J McArthur, 2. O B Ormand, 3.

Priests—O B Ormand, 1.

Barred blondinettes—O B Ormand, 1.

Black Magpies—R & H Hutton, 1.

Magpies—R & H Hutton, 1.

Blue Cheek Homers—J Lemon, 1; J Lemon, 2; F G J McArthur, 3.

Homers—F G J McArthur, 1; A G Mabae, 2.

Blue Homers—J Lemon, 1; F G J McArthur, 2; Allan Taylor, 3.

Blue Fantails—O B Ormand, 1.

Black Fantails—O B Ormand, 1.

English Owls—O B Ormand, 1.

Silver English Owls—O B Ormand, 1.

Tumblers—W Halpenny.

Trumpeters—W R Ritchie.

Mottled Trumpeters—J L Gally.

Black or Dun Barbs—J L Gally, 1; A L Griffin, 2.

Blue Cheek Pointers—O B Ormand.

Red Pointers—O B Ormand.

Blue Pied Pointers—O B Ormand.

Fair Himalayan Rabbits—E G Benson.

Belgian Fancy Canaries—H Kirk, 1 and 2.

Scottish Fancy Canaries—John Hazel, 1; H Kirk, 2.

Manchester Copsies—H Kirk, 1 and 2.

High-colored Canaries—H Kirk, 1 and 2.

Specials—Best exhibit of poultry, medal given by Lieut.-Gov. Schultz, won by H A Chadwick with 55 birds, representing 9 varieties.

Best three cocks and three hens—Cup given by E L Drewry, to be won twice before becoming property of winner; won this year by H A Chadwick.

Best cock, any variety—Cup given by W B Scarth; won by H A Chadwick on Partridge Cochins cock which scored 93 points.

Best cockerel, any variety—Medal, by W J Hinman, V S; won by H A Chadwick with Langshan cockerel scoring 96 points.

Best hen, any variety—Cup given by F W Sprado; won by M Maw with White Wyandotte, scoring 95.

Best pullet, any variety—Medal, by Manitoba Poultry Association; won by W D Lawrence, Morden, with Silver Laced Wyandotte scoring 95 1-2 points.

Best breeding pen—Medal, by F W Drewry; won by S Ling on White Wyandottes, all Manitoba bred.

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, GUELPE.

- 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 prosecutions 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. 1/2 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-SHOY, N. E. 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. 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 week's milk is in.

3. Once a week. The latter part of this question had better be answered by an expert.

4. 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. 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.

5. 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 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 buttermilk 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 40 to 50 cents 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:

Table with 3 columns: Names of Patrons, Number of cows, Cash Received. Includes entries for Stephen Yorke, Angus Yorke, Fred Gorton, Henry Jackson, Sam'l Archer, Sam'l Esaman, John Barr, P. Abbott, R. Tooley, M. P. P., Thos. Rodway, and a Total of 195 cows for \$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.

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, Hæmoglobinuria, Hæmoglobinæmia, Sprain of the Psoe 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. Qwing 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 serious 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 odors, 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,
Fearless before my Father's face,
I will present thee joyfully; and never
Need to say to thee in the 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 tells us that Christians are "living stones," built by God into the spiritual house of which Jesus Christ is "the chief cornerstone." 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 cornerstone," 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 fragrancy.
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 skilful 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 the 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 endeavoring 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 had 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 enquiring 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 around 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."

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 detritus 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 meal. 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 sat 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?"

"The work appears to be light, and the pay munificent."

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. Breteles 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 their



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 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?" "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."

TO BE CONTINUED.

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 unfrequently, 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.

Firkin of Butter weighs	56 lbs.
Barrel of Flour	196 "
" " Pork	200 "
" " Potatoes	200 "
" " Fish	56 "
" " Onions	112 "
" " Beef	206 "
Gallon of Honey	12 "
Chest " Tea	68 "
Cord of dry Maple	2862 "
" " Hickory	4369 "
Bushel of Charcoal	30 "
Quintal of Fish	100 "

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 800 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., 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 speeches followed at a great rate.

And FIVE cannot conceive what loyalty was shown,
As the bell tinkled out its shrill TONGUE 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,
Abanging 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.
- 2—Sup-er-a-bun-dance.
- 3—There-in.
- 4—F R A M E
R A V E N
A V E R T
M E R L E
E N T E R
- 5—Prize puzzle.

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 washer-woman; 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.



ONE OF THOUSANDS OF TESTIMONIALS RECEIVED... ROYAL SOAP CO., WINNIPEG.

Ogilvie's: HUNGARIAN GRANULAR CREAMY FLOUR HAS NO EQUAL.

DIRECTIONS. We insist upon a greater quantity of water being added than you have been in the habit of doing with soft ground flour...

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.

Our New Spring Illustrated Price Lists are free to all to ask for them.

STANLEY MILLS & CO Wholesale Merchants, HAMILTON, ONTARIO.

A FINE SHORTHORN BULL - AND - Two Choice Heifers FOR SALE.

JOHN G. BARRON, Carberry, Man.

FOR SALE... 2 Fine... Shorthorn Bulls

GREAT CLOSING-OUT SALE 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.

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

JOHN E. SMITH, Beresford Stock Farm, Has now, in the City of BRANTFORD, at his new Stock Emporium...

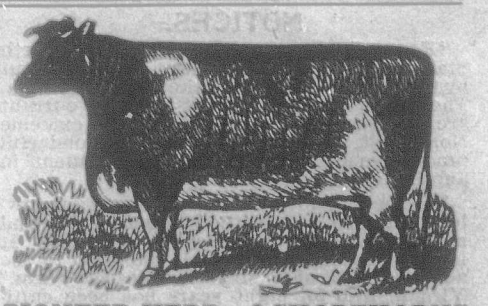
W. S. LISTER, MARCHMONT STOCK FARM, MIDDLECHURCH, MAN. Importer and Breeder of Scotch Shorthorns, Clydesdales, Berkshires...

FOR SALE, PRINCE ROYAL = 10525 = To prevent inbreeding this imported roan Shorthorn bull, combining great substance with rare symmetry, quality and rich breeding.

R. J. PHIN, SHORTHORN BREEDER. A few choice young Bulls for sale. MOOSOMIN, ASSINIBOIA. MAPLE GROVE FARM ROSSER, - MANITOBA.

WALTER JAMES & SONS BREEDERS OF SHORTHORN CATTLE Bates and Cruickshanks. Correspondence invited. Quite a few yearling grade cattle for sale cheap.

FOREST HOME STOCK FARM. SHORTHORNS & YORKSHIRES. FOR SALE now, one bull, Lord Pomeroy, - 15787 -, dark red, 22 months old; a sure stock getter.



PIONEER HERD of SHORTHORNS WALTER LYNCH, Prop., Westbourne, Man. Fifteen first and one second herd prizes in sixteen years.

"RAVENS CRAIG" STOCK FARM DAVID MARWOOD, PROPRIETOR, Treherne, Manitoba. BREEDER OF Holstein Cattle and Improved Large Yorkshire and Red Tamworth Swine.

STEEL BROS. Glenboro, Manitoba. BREEDERS of AYRSHIRE CATTLE Choice Young Stock For Sale.

WILLOW BROOK STOCK FARM PRIZE WINNERS. Shropshires, Chester Whites and Large Yorkshires. At half price, from such sows as Lincoln Lass 5th (418), her dam, Lady Duckering imp. (415) being 1st...

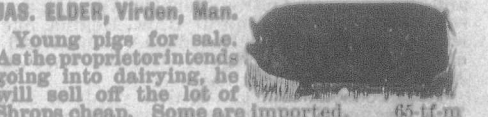
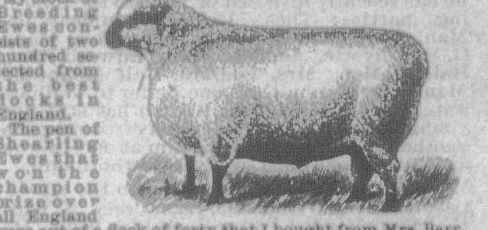
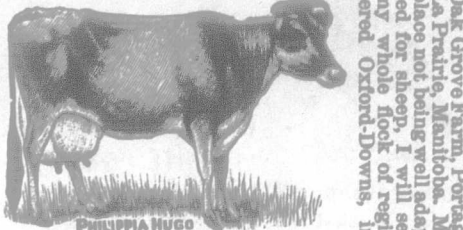
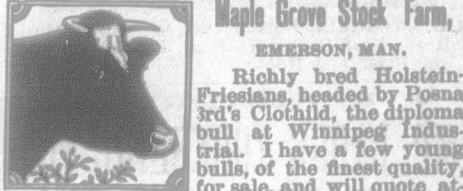
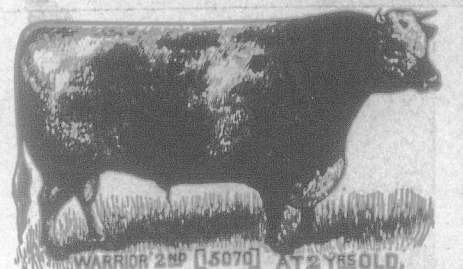
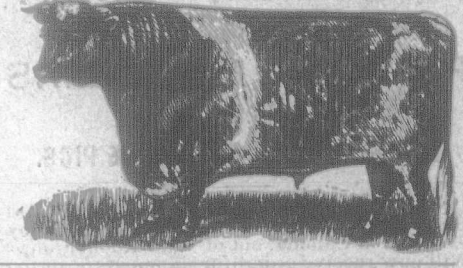
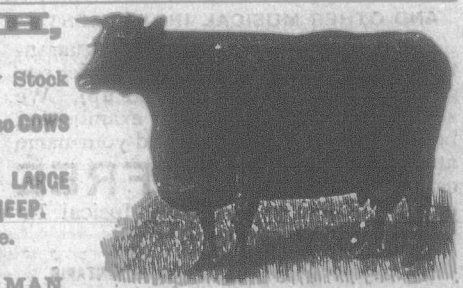
J. A. S. MACMILLAN, Box 183, Brandon, Man. IMPORTER AND BREEDER OF PURE-BRED SHROPSHIRE SHEEP. My stock of Breeding Ewes consists of two hundred selected from the best flocks in England.

HENSALL FARM Shropshires and Berkshires. JAS. ELDER, Virdon, Man. Young pigs for sale. As the proprietor intends going into dairying, he will sell off the lot of Shrops cheap.

JAMES WELLS, Virdon, Manitoba. BREEDER OF PURE-BRED BERKSHIRE PIGS. Have now on hand a lot of different ages, bred from prize-winning stock.

BERKSHIRES JOHN A. ROSS, BUTTERFIELD, MAN. I can supply now a few of different ages of excellent pedigree. Booking orders for spring delivery.

