# Farming World

A PAPER FOR

Farmers and Stockmen

## PATERSON'S Red Star Brand

Patent Wire-Edged Ready Roofing

ECONOMICAL-DURABLE-FIRE-PROOF

Introduced in Canada in 1880

Actual Sales in 1000, 85,000 Rolls



Leaky Shingle Roofs may be made Watertight and Durable, without removing the shingles, by covering the roof with Red Star Brand Ready Roofing.

Positively Vermin-proof, for Lining Chicken Coops Further Particulars and Samples by addressing:

The Paterson Manfg. Co. Limited

TORONTO

MONTREAL

ST. IOHN

HALIFAX

FOR SALE BY THE PRINCIPAL HARDWARE MERCHANTS

The Farming World

Confederation Life Building Toronto





## THE NEW GENTURY AMERICAN CREAM SEPARATOR

No screw bowl top. Few parts and easily cleaned. Has increased capacity. Easy to operate. Most simple and durable machine made.

Write for full description and prices to

#### C. Richardson & Co.

Box 1053

ST. MARY'S, ONT

AGENTS WANTED.

## The De Laval ALPHA DISC

Separators

All Other machines are Compared and Judged.

Are the Standard

of Merit by which

—OUR prices may seem higher than those of our competitors, but SUPERIORITY is remembered long after the price is forgotten.

Twentieth Century Catalogue can be had for the asking.

## Canadian Dairy Supply Company

327 Commissioners St., MONTREAL, QUE.

#### Business Muscle...



BELLEVILLE, ONTARIO

We teach full Commercial Course
Full Shorthand Course
Full Civil Service Course
Full Telegraphy Course

Our graduates in every department are to day filling the best positions. Write for Catalogue. Address,

J. PRITE JEFFERS, M.A., Principal

# Harness Dressing Oil

HAS NO EQUAL
Preserves the Leather. Leaves it with

a Rich, Black, Glossy Surface, also Soft and Pliable.

For sale by all Druggists and General Storekeepers; if not in stock, get them to procure for you.

Best Preparation in the Market

MANUFACTURED BY

The LYMAN BROS. & CO., Limited

SATISFACTION GUARANTEED



## The Farming World

#### For Farmers and Stockmen

VOL XIX

JULY 30th, 1901

No 5

### The Repression of Tuberculosis by Sanitation.

IKE the poor the question of tuberculosis is always with us. It is frequently to the front in the old land. In America no other agricultural question has received more attention than this during recent years, while in Canada it is repeatedly coming to the fore and claiming attention from the agriculturist. In Great Britain just now the phase of the question agitating the public more than any other is that of devising some scheme of insurance whereby losers of animals slaughtered because of the presence of the disease may be recompensed. A scheme of this kind is talked of in many of the larger centres where butchers who purchased animals from farmers may be reimbursed if any such are condemned by the city inspec-At a meeting of farmers and butchers held recently at Edinburgh to start some insurance scheme it was stated that out of 28,000 fat bullocks and heifers annually sold on the auction markets of that city only from six to eight animals per annum have been condemned because of tuberculosis. This is a very small proporand hardly worth going to the trouble of organizing an insurance concern to deal with.

In the United States several bulletins on the Tuberculosis Question have recently appeared, and it would seem as if the majority of the experiment stations there have felt it to be their urgent duty to make a deliverance on this subject. Nothing very new has appeared so far, and the experiments conducted have been a kind of repeti-tion of work already reported upon. An interesting and valuable bulletin has, however, recently appeared from Pennsylvania station. It deals with the question of the repression of tuberculosis by sanitation and sets forth some truths on the subject that every cattle feeder and breeder should make a study of. It has always been our view that the injurious effects from bovine tuberculosis could be contracted and the disease itself kept under control by the adoption of up-todate sanitary measures in connection with the housing of cattle, and therefore we gladly give space to the following synopsis of this work, which was undertaken to measure the effect of the good and bad stabling conditions on the progress of the disease:

"For the purpose of the investigation, two herds were established, of six cows each. Four cows in each herd were healthy and two cows in each herd were tubercular. One herd was kept in a roomy, hight, clean, and well ventilated stable. The stalls and partitions between the mangers in this stable were so constructed that the cows were kept apart from each other.

The other stable was small, close, poorly ventilated, rather dark and not especially clean. The cows here were not separated by stall partitions, and they were well fed from the floor of the passageway in front of their stalls.

This experiment continued for 513 days, or about 17 months, and at the close it was found that two of the originally healthy animals kept in the large, light stable, had contracted tuberculosis and the other two of the originally healthy cows continued sound. Of the four originally healthy cows in the small, dark stable. It had contracted tuberculosis. The progress of the disease in each infected animal in the dark stable was greater than in the infected animals in the light, airy stable.

It is concluded from this experiment that:

 Good sanitary conditions, cleanliness and the comparative isolation afforded by separate mangers out by stall partitions, have a decided effect in restricting the spread of tuberculsis in an infected herd.

2. A poorly ventilated and poorly lighted stable, and one in which the cattle come into direct contact, as is the case when there are no partitions between the stalls and mangers, is favorable to the spread of tuberculosis in an infected

3. However good the construction and sanitary conditions of the stable, and however good the care of the animals may be, the spread of tuberculosis cannot be altogether prevented if tubercular cattle and healthy cattle are kept in the same stable.

#### Losses from Manures

The following are some practical results and suggestions published by the New Jersey Experiment Station and based upon some experimental work on the above subject.

Solid manure exposed for all average of 109 days lost 37.6 pounds of nitrogen from every 100 pounds contained in it, 51.9 of phosphoric acid from every 100, and 47.8 of potash from every 100.

2. Solid and liquid manure combined, exposed for an average of 29 days lost 51 pounds of nitrogen from every 100 pounds contained in it. 51.1 of phosphoric acid from every 100 and 6.1 pounds of potash (rom every 100. More than one-half of the constituents in the total annual moreover product of the cow may be lost by an exposure of less than four months.

3. The amount of constituents !ost from the manure product made in one year from one well-fed cow would cost \$12.50 if purchased in the form of commercial fertilizer, and \$11.50 if purchased in the form of New York manure. If the constituents so lost were replaced by the purchase of commercial forms at present prices, it would increase the cost of milk of a 5,000-pound cow to 25 cents pet hundred; if replaced by the purchase of manure at present prices, 23 cents per hundred.

4. On the average for three crops, one of corn and two of oats, the increased yield from the application of fresh solid, and liquid manure, combined, was 3.38 times as great as from the application of the solid manure alone, though the same amount of nitrogen was applied in each

5. The nitrogen in the leached solid manure was on the whole more enditive than in the fresh, while in the leached solid and liquid combined, it was much less effective than in the tresh. The loss of the liquid portion very materially reduced the effectiveness of the manure.

 The residual effect of the nitrogen in yard manure was very considerable, and was greatest in the solid, fresh.

7. Nitrogen in the commercial products, nitrate of soda, sulphate of ammonia and dried blood, was more effective than in the natural manure products. Of these three forms, the nitrate was the most effective.

In these experiments for every 100 of grain derived from nitrate of soda, there was a gain of 73.3 for sulphate of ammonia and 65.3 for dried blood.

8. There was no increase in crops obtained from the residues of the nitrate, the ammonia and the dried blood, though in the case of the ammonia and blood, a very considerable portion of the amount applied was not recovered in the first crop. In the use of these products, the gains were confined to the first crop.

9. The relative value of nitrogen in the form of nitrate and in manures was clearly shown. The percentage increased yields obtained in the crop immediately following the application of the different products showed that if nitrogen in the form of nitrate, which was used as the standard, cost 15 cents per pound, the nitrogen in the manures would be worth relative to it, as follows:

Nitrogen.
Solid manure, tresh 2 07c per lb.
Solid and liquid manure.

tresh 6 99c per lb.
Solid manure, leached 2 41c per lb.
Solid and liquid manure.

leached 4.54c per lb10. When the residual effect of nitfugen of the manures is taken into
account, and no further applications
of nitrate are made, the values of
nitrogen in the manures relative to
the initiate are:

In solid manure, fresh 3 22c per lb. In solid and liquid man-

ure, leached 6.73c per fb. 11. Manures should be taken from the yard and spread upon the land as soon as possible after it is made, or kept moist and well packed in a covered yard. By this method of handling the maximum amounts of constituents contained in the original product are returned to the land.

The editor of Farming World, Mr. J. W. Wheaton, is at present in the West, having gone to Winnipeg, Portage la Prairie and Brandon, for the purpose of reporting the Agricultural shows now being held there. On his return, a full and impartial account of agricultural conditions and prospects in the Province of Manitoba will be given in these columns.

## Farmer's Telephones.

A movement that is spreading very fast in the United States and which is receiving some attention from farmers in Canada, is that of rural telephones. Wherever they have been established, life on the farm has become more enjoyable, and the farmer is brought in direct touch with the outside world. He is enabled to manage his business better, to buy when the market is dull and to sell By callwhen prices are brisk. ing up the nearest market place he can easily ascertain how the market for farm produce is and sell or not, as he wishes.

The following description of how the Farmers' Independent Telephone Co. of Rud's Mills, Ohio, was put into operation, given by a member, will be found of advantage to parties in Canada desiring to start similar runwements:

"In the first place we called a meeting of all the farmers who were interested in telephones, to meet on a certain date, and we drew up a constitution and by-laws and had them properly signed. We then proceeded to elect a president, vicepresident, secretary, treasurer, three directors and one general manager to hold office for one year. were ready for business. Then we As there were thirty-three of us and all adjoining farmers, we found it necessary to purchase a twenty-five drop switch board and place it in a most central locality and form lines to run in from each direction, limiting the number to 5 or 6 phones on each line.

These lines were built by the members of each line, who set poles and stretched the wire and divided the expense equally among the number on each line. Each line was to keep Builts own repairs.

The poles we used were mostly second-growth white oak and chestnut, being 21 feet high and having a cross arm on them, which gives better service than a bracket tacked on the We used the best galvanized side No. 12 from wire we could get, and the glass insulators cost about 1 each. We set poles about 75 apart. We used the ground cent sach yards circuit system, consisting of only one wire, which gives excellent service. Each individual member purchased his own flong distance telephone from a New York firm at the gost of 811 each, wholesale. Now as the cost per mile will vary greatly under different circumstances I will give an estimate. For one mile it takes 24 poles, 21 insulators and 170 lbs. of We get wire for 3c. per We have our central in WITE pound. charge of one of our members, who answers all calls and does all switching for the sum of only 15 cents per month for each member. We also have a business line to connect with Steubenville, a city of 15,000 population, which is only ten miles distant We get the said connection for 10 cents per message. time has come when the farmer can no more successfully conduct his farm business without the aid of a telephone in his home than can a business man in his city office. In this age of advancement and invention I am glad to see the farmers brought clos- . er together by the aid of the telephone

#### Ontario Sweeps the Board.

Remarkable Success of the Cheese Exhibit at the Pan-American.

A meeting of the committee appointed to provide a suitable exhibit of Ontario butter and cheese at the Pan-American, in competition with all America, was held on the 19th inst. at the Secretary's office, Brantford, at which were present Mr. J. M. Paget of Canboro', Chairman, Mr. H. Eagle of Attercliffe Station, and Mr. George Hately, Secretary The Secretary submitted a report which he had received from the Superintendent of the dairy division of the Pan-American of the judging of the cheese. The showing is a remarkable one. Not only does Ontario sweep the board with its export cheese, being the only classes in which it exhibited, but the exports are all of such high excellence of equality that each and everyone of the fifty-seven exhibits has been awarded a premium. The committee has decided to make an exhibit of August cheese at the September competition. -Export white cheese, G. E. Good-

cheese at the September competition.

The following were the exhibitors:
—Export white cheese, G. E. Goodhand, Milverton, 96.5 per cent.; W. F. Gerow, Napanee, 98.25; Alexander McGregor, Russell, 96.50; Robert Johnston, Bright, 96.50; Dairy Department, O. A. C., Guelph, 98; J.

S. Isard, Paisley, 97.25; A. E. Millson. Lakelet, 96.50; Thos. Greive. Wyandotte, 96; Fred Grothier, Escott, 97 25; John E. Stanton, Cotswold, 97; Joseph Cramer, Glenvale. 97; J. W. Clarridge, Glenhuron, 98; J. A. McIntyre, Palmerston, 96.5, Mary Morrison, Newry, 97; Frank A. White, Mitchellville, 96, E. N. Hart. Milverton, 98.25; N. S. McLaughlin, Heniryn, 97; R. R. Cranston, Lawrence Station, 96.50; Robert Smith, Monkton, 98.50; W. H. Vont, Jasper, 96.75; W. R. Kaiser, Lansdowne, 97, J. M. Smith, Long Lake, 96; Thos. McDonald, Morrisburg, 97-25; J. H. Davidson, Hammond, 97; Jas. R. Butgess, Bluevale, 94; W. P. Stacey, Fullarton, 97; W. A. Bothwell, Hick-son, 94.5; James T. Morrison, Woodstock, 96.5. Export colored cheese-Frank Travis, Cortland, 98, E. G. Marshall, Guysboro'. 94; I. M. Smith, Long Lake, 97.25; Johnson, Banner, 98.5; E. E. Kennedy, Welland, 97.5; Andrew Clancy, Rockwood, 98.75; J. D. Bird, Brig-den, 97.75; S. P. Brown, Birnam, 98; Dinwoodie, Lyons, 98.75; F. E. Kline, Lakeview, 98.75; John Francis, Courtland, 98.50; Geo. A. Boyes, Putnam, 97.50; Connolly Bros., Thamesford, 97.75; Warren Feely Cannamore, 98; D. M. Wilson, Rock-spring, 97.75; W. R. Kaiser, Lansspring, 97.75; downe, 96; Stewart R. Payne, War-saw, 96; M. Morrison, Harriston, 96; J. S. Isard, Paisley, 95.5; T. McConnel, Springhill, 96.25; James Craighead, Havelock, 96.25; Fred Grothier, Escott, 98.5; Frank A. White, Mitchellville, 97.25; John Connolly, Malcolm, Bruce, 98.25; Jas. R. Burgess, Bluevale, 97.25; J. W. Clarridge, Glenhuron, 97.50. Flat white 98.75 -Dairy Department, O. A. C. Guelph.

#### The Old Farmer.

A Southern paper tells a story of a Chattanooga, Tenn., merchant who installed a telephone near the front door of his shop and one morning stepped up to the transmitter to answer a call. Just at that moment a north Georgia farmer, who had never seen a telephone before, came into the place and inquired, "Wanter buy any aigs?" The merchant, who The merchant, who was intent upon getting his message, gazed abstractedly at the farmer and told the telephone, 'I can't hear you!" "Wanter buy any augs?" shouted the farmer, in a voice that made the windows rattle. Still unable to hear the man who was caliing him, the merchant again remacked, this time without looking at the farmer, "I can't hear you! Speak louder!" For the third time the farmer spoke, roaring out his previous question so loud that people several blocks away stopped and asked what the trouble was. This had the desired effect. The merchant left the telephone forgetting his cali, and turning savagely on the intruder, re-marked, "No, damn it, I don t want any eggs!" The farmer smiled, and as he went out was heard to remark softly, "I never did see one o' them deaf fellers but whut I could make 'em hear if I only let myself out.'

### Studies in Nature

## A Review of Insect and Bird Life on the Farm

Edited by C. W. Nash.

#### BIRDS OF THE ROADSIDE.

While I was standing near the roadside fence watching the sparrow bawk and wondering how the farmers would contrive to keep down the swarms of mice and rats that would arise when they had destroyed all the hawks and owis. I heard from some elm trees over my head a succession of curious gurgling and churking sounds that at last ended with a loud "kow, kow". These of course, I knew were uttered, by one of the cuckoos and apon looking up saw the bird. A long, slim, clean built figure, neatly but solerly clad from head to tail above, in dark olive grey, upon which a beautiful satiny sheen; beneath white, the outer tail feathers tipped with white, beak black, eylids bright scarlet. We have two cuckoos, summer visitors to this province. The black billed cuckoo which is the one I have just described and the yellow billed cuckoo, a much rarer bird. When seen in the trees, it is rather a difficult matter to distinguish the one from the other, but when flying the chestnut secondaries of the wing of the yellow billed are very noticeable and enable an ordinary observer to at once settle its identity. The black billed cuckoo is one of the very few birds which is increasing in numbers, and it is a good thing for us it is so for certainly no more that useful bird visits us than this. It is rather a late emigrant, seldom reaching us before the twentieth of May, by which time all our woodland birds have come so that its arrival does not often attract attention. In its movements it is remarkably quiet and unostentious, usually gliding through the bushes so noiselessly that its presence is quite unsuspected; when however, it utters its peculiar notes from amongst the foliage of some tall tree, it at once betrays itself, for there is no other sound in nature, like it, and I find that while but few people in the country know the bird itself, nearly every one knows its note, and they have often wondered what sort of a bird or beast it was that made such a queer noise in the bush. This is certainly a tribute to the bird's skill in hiding, for it is common enough and sufficiently noticeable to be easily re-cognized when once known. While with us the cuckoos feed entirely on insects, and strangely enough seem to prefer those which are as a rule re-jected by other birds. Tent caterpil-lars, cankerworms, the caterpillars of Tussock moth, codling moth, Camberwell beauty, and many others seem to be particularly enjoyed by the cuc-Several species of caterpillars are protected from the attacks of birds and parasitic insects by a thick covering of stout spines or hairs and these hairy or spiny caterpillars are but rarely eaten by most birds. Cuckoos seem almost to prefer them, and eat them whenever they can get :hem, so much so, that a cuckoo's stomach

is frequently found to be completely furred on the inside by hairs which have pierced the lining and have be-come fast. I have frequently seen cuckoos feeding upon tent caterpillars and have found their stomachs packed full of them and also with the larvae of the Camberwell beauty. Besides caterpillars these birds devour every other insect large enough to attract their attention, even the large Danaius butterfly that we see in such swarms in August and September, that however, is not an injurious insect, its larvae feeding entirely on the leaves of the milkweed (Asclepias). gether the cuckoos are exceedingly valuable birds to us, and should be protected with the utmost care; if not disturbed at their nesting places they soon gain confidence and like most other birds will return to the same spot year after year.

The well-known cuckoo of Great Britain has the same useful food habits as our birds, but it is in ill repute because instead of building a nest for itself and raising its family in seemly fashion, it deposits its eggs in the nests of other birds smaller than itself and leaves them to be brought up by foster parents, exactly in the same way that our cow bird does, and with the same result to the young of the tree owner of the nest, viz., their destruction. I have heard our cuckoos accused of the same thing, but have never seen it, though I have very many times found cuckoos' nests and have seen them feeding and caring for their own young, and it is worthy of remark, that the European Cuckoo's egg being remarkably small for the size of that bird, in fact but little larger than a sparrow's, seems to be naturally adapted to the nests in which it is to be deposited; while our cuckoo's eggs are of a size properly proportioned to that of the birds, viz., a little larger than tobins'

#### INSECTS.

In the early part of the season, insect life was less noticeable than usual, probably because many perfect insects were delayed in their emergence from the chrysalis state by the cold wet weather which then prevailed; the hot wave that has been and still is passing over us seems to have roused them to full activity and the hum of wings is heard everywhere.

Young grasshoppers and locusts are enormously abundant and riay become a pest unless their natural enemies increase sufficiently to check them. I have seen the same thing often before at this season, but when the birds had ceased feeding their young upon them, and the predatory insects had fattened on them their own peculiar parasites were able to keep them down to their proper number to preserve the balance of power.

The cherry and maple aphis are a

perfect plague in the neighborhood of Toronto, and I am now watching the outcome of a struggle for mastery between the aphides and the ladybirds in the trees surrounding my house. The ends of the branches of the wild cherry trees are brown and shrivelled up, looking exactly as if they had been scorched, the underpart of the leaves being covered with aphids. The abundance of these aphids has attracted to the place an immense number of fifteen spotted ladybirds. The larvae of the first brood of ladybirds have passed through the pupal stage and are now emerging as perfect beetles. these will I expect deposit eggs to produce a sufficient number of larvae of the second brood to entirely clear off the aphids. These struggles between the various forms of life are of the greatest interest to both the farmer and the naturalist particularly to the farmer, for it is upon the protective forces in nature that he must chiefly rely to preserve the fruits of his labour from the destructive forces.

### The Figt-Meaded Apple Tree Borer (Chryse-bothris Femorata).

Beetle about ½ an inch long. Color, greenish black; the head, legs, and underside of the body have a coppery lastre. On each wing cover are three smooth, polished raised lines, running lengthwise.

Larvae.—The first segments of the thorax much broadened and flattened, much wider than the rest of the body. Length one inch, color pale yellow.

The beetles appear about the end of May, and from that time to the end of July, may be found upon the apple trees, etc. Their eggs are deposited upon the bark of the trunk and limbs of the trees. As soon as hatched, the larvae bore into and feed upon the sapwood. On the approach of winter they hibernate. Early in spring they change to pupae, and remain in that condition for about two weeks, when the perfect beetles eat their way out. They live only one year within the tree, and are more apt to attack unhealthy, neglected trees than thrifty, healthy ones.

#### KEMEDIES.

The presence of the borer within the tree may be detected by the sawdust-like castings, at the entrance of its hole, or by the sap which flows from it. It may then be cut out or killed by probing with a piece of flexible wire.

To prevent the attacks of these borers, dissolve about one quart of soft soap in two gallons of water, and add to this a little lime and crude carbolic acid. With this paint over the trunks and limbs of the trees as far as possible. Three applications should be made. The first at the end of May, second in the last week of June, and the third at the end of July.

## The Sugar Beet World

Devoted to Sugar Beet Culture in Canada and Allied Industries. Specially Representing the Farmers' Interests

Edited by JAMES FOWLER

#### Beetlets

Don't forget to use your Cultivator on your beet fields.

The importance of thinning properly is not fully appreciated.

There is a tendency to leave beets in bunches.

In introducing this new crop you will have to put your very best land into the business.

Once established, the industry will prosper and the entire province feel the benefits directly or indirectly.

Our soils, especially in the western part of the province, are peculiarly adapted to the raising of sugar beets.

If you can, sell your beets according to the amount of saccharine matter they contain, it will pay you, if you have given the beets proper attention.

#### A Proper Contract.

The Department of Agriculture of the Province is preparing a form of contract to be used by the factories in making contracts for the growing of sugar beets with the farmer, if they expect to take advantage of the recently passed for the engagement of the beet sugar industry In this contract the farming interests are carefully looked after, and there should be no hesitancy on the part of those intending to grow beets, to signing the contract for the full period of three years, the time covered by the Act. Farmers asked to sign contracts should be particular to see that it is one approved by the Gov-

#### Make Haste Slowly.

Numerous projects for the building of sugar factories are in circulation. Some meritorious and others not worthy of serious consideration. One instance of the latter has recently come under our notice and shows the promoter's hand pretty freely. It is about as follows: The promoter about as follows: The promoter proposes to take \$100,000 stock, asks local people to take \$100,000 preference stock, the balance of the capital sequired to be raised by bonding the plant (which is supposed to cost \$600,000), for \$400,000, the holders of the bonds (which the promoter proposes to take care of) to receive an equal amount of common stock as a premium on bonus. This plan shows the inner working of some of the schemes, and, unless great care is exercised in connection with these matters some locality is sure to "get left," or will be misled into doing a lot of preliminary work with nothing resulting from it. Do not be led away with the idea that your own locality rossesses all the advanta ages and conditions favorable to the

erection and establishment of a successial sugar plant, and the other places none, that you have the only place on earth, and that capitalists will be "tumbling over themselves to establish a factory. Just bear in mind "there are . " and trat in nearly every place spoken of as a suitable location almost the same proposition has been made to them as to you. If you wish to secure a factory you must go about it in a business manner, and carefully in-vestigate every proposition, and you must be prepared to show that you have favorable conditions for the establishment of a business, and that you are willing to treat liberally with any party or parties who are prepared to invest their money. Do not show up some wild-cat scheme as being a more favorable offer or proposition than has been made you, but go into every prospect on its Make haste slowly, in this merits. matter All the factories talked about will not be built next year.

#### Fall Cultivation.

If the beets follow fall wheat, the land may be plowed shallow, just covering the stubbles, as early after the wheat is harvested as possible and harrowed, causing the vegetable matter to decay and seeds to germinate Late in Autumn, crossplow to a depth of nine inches, following in each furrow with a subsoil plow. loosening (not turning up) the soil several inches deeper. land, thus plowed and loosened, to the winter frost, which through alternate expansion and contraction, becomes disintegrated and mellowed. But in case potatoes or fodder corn precede the beets, early autumn cultivation of the potato ground hould not be necessary, while that of the corn land may be modified for the purpose of disposing of the corn Late deep plowing is an essential part, however, of fall cultivation of sugar beets on any soil, but subsoiling, as above described, may be omitted in exceptional instances where the subsoil is naturally free and open.

In case it has not been practicable to apply farm-yard manure to the crop preceding sugar beets, then the manure should be drawn out upon the stubble land and just covered with the early autumn shallow plowing which is mentioned above.