IMPROVED LARGE YORKSHIRES Orders taken for summer and early fall pigs at greatly reduced prices. For sale, from imported Boar. Prices away down. Correspondence solicited.



NOTICES.

"FROM GARDENING," Chicago. The North Star currant is a new variety, being sent out by the Jewel Nursery, of Lake City, Minnesota.

The seeding down with grass is now acknowledged as the best method of conserving and restoring the fertility of our prairie soils.

The Jewel Nursery Co., Lake City, Minnesota, whose advertisement appears in another column, have kindly favored us with one of their beautiful catalogues, containing complete list of forest, ornamental and fruit trees and shrubs and flowers.

STOCK GOSSIP.

We are in receipt of a neat little catalogue of the Hartney Poultry Yards, J. E. Callender, proprietor. He has Light Brahmas, Barred Plymouth Rocks, S. C. Brown Leghorns, Bronze Turkeys, Toulouse Geese and Imperial Pekin Ducks.

Mr. Ling reports hens laying well and sales good. Amongst numerous sales during the month were the following:—To Mr. McNaught, M. P. P., pen of Golden Wyandottes and two Minorca pullets; Mr. Winkler, M. P. P., one Black Minorca cock; Hudson's Bay Co., one trio of Bronze turkeys, also one Bronze turkey gobbler and Pekin drake.

An error had recently crept into our Gossip column in the February 20th issue. We quoted from the Saskatchewan Herald, which made it appear that J. M. McFarlane, of Battleford, purchased along with other Clydesdales the stallion Ringleader (2082), from J. E. Smith, of Brandon, whereas Ringleader was bred by Messrs. R. & J. A. Turner, of the "Clydesdale Ranch," Calgary, Alb., and purchased directly from them by Mr. McFarlane.

John B. Robson, Thorndale Stock Farm, Manitowish, reports that his Shorthorns have done well, and sales are averaging well up; he has recently disposed of bulls to the following parties:—Thos. Usher, Campbellville, Man.; Fargoy & McGregor, Manitowish, Man.; G. W. Ulyotte, Manitowish, Man.; Edward Rinn, Rainald, Man.; Mrs. Bedford, Cal. Mountain, Man.; also one bull and one heifer to William Tate, Pilot Mound. Mr. Robson has still five young bulls for sale. See his advertisement in another column, and write him at once if you are in want of a good, useful Shorthorn bull.

We would call your attention to the advertisement of B. Woolhouse, Loon Creek, N. W. T. He has some good Large Yorkshire pigs. He won many prizes last fall at Regina, Indian Head and Qu Appelle. He reports the following sales:—Thomas McKay, Prince Albert, three boars; D. McKinnon, Fort Qu Appelle, one boar; E. Halstings, Regina, one boar; F. A. Her Huganard, Mission, Fort Qu Appelle, one sow and one boar; J. W. Smith, McLeod, one boar; Knight Bros., Regina, one boar; J. Smith, Qu Appelle, one boar; W. Bird, Qu Appelle, one sow; D. McDonald, Regina, three sows and one boar; J. S. Court, Fort Qu Appelle, two sows and two boars; J. Boyd, Indian Head, one sow and one boar; — Andros, Fort Qu Appelle, one sow and one boar; Knight Bros., Regina, one sow and one boar; A. Davidson, Indian Head, one sow and one boar; W. Gibson, Fort Qu Appelle, one sow.

On a recent visit to the poultry yards of Mr. Wm. Brammell, of Jarvis Avenue, Winnipeg, a member of our staff saw a fine lot of Light Brahmas, of which Mr. Brammell has made a specialty for several years. His present breeding birds number about twenty in all. By a proper importation of fresh blood from the celebrated yards of J. N. Baker, of Ind., U. S., where his original stock was procured, he has succeeded in rearing a fine lot of healthy and vigorous birds that are a credit to their owner. He has not been an exhibitor up to the present, but at the recent exhibition held by the Manitoba Poultry Association, Winnipeg, birds from eggs from his yards, or bred by him, were successful prize-winners. He informs us that a limited number of eggs for hatching can be supplied to those booking their orders early. See his advertisement in another column.

THE WHITE WYANDOTTE WINNER. North Main Street Poultry Farm, Winnipeg, March 21, 1894.

To Editor of FARMER'S ADVOCATE, Winnipeg. Sir,—It having been stated to you and circulated broadcast that the White Wyandotte hen, "Lily White" (with which I won the Challenge Cup for best hen in exhibition, any variety, at the poultry show held in Wesley Hall, March 6th), was purchased by me for exhibition purposes, I now positively assert that the statement is an unqualified lie; that the hen "Lily White," score 95 points, was bred in my Winnipeg yards from the original stock imported to this country by Mr. Weld, of the Farmer's Advocate, and is two years old; that I exhibited her sisters at above show, scoring 94 and 93 points; that last summer I exchanged eggs with another breeder of White Wyandottes, the result being two pullets, one of which I exhibited in breeding pen at late exhibition. Mr. Butterfield cut her 94 points for defects in color, although its symmetry and general build seemed almost perfect. This pullet lost me the Drewry Medal, and it has left my yards for a whiter world. It is impossible to get a better strain than the Advocate, and I don't intend to lower it by mixing with unknown strains. Yours truly, M. MAW.

Bronze Turkeys, Mammoth Pekin Ducks, Plymouth Rocks, White and Laced Wyandottes.

I keep the best only. At Manitoba Poultry Association Show my B. P. R. Cockerel Hero scored 94 prizes, winning first \$10 special in strong competition. White Wyandotte hen, "Lily White," scored 95 points, winning challenge cup for best hen any variety. Bronze Turkey Cockerel Champion 1st, weight 26 1/2 lbs., ten months old; Bronze Hen 1st, weight 19 1/2 lbs.; Pekin Ducks, 1st old, 1st young and special—11 exhibits, 11 prizes. Birds and eggs for sale. Write and send stamp for reply.

M. MAW, Winnipeg, Man.

"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, botch, scurvy, loss of cud, horn distemper, black tongue, etc., and also will backen the heaves, and in recent cases effect a cure.

PRICE, 25c. AND 35c. PER PACKAGE.

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

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 our wholesale price list of Musical Instruments. Address

THE SUPPLY CO., NIAGARA FALLS, ONTARIO

R. MCKENZIE High Bluff, Man.

BREEDER OF PEDIGREE HOLSTEINS

AND LARGE ENGLISH BERKSHIRE PIGS.

Numerous first prizes at Winnipeg and local shows. One young Bull for sale; sired by Emperor of Canada, out of Vida Rooker (imp.) Will now receive orders for shipments of spring pigs; pairs supplied not akin. Correspondence solicited.



R. J. MITCHELL, Polson Ave., Winnipeg, Man., Breeder of Berkshire Pigs, Bronze Turkeys and Plymouth Rocks.

REGISTERED IMP. LARGE YORKSHIRE PIGS

I send out nothing but the best. Made a clean sweep in thoroughbred pigs last fall at Fort Qu Appelle, Indian Head and Regina fairs. Prices low. Address

B. WOOLHOUSE, 67-m Loon Creek, N. W. T.



BREEDER OF IMPROVED - CHESTER - WHITE - SWINE, - Dorset Horned Sheep, Bronze Turkeys and Black-Breasted Red Game Fowls.

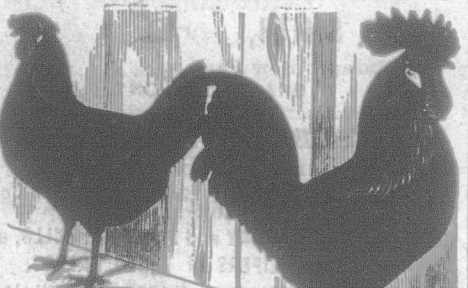
Prices reasonable. Write for particulars to E. VANCE, Emerson, Manitoba. 64-d-m

FORT ROUGE POULTRY YARDS Eggs for Hatching

From Barred and White Plymouth Rocks, Silver and Gold Laced, Black and White Wyandottes, Light Brahmas, Langshans, \$2 per setting of 15 eggs. Bronze Turkeys, \$2 per 9 eggs. Pekin Ducks, \$2 per 11 eggs. My breeding pens contain birds that won 11 first, 5 second and 3 third prizes at Winnipeg Industrial. Also, in recent show in Wesley Hall, 15 entries, 15 prizes and Gold Medal for best breeding pen in the show. A few choice birds and Rabbits for sale. Write S. LING, Proprietor, Winnipeg, Man. 47-y-m

REID'S : POULTRY : YARDS

BREEDER OF: Golden Wyandottes, White Wyandottes, Black Minorcas, Black Red Game, Light Brahmas and Barred Plymouth Rocks.



At Winnipeg Industrial, 1893, I won 5 prizes on 6 entries:—1st Golden Wyandotte; 1st and 3rd W. Wyandottes; 1st, B. B. Red Game; 2nd, B. Minorca; At Manitoba Poultry Show, 1894—9 entries and 9 prizes: 1st and 2nd, W. Wyandottes; 1st, breeding pen B. B. Red Game; 1st, Golden Wyandotte cock; 2nd, best and 1st on B. Minorcas. EGGS IN SEASON. Send stamp for catalogue. THOS. REID, 203 Little St., WINNIPEG.

McCLURE'S POULTRY YARDS

White Leghorns and Light Brahmas.

GET OUR CATALOGUE AND PRICE LIST FOR 1894. 63-m J. McCLURE, 448 Carey-St., Winnipeg.

WINNIPEG : POULTRY : YARDS

S. WISE, - PROP. BREEDER OF PRIZE-WINNING Golden Wyandottes At Manitoba poultry show, March, 1894, I won 1st on hen, 1st and 3rd on cockerels—score, 94 and 91; 1st and 2nd on pullets—score, 93; and 2nd by Butterfield. Eggs from prize matings, \$3 per 13, \$5 per 26. Also high-class B. P. Rocks; eggs, \$2 per 13. Address— 633 Ross Ave., - WINNIPEG.

WHITE LEGHORN POULTRY YARDS

Boyd Avenue, - Winnipeg, Man. My birds have won prizes at Winnipeg Industrial, 1892, '93, and at Manitoba Poultry Assn. Show, March, 1894. EGGS FOR HATCHING, \$2 per setting. A few birds for sale, including 2nd prize cockerel at recent show. W. A. PETTIT, Breeder of S. C. W. Leghorns.

BOUNDARY : ST. : POULTRY : YARDS.