## Well Christened

Mrs Molligon—And shure have yez had the baby christened yit? Mrs Blennigan—I should say so. The little feller was cryin' the other day, and Pat couldn't make him stop, so he went and played the hose

on him -- Yonkers Statesman

#### Beet Sugar Bylaw.

Bright Prospects of a Factory.

A \$40,000 Bonus and a Guarantee of 5,000 Acres of Beets for Three Years.

Mayor Ribble has not been idle if we have not heard much from him for a few weeks regarding the prospects of the beet sugar factory for Dresden. He has been quietly working in the interests of the town and has finally got things in shape to make a proposition to the people of Dresden and vicinity, which is sub-stantially as follows: If the people of Dresden will give a bonus of \$40,-000 and guarantee to furnish 5,000 acres of beets to the factory for three years, the mayor has a company of capitalists ready to establish and operate a most modern beet sugar fac-The consensus of opinion is that there will be no trouble in carrying the by-law in Dresden, and it is hoped that the farmers of the vicinity can be shown the advantage that will accrue to them by the es-tablishment of such a factory here and co-operate by guaranteeing the acreage. It will be necessary to at once commence holding educational meetings to instruct citizens and farmers .- Dresden Times.

#### The Industry is Growing.

"There will be over 40 beet sugar factories in operation this year in the United States. They have thrown out the imported machinery already, both in the field and factory, and are essing. American inventions that are so much superior that we expect a great development in the business. The sugar men have borrowed an idea from the oil companies. At one of the oidest factories in the United States in Utah, they have built three mills around the factory, one of them 23 miles away, from which they run the mice from the factory in pipes to the central station. Eastern capital is rapidly developing the beet sugar the dustry in the arid tates through irrigation. In the Arkansas valley for \$1,000,000 factories have instance, been put up."

#### Pulp Feeding.

Twenty-six cars containing 1.100 head of cattle arrived in Chino for pasturage and fattening. They belong to O. B. and Charles Fuller, and came from their range at Tucson Arizona. Another consignment will reach here in a few days. They will be put on the hillrange until the beet pulp is ready for feeding, when they will be put on the 1 do intil they are fat enough for the market.—Chino Champion.

### Experiments to be Made at Toronto Exhibition.

Different Stages in the Growth of the Vegetable to be Fully Demonstratei-How Saccharine Matter is Produced-Experiments Throughout the Province.

In connection with the establishment in Ontario of the sugar beet industry, which, it is anticipated, will greatly increase the return to the farmers from land shown to be adapted to the cultivation of the beets, Prof. A. E. Shuttleworth, of the Agricultural College, Guelph, is conducting, for the Department of Agriculture, a series of extremely interesting experiments. At the forthcoming Exhibition there will be shown a model beet sugar plot, together with all the necessary implements used in the cultivation of the sugar beet. A third of the plot was planted early in May, and at the exhibition season the beets in this portion will be shown in full growth. Another third will be planted to-day, and the beets will be shown at the Exhibition standing in rows, giving the distance which every beet should The remaining third, which OCCUDY. will be planted in a few days, will be shown at the Exhibition with the beets standing thickly together in rows, and a demonstration will be made as to how the beets should be thinned out to show the best returns in saccharine matter. It is anticipated that hundreds of farmers will attend these demonstrations.

If Ontario is to succeed in growing sugar beets the nature of the vege-table must be understood. Beets growing far apart make starch, and continue their growth far into September. Beets planted to produce sugar must be so thinned out that about the 1st of September they will begin to crowd each other in the patch, thus preventing growth, and insuring a ripening of the vegetable, which in the bright sunshine and cool nights of September makes sugar in these conditions very rapidly.

Another branch of the experiments of the greatest interest is the cultivation of fifteen different sections throughout Ontario of sugar beets, following upon the application of farmers for the holding of the experi-The fifteen centres are:-Alvinston, London, Waterford, Simcoe, Dunnville, Cayuga, Berlin, Clinton, Mount Forest, Walkerton, Whitby, Port Perry, Lindsay, Peterboro' and Belleville. In each of the centres there are twenty-five plots of one-quarter acre each, representing the various qualities of soil and conditions of culture. In the latter part of August a sample of ten beets is to be taken from each of these 375 plots, and one of the ten will be brought to the Toronto Exhibition. The beets are to be analyzed to discover how they stand before their sugar-making period begins. They have all been cultivated according to the directions sent out when the farmers applied for the seed. Inspectors have seen that they were properly thinned, and at the time of thinning the plots were scored, and marks given for the cleanliness of patches and methods of thinning. Cn the 20th of August the patches will be again inspected, when they should be at their full growth and the ground should be covered with foliage. Marks will then again be given for their condition. Samples will be taken for chemical analysis three times during the autumn, so that the increase in sugar qualities to the maximum may be ascertained, and early in October parties will be sent out by the department with beet pullers and scales to lift and estimate the yield per acre of the experimental plots In estimating the respective value of the experiments, a maximum of 40 per cent. will be allowed the cultivation, and 60 for the yield in quantity of sugar contained and purity. It is understood that a silver medal will be presented by the

Exhibition to the test plot.

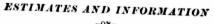
With respect to the commercial value of all this, Prof. Shuttleworth is no longer in doubt. A sugar beet

factory is now being built in Wallaceburg. Farmers adjacent, to centre have agreed to supply this season 20,000 tons of beets to Lansing beet sugar factory of Michigan, and they are to be shipped to Michigan, yielding the farmers three dollars a ton. Next year the Wallace-burg factory is under contract to pay four dollars per ton, and will prob-ably require from 50,000 to 60,000 tons of beets. The location of the The location of the other factories, in all probability, will be determined by the result of the experiments now being made in beet culture. Although it is not in the line of his researches, Prof. Shuttleworth believes that in Onatrio beet sugar can be produced from beets more cheaply than it can be imported, and that the industry will be second only in importance to dairying.

## From Dresden.

Reports from the town of Dresden point to the establishment of a sugar factory there. Negotiations are now going on with a number of American capitalists. Mr. P. H. McEwen, of the Dresden Times, writes us as fol-"You will be interested lows: knowing what is going on in this dis-trict. We have for some time been giving considerable space to this subject in our paper, and I believe with beneficial results. I am quite confident that the result of negotiations now pending, will be the establishment of a factory here. The capitalists for the most part are Americans, and the present plan outlines the establishment of a sugar factory, including a large cold storage plant, the entire cost to be in the neighborheod of \$700,000. Many acres of beets are being grown experimentally by farmers in this vicinity this year, and where proper cultivation has been given a splendid showing is made. The education thus given the surrounding farmers is having a teneficial effect. I am much pleased to find such an excellent Beet Sugar department in your journal."

## BEET SUGAR MACHINERY





BEET SUGAR MACHINERY, BEET CULTURE, ETC. HYDRAULIC PRESSES FOR CIDER PRESSING, ETC, FILTER PRESSES FOR BEET SUGAR FILTERING, CREAMERIES, ETC.

Send for our Catalogue

## William R. Perrin & Company

122 Church St., . Toronto, Ont.

#### THE FARMING WORLD

#### Neglect in Thinning.

By Thissell

If we could only write or say something that would convince sugar beet growers that they do not attend to this part of the work as faithfully as they should do, it would mean thousands of dollars more valne in the crop every year than is got for it now.

We say the proper time to thin is when the plant has four leaves, or is about two inches high, if there are no cut worms or other good reasons why we should delay for a time to see what part of our crop our enemy will claim. As we go over the field. we find those that are all the way from, say four inches high to a foot high and often with a very large percentage of weeds or grass in with and when the work is done beets and the single plant stands alone it has become a slim spindling, often nearly lying down simply because it has not strength enough to stand

Its growth is often seriously empled with such course of treatment and the future value of the field is diminished many dollars, often much more than it would have cost to have put on more help and did it at about the correct time.

Sometimes we find cases where the owner wishes to save expense and thinks his own help can manage it all right, and as it's often his crop he cannot realize the actual result of the neglect he cannot see

Cases have arisen where the sugar company has advised crowding the work of thinning and offered money to do it, knowing that five dollars acre spent at the right time would bring very much more at hervest time and it is not always we can make it so plain that the grower accepts the proposition. He don't want to use up his crop, it grows by taking money in advance (and there are others who want all the advance money they can get, even though they do not need it.) He thinks he can soon do it. as his own help is good and they are spending all their time in the field.

This neglect of thinning is the most serious defect in the growing of the crop that we have so far. Neglect of cultivating may come in next, and we find cases where growers have been so anxious to do the thinning, that they wanted to do it before

cultivating the crop, whereas, the crop should be cultivated as soon as up and again just ahead of the bunching and thinning. This keeps it in good condition. Some of the fields we see would be benefitted by being blocked some days ahead of thinning as it would take out of the mass of weeds and beets a large share of the overcrowded vegetation and thus help matters some, but we prefer to see the field where the crop was thinned at the correct time and no weeds are sharing the substitute of the soil with the beets—Machigan Sugar Beet.

#### A Hopeful Sign.

A very hopeful sign for the future American beet sugar industry is found in the evident belief on the part of the projectors of many of the factories that the industry has long since passed the experimental stage This is evidenced by the large, sub-stantial buildings, and the arrangement of machinery so as to admit of readily enlarging the plant. With few exceptions, the factories built within the past ten years have been designed with a view of doubling their capacity, 350 or 500 tons of beets having been considered an economical starting point. Two of the old factories have been repeatedly larged, two factories have doubled and one has nearly quadrupled its The beet sugar building of capacity. to-day is lofty, and is prepared for almost any emergency that may arise on the development of new processes and new machinery.

Experience has demonstrated that the greatest problems in the American heet sugar industry are to be found in the field rather than in the factory. It should not be assumed from this statement that suitable heets are difficult to grow in satisfactory quantities; the problem is to convince the farmer that with persistent effort and experience he will find sugar beets a surer and more profitable crop than many others.

Of the factories built in this country within the past few years, the most successful, mechanically considered, have been designed and built by Americans or by sugar engineers of foreign birth who have been long identified with the sugar industry in the United States—Beet Sugar Gazette

#### Alberta Next.

The Beet Sugar Gazette, of Chica-

go, has the following item:
"Mr. C. A. Magrath and Mr. Eliott T. Galt of Alberta, Canada, have been on a visit of inspection to the factory at Lehi, Utah, where they were the guests of Mr. T. R. These gentlemen are studying the beet sugar industry with a view to building a factory at Magrath, Canada. The soil in that locality is said to be of a black loam. and is from two to six feet deep, and there are tens of thousands of acres suitable for beet culture. have been grown there as an experifor several years, and some sent to the Lehi factory last season tested 3 or 4 per cent higher in saccharine matter than did the Utah beets.

#### Employment of Labor

The introduction of the beet sugar industry into this country means the employment of a large amount of labor, directly and indirectly. The raising of sugar beets requires considerable more labor than any other product, and it is labor of such a kind and extent that no farmer doing considerable business could perform more than a portion of it. The farmer will receive enough from his beets to be able to have the work done, so that the raising of beets required to supply a factory will call for the exployment of a large number of laborers now engaged in other ways. A factory itself will require a large number of hands, and in addition will call for the employment of a large number of hands in other branches of industry. For instance, fuel is used in very large quantities, limestone will be required to be mined, transportation will require the employment of many railway hands, the wagon maker, the harness maker, the farming implement maker, the cooper, who makes the barrels, the lumberman who gets out the material for barrels, machine shop and brick makers will benefit. In fact, you can hardly mention one single line of business but what will be benefited directly or indirectly by the establishment of even one factory. What will be the result when we manufac-ture all our own sugar? There are great possibilities in the beet sugar industry



\*\*\*\*\*\*\*

## The Kilby Manufacturing Co.

Founders and Machinists

Corner Lake and Kirtland Streets. CLEVELAND, OHIO New York Office: Kirtland Streets.

Builders of Complete Machinery for Beet, Cane and Glucose Sugar Houses and Refineries.

## The Agricultural Gazette

The Official Bulletin of the Dominion Cattle, Sheep and Swine Breeders' Association, and of the Farmers' Institute System of the Province of Ontario.

#### THE DOMINION CATTLE, SHEEP, AND SWINE BREEDERS' ASSOCIATIONS.

Annual Membership Fees :-- Cattle Breeders', \$1; Sheep Breeders', \$2; Swine Breeders', \$2. BENEFITS OF MEMBERSHIP.