Single Comb Brown Leghorns won 6 prizes; 3 firsts at Winnipeg Industrial, 1891, '92, and '93, also 1st on breeding Pen at the Manitoba Poultry Show, 1894. The 1st prize cockerel and pullet were also from my stock. Eggs—S. C. B. Leghorns \$2 per 13 " Pekin Ducks 2 " 11 " L. Brahmas 2 " 13 One P. Rock Cock 2 " 13 Three Pekin Drakes 1.50 each. Orders promptly attended personally. No circular. Send stamp. Address, A. WILLIAMS, Boundary St., WINNIPEG, MAN. 67-y-m

BUY THE BEST.

Single Comb White and Brown Leghorns, the champion Layers. Our pens are headed by 1st prize cockerel, scoring 92. Pullets and hens scoring 93. Braham pen headed by 2nd prize cockerel. B. B. Red Games. Hen scoring 94; acknowledged by Judge Butterfield to be the finest in Canada. Eggs, \$2.50 per setting. Show birds with score cards for sale. HANLEY BROS., 220 Notre Dame St., WINNIPEG. 67-b-m

EGGS FOR HATCHING

Prize Winning Buff Cochins, Blk. Spanish, W. Leghorns, W. Wyandottes, Game Bantams and Mammoth Pekin Ducks. SENT SAFELY. PRICES REASONABLE. A. M. Matheson, 65-tf-m BRANDON, MAN.

LIGHT : BRAHMAS AND LANGSHANS only.

EGGS from 1st prize breeding pen Light Brahmas (at recent Manitoba Poultry Association Show, average score of hens 90) at \$3 per 13. Other pens at \$2 to \$5 per 13. Langshans from imported birds at \$2.50 per 13. Address—

C. M. RICHARDSON, FARMER'S ADVOCATE, WINNIPEG, MAN. 66-tf-m

MINORCA

AND: BRAHMA : EGGS \$2 per Setting.

1st, 2nd and 3rd for young Brahmas, and 2nd for young and old Minorcas at last Industrial Exhibition.

1st on Black Minorca Cockerel, 2nd on Pullet, and 3rd on Light Brahma Cockerel, and 2nd on Pullet, at the recent show held by the Manitoba Poultry Association.

A. CURLE, Pembina Road, FORT ROUGE. 66-m

E-G-G-S

FROM CHOICE: LIGHT : BRAHMAS Only \$2 per 13.

Orders booked and filled in turn as received. WM. BRAMMELL, 375 Jarvis Ave., WINNIPEG, 66-tf-m

HIGH-CLASS SILVER : LACED : WYANDOTTES A SPECIALTY.

W. D. LAWRENCE

11 prizes won at the Manitoba Poultry Assn. Show, including breeding pen and best pullet any breed. Every bird shown won a prize. Orders for eggs filled in turn as booked. Correspond with W. D. Lawrence, Morden, Man. 66-f-m

CARBERRY POULTRY YARDS.

Light Brahmas (Duke of York and Felch Strain.) A FEW CHOICE COCKERELS

AND: Eggs for Hatching. W. ATKIN, 64-f-m Carberry, Man.

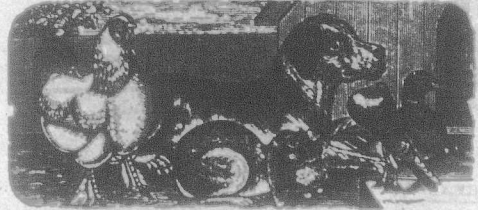
Emerson Poultry Yards.

Five Breeds of best Imported Stock—Light Brahmas, B. Langshans, B. P. Rocks, B. Minorcas, W. C. B. Polish. Eggs from ten grand breeding pens, \$2.00 per setting. Young stock for sale. J. SULLIVAN, - 64-f-m - Emerson, Man.

TO MY FRIENDS & PATRONS.

I have as many orders now booked for eggs as I can fill. I have to turn away some of my last year's customers that got eggs and were so well satisfied with the stock. I am importing some other breeds. H. K. ZAVITZ, Prairie Poultry Farm, Carberry, 59-y-m Man. Breeder and Importer of High Class Poultry. STOCK FOR SALE. 30-1-y-m H. W. DAYTON, Virden.

H. A. CHADWICK, St. James, Man.



Light and Dark Brahmas, Buff and Partridge Cochins, Barred Plymouth Rocks, Black Langshan, Black Spanish, Pit Game, Guinea Fowls and Black African Bantams, Silver Grey Dorkings. Fowls for sale of each variety. I won 14 first prizes out of 16 entries in 1891 and 10 firsts, 7 seconds and 1 third in 1892 at Winnipeg Industrial Exhibition. Send stamp for catalogue and price list.

HARTNEY POULTRY YARDS!

L. Brahmas, B. P. Rocks, S. C. B. Leghorns, Bronze Turkeys, Toulouse Geese, Pekin Ducks and Chester White Swine. Young stock for sale. Eggs for hatching, in season, \$2 per setting, \$3.50 per two settings. Send stamp for illustrated circular and prices on stock. Lambert's "Death to Lice," per fifteen ounce package, 40c. by mail post-paid.

64-a-m J. H. CALLANDER, Hartney, Man.

EGGS : FOR : HATCHING.

- Golden and Silver Hamburgs... \$3 per setting
Light and Dark Brahmas... 3
Buff and Partridge Cochins... 3
Langshan and Houdan... 3
Golden and Silver Wyandottes... 3
Blue Andalusians & Buff Leghorns... 3
Barred P. Rocks and B. Minorcas... 2
White and Brown Leghorns... 2
Pit Games... 2
Cornish Indian Games... 4
Black Sumatra Games... 4
Black and Brown Red Games... 3
Rouen and Pekin Ducks... 2 per 11.
Bronze Turkeys... 3 " 11.
Toulouse Geese... 3 " 7.

A fair hatch guaranteed. Address, AUSTIN POULTRY FARM, AUSTIN, MANITOBA. WM. JONES, Prop. 63-y-m

THOS. LYONS,

598 Main St., Winnipeg. Has the Cheapest and Most Reliable Stock for the Spring Trade. NEW GOODS ARRIVING DAILY.



WINTER GOODS AT COST. Custom Work and Repairing done on the premises. 50-2-y-m

J. R. CAMERON, Merchant Tailor.



VIOLIN, BOX & BOW COMPLETE

\$4.00 to \$150.00



Value guaranteed. Sent C. O. D., with privilege to examine. J. FRANK GRUNDY, P. O. Box 259, WINNIPEG, MAN.

All kinds of Musical Instruments at lowest possible prices. Mention this paper. 58-y-m

A. M. Matheson, Brandon, whose advertisements appears in another column, reports that his poultry have come through the winter in good shape, and he hopes to fill all orders for eggs promptly. His Cochins and White Wyandottes are of the best strains. He has also a few Pekin ducks. One of our staff who called on Mr. John E. Smith, of Beresford Stock Farm, is pleased to report that he has added to his stock list some fine Large White Yorkshire pigs and Oxford Down sheep. He now also has some Galloway cattle, which add much to the already extensive high-class stock breeding operations carried on by him.

ESTABLISHED 1879. WM. BELL MAIN STREET 288 WINNIPEG, MANITOBA. (CORNER GRAHAM.)

DRY GOODS

Ladies' and Gents' Furnishings always on hand. A full and varied stock of Staple and Fancy Goods. Orders by letter and in person from our country friends given special attention. We have everything in stock to suit the farming community. Our stock will be found complete, and in prices cannot be undersold. 39-y-m WILLIAM BELL, 288 MAIN ST.

BIGGER, BRIGHTER AND BETTER THAN EVER!

THE WEEKLY TRIBUNE

FOR 1894

Recently enlarged and greatly improved. Eighty-four columns of matter each issue. Recognized as the great family newspaper of Manitoba and the Northwest. Publishes Talmage's Sermons, \$1 per annum.

THE TRIBUNE PUBLISHING COMPANY, WINNIPEG, MAN. 14-y-m

1894 BRANDON'S GREAT FUR AND CLOTHING EMPORIUM

(THE LARGEST WEST OF WINNIPEG.) Furs repaired and relined, men's and boys' suits, odd pants, leather jackets, gloves and mitts, gents' furnishings, etc. Get prices before purchasing elsewhere. 63-y-m JOHN T. SOMERVILLE



POULTRYMEN! GREEN CUT BONES

Warranted to double the egg production. Our BONE CUTTER reduces green bones fine enough for little chicks. MEDAL AND DIPLOMA AT WORLD'S FAIR, and, as far as we know, the only one worthy of mention. Get our circulars also of HAND STONE CRUSHER for making grit out of stone, shells, broken crockery, etc. Pure Limestone Grit, in sacks, \$1 per 100 lbs. Our CLOVER CUTTER finest made. Write for circulars. Webster & Hannum Cazenovia, N. Y. 66-2-o-om



CAPACITY, 200 HOGS PER DAY. HOGS - PURCHASED - ALL-YEAR-ROUND. 51-y-m

SEEDS Keith & Co., P. O. Box 333, - WINNIPEG. 65-h-m

AGROPYRUM : TENERUM (Native Rye Grass) SEED FOR SALE.

A limited quantity of this valuable Native Grass can be had at 8c. per lb., in 40-lb. lots; at 10c. per lb., in 20-lb. to 40-lb. lots. F. O. B. Virden. Bags extra. Address, K. McIVOR, Virden, 67-a-m Man. 62-f-m

TWO POINTS HARNESSES

THE BEST WORK. ALL OUR HARNESSES IS HAND-SEWN. THE BEST STOCK. WE USE NOTHING BUT OAK-TANNED LEATHER IN OUR NO. 1 HARNESSES.

ABOUT OUR HARNESSES

PIERCE'S HARNESSES MANUFACTORY, 278 James Street, Winnipeg, Man. Cheapest House in Manitoba. Send post card for prices. 67-

S-E-E-D-S-I

Fine Stock, Lowest Prices, Best Quality. Send at once for FREE Illustrated Catalogue. J. M. PERKINS, 241 Main St., WINNIPEG. 62-f-m

Veterinary Surgeons in Manitoba and N. W. T.

S. A. COXE, Veterinarian, DENTISTRY AND SURGERY SPECIALTIES. Office and Infirmary: 68-2-y-m BRAUBIER STABLES, BRANDON, MAN.

W. A. DUNBAR VETERINARY SURGEON, 15 1/2 Jemima St., - - Winnipeg. Communications by letter or telegraph promptly attended to. TELEPHONE 59. 25-2-y-m

W. S. HENDERSON, V.S. VETERINARIAN DISTRICT NO. 9, CARBERRY, 44-2-y-m MANITOBA.

ALL-STEEL



BRANTFORD ALL-STEEL PUMPING MILL THE NEW WAY



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. COCKSHUTT PLOW CO. (Ltd.), Winnipeg, Man., Agents for Manitoba and N. W. T. 4-y-om

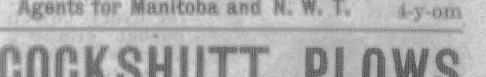
COCKSHUTT PLOWS

THE STANDARD PLOWS FOR THE NORTHWEST.



Our new Combination Breaker and Stubble Plow leads all competitors. We claim superiority in cleaning qualities and ease of draft. Our popular J. C. Sully and Columbia Gang are in constant demand. If you need a Plow, or think of purchasing a Wind Mill, write us before you buy. 66-f-m COCKSHUTT PLOW CO., Winnipeg.

WRIGHT & CO. Winnipeg, Man.



IF YOU REQUIRE FARM HARNESSES Or anything in our line, call and examine our goods, or write for what you want. We do not intend to be beaten in quality of goods or prices. Bottom prices for cash. 44-y-m

HIDES AND WOOL

HIGHEST PRICE PAID FOR HIDES - SHEEPSKINS - AND - WOOL Consignments Solicited. JOHN HALLAM, Prop., HARRY LEADLAY, Man., TORONTO. WINNIPEG. TORONTO HIDE AND WOOL CO. 298 Ross Street, - - WINNIPEG. When writing please mention this paper. 67-1-m

WANTS.

One insertion of six lines in this column, \$1; three insertions, \$2.50, in advance. Contracts not made for more than three consecutive insertions.

TO SELL an A 1 Mixed Farming 100-acre Farm, 20 miles from Winnipeg; half farm broken and fenced; near church and school. Apply to D. W. McIVOR, Winnipeg, Man.

PURCHASER for Farm (100 acres) near to city of Winnipeg; will sell on very liberal terms. Apply Box 214, Winnipeg.

TO SELL Pure-bred Shropshire Ram Lamb of first-class breeding and a good one. Address, G. C. WELB, care Farmer's Advocate, Winnipeg.

MARKET HARDWARE STORE


FULL LINE OF
**HARDWARE,
STOVES, TINWARE,
PAINTS, OILS,
GLASS, Etc.**

FARMERS wanting anything in our line will always be gladly informed as to prices by writing or calling.

SOLE AGENT FOR
JOHN CURRIE'S
well-known and justly celebrated
PUMPS

W. M. LAWRENCE,
289 Market Street,
Winnipeg, 503-y-m Man.

RICE'S AERMOTOR MILL



Feed grain ground for eight cents per one hundred pounds, or for every tenth bushel. Rice's Process Flour for brown bread, biscuit, cake and pudding (the healthiest on the market). Every municipality, town or village, should have one of the above class of mills. Cost about \$1,500.

Pumping Aermotors for pastures, town water-works, market gardens, land aerating, etc., cost from \$100 up. Geared Aermotors erected on farm barns to pump water, saw wood, grind feed out hay and straw, elevate grain, turn the fanning mill, grindstone and churn. Also Rice's Frost Proof Force Pump and the above Aermotors for sale. Green bones ground and for sale for poultry feed, and custom work of this kind done at moderate prices.
GEORGE RICE, Aermotor Mill, Main St. N., Winnipeg. 60-

CANADIAN PACIFIC RY

TO
TORONTO, MONTREAL, NEW YORK
AND ALL POINTS EAST.

LOW RATES TO
MID-WINTER: FAIR
San Francisco.

AUSTRALIA
FROM VANCOUVER.

SS. Warrimoo March 16
SS. Arawa April 16

CHINA and JAPAN
FROM VANCOUVER.

Empress China..... March 5
Empress India..... April 2

W. M. McLEOD, City Passenger Agent, 471 Main street; J. S. CARTER, Depot Ticket Agent, or to

Robert Kerr,
General Passenger Agent.

USE!!!
RICHARD'S
PURE SOAP
ONCE USED
ALWAYS USED
SPECIALLY ADAPTED FOR USE IN THE WATERS OF
MAN. N.W.T. & B.C
BEWARE OF IMITATIONS

BUCKLE PRINTING COMPANY
146 Princess Street (Opposite Market),
WINNIPEG, - MANITOBA.

ALEXANDRA
CREAM SEPARATOR

Our Separator does not go through the hands of half a dozen agents before reaching our Customers.

We import them direct from the manufacturers in England, that is why we sell it 25% cheaper than any other Separator.

S. M. BARRE,
Dairy Supplies and Produce,
249 KING STREET, - WINNIPEG.

SEND IN YOUR ORDERS EARLY.
Butter bought and sold at the highest figure. Proceeds promptly remitted. 59-y m

WE INVITE YOU TO INSPECT THE "BRANTFORD BAIN"



Because it will pay you to buy it. It is finely finished, well-proportioned, light-running, durable, superior quality. There are thousands of farmers who are well pleased with their BRANTFORD BAIN WAGON. Write us for prices, or call on our agents.
BAIN BROS.' MANUFACTURING CO., - 7-a-om - BRANTFORD.

NORTHERN PACIFIC R.R.

TIME TABLE—Taking effect Monday, March 5, 1894.

READ UP.		MAIN LINE.		READ DOWN.	
NORTH BOUND.		STATIONS.		SOUTH BOUND.	
Fr. No. 133. Daily.	St. Paul Ex. No. 107. Daily.	Miles from Winnipeg.	St. Paul Ex. No. 108. Daily.	Fr. No. 134. Daily.	St. Paul Ex. No. 106. Daily.
1:30p	4:00p	0	Winnipeg.....	11:00a	5:30a
1:00p	3:45p	2.0	*Portage Junc't.....	11:12a	5:47a
12:45p	3:35p	9.5	*St. Norbert.....	11:25a	6:07a
12:32p	3:22p	15.3	*Cartier.....	11:38a	6:25a
11:54a	3:05p	23.5	*St. Agathe.....	11:54a	6:51a
11:31a	2:54p	27.4	*Union Point.....	12:02p	7:02a
11:07a	2:42p	32.5	*Silver Plains.....	12:13p	7:19a
10:31a	2:25p	40.4	*Morris.....	12:30p	7:45a
10:03a	2:11p	46.8	*St. Jean.....	12:45p	8:25a
9:23a	1:51p	56.0	*Lacellier.....	1:07p	9:18a
8:00a	1:30p	63.0	*Emerson.....	1:30p	10:15a
7:00a	1:15p	68.1	*Pembina.....	1:40p	11:15a
11:05p	9:15a	168	*Grand Forks.....	5:25p	8:25p
1:30p	5:25a	223	*Winnipeg Junc't.....	9:25p	1:25p
3:45p	4:53		*Duluth.....	7:55a	
8:30p	4:70		*Minneapolis.....	7:05a	
8:00p	4:51		*St. Paul.....	7:35a	
10:30p	8:53		*Chicago.....	9:35p	

MORRIS-BRANDON BRANCH.

READ UP.		WEST BOUND.			
EAST BOUND.		STATIONS.			
Fr. No. 130. Mon, Wed. and Friday.	Ex. No. 128. Tu, Thu. & Saturday.	Miles from Morris.	Fr. No. 127. Mon, Wed. and Friday.		
1:20p	4:00p		Winnipeg.....	11:00a	5:30p
7:30p	12:25p		*Morris.....	2:30p	8:00a
6:50p	12:05p	10	*Love Farm.....	2:55p	8:45a
5:45p	11:37a	21.5	*Mylie.....	3:21p	9:31a
5:25p	11:25a	25.9	*Roland.....	3:32p	9:50a
4:39p	11:05a	33.5	*Rosebank.....	3:50p	10:23a
3:58p	10:54a	39.6	*Miami.....	4:05p	10:54a
3:14p	10:33a	49.0	*Deerwood.....	4:28p	11:44a
2:51p	10:21a	54.1	*Altamont.....	4:41p	12:10p
2:15p	10:03a	62.1	*Somerset.....	5:00p	12:51p
1:47p	9:49a	63.4	*Swan Lake.....	5:15p	1:22p
1:19p	9:35a	74.6	*Indian Springs.....	5:30p	1:54p
12:57p	9:24a	73.4	*Marquette.....	5:45p	2:18p
12:27p	9:10a	88.1	*Greenway.....	5:55p	2:52p
11:57a	8:55a	92.3	*Baldur.....	6:15p	3:25p
11:12a	8:39a	102.0	*Belmont.....	7:00p	4:15p
10:37a	8:16a	109.7	*Hilton.....	7:18p	4:53p
10:13a	8:00a	117.3	*Ashdown.....	7:35p	5:23p
9:49a	7:53a	120.0	*Wawanesa.....	7:44p	5:47p
9:39a	7:45a	123.0	*Elliotts.....	7:55p	6:04p
9:05a	7:31p	129.5	*Rounthwaite.....	8:08p	6:37p
8:28a	7:19p	137.2	*Martinville.....	8:27p	7:18p
7:50a	6:55a	145.1	*Brandon.....	8:40p	8:00p

No 127 stops at Baldur for meals.

PORTAGE LA PRAIRIE BRANCH.

READ UP.		WEST BOUND.	
EAST BOUND.		STATIONS.	
Fr. No. 144. Monday, Wednesday and Friday.	Miles from Winnipeg.	Fr. No. 143. Monday, Wednesday and Friday.	Miles from Winnipeg.
5:30 p. m.	0	Winnipeg.....	9:00 a. m.
5:15 p. m.	3	*Portage Junc'n.....	9:15 "
4:43 a. m.	11.5	*St. Charles.....	9:44 "
4:30 "	13.5	*Headingley.....	9:54 "
4:07 "	21	*White Plains.....	10:17 "
3:15 "	35.2	*Eustace.....	11:05 "
2:43 "	42.1	*Oakville.....	11:36 "
1:45 "	55.5	*Portage la Prairie	12:30 p. m.

Stations marked * have no agent. Freight must be prepaid.

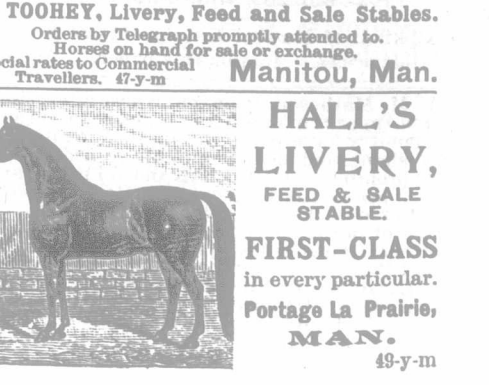
Numbers 107 and 108 have through Pullman Vestibuled Drawing Room Sleeping Cars between Winnipeg and St. Paul and Minneapolis. Also Palace Dining Cars. Close connection at Chicago with eastern lines. Connection at Winnipeg Junction with trains to and from the Pacific coast.