Each member receives a free copy of each publication issued by the Association to which he belongs, furing the year in which he is a member. In the case of the swine Breeders Association this includes 2 copy of the Saine Receivers Association is allowed to register plas at 50c, per head; non-members are charged \$1.00 per head; Association is allowed to register plas at 50c, per head; mon-members are charged \$1.00 per head; shociation is allowed to register sheep at 50c, per head; while non-members are charged \$1.00 per head; and the stock he has for sake are published once a month, Over 10.000 copies of this directory are mailed monthly. Copies are sent to each Agricultural college and each Experiment Sainon in Canada and the United States, also to prominent breeders and probable buyers resident in Canada, the United States and elsewhere.

In the state of the Sainon in Canada and the Canada state of the Sainon in Canada, the United States and elsewhere.

In the state of the Sainon in Canada is the Sainon in Canada, the United States and the Breeders' Association will only be allowed to advertise stock corresponding to the Association to the Sainon in Canada, the United States and the Dominion Sheep Breeders' Association, and to advertise which he must be a member of the Dominion Cattle Breeders' Association, and to advertise which he must be a member of the Bominion Sheep Breeders' Association, and the Canada sheep the control of the Breeders' Association, and the Sainon is the Canada sheep the Canada sheep Breeders' Association, and the Canada sheep Breeders' Association, and the Sainon is the Breeders' Association and the Sainon is the Breeders' Association, and the Sainon is the Breeders' Association, and the Sainon is the Breeders' Associatio

#### FARM HELP EXCHANGE.

The Farm Help Exchange has been started with the oldeet of bruigin together employers of farm and domestic labor and the employers. Any person wishing to obtain a position on a farm or dairy, or any person wishing to employ help for farm or dairy, is requested to forward his, or her name and full particulars to A. P. Westervelt, secretary, Live Stock Associations, in the case should be given; perticulars as to the kind of work to be done, probable length of emgagement, wages, etc. In the case of persons wishing employment, the following should be given; experience and references, age, particular department of farm work in which a position is desired, wages ext. These names when the probability of the control of the following should be given; experience and references, age, particular department of farm work in which a position is desired, wages ext. These names when the probable length is control of the cont

#### Help Wanted.

A first class butter maker wanted to manage a large private dairy. Refer-ences required. No. 841. ences required.

Boy wanted to do chores around a farm. Wages \$10 a month and board. No. 838

Good chicken plucker wanted. Good wages paid the right person. 839

Man and wife wanted to work on farm in Halton County. Good wages paid to good man. Wife to act as housekeeper. Only owner and bired man to work for. Good home or reliable people. No. 840.

#### Situations Wanted.

A capable man of forty-five years is open for an engagement in October next as manager or superintendent of a stock farm. Has also a fair knowledge of poultry, bees and fruit growforeman. No. 911

Position wanted on a farm or ranch in Manitoba or British Columbia, as foreman. N. 941. b

Position wanted in Ontario or the West by young man 20 years of age on a farm where he can gain exper-ience. Has always lived on a farm

where a good deal of butter is made: good milker, and handy in carpenter line. Can give good references if ne-No. 940

N.B.—Where no name is mentioned in the advertisement apply to A. P. Westervelt Parliament Buildings, Toronto giving number of advertisement.

#### Farmers' Institutes.

Under this head the Superintendent of Farmers Institutes will cach week publish matter relating to Institute work. This will include instruction to secretaries and other officers, general informations of the Institutes and Institute work, suggestions to the Institutes and Institute work, suggestions to Institute and Institute work, suggestions to the evidence of the evid also from time to time review some of the twartous Agricultural Colleges and Experiment Stations of Canada and the United States. In this way he hopes to give a finite members some valuable agricultural information of the Institute members some valuable agricultural information of the Institute members some valuable agricultural information. If any membershap time desires further information along any of the lines discussed, by applying to the Superintendent he will be put in direct communication with the Institution that has carried on the work.

Superintendent Farmers' Institutes.

#### North Grey Women's Institute.

The first annual meeting of the North Grey Women's Farmers' Institute was held in Kemble hall on June 11th, which was well attended.

In order of business, the President, Mrs. Jas. Gardiner, gave a short report showing that five regular meetings had been held, and fourteen excellent papers had been given by the different members. As our Institute was just organized last Septem-ber, the success of the work has gone beyond our expectations. The members have found the meetings both interesting and instructive. The Institute promises to become one of the most useful organizations for the bettering of our homes and the spreading of knowledge pertaining to domestic science. In view of the fact that this is our first year, and that the work has been new, both to officers and directors, we feel pleased with the results, and are encouraged to look forward to greater success in the future. The Secretary's report showed a membership of sixty-six,

and also a branch Institute at Bognor, being carried on with progress and enthusiasm. After the auditor's report we elected a few new directors, striking off some of the old names. The old officers were all reelected.

#### MISS ROSE SPEAKS.

Miss Laura Rose, Instructor of the Ontario Agricultural College, Guelph, was then called on for an address on Bread and Butter Making, This lady has such a pleasing manner, and was so thoroughly in earnest, that her remarks were listened to with the closest attention. She discussed the kind of flour to select for family use, the making of yeast, the setting, kneading and baking of bread, and the care of bread after it is baked, and also the care of cream and making of butter. This was followed by a discussion in which a good many of the ladies took part. Meeting then closed, agreed to meet again on the first 'ay of August, for which a good program is being prepared.

MRS. WM. McGREGOR, Secretary.

#### Annual Report of West Huron Women's Institute for 1900.

The annual meeting of this society was held on June 19th at Nilo, with a fair attendance of delegates. The president Mrs. E. Elford, of Holmesville, was in the chair, and gave an excellent address on the aims and objects of Women's Institutes. The secretary, Mrs. Colin Campbell, of Godrich, presented the following report: At Goderich, on December 28th, last, a meeting of the ladies of West Huron was convened, for the purpose of organizing a Women's Institute. siderable interest was manifested and a partial organization was effected. On February the 5th another meeting was called, officers were elected and the Women's Institute of West-Huron, was fairly launched. The success of the work has gone beyond our expec-The members have found the meetings both interesting and instructive, and the Institute promises to become a most useful organization for the bettering of our homes and the spreading of knowledge pertaining to domestic science. At our first neeting twenty-seven names were handed in for membership and the list has steadily increased until now we have a membership of eighty-two. During the past five months thirteen regular meetings, with an average attendance of fifty-six, have been held as follows: Four at Goderich, three at Holmesville, three at St. Helens, two at Wingham and one at Kintail. For the better carrying on of the work. branches have been organized at Gode-Wingham, Holmesville, Kintail and St. Helens. The following addresses and papers have been read by the members

Women's Institute and poultry raising, Mrs. E. Elford; Household Eco-

nomics. Home Influence and the art of Bread-making. Mrs. Colin Campbell, should girls have an allowance? Miss Mary Salkeld, decorating a country home and Women's Institute, Mrs. D. Todd, the aim and object of Women's Institutes. Miss McDonald, how we may lessen our household duties, Mrs. Bichan, care of poulitry, Mrs. Church, reading, Miss Green, a happy home, Mrs. J. Linklater. In view of the fact that we have not yet been organized six months, and that the work has been new hoth to officers and directors, we feel pleased with the results, and are encouraged to look forward to greater success in the future.

Annie E. Campbell, Secv.

#### East Lambton Farmers' Institute Annual Meeting

To the members of the East Lambton Farmers Institute. In presenting this, our annual report, we beg to say that we have had a very successful year, our membership having increased to a considerable extent, now numbering 206. This, although above any of the past years, is by no means what it ought to be, our aim should be doubling our membership at least, which we think can be done by a little extra effort on the part of each director.

We field during the year seven meetings (incliding the annual meeting which was field at Warwick Village) Viz Thedford, attendance 125. Wyoning, 90. Warwich Village, 150. Camlachie, 150. Inwood, 270. Alvinston, 115. The number of addresses given and papers read were 4s, which were listened to by 900 people. This is considerably in excess of any previous year. Our finances, as you will see by the financial report is in good slape, and we ought to be in splendid trim for the ensuing year.

Signed.

Macalpin, Secy Wm. Wright, Pres

## Extracts from a Letter from Miss Maddock

Who is Doing Institute Work in Manitoba.

"The people of Manitoba—officers of Institutes, speakers and all included—are more easy going than in Ontario. For this reason there is not the interest taken in the work that there is at home. Still, in Southern Manitoba the meetings have been fairly well—attended, averaging about 50.

GOOD CREAMERIES. — THE BABCCCK TEST

"There are a number of very fine creameries in this section, so that my dairy talk is wanted in almost every place. The question of the test comes up at nearly every meeting. The patrons complain that their tests vary too much. As it happened, the same question came up in Bruce County last winter, and as far as we could find out, the trouble was due to careless handling of the milk, improper stirring and careless-

ness in separating. I told the peo-ple of some of the experiments we have tried in mixing milk, first by pouring from one vessel to another, and secondly, by stirring with a dipper in the ordinary way. The result seemed to surprise some of them, while others said their tests had varied until they commenced mixing the milk thoroughly as I described They said that since that time their tests hardly varied at all. So that by taking up ones and other questions that trouble the people, we have some lively discussions at some of our meetings

#### NO EVENING MEETINGS.

"We only have one meeting a day, and that never lasts two hours, as it is very hard to get the local men to take part, so that we are having a comparatively easy time."

#### WOMEN'S INSTITUTES

"I nearly always say something to the women on Women's Institutes (I cannot keep from (I), because there is a great opening here for woman's work. I think before long they could be organized all over this Province.

#### GOOD HARVEST EXPECTED.

We are having a very pleasant time My colleague is very kind. He has taken me out through the country a great deal. There is the prospect for a wonderful harvest this year. The people are delighted. I think the prospects are almost too good for our work. They think that as long as they are making morey out of wheat it is entirely unnecessary to find out anything along other lines. Still, the work has been very encouraging in our district. We expect a big meeting in Brandon on the 20th. We are not sure yet when we can return."

## How to Make the Women's Institute a Success.

By Mrs. C. Nicholson, West Bruce.

In organizing the Women's Institute. I think the one thought upperin the minds of those taking part was, that through these meetings, the women of the community would be brought together, become better acquainted and be more in sympathy with each other. In the United States they have their Women's Clubs, where they meet and read papers on various subjects of interest. followed by discussions and exchanging idea. Mrs. Hoodless, of Hamilton, in a paper on Organization in the Rural Districts, says: of the saddest features of social life in the country is the lack of sympathy and mutual helpfulness between women of a community. meeting here as we do every month, we are afforded an opportunity of being helpful to each other. wish the meetings to be a success and a help, we should each feel our personal responsibility in trying to make them such. We converse freely in our homes, why not do so here? I know that in quiet talks with those who have had experience in house-keeping and the care of children, one

may be greatly belped. Surely then, when a number of us meet and exchange ideas we cannot us meet but feel that organizing a Womans Institute was a step in the right direction. Let each member, then, feel it her duty to make the meetings as interesting and profitable as possible. It is good to read suitable selections, but when possible it is well to write up a paper on the subjects chosen by the committee, or on any subject you may wish, as in doing so the intellectual faculties lying dormant are awakened, thus bringing out the good that is in us. When good thoughts come to us, if we write them on paper and read them at these meetings, it helps keep them in our memory, so that we are benefited as well as trying to help others.

J. E. N.

## The International Live Stock

The second International Live Stock Exposition to be held at Chicago from November 30th to Dec. 7th next, promises to be greater, grander and more comprehensive in all its departments than the initial Exposition last year. Buildings better adapted for its use are in course of construction. An immense brick building 320 ft. long by 150 ft. wide, equipped in the most modern manner, is being constructed for the use of the pure bred show cattle of all breeds, while another building 750 ft long by 150 ft, wide is being built for the display of pure-bred sheep and hogs. The mammoth Pavilion at Dexter Park will be used for displaying the draft horse exhibit and other magnificent specimens of all breeds of live stock. Great care is being taken in all of these buildings of everything looking to the comfort and convenience of exhibitors and visitors. Improved railway and street car service will receive attention. The Na-tional Live Stock Association holding its annual convention at the time of the Exposition, with papers and short talks by the ablest men in the live stock industry, from home and abroad and twenty American Live Stock Associations also holding their annual meetings at the same time, will indeed make this an eight-day educational course in the breeding, raising, feeding and finishing of live stock. The railways will grant greatly reduced rates from everywhere

#### He Was Holding the Form

It was late and getting later. However, that did not stop the sound of muffled voices in the parlor. Meantime the gas meter worked steadily.

The operator endured it as long as he could and then resolved on heroic measures.

"Phyllis,"he called from the head of the stairs, "has the morning paper come yet?"

come yet?"
"No, sir." replied the funny man
on the Daily Biggle, "we are holding
the form for an important decision."

And the pater.

And the pater went back to bed wondering if they would keep house or live with him.

#### A Five Acre Poultry Farm

The size of a poultry plant is not so much measured by the amount of land as it is quartered upon as the actual results obtained. We have visited large farms occupying but a few acres, and small affairs on ten times the amount of territory.

The beginner if he is blessed with sufficient capital, is apt to purchase from fifty to one hundred acres, and put up buildings to quarter a thousand hens. Folks passing say it is a huge affair, but an investigation proves that Jones, across the way, is doing a better business with one hundred well-kept fowls.

The writer for a number of years has carefully noted the work of small forms, kept a memorandum of the expenses and receipts-and had the sadisfaction of learning that for poultry for profit a well-managed five acre plant not only proved less risky, but more profitable, than many larger ones

Take the larger plants in the country, farms containing twenty-five, fifty, and as high as one hundred acres each, and measure off the actual amount of land occupied by the business, and, in nine cases out of ten it will be found that the actual poultry part can be included in a five-acre

If out of five acres of land one acre is used for dwelling, barn for a horse and cow and general house-yard, four acres will remain for the poultry Scattered over these four acres could be planted four hundred fruit trees with ample open space for the poultry buildings, the runs to be in this planted orchard. Three hundred would thus have comfortable quarters and large range, and enough room remain to run a brooding house, and to scatter small buildings and coops for growing stock

Such a farm could easily be managed by one man, or a man and a boy. A combination of egg, broiler and fruit-raising is one that brings good returns. The expenses would not, necessarily, be heavy, and the work would be both pleasant and profitable

What would be the profits?

Well, a good man can make, clear money, from nine hundred to one thousand dollars a year.

Suppose we figure it out:

We will say the three hundred hens will lay six bundred eggs a week during the months of July, August, September, October, November and December. That is allowing only two eggs a week for each hen. Many hens lay better than that during those months; but we have the coming moulting season in mind. When a retail market is established, the price will run about two cents per egg, giving a total of three hundred and twelve dollars for the six months' product. The cost of feed during that time will amount to one hundred and fifty dollars, leaving a margin of one hundred and sixty-two dollars. So much for eggs.

During January, February, March April, May and June, we will run the incubators. We will credit the hens with but one egg each per week during those months, which, in the twenty $\sin x$  weeks, will amount to seven thousand eight hundred.

Counting that it takes four eggs to make up for one broiler, we will be able to produce about two thousand broilers, and, taking into considera-tion the cost of eggs, fuel, feed for chicks, etc., we will have, say, twenty five cents profits on each bird when marketed-making a profit of five hundred dollars for the crop.

Those who have kept a careful account of the manure crop say the droppings from a hen is worth fifty cents a year, but we will count it twentyfive cents, making seventy-five dollars for that item.

Now in all this we do not allow for male birds, counting the 300 fowls as hens. As we do not take into consideration the sale of roasting fowls, the price of males and reproducing the stock must come in from the receipts of the sale of roasters, and if rightly managed it will offset that cost.

Authorities on fruit culture say a fruit tree in bearing is worth one dollar a year, so we will place the figure at half, giving the yield as worth two hundred dollars for the four hundred

#### RECAPITULATION.

Eggs, profit										\$162
broners, profit										500
Droppings.										75
Fruit Marketed	• •	. ,			٠.					200
Total									•	
1 Otal	 									V0.27

These figures are certainly not extravagant. The expenses are placed at a good rate, and the products and profits at a low amount. Yet, with all that, a man to accomplish even what we have mapped out, must be wide awake and energetic. He must watch the details, never slight his work, and endeavor to profit by his experiences. And we believe these fi-gures can be bettered as experience grows .- Farm Poultry.

#### The Feeding of Pigs.

Mr. Sanders Spencer, the well-known English authority gives the following revised set of answers to old questions on pig management:

What do you consider the best

food for an in-pig sow?

In the summer grass, lucerne, tares or clover, with a few beans or peas, until she is within about a week of farrowing, when randan or sharps and bran should be substituted.

2. What is the best food for the boar?

In summer lucerne, clover or tares and in the winter half of the year, roots, with a few beans, peas or mixed meal added, according to the amount of work required of him.

3. What do you consider the best food for the sow and litter?

Until the little pigs are three to four weeks old, I like to feed the sow on about one-fourth bran and threefourths sharps, or randan, after that time, if the pigs will stand it without scouring, some mixed wheat, barley and pea meal may be added

4. What food do you prefer on which to wean the litter?

Continue the above and a little whole wheat with skim or separated milk.

5. What do you consider the best food for pigs from twelve to twenty weeks' old?

A continuance of the above, with a gradual increase of the meal, until the pigs are four months old, when the food may consist of nearly all meal. In the winter time a few cut roots or steamed potatoes are good; summer lucerne or other green food will be much appreciated by and prove of benefit to the pigs.

6. What do you consider the best food for fattening pigs?

Barley meal is the best single food, but I prefer a mixture of meals, composed of barley, wheat, peas, and a small proportion of maize, cocoanut meal, palm-nut meal, rice meal, and even ground linseed.

7. Do you like as pig food beans, peas, wheat, and barley, and in what order, and whether whole or ground?

I prefer them ground, and in the reverse order to that given. I do not remember ever holding the opposite opinion, as given in the "Book of the Pig.

Wife-"We have been twelve years, and not once in that time have I missed baking you a cake for your birthday. Have I.

Hubby-"No, my pet. I look back upon those cakes as milestones in my life."-Ex.

#### The Model Dairy

Report of the Model Dairy at the Pan-American Exposition, giving totals of each herd complete from the commencement of the test, May 18, up to and including the week ending July 16th, 1901.

Name of Cow.	Lbs. Milk.	Amount of Butter.	Value at 250. per 1b.	Value Hay fed.	Value Silage fed.	Value Grain fed.	Total Cost of Feed.	Profit.
Shorthorn. Holstein Ayrshire Jersey Guernsey Brown Swiss Red Polls Polled Jerseys Dutch Belted	18505.6 1654.2 12997 7 13716 9 15429.8 14380.1 9855 5 11240.3	616.65 670.19 687.32 662 63 698.99 632.44 648.80 516 99 429.60	154.16 167.50 171.91 165.68 174.80 138.c9 162.18 129.17	12.76 11.85 12 27 10.95 15.59 18 65 12.12 14.85 12.62	11.98 12.82 11.72 11.53 9.54 9.33: 11.21 7.65 9.01	45.01 42.67 39 64 38 89 37.73	69.78 67.34 63.63 61.37 62.86 69.47 64.22 49.57 58.31	84 36 100.16 108.28 104.31 111.94 88 62 97 96 79 60 49 21
French Canadian.	12320 6	537-33	134.42	10.74	11.36	33.15	55 25	79.17



## Ideal Farm Homes

One of the most substantial houses which we have to present is our number 11, to be seen on this page. We show here the perspective view and the first and second floor plans. This house takes a long and narrow lot, such as one often wants to build on in a city, or any place where land is expensive. The rooms are, for the greater part, square and well arranged.

As will be seen by consulting the floor plans, there are five rooms below and four above, not counting the bath-room or the alcove, the latter being quite a room in itself. In many of the plans the bath-room leads of of one or two of the chambers, but in this one we give a little variation, the bath-room leading off the hall. It will be noticed, also, that the house is very well—provided with closets, and has very—well arranged porches.

This house can be built for about \$2,000, which does not include plumbing or mantels, but includes everything else, excavation for cellar,

cellar walls, and, in fact, everything for the complete finishing of the house. The size is 26 feet in width and 52 feet in length, exclusive of porches.

The blue prints consist of cellar and foundation plan; first and second floor plans, front, rear and two side elevations, wall sections, and all necessary interior details. The price of the blue prints, together with a complete set of typewritten specifications, is \$4.50, and can be had at the office of The Farming World.



#### Preparing Lambs for the Show Ring

The first thing to be considered in this arduous task is the lamb. It must be good before you start to work upon it, having nothing about it that will disqualify; and in order to get good ones you must aim to breed them.

English sheepmen select a certain number of ewes from which they expect to raise their show lambs, and they invariably do accomplish this task. The ram, of course, plays a great part in this judicious mating, and careful treatment to the ewes during their stage of pregnancy are two chief ceaures.

You might say, "How do you know what a ram will get?" Well, none can tell accurately unless the ram has been tried. It is of course less risky breeding from such a ram than one whose get you have never seen, or one that has probably never been tried, though a good judge can form an idea what sort of ram will nick well with his ewes, but rams are, as the Indian said about the white man, "mighty unsartain." One thing sure, don't buy a ram that has been fed heavily all summer and is fat and lazy. A ram fed all summer on strong grain with little or no exercise is sure to give bad results.

Some people advocate using a ram strong in points where your ewes probably lack, but I should say use one that is as uniform as possible, not one that is very strong in some points and weak in others. No ram can be too good

The ewes should be bred so as to lamb in February. When the lamts are a month old they will commence to eat. Then a creep should be built for them where they can be fed. A little oats, bran and oil cake makes a very good ration for the youngsters, and should be always kept before them until they are eating quite heartily. Then we feed twice daily, about 6 a.m. and 6 p.m., except when the weather is very warm; then we feed about 8 p.m.

Many advocate the self feeder, but we have never tried one, so cannot say. We always make it a point to have the youngsters eat what they were given, and had they any left, it was removed before they had any more given them. Always aim to keep them eating with a relish; if they leave a little in the morning, why, don't give them quite as much at night. Be sure the troughs are clean before you feed.

When the days become hot and the flies troublesome, it is wise to house those you are preparing for show during the warm hours of the day, giving them a run on pasture during the night.

Some shepherds use the bottle—that is, for lambs. Of course, no one would think for a moment the shepherd ever did anything like that. This is done mostly by the long wool men, and it is amusing to see a great fat lamb fasten itself to a bottle of milk and drink it down as neatly as you please

They seem to do very well on it, but I don't think it a good plan, especially for the beginner, who is sure to

overdo it and have his lambs fit for the show ring by July and stale by September. They do not seem to do as well when the milk is discontinued as those that have never been bottled.

Beginners are very apt to get overanxious and feed too much. Too much grain is injurious to the young lamb. especially if it contains corn, peas or beans; a little of any of these might be fed the last month to finish with. but the grain ration should be of the bone-producing nature. Give all the green feed they will eat, and the greater the variety the better. Here is where the Englishman has the advantage of us. He has a greater variety such as rape, clover, sanfoin, vetches, alfalfa, kohlrabi, kale, turnips, swedes mangels, etc., and can get them earlier than we can, so you can well understand how it is they get such well-

Trimming, of course, is an art and will be found very difficult by the beginner, but by doing a little at the lambs at intervals of every two weeks or so, this difficulty can be overcome to a certain extent. A good trimmer has to be a good judge.

Be particular about your lambs' feet, and have them standing square. Nothing looks worse than a lamb with great long hoof, standing over on its pasterns, when this could be avoided simply by paring its hoofs.

Bring out your charge in the most attractive form possible. The first impression has a great weight with the judge.— H. Noel Gibson, Delaware, Ont., in "Wool Markets and Sheep."

#### For Good Roads.

Prof. Ira O. Baker, of the University of Illinois, gives the following five suggestions on good roads:

1. It is believed that material improvement can be attained by paying more attention to the office of highway commissioner and pathmaster. Elect only the very best men without regard to party, men who have judgment in business affairs, who have ideas on road making and mainskill who have skill in labor of others, tenance. directing the and who will give to their official duties their best endeavor. If they do reasonably well and are continually seeking to increase their road knowledge and to improve the roads under their care, continue them in office. If not, try again to find some one who will do these things. Dignify the office by every means possible.

2. In private conversation and in public meetings discuss ways and means of improving the earth roads. Organize for the purpose of creating interest in common earth roads. As soon as possible adopt rules for the guidance of the road officials, and then let each taxpayer note whether these rules are obeyed. Do not fail to give due credit if they are, and if they are not, do not shrink from entering a respectful protest. Unless the earth roads are maintained in reasonably good condition, it is folly even to talk of constructing high-price broken stone roads.

3. Divide the roads up and allot definite sections to farmers, and publish

these allotments. As far as possible require each man to care for the road nearest home and whele travels most. By private conversation and public meeting seek to stimulate pride in road making and maintenance, and try to secure the effect of competition in road work. Possibly have annual inspections and award prizes and diplomas. Railroads find annual inspections and nominal cash prizes and diplomas exceedingly effective. France has a system of gratuities for excellence in road work.

4. Permanently hard roads are very desirable if their cost is not too great, but remember that high-class stone or gravel roads are not feasible unless the roadbed is thoroughly underdrained, and unless the subgrade is adequately crowned, and, unless the public understands the superiority of perpetual maintenance over annual repairs, and unless the road officials are intelligent, energetic and conscientious, Fortunately these things are the very best investments for earth roads, and good earth roads are the very best preparation for good gravel or broken stone roads.