For rates and full information concerning connections with other lines, etc., apply to any agent of the company, or

CHAS. S. FEE, H. SWINFORD
G. P. & T. A., St. Paul. Gen. Agt., Winnipeg.
H. J. BELCH, Ticket Agent,
486 Main Street, Winnipeg.



H. TOOHEY, Livery, Feed and Sale Stables.
Orders by Telegraph promptly attended to.
Horses on hand for sale or exchange.
Special rates to Commercial Travellers. 47-3-m
Manitou, Man.



HALL'S LIVERY, FEED & SALE STABLE.
FIRST-CLASS in every particular.
Portage La Prairie, MAN.
49-y-m

: 50,000. :
50,000 MANITOBA MAPLES FOR SALE.
 A way down cheap for cash; also a good supply of
Currants, Raspberries & Rhubarb
 (ALL MANITOBA GROWN).
 Send for Prices.
CALDWELL & CO.,
 VIRDEN NURSERIES.
 Virden, 66-1-m Man.

ULCERKURE
 Calgary, August 6th, 1893.
 Gentlemen, I have used Dr. Warnock's Ulcerkure with greater success in healing flesh wounds than any other medicine I have ever tried. It healed a large cut on one of my horses when liniments and lotions failed to effect it. I believe it to possess every virtue you claim for it.
 WM. MALONEY,
 Agent McCormack Mfg. Co.

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

CRADLE CHURN.
 PAT. NOV. 28, 1892.



For sale by hardware dealers generally. If your dealer does not keep them write to B. R. HAMILTON & CO., Patentees, Neepawa, Man.
 49-y-m

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


OLDENBURGH COACH HORSES
 I have always on hand choice stallions and mares. All horses registered. Horses from my stud have won a great many prizes in Europe, North and South America and Australia. Prices reasonable. 7-d-om
ED. LÜBBEN,
 Surwürden, Granddukedom of Oldenburg, Germany.

I have one **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. I will sell him cheap, and time will be given, if required.
PETER ARKELL, 5-c-om Teeswater, Ont.

FOUR IMPORTED GLYDSDALE STALLIONS.
 All four years off. Fresh horses of fine quality and the best breeding. Prices according to the times.
NEIL SMITH, Brampton.
 3-e-om

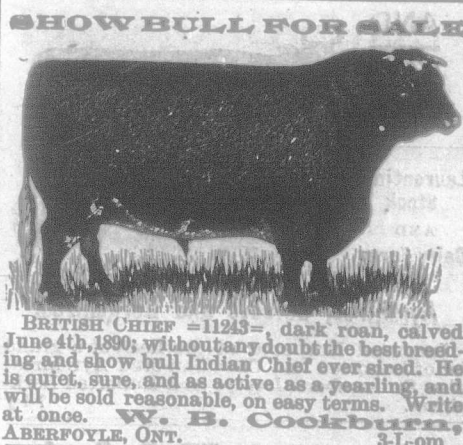
HEREFORDS
 WRITE TO
F. A. FLEMING, 5-y-om Weston, Ont.

H. CARGILL & SON,
 Cargill, Ont.
SHORTHORNS.
 Two imported bulls are now at the head of our herd. Stock of both sexes and different ages from the best imported and home-bred cows now for sale. 11-tf-om



FOR SALE—Two choice Shorthorn Bull Calves, 10 & 13 months old, sired by Barmpton Chief =14380=. Also a few Berkshire Sows, 5 months old, at prices to suit the times.
R. Rivers & Son,
 13-1-y-om Spring Hill Farm, WALKERTON.

SHOW BULL FOR SALE
FOR SALE.
 A choice lot of Shorthorns—bulls & heifers of good quality and of the most approved breeding. Show animals a specialty. The accompanying out-represent 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.



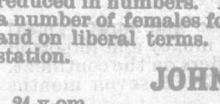
VALENTINE FICHT,
 Maple Leaf Farm, Orill, Ontario.
 Offers for sale at reasonable figures and on liberal terms, 30 head of well-bred Shorthorn bulls and heifers, yearlings, and two-year-olds also a three-year-old shire stallion from imported sire and dam (2nd prize, Toronto); and a grand lot of Cotswold sheep. STATION: Woodstock, on C. P. R. and G. T. R. 11-1-y-om

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. Farm one mile from G. T. R. station. 7-om

WESTRUTHER PARK Herd of Bates Shorthorns, consisting of Oxford, Barrington, Waterloo, Gwynne, Darlington, and other families, has outgrown the place and must be reduced in numbers. Four yearling bulls and a number of females for sale, at lowest prices and on liberal terms. Farm a mile from the station.
JOHN IDINGTON,
 24-y-om Stratford.

JOHN RACEY, JR.,
 BREEDER OF—
Shorthorn Cattle and Berkshire Pigs.
 Stock for sale. 17-1-y-om LENNOXVILLE, P. O.

SHORTHORNS.
 I have FOR SALE two Shorthorn heifers and two bull calves of fine breeding, fine colors, fine form and carriage, in fine condition, at fine out prices. Also one or two cows.
D. ALEXANDER, BRIGDEN, Lambton Co., Ont.



SHORTHORN : BULLS
 An extra good lot now for sale of the following Scotch families: Village Blossom, Duchees of Gloster, Mina and others.
H. & W. SMITH, Hay, Ontario.
 Exeter Station, half mile. 13-1-y-om

LINDEN STOCK FARM.
 At the head of my herd is the Kinnellar bull imp. Royal George, while my cows and heifers are principally of the Wimple and Rosedale, also of Kinnellar breeding. Young bulls are now offered.
JOHN GILLSON,
 3-1-y-om London, Ont.

MEADOW-LAWN SHORTHORNS.
 I will sell bull calves from my stock bull Royal Sovereign at prices to suit the times. Come and see me or write.
M. J. IRELAND, Copetown, Ont.
 15-1-y-om

H. I. ELLIOTT, Riverview Farm, Danville, P. O.
 Breeder of Scotch Shorthorns. Representatives of the most noted Scotch families: Duchees of Glosters, Claret, Lovely, Nonpareils, Minas, Rosebud and Mayflower. Head headed by the imp. Cruickshank bull, King James. 15-1-y-om

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., Q.T.R.

IF YOU WANT a well-bred Shorthorn Bull for use on grade cows, or a heifer to start a herd with, or some Improved Yorkshire pigs from imported sow Lady Lindsay (422), write C. G. DAVIS, Woodland's Terrace Farm, Freeman P. O. 13-1-y-om

FOR SALE.
 A choice lot of Shorthorns—bulls & heifers of good quality and of the most approved breeding. Show animals a specialty. The accompanying out-represent 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.



SUNNYSIDE HOLSEIN-FRIESIANS
 Choice animals, either sex, all ages, for sale at any time. Correspondence solicited. Address
McDUFFEE & BUTTERS, Stanstead, P. Q.
 16-y-om



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 strongest class ever shown there. War-ranted 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
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. Kempville Station, C. P. R.** 5-1-y-om



HOLSTEIN-FRIESIANS.
 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 Abbe-lack now for sale at living prices. Also some extra fine Berkshire pigs. Address,
H. BOLLERT, CASSEL, ONT.
 2-1-y-om

JERSEY COWS
H. COOKE, Orillia, Ont.
 Breeder and importer of the choicest milking strains of Jerseys. Inspection solicited. Prices right. 2-1-y-om



GLEN ROUGE JERSEYS
WILLIAM ROLPE, Markham, Ont., offers Twelve Jersey Bulls and Heifers (pure St. Lamberts), out of tested cows. Grand individuals. Prices right. 19-y-om

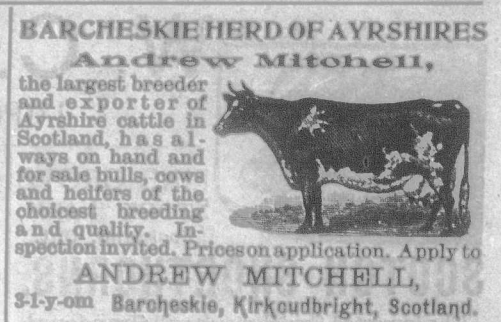
JERSEYS AND TROTTERS.
 At the head of herd is Nell's John Bull, grandson of Ida of St. Lamberts. Females from \$75 to \$150. Our stud is principally composed of the got of Almont Wilkes 2.125 and General Stanton, the sire of more horses in the 30 list than any sire in Canada.
Jonathan Carpenter,
 13-1-y-om WINONA, ONT.

FIRST PRIZE JERSEY HERD.
 Two young bulls from first prize cows and first prize bull at Toronto. Several heifers to calf shortly, suitable for family cows.
J. H. SMITH, Wignfield, Ont.
 3-1-y-om

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.** 7-om

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.** 19-1-om

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,
 5-1-y-om Barcheskie, Kirkcudbright, Scotland.



J. YUILL & SONS,
 Meadowside Farm, Ontario.
 Carleton Place, Ontario.
 Our herd is composed of seventy-five head. Leonard Meadowside =1423=, 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



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.



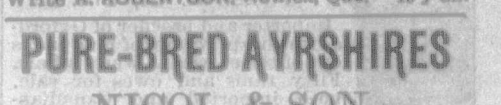
Champion Dairy Herd of Ayrshires at various government tests. Prize winners at the World's Columbian Exposition, Chicago. Write **R. ROBERTSON, Howick, Que.** 19-y-om



PURE-BRED AYRSHIRES
NICOL & SON,
 Cataraqui, Ontario.
 6-d-om Some young bulls for sale.

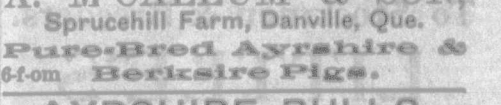
A. McCALLUM & SON,
 Sprucehill Farm, Danville, Que.
 Pure-Bred Ayrshire & Berkshire Pigs.
AYRSHIRE BULLS.
 THREE Ayrshire Bulls for sale—12, 13, and 15 months old. **M. BALLANTYNE, St. Marys P. O., Ont.** 7-om

GOTSWOLD RIDGE FARM
 The largest breeding flock of pure-bred Cotswold Sheep in Ontario. Shearing 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.** 6-1-y-om

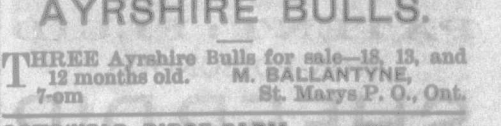


Imported Gotswold Ewes
 In lamb to an English royal winner that has proved himself a great stock sire. Ram lambs and ewe lambs from imported stock, which will make good show sheep, for sale at hard times prices.
WM. THOMPSON,
 MT. PLEASANT, Uxbridge Station, G. T. R. 9-1-y-om

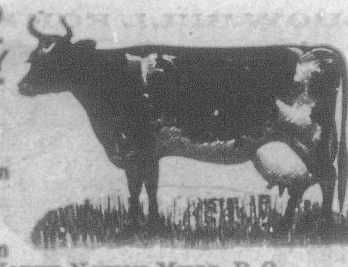
SHROPSHIRE - FOR - SALE
 My whole flock of 60 head of imported Rams and Ewes, a few home-bred Shearing Rams, and a choice lot of lambs of both sexes. Also a choice lot of young Yorkshire Pigs.
T. H. MEDCRAFT, Sparta, Ont.
 19-y-om



IMPORTED SHROPSHIRE EWES
 And their lambs for sale by car lots; also a very choice Shorthorn Bull calf, ten months old.
W. S. HAWKSHAW, Gleanworth P. O., Ont.
 7 miles south of London. 7-tf-om



W. C. EDWARDS AND COY
IMPORTERS AND BREEDERS.



PINE GROVE STOCK FARM, Rockland, Ont.
SCOTCH SHORTHORNS.