5. Do not overlook the fact that the interest in good roads should have a broader foundation than mere commercial needs. Comfortable and easy communications between the members of a rural community and also between the rural and urban inhabitants is of great importance in the social and educational development of a community.

#### To Prevent Hog Cholera.

The Bureau of Animal Industry at Washington gives the following prescription as being beneficial in warding off hog cholera and should be used as a preventative for all well breds:

Pulverize and mix thoroughly:

1 part wood charcoal,

1 part sulphur

parts sodium chloride (salt)

2 parts sodium bicarbonate (soda)

2 parts sodium hyposulphite 1 part sodium sulphate

1 part antimony sulphate

Dose, 1 tablespoonful for each 200 pounds weight of hog once a day.

"How do you buy your apples? By the barrel?"

"That's the way I try to buy them, but when I get them home I generally find I have bought them by the top layer."—Chicago Tribune.

Sample copies of The Farming World will be sent to any address, free of charge, upon request. Send us the name of a friend who does not subscribe and we will send the paper for two weeks free on trial. Address, The Farming World. Toronto.

## The Farm Home

#### An Eavesdropper's Punishment.

All of it came about through listening at the parlor door. Eavesdropping is always a reprehensible proceeding, and when indulged in by a person who has good grounds for beheving that that person's own self is the topic of conversation likely to be overheard, the practice becomes al-together unpardonable. Without desiring in the least to justify the breach of good manners committed of good manners committed when I. Emma Summerford, applied my ear to the key-hole, of our best room door on a certain reportant occasion that happened quite recently, I am constrained to think, revertheless, that there was some little excuse for my behavior.

You see it was L'e this : Butterfield, the son of Cor. Putterfield of the British army, was desperately in love with me, and I hope I not overstepping the bounds of maidenly modesty by admitting that I was very fond of hen in return

Harry and I west met at a leave given by a mutual friend, and, as in the manner of the " bok we fell in love with each other at the start, we were not slow in finding out low to strike an acquaintan eship, Harry was an only on, and i a sole surviving daughter, so that we had something in common outside the affection that drew us together

Harry lived with his father, a military officer, retired on 'alf-pay, at Kensington, and I resided with mine in a little villa at Clapham, although the distance separating our two abodes was great. Harry generally managed to spend two or three evenings a week on the Surrey side of the Thames

My papa had formerly been in business in the Barbican, but, having " made his pile," he sold off his horses with the exception of a favorite gray mare and bought the aforesaid villa, which henceforward became our home.

Harry was connected with a riding school at Knightsbridge, and consequently knew something about horses, so on the evenings he visited us he used to spend part of the time conversing with my papa about matters equine, while the remainder (considerably the larger portion) he passed in my company, discoursing love.

One evening after working himself up to the requisite pitch of passion Harry made me a proposal of mar-riage. Although I had long seen it coming, of course, I pretended, in a woman's regular way, that his offer had quite taken me by surprise; and, notwithstanding the fact that I was dying to say "yes," I assured him that I could not possibly give him an answer for at least a week. As I expected, he was so pressing, however, that I consented without further delay and fell into his arms in the usual manner while he whispered words of eternal constancy, and so on. It was all very delightful, I can assure you, and when it came to a protract-ed ending and Harry had taken his

leave in the way common to lovers I retired to rest the happiest girl in Clapham.

Harry had told me before going that he had some little business to transact with my father in the morning, and said he would seize the opportunity thus afforded of getting papa's consent to our marriage. When, therefore, the bell rang early the next day, and Harry was admitted and shown into the parlor, where papa was reading the auction news in the morning paper, of course, I knew what his errand was.

It is a trying time for a woman when her lover %s pleading for her hand to a possibly obdurate parent. Not that I thought my papa, with his well-known regard for my welfare would offer any insuperable objection to our union, but, being an only child I knew it would cost him a pang to part with me, and I was also well aware that he would never give his consent until assured of Harry's competency to maintain a wife.

I was therefore naturally anxious to the result of the interview, and when it began to get unduly prolonged. I was quite on thorns. My solicitude at length became so great that left the housekeeper's room, where I had been vainly endeavoring to fix my attention on some preserves that required tying down, and stole on tiptoe along the passage leading to the parlor where my father and Harry were engaged.

The door was just out really thinking that I was indulging in an unladylike action, I bent my head forward and listened. Harry was talking

She enjoys pretty good health, I

suppose" he asked, inquiringly
Capital," was my father's answer. "Yever, had an hour's illness
since the day she was born."

It was kind of paga to say this, but of course his statement was not literally correct. Everybody has illness at some time or other in their lives, and I was no exception to the As a child I had had whooping cough, measles and the croup, among other infantile complaints, to say nothing of headache and tic-doloureaux since I had grown up. But I suppose it was because I always made a practice of keeping my ailments as much as possible to myself that papa-who would not willingly deceive, bless him '-thought I had never been ill. As I say, it was kind of him, and I quite appreciated his motive. I was just about tripping away on thus discovering that the interview had not ended, when Harry again spoke.

" Is her appetite good ?"

It was certainly a strange question and I could not see that it was at all a necessary one, but I confess I do understand men's ways. Papa answered my lover's query by saying that I took my meals regularly, and seemed to enjoy them, which I must admit was a fact. Curiosity now made me stay for Harry's next query.

" Has she any temper " he asked, almost directly. .

It was preposterous! Temper! I soon should have if inquiries suah as this were persisted in. In fact, it was only papa's answer-"Not the slightuttered in his most assuring manner, that prevented my developing something of the kind at once. As it was the blissful frame of mind in which I had been wrapped since the previous evening was, as the meteorologists say, decidedly inclined to give way. Although feeling that I had heard enough, I thought that, as I had listened to so much, I might as well hear a little more. I had not to

"I really must say," Harry went "that there are one or two on points about her of which I don't altogether approve."

I had quite developed a temper now, which even papa's response could not assuage.
"Well," returned

returned my parent, " of course. I don't pretend she's perfection; but, take her altogether, she won't be easy to beat. All the same I should like to hear what you consider her faults.'

Yes, indeed, and so should I! Wild horses would not make me go away from the door now!

"Well,"said Harry, commencing his criticism with a deliberation that made my flesh crawl, "she is passable about the head and face, I admit, but her neck seems to me unduly long, and her shoulders have the ap-pearance of being a trifle too broad!

Could it be possible that the man giving utterance to this opinion was the same who had held me in his arms a few hours previously and asserted that I was the most beautiful creature on God's earth?

" Broad shoulders are by no means a drawback, Master Harry," he said, for they enable her to accomplish a great amount of work.

Yes, it was true, a lot of labor did fall to my share ever since my poor mother's death, three years previously. But I went at it cheerfully and without complaint. Work even to the point of exhaustion, became a pleasure awhen performed for an appreciative father, but it never could be so when done on behalf of an unsympathetic husband. (Husband, thank heaven, Harry Butterfield was not that vet

"And then, you know," went on my lover—save the mark!—"her figure is somewhat disproportionate, and she is decidedly fat

It was a gross libel! Although not in the least addicted to tight lacing, I could assert with absolute accuracy that my last new blouse was only eighteen inches around the waist, and I was quite comfortable in it! call me stout under such circumstances was a cruel untruth. that my love was fast giving way to an altogether different emotion, it would need but little more to turn the scale entirely. Strangely enough,

it was my father who applied the last straw

"Look here," papa said, after a momentary pause, "I'm sure you on-'I'm sure you only need to get used to her to appreciate her value. Take her for a month on trial; and if at the end of that time you don't like her let her come back again !

That was more than I could stand. The idea was monstrous, and how my father could suggest such a thing quite passed my comprehension. effect upon me was magical. Throwing propriety, good manners and everything else to the winds, I rushed into the room.

"It shall not be!" I exclaimed, passionately; "I will never be a par-ty to such a shameful transaction!" and then, deeming that the occasion eminently warranted the proceeding.

1 threw up my arms and went of into a fit of hysterics, winding up with a dead faint

When I came round I was lying on the sofa with Harry bending anxiously over me. Papa had gone for a doctor.

"Thank heaven, you are recovering !" said Harry, as I opened my

" Would that I had died !" I groaned.

"Pray do not talk like that, Emmv. said Harry. "How can you utterance to such a wicked give wish ?"

murmured, mournfully. "There is nothing to live for," I

looking into my eyes.

"Nothing, no one," I answered repeating his words.

"You are ill, Emmy," he said.
or you would not talk in this strange way.'

"I am not ill," I said, rising from the sofa to prove the truth of my statement. "Look at me for a mo-ment, Harry Butterfield." I continued, facing my lover, fearlessly, "and let me hear first-hand what you think of me. Am I passable about the head and face? Is my neck unduly long; and do you consider my shoulders broad, and my figure fat, eh? Answe me to my face, sir, for I know that is your opinion of me!

" Emmy, you talk in riddles, which I cannot understand."

'Is it not your opinion of me what I have just stated?" Certainly not, my dearest."

Did you not give expression to those sentiments when talking of me to my papa a little while ago ?"

"I certainly used those or similar terms, but not in connection with you, my pretty," said Harry, smiling

"Of whom were you then?" I asked speaking, I asked, a faint light beginning to break in upon me.

"Why, the gray mare, to be sure, which I think of purchasing for our use when we are married."

I fell into Harry's arms as I saw my stupid mistake, laughing and crying by turns. As soon as I was able, I told him all about my eavesdropping, what I had heard, and the construction I put upon it. Then I gave over crying and we both laughed together,

and were thus employed when papa and the doctor came. The latter did not think I required physicing when he had examined my tongue, so we all went into lunch, and Harry took occasion to inform me that papa had given his consent to our union, and all the financial part of the business was settled to his entire satisfaction.

Thus my little comedy of errors came to a happy ending after al!. and when, a few weeks later, Harry and I were united in the bonds of matrimony, it was by my express wish that the gray mare was used to drive us to church.

#### Hints by May Manton.

3865 Morning Jacket, 32 to 46 Bust. Tasteful morning jackets are essential to comfort and well being and can scarcely be possessed in too



3865 Morning Jacket, 32 to 40 bust.

number. This very charming model has the merit of being essentially feminine and graceful at the same time that is ideally comfort-As shown, it is made of white able.

Only vegetable oils and no coarse animal fatsare used in making

## Baby's Own

Soap" PURE, FRAGRANT, CLEANSING.

Doctors recommend it r Nursery and Toilet use Beware of Imitations

Albert Toilet Soap Mfrs., Montreal

dimity, with collar of revering frills of Valencennies lace; but various white and colored materials can be substituted, and needle work can be made to take the place of the lace. Dainty striped materials are fashionable and always effective; polka dots and other simple all-overs are admirable and such plain colors as blue, pink and lavender are pretty when they suit the wearer.

The back of the jacket is plain and terminates at the waist line, but the fronts are elongated and fall in soft graceful folds. The sleeves are in elbow length and comfortably isose. At the neck is a big sailor collar that is becoming to almost all women

To make this jacket for a woman of medium size, 34 yards of material 27 inches wide, 3½ yards 32 inches wide, or 2½ yards 44 inches wide, will be required, with 71 yards of lace to trim as illustrated.

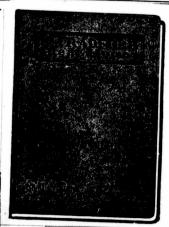
The pattern 3865 is cut in sizes, for a 32, 34, 36, 38 and 40 inch bust measure

## Plans of Ideal Homes

are you interested in moderate-priced cozy homes? Get "Ideal Homes," containing 56 plans of medium prices, besides plans of four good, sensible barns, one store building, and two church plans; 34 of these houses range in cost from \$500.00 to \$1,500.00, the others from \$1,550.00 up. This cloth bound book o 72 pages, 81/2x101/2 inches in size, sells for 50 cents; but we have made special arrange-ments with the publishers so that we can furnish this book of House Plans free to anyone ending us one new subscription to The FARMING WORLD. Any present subscriber, not in arrears, may have a copy for 50 cents You cannot afford to miss this opportunity to

save money when you are ready to build.

In remitting, send post office or expre order to-



#### THE FARMING WORLD Confederation Life Building. Toronto

## The Farming World.

A PAPER FOR FARMERS AND STOCKMEN.

D. T. MCAINSH.
J. W. WHEATON, B.A. Editor.

The Farming World is a a paper for farmers trations. The subscription price is one dollar a year, payable in advance.

a year, payance in arrange.

Postage is prepaid by the publisher for all subscriptions in Camada and the United States.