The imported Crickshank 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.
7-1-y

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

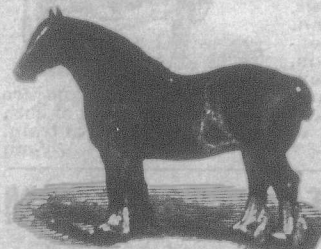


BERKSHIRES
Of the best strains not connected, from a number of grand sows and three different boars. Fifty-eight prizes won last season. All ages for sale, including sows in farrow.
3-1-y-om WM. McALLISTER, Varna, Ont.

IMPROVED: LARGE: YORKSHIRES



THORNCLIFFE STOCK FARM!



I have on hand the best young Clydesdale Horses and Mares on this continent. Bred from the well-known sires, Princes of Wales, Darley, Macgregor, Energy, Lord Montrose, The Ruler, Carruban Stamp, Knight Errant and other celebrities. My stock in the above lines were very successful at all the large shows last year. Call and examine our stock before purchasing elsewhere.
19-1-y-om

SHROPSHIRE.
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 Crickshank bulls NORTHERN LIGHT —AND— VICE CONSUL

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

JOHN DRYDEN,
BROOKLIN, ONT.
Makes a speciality 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

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, \$300.

IMPROVED YORKSHIRES.—We claim to have the longest, deepest and most typical LARGE YORKSHIRES IN AMERICA, and the reason is we have paid more money and 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, 9-7-om
J. Y. ORMSBY, Manager.

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, over all breeds. C. P. R.; Telegraph, Guelph; Telephone, Arkell. 7-1-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 18th year; also stock from "Signal of Belvedere," whose dam made 20 lbs. 6 oz. butter in one week on second calf. Also stock from the greatest living prize bull, Canada's Sir George, whose dam made 28½ lbs. butter a week and 57 lbs. milk a day. Splendid bulls, six months old and registered, \$100 each.
MRS. E. M. JONES, Brookville, Ont., Can.
Mrs. Jones' great book, Dairying for Profit, 30c. by mail. Address, ROBT. Y. BROWN, Agent, Box 324, Brookville, Ontario, Canada. 8-7-om

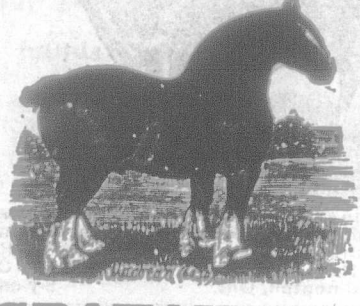
THE MARKHAM HERD
Farm at Louest Hill Station, C.P.R. Registered Improved Large Yorkshire and Berkshire pigs. As we do not intend to exhibit, we will now sell a choice lot of show pigs of each breed.
17-y-om JOHN PIKE & SONS.

YORKSHIRE PIGS
Of the best type and breeding. Pairs not skin for sale at all seasons.
J. M. HURLEY & SON
Belleville, Ont. Box 442. 17-y-om

S. COXWORTH, CLAREMONT, ONT.,
Breeder and Importer of Berkshire Hogs. Twenty young sows for sale, bred to my three stock boars, Highlers Prince, King Lee, and Champion Duke, Imp. Write for prices or come and see my stock. Station and Telegraph 8-y-om

To Stockmen & Breeders.
LITTLE'S PATENT: FLUID NON-POISONOUS SHEEP DIP AND CATTLE WASH.

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. 7-5-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 whose 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

For the destruction of Ticks, Lice, Mange 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

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 16½ hand sellers. We also handle Trotting and Pacing stock. Send for Catalogue.

LAFAYETTE STOCK FARM,
J. CROUCH & SON, Proprietors, LaFayette, Ind., U. S. A. 6-4-om

ISRAEL GRESSMAN, New Dundee,
—IMPORTER OF—
Large - English - Berkshires
4-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, Montreal. 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. H. GEORGE & SONS, Crampton, Middlesex County, Ont. 7-y-om

ADVERTISE IN ADVOCATE

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. 5-y-om

Boulder Grange Flock
—OR—
REGISTERED SHROPSHIRE.
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.

JOHN A. MCGILLIVRAY,
Jerseydale Farm, Uxbridge, Ont., Midland Div. C. T. R., Importer and breeder of Dorset Horned Sheep 19-1-y-om

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

IMPROVED CHESTER WHITE SWINE
—AND—
DORSET-HORNED SHEEP
A SPECIALTY.
Write for particulars or call and inspect the stock. Visitors welcome. 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

TAMWORTHS FOR SALE

I have for sale a few choice Tamworth Boars, fit for service; also sows from four to seven months old. I am booking orders for spring litters. My breeding pens contain twenty typical Tamworth Sows and two Imported Boars, all of superior quality. I guarantee all stock sent out by me to be as represented.

JOHN BELL, Amber, Ont.
1-y-om

RED TAMWORTHS, YORKSHIRES AND AYRSHIRE

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

W. & F. ROW, AVON, ONT.

Breeders and importers of Poland Chinas and Tamworths. Young pigs of all ages and both sexes furnished, not akin. A few Poland-China boars fit for service on hand. Stock guaranteed as represented. 7-1-0

PINE GROVE HERD
—OF—
POLAND-CHINAS

I have a few pairs of good fall pigs, unpaired, yet for sale. Send for Catalogue just out, for description of Spring Litters.

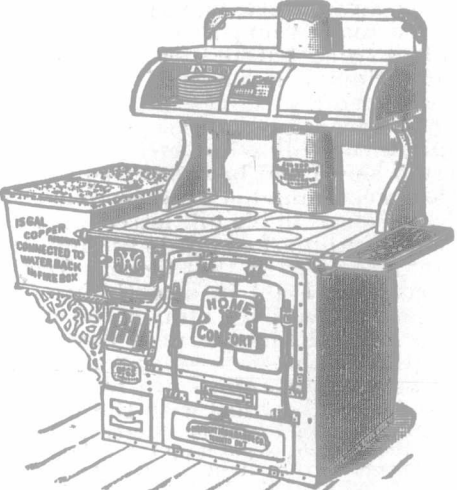
CAPT. A. W. YOUNG,
17-1-y-om Tupperville, Ont.

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.

SALES TO JANUARY 1st, 1894, 277,188.

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.

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

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

7-y-om

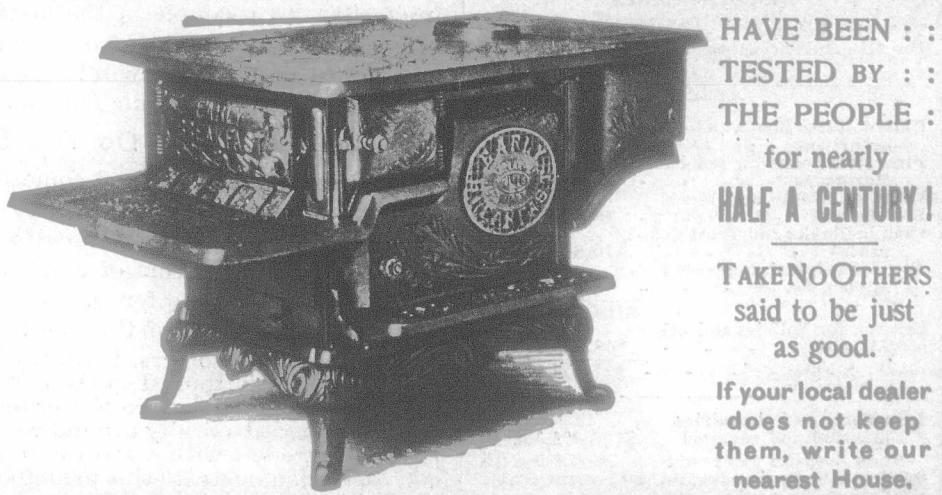
PACIFIC HEIGHTS NURSERY COMPANY

2021 Sacramento Street, San Francisco, California,

WHOLESALE AND RETAIL

Importers of and Dealers in New, Rare and Elegant Plants of every description. Palms, Orchids, Cacti, Bamboos, Bulbs, Aquatics, New Chrysanthemums, etc. Shade and Ornamental Trees, Shrubs, Tropical and Semi-Tropical Fruit Trees and Plants. Japanese and Chinese Fruit Trees a specialty. Catalogues sent free upon application. 62-y-om

McCLARY'S FAMOUS STOVES



HAVE BEEN : :
TESTED BY : :
THE PEOPLE : :
for nearly
HALF A CENTURY!

TAKE NO OTHERS
said to be just
as good.

If your local dealer
does not keep them,
write our
nearest House.

THE McCLARY MFG. CO.

7-y-om LONDON, TORONTO, MONTREAL, WINNIPEG, VANCOUVER.

YOU NEVER HEARD OF THE LIKE BEFORE—BARGAINS 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, 4 sets 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 230 00
We can send you a 2-horse tread power separately.

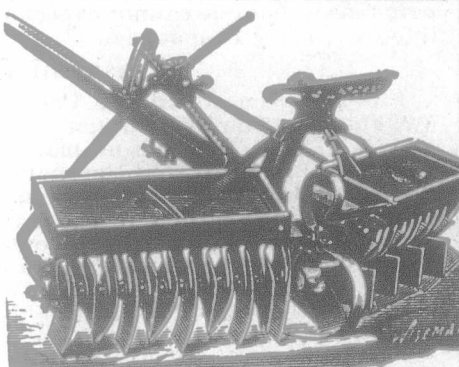
PEDLAR'S PATENT SHINGLE

GALVANIZED STEEL.			PAINTED STEEL.		
Quality.	Weight.	Price per Sq.	Quality.	Weight.	Price per Sq.
XXX	100 lbs.	\$6.00	XXX	90 lbs.	\$4.10
XX	80 "	5.50	XX	80 "	3.85
X	70 "	5.00	X	70 "	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.

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 Sift. Prices and terms given on application.

—ADDRESS—
THE WORTMAN & WARD MFG. CO.
LONDON, 5-a-om ONTARIO.

THE OXFORD HERD OF REGISTERED POLAND CHINAS

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.

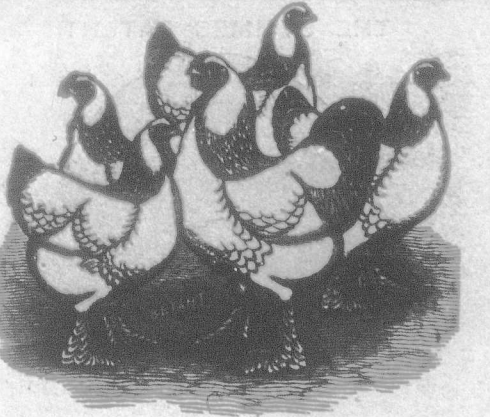
15-y-om **W. & H. JONES, Mount Elgin, Ont.**

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 Rht's Chief, who weighs 1,000 pounds. Correspondence or inspection of herd solicited. **J. J. PAYNE, Chatham, Ont.** 8-y-om

EGGS from grand yards of Black Minorcas, Light Brahmas, Brown Leghorns and Barred Plymouth Rocks, \$1 per setting. Some choice Minorcas for sale. **W. L. BROWN, London West, Ontario.** 5-1-d-om

M. B. TURKEY EGGS FOR SALE.
From 2 yards; not akin. No. 1 headed by Wild Tom; No. 2 headed by Tom; bred by myself. Both are A 1 birds. Write for prices to **JAMES A. STEWART, Jr., M. S. Farm, Menie P. O., Ont.** 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.

CULLODEN POULTRY YARD, Mount Brydges, Ont.

MUNGER'S AMERICAN STRAIN.

MADE IN CANADA. REGISTERED IN THE PATENT OFFICE OF THE U. S. DEPT. OF AGRICULTURE. 25 Years Experience in Breeding and Raising. 40 Grand Breeding Pairs for 1894. Pairs and Eggs for Sale at all Times. Pairs, Trios and Breeding Pairs Mated for Best Results. Address **F. M. MUNGER, DeKalb, Illinois**

MONITOR INCUBATOR.
Two Medals at World's Fair. Illustrated Catalogue for stamp. **A. F. WILLIAMS, Box , Bristol, Ct.**

Siberian Seed Oats!

Which Mr. Zavits, 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., 85c. Bags, 20c.

THOS. TEESDALE, Concord. 6-b-om

SEED POTATOES. THE "WHITE STAR."

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, Ample Shade Stock Farm, St. Helens, Ont. 13-1-y-om

400—Helderleigh Fruit Farms Nurseries—400
(Four Hundred Acres in Extent.)
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.

13-y-om **E. D. SMITH, Winona, Ontario.**

Spring Planting

TREES!

THE TORONTO NURSERIES.

Greeting:—Bigger and better than ever. Fifty-five years experience in our beloved Canada. Everything the PLANTER wants. Our stock packed to carry safely around the world. Shipped to CENTRAL ASIA last year—3 months trip—all grew. Evergreens our great specialty. Price-lists on application. Personal attention given to orders by mail.

GEO. LESLIE & SON. 7-a-om

Seed Grain FOR SALE!

Coanetta, Black Tartarian and Early Gothland Oats

in quantities of 5 bus. and over, 50 cts. per bu.; bags extra.

MUMMY and CROWN PEAS,

in quantities of 5 bus., 75 cts. per bus.; bags extra, Crown Peas not perfectly pure.

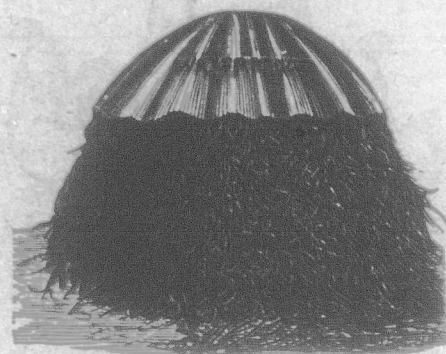
G. A. BRODIE, 5-c-om BETHESDA P.O., ONT.

SHEEP BREEDERS' ASSOCIATIONS.

American Shropshire Registry Association, the largest live stock organization in the world. Hon. John Dryden, President, Toronto, Canada. Address correspondence to **MORTIMER LEVERING, Sec., Lafayette, Indiana.** 13-1-y-om

ADVERTISE IN THE ADVOCATE

THE SYMMES PATENT



HAY AND GRAIN CAP.

THOROUGHLY WATERPROOF.
The most practical, cheap and efficient hay and grain cap yet introduced. Not necessary to fasten down. Almost indispensable on grain when using a self-binder.

VEGETABLE AND FLOWER COVERS

For Transplanted Plants.
Stack Covers,
Built in sections. Diam. at bottom, 8 feet, by about 5 feet deep.

Send for circular to
SYMMES HAY CAP CO.,
7-h-om Sawyerville, P. Q.

THE NEW

Chatham and Chautauqua Giant Wagon

With Unbreakable Axles and Unbreakable Arms.

THE BEST MADE ON EARTH. So said the Judges on Vehicles at the

WORLD'S FAIR,

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 Skains. These Giant Arms completely revolutionize the building of wagons. Our 3-inch Malleable Giant Arm Wagon is

WARRANTED STRONGER,

Though less in price, than any ordinary 3 1/2 to 3 1/2-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.

THE DEMAND for these wagons is

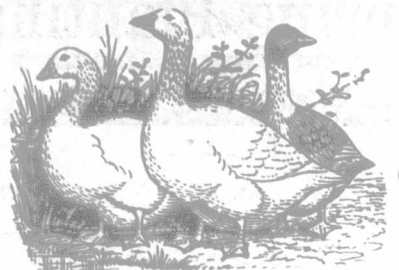
so great that though we are turning out 12 per day, we are taxed to the utmost to supply it. Send in your orders early.

TERMS AND PRICES LIBERAL.

CHATHAM MANFG. CO. (LTD.)

CHATHAM, Feb. 9th, 1894.

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.

250,000 ASPARAGUS ROOTS!

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.

Geo. Leslie & Son,

TORONTO NURSERIES. 7-a-om

Cheese Vats, Curd Sinks, Gang Presses and Hoops, Whey Cans, Milk Cans,

AND DAIRY UTENSILS OF ALL KINDS.

Write us for full information and prices.

Wm. Stevely & Son,

7-a-om Manufacturers, LONDON, CAN.

THE MUTUAL LIFE INSURANCE

COMPANY OF NEW YORK

RICHARD A. McCURDY, PRESIDENT

For the year ending December 31, 1893

Income

Received for Premiums	\$22,594,327 98
From all other sources	8,488,907 70
	\$31,083,235 68

Disbursements

To Policy-holders	\$20,885,472 40
For all other accounts	9,484,607 47
	\$30,370,080 87

Assets

United States Bonds and other Securities	\$72,936,322 41
First lien Loans on Bond and Mortgage	70,729,088 92
Loans on Stocks and Bonds	7,497,200 00
Real Estate	18,080,918 69
Cash in Banks and Trust Companies	10,844,691 72
Accrued Interest, Deferred Premiums, &c.	6,009,608 29
	\$186,707,680 14
Reserve for Policies and other Liabilities	108,755,071 22
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.

ROBERT A. GRANNISS, VICE-PRESIDENT

WALTER R. GILLETTE General Manager
ISAAC F. LLOYD ad Vice-President
FREDERIC CROMWELL Treasurer
EMORY MCCLINTOCK LL.D. F.R.S. Actuary
HENRY K. MERRITT, Manager
31, 32, 33 Bank of Commerce Bldg., Toronto
E. J. MacROBERT & BRO., District Managers
P. SLAGHT, Special Agent
J. J. WRIGHT, Special Agent, London, Ont. 7-a-om

ALMA
The leading Canadian College for Young Women.
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. 200 students from all parts of America. Health and home. LOW FEES. Only 3 hours from Detroit. 60 pp. illustrated prospectus.
President AUSTIN, A. B.

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

WEAKNESS OF MEN

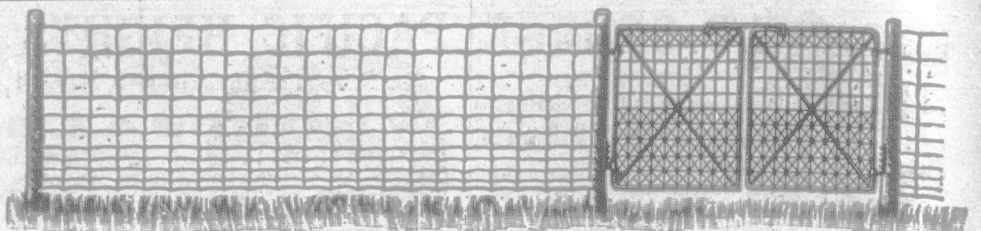
Quickly, Thoroughly, Forever Cured

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 falling 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.

5-y-om

MUSICAL CLOCK
& Box Combination
keeps perfect time & furnish 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 town furnished reliable persons (either sex) who will promise to show it. Send at once to Inventor's Co., New York City, P. O. Box 2252.



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. 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 agent of the Page Fence, 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.

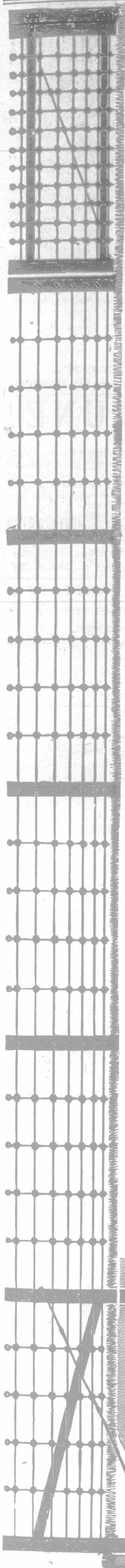
How a Black Sheep Sold 200 Rods of Page Fence.

(This is another Withington experience). A year ago or more, he was asked to figure on 700 rods of Page Fence, to be erected just out of Detroit, he was asked to figure on work. He named the lowest price at which he thought he could afford to furnish it and supping 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 but the offer was respectfully declined.

Last fall Mr. Withington was driving in that vicinity, and called to see what satisfaction that 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 ways 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" sheep 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.



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 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., INGERSOLL, ONT.



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.