For all other countries in the Postal Union add for postage

Change of Address - When a change of address is ordered, both the new and the old addresses ordered, both the new and the old addresses ist be given. The notice should be sent one ek before the change is to take effect.

week before the change is to take effect.

Receipt are only sent injective request. The date
offsestle the name on the address larvel indicates the time in to will be address larvel indicates the time in to will be subscription is
faid, and the change of the sufficient
acknowledgment of payment when this
change is not made promptly bettly its
change is not made promptly bettly its

change is not made promptly normy as.

Discontinuances—Following thegeneral desire of our readers no subscriber's copy of THE FARMATS. WORLD is discontinued until before to that effect is given. All arrears must be paid.

that effect is given. All arrears must be paid.

How to Remit,—Remittances should be sent by cheque, draft, express order, jostal hote, or though order, payable to order of Thir FARMS WORLD, Cash should be sent in registered. Advertising Rates on application. Rates on appoint
and be addressed;
THE FARMING WORLD,
CONFEDERATION LIFE BUILDING,
TORONTO.

#### When You Get a Pig by Express

When a pig is received by express or freight, remember that he is tired from a long and exciting journey, during which he has been a close prisoner half frightened to death by the strange quarters, strange people and strange sounds about him. He is probably more than half starved and as thirsty as he is hungry. Give him a drink of water, and if it is hot weather dash a bucket full over him in the crate. Take him home in as kindly a way as possible. If your wagon has no springs put some hay in the bottom to break the jar of the rough road. When you get home give him a quart of water get home give him a quart of water and a very light feed. Three hours after give more water and another light feed, and repeat every three hours the first day, and by the next morning your pig will probably be all right and ready for a full meal. It is always best to err on the side of too little rather than too much feed and drink. It is very easy to over-feed, and the result of it is a sick pig and no growth for weeks, perhaps. Keep him hungry until you know his capa-city, and then feed so as to be sure that all is cleaned up and that he will have a good appetite for the next meal. When you receive the pig, if he looks thin and gaunt and droopy, don't sit down and write the man who sold him to you a saucy letter full of saucy cuss words, and call him a swindler, because he has not sent you a good pig. Wait a few days until the pig has filled up the waste places in his carcass again. There are two beings that do not appear to advantage when hungry, a man and a hog. Physically they are duplicates in stomach, and in disposi-tion similar; both are fine when well fed, but miserable looking creatures when ill-fed

When writing to advertisers lease mention The FARMING FORLD.

#### Toronto Exhibition.

Entries for live stock, dairy products, ladies' work, fine arts, honey and all classes of manufactures at Toronto Exhibition close with Manager H. J. Hill, 82 King street east, Toronto, on Saturday next, August 3rd, and should be sent in, accompanied by entrance fee, at once means greatly increased work for the office staff at Toronto. As has been previously stated in these columns, the prizes for Shorthorn cattle have. by the joint enterprise of the Industrial Exhibition Association and the Dominion Shorthorn Association, been increased by 25 per cent this year, the amount given in this one class being just \$2,000 in cash, besides four fifty-dollar gold medals Such money was never before offered at any annual fair on this continent In the other classes, there has been some arrangement, while to the class for dairy products some notable additions have been made in the way of prizes for butter making as well as for the highest scoring creamery butter, and the highest scoring creamers cheese, for which two valuable challenge trophies are offered. For the dairy products the premiums aggregate \$1,200, besides medals and cups In short, to the entire agricultural branch of the Fair the Toronto Exhibition Executive have this year been remarkably generous. It remains for the breeding and farming community to show that they appreciate enterprise. Entries grain, field roots and horticultural products close on Saturday, August 10, for poultry on Wednesday, August 14th, and for dogs, Saturday August 17th, Space to Space for Agricultural Implements and Machinery is virtually free, only the small charge of 25 cents being made for each article. while for horses and cattle the entry \$1.00 each animal, stabling and stalls free, for cattle under one year for sheep and for swine the fee is 50 cents a piece. for poultry, 25 cents each bird, and for agricultural and horticultural products, 10 entries and under 50 cents, 10 to 25 entries, \$1. over 20, 5 cents each entry, for ladies' work, 5 entries are 25 cents, and over 5, 50 cents. The children's department is free. department is free Live stock must be on the grounds by August 29th. Live stock must entry must be made in the name of the rightful owner

Biggs-"What do you call your twins?" Diggs-"Henrietta."

Biggs-"But that's name

Diggs—"Yes, but we divided it between them. We call the boy Henri and the girl Etta. See?"

#### Stock

#### IMPERIAL HOLSTEIN-FRIESIAN STOCK FARM

10 Young Bulls from one month to fou months, bred from Winnie R's De Kol

W. H. SIMMONS,

### The Up-to-date Herd Tamworths

Bred from sweepstakes herd.
Young stock of both sexes for Sale.
W. H. McCUTCHEON, BRUSSELS, ONT

#### RETTIE BROS.

HOLSTEIN-FRIESIAN BREEDERS A few choice young animals for sale. RETTIE NORWICH, ONT.

#### Glen Crescent Shorthorns and Oxfords.

Sheep of both sexes and all ages, and two bull calves by imported sire for sale.

J. W. WIDDIFIELD. Uxbridge, Ont

#### W. R BOWMAN Mt. Forest, Ont.

Breeder of POLLED ANGUS CATTLE Young Stock of both sexes for sale.

### OXFORD DOWN SHEEP

J. H. JULL & SONS.

Yearling Rams and Ram Lambs, and Ewes of all ages, for sale. Prices reasonable. Our flock is beaded with the best imported rams in Canada—prize-winners in England, first prize at Toronto Industrial and all leading shows i Canada.

Brant and Plain View Stock Parms.

Mt. Vernon. Ontario. Can

#### OXFORDS

#### AT FARNHAM FARM

O Superior Yearling and Two Year Rams. 2 Extra Fine Imported Lambs. O Ram Lambs. ambs. er of good Yearling Ewes and Ewe Lambs.

-PRICE REASONABLE.

HENRY ARKELL, Arkell, Ont.

## For Best PORTLAND

The Rathbun Company 310 Front St. West, Toronto



ROCK SALT for horses and f for horses and cattle, in ton and Toronto Salt Works, Toronte car lots.

## OAK LODGE YORKSHIRES

BRETHOUR & SAUNDERS.

## Market Review and Forecast

Office of The Farming World, Confederation Life Building,

Toronto, July, 29th, 1901.
The improvement in weather conditions of the past week has had the effect of stimulating business somewhat. Remittances have been made as promptly as insual at this season and prospects for fall trade are good. Money keeps steady at about 5 per cent, on call and discounts at about last week's quotations.

#### Wheat.

The wheat market has declined somewhat, and during the week there has been a fractional fall, due, perhaps, to the improved prospects of crops in the West and the rains which have benefitted the corn districts. Quotations on St. Lawrence Market are, for red and white wheat, 72c, to 73c, and goose at 62½c.

#### Oats and Barley

Oats have improved and are now selling on the Farmers' Market at 41c. to 42c. Prices for Barley are nominal, quotations being at 43c. to 44c.

#### Peas and Corn

Peas are almost unchanged, millers paying 70c. to 71c. Corn, none offering; No. 2 yellow is quoted at 61c., Toronto.

#### Bran and Shorte

Bran is firm and in good demand, selling here at \$14 per ton and shorts at \$16 per ton, f. o. b., Toronto.

#### May and Straw

Hay, baled, in car lots, is selling from \$9.50 to \$10. Old hay, on St. Lawrence Market, is quoted at \$12 to \$13. New hay from \$8 to \$9. Straw, loose, \$6; sheaf \$11, baled \$4.75 to \$5 per ton for car lots on track here.

#### Potatoes.

The market for old is quiet, and prices steady at 30c. to 40c. a bag. New are somewhat scarce and variable, quoted at 50c to \$1.10 per bushed

#### Eggs and Poultry

The warm weather has done much injury to shipments from outside points. Really first class eggs are very hard to get, and are quoted firm at 12½c. to 18c. on the Farmers' Market here, the latter figure is readily obtainable. Fresh gathered are in good demand at 11c. to 11½c., and culls, scarcely wanted, at 8c. to 9c. Poultry is in good demand; chickens (old) are quoted at 60c. to 80c.; spring chickens at 40c. to 81 per pair. Turkeys, 10c. to 12c. per lb., and spring ducks at 60c. to 8.0.5 per pair.

The Canadian Produce Co., 36 and 38 Esplanade east, Toronto, will pay until August 8th, for Jucklings and spring chickens, not less ban two pounds each, 8c. per lb. For hens cincluding last year's birds), 4c. per lb. These prices are for live weight on arrival. Crates supplied free and express paid up to 50 cents per 100 pounds for chickens.

Fruit

The last few days have shown a lighter supply and active demand for all obtainable, with slightly higher prices. Raspberries, red. 9c. to 10c., black 7c. to 9c. Red currants 40c. to 60c., and cherries 90c. to \$1.25.

#### Cheese

The cheese markets have again shown an upward tendancy in prices, amounting to ic to ic on the week, but whether or not this rise is due to bona fide orders or the filling of short sales there is some difference of opinion. Cable orders came to hand pretty freely up to the recent advance the country markets, but at the rise English buyers hesitate to follow. There has been a heavy shrinkage in the exports from Canada and the United States this season as compared with those of a corresponding period last year, and there is also an undoubted shortage in the English make. Sales are reported, of the f.nest Western at 9½c and 9¾c, the latter figure for colored. Eastern at 9½c, to 9½c., under grades at 8½c. to 9¼.

#### Butter.

The market is firm for creamery, quotations are here, boxes 18c, to 19c. rolls 19c, to 20c. In Montreal there is quite a demand for tubs, which are scarce, most of these packages being wanted for Bristol, prices there are 19½c, to 19¾c, and fancy 20c. On the Toronto Farmers' Market, lb. rolls, 16c, to 20c. Wholesale creamery 18c to 19c., creamery, lb. rolls, 19c. to 20c., tub 16c, to 17c., bakers' tub 12c. to 13c.

#### Wool.

Manufacturers are not yet particularly anxious to buy, though a few of the larger mills have made some purchases of both foreign and Canadian. Quotations here are, sheepskins, fresh, 90c. to \$1, lambskins 30c., wool fleece 13c. to 14c.; wool, unwashed fleece, 8c. to 9c.

#### Cattle

Cattle have been selling at high prices, and although during the past week they have gone a little lower, they are still about 1c. per lb., live weight, higher than at this time last Horses have also advanced considerably in price, due in part to the export demand. On the Toronto Market more shipping cattle were offered than were required for immediate use, and dealers did not feel inclined to buy to feed here unless they got them at low prices. The bulk of the export cattle sold at \$4.65 to \$4.90

per cwt., and the best loads at \$5 to \$5.512\frac{1}{2}\$ per cwt. Drovers generally complain of having lost money, and doubtless many of them have, but they have themselves to blame for paying too high prices for cattle that were unfinished and not wanted. Light feeders and stockers from 900 to 1.000 lbs. are quoted at \$3.25 to \$3.40 per cwt. Butchers' cattle, choice picked lots, equal in quality to the best exporters, sold at \$4.40 to \$4.60 per cwt. good are worth \$4.25 to \$4.35, and medium \$3.85 to \$4.00 per cwt. Export cows \$4.00. Common butchers' cows \$3.50 to \$3.65. Grass cows \$2.50 to \$3.25 per cwt. Mich cows and springers \$25 to \$48. Calves

#### Sheep and Lambs.

Sheep and lambs are fairly plentiful and prices easy. Ewes \$3.40 to \$3.60 per cwt. Bucks \$2.70 to \$2.75 per cwt. Spring lambs \$2.50 to \$4 each.

#### Hogs

The price of hogs has still kept up, choice, not less than 160 lbs. and up to 200 lbs. were quoted at \$7.25, lights, under 160 lbs., \$6.75, fats \$6.75. Sows \$3.56 to \$4, stores \$4.50; stags \$2.

The Wm. Davies Co., Toronto, will pay for select bacon hogs, 87.50 for the week, ending August 3rd.

#### Education that Doesn't Educate

A story which seems almost incredible comes from Paris. A school inspector was visiting a girls' high school in a large provincial city.

He asked one of the pupils what sort of nutriment eggs contain and received the confident and correct reply. "Nitrogenous." Another pupil gave satisfactory answers to questions about various wild and domestic fowl.

Then the inspector asked another pupil how long a "soft-boiled" egg should be cooked. The girl blushed, hesitated, and finally stammered, "Half an hour." The inspector frowned and turned to the next girl, who replied, confidently:

"At least three-quarters of an

The third girl thought an hour was necessary, while the fourth said that soft eggs were not cooked at all. These girls knew all the "ologies," but they couldn't boil an egg.