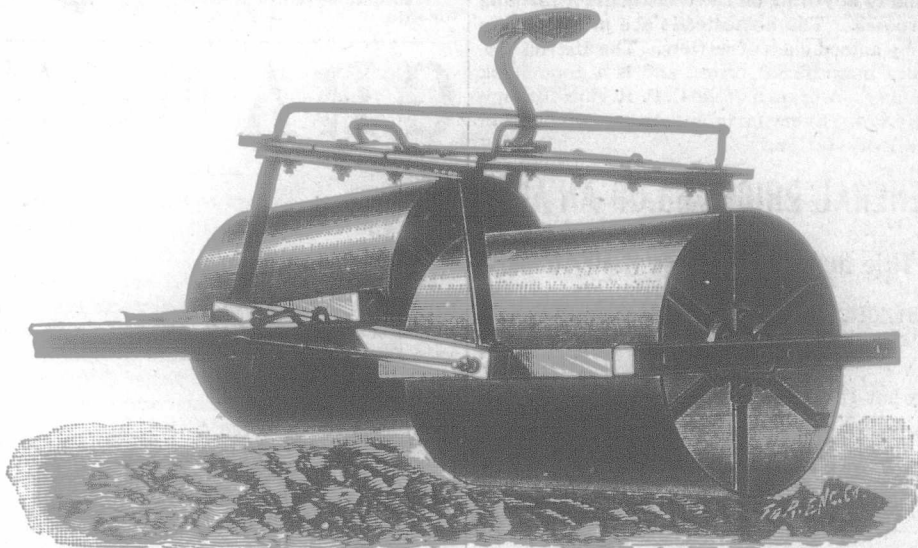
Use Mica Paint To Repair Leaky Roofs. Shingles, Iron or Tin Roofs painted with it will last twice as long.

RAPIDLY TAKING THE PLACE OF SHINGLES.

Is put up in rolls of 100 square feet each, 36 feet long by 3 feet wide, and cost 2 1/2 c. 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.

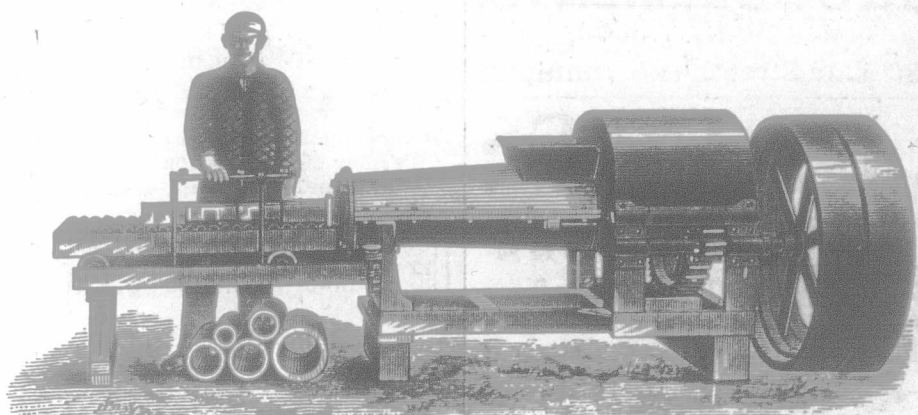
HAMILTON MICA ROOFING CO.,
17-1-y-om Office—101 Rebecca Street, HAMILTON, ONT.

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 approbation. 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 2-h-om **H. C. BAIRD & SON, Parkhill, Ont.**

NORTH STAR CURRANT. Perfectly hardy in any climate. Berries do not shell or drop off. Fruit large, delicious flavor. Best for wine or jelly. Very sweet, uses only half the sugar. Full instructions for planting and care of all kinds of fruits, and three North Star Currants by mail for \$1.75. **THE JEWELL NURSERY CO., Lake City, Minnesota.** 66-b-om Nursery Ave. 49.

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.**

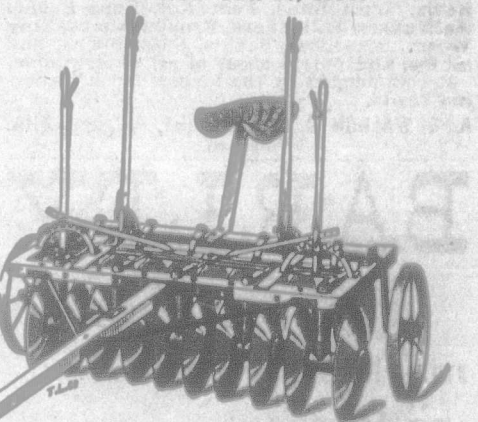
Do Not Insure

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,

68 Yonge Street, Cor. Colborne, Toronto, Ont.

PATENT IMPROVED DOUBLE DISC HARROW



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



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 help you. Address **LOCK DRAWER 697, CHICAGO, ILL.** 6-f-om

COLE, EMORY & CO., MERCHANT TAILORS

Woolen Merchants
508 Main Street - WINNIPEG,
(Near City Hall)


Our travellers frequently call at most points
on railroads. Write for samples. 44-y-m

FLEMING & SONS Chemists,

BRANDON, - - MANITOBA,
- DEALERS IN ALL KINDS OF -
Drugs, Patent Medicines, Toilet Articles,
Spectacles, Trusses, Artificial Eyes,
Crutches and Batteries.

MAIL ORDERS RECEIVE OUR PROMPT
ATTENTION. 46-y-m

PATENT
Ventilated : Closet



No house should be without one. Acknowledged by thousands of users to be the best house commode in the world. Everyone guaranteed absolutely odorless. Write the
Manitoba Ventilated Closet Co.,
Box 457,
WINNIPEG, MAN.,
for descriptive pamphlets and testimonials. Shipped to any address, securely packed, on receipt of price, \$9.00. 67-j-m

ULCERURE

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, Malanders, Fallenders, 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

BARLEY

We are now in the market for good Malt-ing Barley.
Send us samples and we will give you the highest price paid.

EDWARD L. DREWRY,
Redwood and Empire Breweries,
WINNIPEG, - - MANITOBA.
61-y-m

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

ADVERTISE IN THE ADVOCATE

PRINTING

Prize
PRINTING :: Lists,
PRINTING :: Circulars,
CHEAP :: Catalogues.
CHEAP
WINNIPEG.
R. D. RICHARDSON

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,**
6 Victoria-St., TORONTO.
11-y-om

SPRING IS COMING - SURE -

SPRING SUITINGS
To be SURE, we have the best assortment of
And you are SURE to get good value and a SURE fit, if you go to
GEO. CLEMENTS,
MERCHANT TAILOR,
480 Main Street, 44-y-m Winnipeg.

: PAINT :


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

R. B. THOMPSON,
- AGENT FOR -
BEST ELECTRIC BELTS
62-y-m Winnipeg, Man.

SALT RHEUM CURED



By "Munson's Indian Blood Purifier" and "Munson's Emollient." These medicines have met with marvellous results wherever used, and have given relief immediately after using. "Munson's Indian Blood Purifier" drives all impurities from the blood. It cures constipation, poor appetite, and makes you feel like living. It cures that peculiar weak feeling caused by impure blood, and makes you feel young again. Munson's Emollient cures all chaps and cracked hands. You do not have to use it more than twice in any one case. These medicines have cured hundreds of cases of that very troublesome affection - Salt Rheum. Munson's Indian Blood Purifier is for sale by all dealers, at one dollar a bottle. Munson's Emollient cures Salt Rheum every time when used along with Munson's Indian Blood Purifier. Munson's Emollient is for sale by all dealers at 25 cents a bottle, or direct from the manufacturer, A. E. MUNSON, Chemist, Medical Hall, Garberry, Man.
Send in your name and address at once if you wish to get one of Munson's Family Almanacs. These almanacs are not an ordinary patent medicine affair; they contain sure cures and proper treatment for all the common ailments of both man and beast - not probable cures, but sure cures in every case.

W. G. FONSECA,
705 Main Street,
WINNIPEG, - MANITOBA,
Will furnish, in large or small quantities, to parties building, the celebrated
Mica Roofing.

IS THE MICA ROOFING A SUCCESS?
GURNEY SCALE FACTORY: - Well pleased with it. Will cover all our buildings with it. 60-2-y-m

GRIEVE & PHIPPEN
TAXIDERMISTS,
247 Main Street, Winnipeg.
We pay cash for all specimens of Manitoba
BIRDS AND ANIMALS.
Artificial Eyes for above for sale. 50-2-y-m

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.

PILES Radically Cured.
W. E. BESSEY, M.D., C.M.,
OFFICE: 1333 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

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

DRINK
THE "LIGHT OF ASIA" TEA
In one-pound packets at 50c. or a handsome canister of five pounds for \$2.50. The finest tea on the market. Sold only by
W. H. STONE, Grocer,
623 Main St., Winnipeg.
Send for samples free by mail. 45-y-m

"THE CUP THAT CHEERS."
J. E. ACTON
After the toll and worry of business the human system demands a refresher in the shape of a Good Cup of Tea. We have got a splendid line of
INDIAN and CEYLONS
of noted strength and purity on hand at present at very moderate prices.
JAPANS at 30c., 30c., and 35c.
INDIAN & CEYLONS at 30c., 35c. & 40c.
Write for samples.
J. E. ACTON,
Tea Merchant, 230 McDermott St., WINNIPEG.

A FORTUNE!

A nice thing to have these hard times. Well write us for circular and we will give you our terms to teach you Shorthand. You can start out on the road to fortune by becoming master of this art. Can be taught by mail, if you cannot attend our college. Address,
WESTERN : SHORTHAND : UNIVERSITY
326 Main Street,
WINNIPEG, 60-y-m MAN.

HIDES & SKINS
... HIGHEST PRICE AT THE ...
Tannery.
Robes and Furs of all kinds nicely dressed by the best process.
CHRISTIE & CO.,
62-y-m Lombard St., WINNIPEG.



GUNS, RIFLES AND SPORTING GOODS
SNOW-SHOES, MOCCASINS,
Hockey Skates and Sticks, Foot Balls, Boxing Gloves
60-Page Illustrated Catalogue on Application.
THE HINGSTON SMITH ARMS CO.
62-y-m Winnipeg, Man.

THE MARKET DRUG STORE
291 Market Street, WINNIPEG, MAN.
(Opposite Meat Market.)
Everything in the drug line. We especially solicit farmers' trade. Both personal and mail orders promptly attended to. Sole agent for "Indapo," the great Hindoo remedy for nervousness, general debility and kindred diseases. Use Gibson's Balsam for Coughs, Colds. For horses and cattle use only Eddington's Invariable Condition Powders. For cuts, bruises, sprains, use only Eddington's Liniment Iodide of Ammonia. C. M. EDDINGTON, Pharmaceutical Chemist. 60-y-m



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,
Paris Station P.O., Ont.
23-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.