Dr. Jalap-"Let me see your tongue, please."

Patient-"Oh doctor, no tounge can tell how bad I feel."

## CANADIAN PRODUCE CO.

## Want Every Chicken in Ontario

AND WANT AGENTS TO BUY THEM.

Horse Owners Should Use GOMBAULT'S

## Caustic

The Great French Veterinary Remedy.



SUPERSEDES ALL CAUTERY OR FIRING As a HUMAN REMEDY for Rheumatism.

Sprains, Sore Throat, Etc., it is invaluable.

WE GUARANTEE that one tablespoonful of CAUSTIC BALSAM will results than a whole bottle of

y liniment or spavin cure mixture ever mane. Very bottle of **Caustic Enjearn** sold is Warran-ito give satisfaction. Price **81.50** per bottle Sold druggists, or sent by express, charges paid, with full excitons for its use. Bead for descriptive circulars, timonials, etc. Address

### THE LAWRENCE-WILLIAMS CO., TOPODIO, ODI.

## The London Daily ...Free Press

Second Edition at your Post Office daily. Contains latest cable dispatches and market

Ask for Sample Copy .. \$2 per year.

THE LONDON FREE PRESS PRINTING

CO., Limited, London, Can.



## Don't Neglect **Heating Arrangements**

when building a new home or re-A HOT AIR FURNACE will give you a nuch more efficien, convenient and economical system than by using stoves. Write under the convenient and economical systems with the convenient and economical systems. about our

### HECLA FURNACE

It will burn any kind of fuel,coal, wood or peat. Its PATENT coal, wood or peat.

FUSED JOINTS keep it free from dust, smoke, or gas. Write us dust, smoke, or gas. for estimates and advice.

CLARE BROS. & CO. PRESTON AND WINN!PEG

#### No Charge for Selling Dairy Exhibits.

The management of the Toronto Industrial Exhibition have decided make no charge this year to exhibitors for selling their exhibits of butter and cheese. Heretofore the Supt. in charge of the dairy department has taken it upon himself to sell exhibits when requested to do so by exhibitors for a small commission fee, which he kept back from the proceeds of the sale. Many dairymen have objected to this and consequently the management this year will arrange to sell all cheese or butter exhibited at Toronto free of any charge whatever when requested to do so by exhibitors. Dairymen should make a note of this as it will certainly be of advantage to them to have their exhibits sold at market prices without any charge.

#### Men Wanted

Never before, perhaps in the history of this country, has there been presented such an opportunity to men, especially men without capital, and with a resonable fund of the spirit of venture, to establish themselves in this country.

The harvest in Manitoba and the Northwest is far and away the greatest ever faced. The officials say that it will require 20,000 men

to take care of it.

The C. P. Railway offer to carry men out to the West for the nominal sum of ten dollars. When once there, work and good wages is assured.

When harvest is over land can be secured by those wishing to remain, return tickets may be had for eighteen dollars.

Every man in the older provinces, who is not fully employed at fair wages, should avail himself of this chance

from the nearest C. P. R. station, or direct from A. H. Notman, A. G. P.

## Fencers and Farmers



#### The Beaver Post Hole Digger

Works in any soil. Cannot get out of order. Is positively guaranteed superior to all others.

Railway Companies use them altogether.

Address-

HALL & SON 50 Bay St., Toronto

## Windsor Salt

The test of time proves
Windsor Salt as "best"—no
stronger test exists.
Buy Windsor Salt and you buy
an absolutely pure, white, dry
Salt that has no equal.

" Best By All Tests'

#### ST. LAWRENCE COFFEE HOUSE

78 and 80 King St. East

RESTAURANT"

Dinner for 20c.

Dinner Tickets S Served from 11.30 to 3 and from 6 to 8 Farmers and their wives visiting Toronto will find

### Agricultural College GUELPH.

A large staff and first class equipment, furnishing the kind of education needed by roung men intending to live on the farm or follow any kind of practical or professional pursuit connected with farming

- (1) Two Years' Course for Associate Diploma, Sept. 13th.
  (2) Four Years' Course for B.S.A. Degree, Sept. 13th.
  (3) Dairy Course, Jan. 4th.
  (4) Two Weeks' Course in Judging Live Stock and Seed
- Grain Jan. 8th.

  Grain Jan. 8th.

  Four Weeks' Course in Poultry Raising, Jan. 10th.
- end for Circular giving full inform July. 1901.

JAMES MILLS, M A., President.

CHICKSNS DUCKE

TURKEY

## WANTED

We forward empty crates to any express office in Ontario, and pay express charges both we have a steady demand for all the birds we can procure we would be pleased to purchase poultry at we have a steady demand for all the birds we can procure we would be pleased to purchase poultry a all times of the year and in any quantity. Write to us for further particulars, and if you have any time to purchase for us you will find it a very profitable employment.

Toronto Poultry and Garden Produce Co., Limited

Toronto Telephone, North 1030.

## The Awakening of Poultry Trade.

Rapid strides have been made during the last year in our poultry trade, quietly and without much heralding of trumpets it is true, but still none the less substantial and real. Probably the most serious question to our farmers in the past has been the disposal of their poultry, and especially their chickens and ducks, the market being always uncertain, and, in the case of dressed poultry, often proving a total loss on account of its perishable nature. What has been wanted all along was a reliable market for live poultry. Within the last year this has all been changed very greatly to the advantage and profit of the farmer, for what has been a nuisance and a frequent loss is now probably his most reliable product with a good market at a fair price, devoid of uncertainty or expense in any way but the initial cost, convertable into cash without delay and in any quantity. As the heading of this editorial indicates the trade is only just awakening, for the possibilities of poultry in Ontario under these conditions are unlimited, and must soon emerge from its present state of easy-going indiffer-ence, to be one of the important branches of farming.

The farmer can now feel secure in raising any quantity of poultry, knowing there is no uncertainty as to the price he will receive, such as the case of most goods sent to commission houses.

The reason for all this change in conditions is proved in the enormous increase in the export of poultry to England and the consequent increase in the demand for poultry here, one house in Toronto calling for no less than one thousand tons this season. Their method of doing business is to pay a cash price per pound for live pay a cash price per pound for five ducks and chickens, pay a fair pro-portion of the express rates and sup-ply crates free. It can be seen at a glance that the above conditions remove all uncertainty, trouble or risk.

#### A Romance of the Wheat Pit.

"The End of the Deal," is the title of an unsually good business serial story which is to begin in an early number of The Saturday Evening Post, of Philadelphia. A famous transaction on the Chicago Board of Trade is the basis upon which the author, Mr. Will Payne, has founded this striking romance of the wheat pit. A charming love story runs through the stern and stirring plot.

A Sprained Ankle is not an uncommon accident. Pain Killer relieves and cures almost as if by magic. The greatest household remedy. Avoid substitutes, there is but one Pain-Killer, Perry Davis'. 25:. and

EPILEPSY, FITS, ST. VITUS' DANCE.



# A BIG

INTO

is especially adapted for Farm Buildings, machinery, wagons, in fact everything that needs paint.



## Atlantic Refining Company,

Foot of Jarvis Street, TORONTO, Ont.

## ELL.. PIANOS ... AND ORGANS.



Built to last a lifetime By the Largest Makers In Canada.

**\*\*** 

BELL is the Musician's Favorite

The BELL ORGAN AND PIANO Co., Limited, Guelph, Ontario



Any one sending us six new sub-scribers to THE FARMING WORLD scribers to 1-HE FARMING WORLD will receive one of these fine Watches, carefully packed in wooden box, postpaid, Free. Or we will send the Watch for three new subscribers and one dollar in cash. Or any subscribers whose subscribers in paid up the wooden was subscribers and the sent was subscribers and the subscribers whose subscribers in add up the subscribers. whose subscription is paid up may have one for \$2.00. Your money back if you are not satisfied.

The Farming World is published every week, only \$1.00 per year.

You can earn one of these watches in one afternoon.

## Matter

Whether you are training for a race or racing for a train, this watch will keep you right. It is honest, reliable and looks well. It is a man's watch, and every man should carry one. Every school-boy can earn one easily. Read our offer below:

#### Five Good Points

FIRST—It is made by one of the best manufac-turers in the world. Every one is guaranteed. SECOND—It is a good timekeeper—in fact so good that many railway conductors rely on it. THIRD-It is strong, and will stand the rough and tumble, the dust and damp of every-day

wear.

FOURTH—The case is nickel-finished, and looks
just as well as solid silver. With ordinary
wear it will keep its color for two or three
years—much longer with care. The works
will last ten or fifteen years.

fH-It has a stem-wind and a stem-set. No tey to lose; no key-hole to let in dust.

Farming World, Confederation Life Building, TORONTO

34th Annual Exhibition

## western fair • London

SEPTEMBER 5TH TO 14TH, 1901-

A Home Exposition of Genuine Merit. Continued Improvements. Buildings Painted and Renovated. Liberal Prizes. More Specials Added. Special Excursion Rates on All Railroads. Incomparable, New and Original Attractions For Prize Lists and Particulars, Address-

LIEUT.-COL. W. M. GARTSHORE, President.

J. A. NELLES, Secretary.



### NO CURE, NO COST.

If Fleming's Lump Jaw Cure saves one head of stock for you, it is worth the cases, and if it mines its cost. But one bottle usually cures one to be cheerfully refunded. This same positive guarantee applied and the common of all lumps and swellings, including System on the common of the common of

Arkwright, Ont., Aug. 29th, 1899.

Artwright, Ont., Aug. 20th, 1899.
Dear Sirs,—I have noticed in The Sun that you have advertised a cure for Lump Jaw, and also have heard of it being used, and drove to find out the result, and I am satisfied if you send me the same kind of stuff will not begridge the money. I hereby enclose \$2.00 for one package of Fleming's Lump-Jaw Cure. Yours truly, JAMES A. FLETCHER.

Our New Pamphlet may be worth much to you; it's FREE to readers of this paper.

FLEMING BROS., Chemists Room K. 58 Bay Street, TORONTO, Ont.

#### LOW HANDY WAGGONS



Wide Tire Wheels

Made to fit any axle. Send your address on a post card for a catalogue, and learn the advantages of And learn the advantages of a Low Handy Waggon. You can do your farm work in just half the time, which is money in your pocket.

Dominion Wrought Iron Wheel Co.

9 and 11 Brock Ave., TORONTO, ONT.

### WILSON'S HIGH-CLASS SCALES

SPECIAL PRICES THIS On 2,000 lb.

Diamond Steel Bearing SCALES

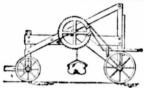
Write To-day C. WILSON & SON



so Esplanade St. E., TURONTO, ONT.

Our market reports are reliable and up-to-date. They are written specially for The Farming World and are of inestimable value to every farmer.

#### LEMIRE'S STONE AND STUMP LIFTER



The New Stone and Stump Extractor breveted by Leutire. Capable of lifting a long libs. Has no equal for lifting and carrying stones, etc., for placing stones so as to build up fences to officially and the stones of the library of t

## *Maxwell's* "Favorite"

Churn.



Patent Foot and Lever Drive. Patented Steel Roller Bearings. Improved Steel Frame

Superior in Workma

DAVID MAXWELL & SONS St. Mary's, Ontario, Canada.



BRANTFORD ENGINES.

STRICTLY HIGH GRADE 2 to 25 H.P.



The Perfected Pro-duct of Many Years' Experience. Also Makers of Stee works Outfits, Etc.

WRITE US

#### CANADIAN PACIFIC

20,000 Harvesters Wanted

in Manitoba and

#### FARM LABORERS' EXCURSIONS

From stations in Ontario East of Toronto to Sharbot Lake and Kingston Division North of

s | Winnipeg

And all stations North-west, West and South west to Yorkton Moosejaw

North of Toronto and Sarvia and North, except North of Toronto and August 5th, Main Line Toronto to Sarvia and North, except North of Toronto and Cardwell Junc., August 6th, and all stations South of Main Line Toronto to Sarvia,

On complying with conditions of certificates which will be given purchasers of one-way \$10 tickets, passengers will be returned to starting point by same route on or before Nov. 10th, 1901, on payment of \$18.

TICKETS ARE SECOND CLASS

Apply for pamphlet giving full particulars to A. H. NOTMAN Assistant General Passenger Agent 1 King St. Eas\*, Toronto

#### AGENTS WANTED

the New Pictorial Stock Doctor and Live ock Cyclorable, revised to 1901 with the assistance of the Uniario Agricultural siege, Gueloh. The finst illuvirated, cheapest and a book of its force or published. Large wages for

World Publishing Co., Guelph, Ont.