Every Week-\$1.00 a Year.

Toronto, September 23, 1902.





There is no duty on U.S. Separators into Canada.



Always Mention THE FARMING WORLD when writing to Advertisers

Tolton's NO. I Double Root Cutter

Points of Merit:

- 1. To change from pulping to slicing is but the work of a momen.
- 2. There are two separate wheels, one for pulping
- and the other for slicing.

 The united force of both wheels is always used
- in doing the work in either capacity.

 4. The hopper is between the wheels, and does not choke.

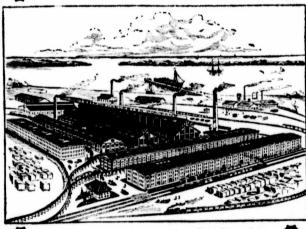
The Only Double Root Cutter Manufactured.

Fitted with Roller Bearings, Steel Shafting, and all that is latest and best in principle, material and construction.



TOLTON BROS., - Guelph, Ont.

DEERING ... At Home IN CANADA ≒



Factory now being erected at Hamilton, Ont., when completed will be the most up-to-date factory in Canada.

NOW CAN'T YOU SEE

It Pays to Buy DEERING MACHINES.

Deering Division International Harvester Co. of America

Canadian Branch Houses:

TORONTO, Ont. MONTREAL, Que. LONDON, Ont. WINNIPEG, Man.

Muscle..



BELLEVILLE, ONTARIO

teach full Commercial Course
Full Shorthand Course
Full Civil Service Course
Full Tolography Course

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

J. Frith Jeffers, M.A.

PRINCIPAL

Albert College

Business School Founded 1877 \$37.00 pays board, room, tuition, electric light, use of gymnasium and baths (all but books and laundry) for so weeks—longer time at same rate—in either department.

(a) Bookkeeping

(b) Shorthand, Typewriting (c) Telegraphy

302 Students enrolled in the College last year. Send for spe-cimen of penmanship and special circular. Address

PRINCIPAL DYER. D.D., Belleville, Ont.

AT HOME

Do you want to know more about your business or profession? Do you wish

to write on the Civil Service or the Junior or Senior Matriculation examinations? Would you like to be a better housekeeper, farm mining prospector, or mechanic?

Write for FREE booklet

The Canadian Correspondence College, Limited da Life Building, TORONTO, ONT.

Agricultural College

- (1) Two Years' Course for Associate Diplome— Sept. 13, 1902.
- Three Years' Course for Associate Diplome and Specialist Certificate in Agricul-ture or Horticulture—Sept. 13, '02.
- (3) Four Years, Course for B.S.A. degree-Sept. 13, '02.
- (4) Three Weeks' Creamery Course—Dec. 2, 08 (5) Twelve Weeks' Dairy Course—Jan. 3, '03.
- (6) Two Weeks' Course in Stock and Grain Judging-Jan. 8, '02.
- (7) Pour Weeks' Course in Poultry Raising-

Ladies Admitted to Dairy and Poultry Courses
Send for Circulars.

JAMES MILLS, M.A., President

Guelph, July,1902.

Tell your neighbor about THE FARMING WORLD. It will pay you and help him, Sample copy free. Write us.

The Farming World

For Farmers and Stockmen

V M. XXI.

SEPTEMBER 23rd, 1902

No. 13

Lessons from the Fairs

O a great majority of the visitors at the ahnual fall fairs, the exhibition means little more than a pleasant outing. It should, however, mean more than this and especially so to the farmer. The display of live stock and agricultural products forms the larger part of the exhibits at our fairs and consequently there is more for the farmer to examine and study than for any other class of our citizens. But as a rule he makes less of a business of studying the exhibits in his own particular line than does the manufacturer or business The up-to-date manufactuman. rer or tradesman is always on the alert for some new idea or some new scheme or invention that will help him in his business and enable him to provide more cheaply and perfectly the kinds of goods the people want.

Farmers as a class do not appear so eager to gain helpful information about their business as do people in other walks of life. Of the hundreds of farmers who visited the Ottawa, Toronto and London Fairs during the past few weeks, how many of them utilized the time or a portion of it in perfecting their knowledge by making a close study of the various exhibits. We venture to say that the number was comparatively few, though it is growing larger every year as farmers come to realize the importance of obtaining more knowledge about their business.

It may be asked what there is for a farmer to learn at the big fall Fair. To go into detail would take up more room than we have space for in this issue. But let the farmer who has visited any one of the large fairs we have named decide for himself. Are there not many lessons for him in the exhibits of live stock? If he be a specialist in horses, he cannot but benefited by a close study of the exhibits in this department which were above the average at all the big shows this year. Of cattle, sheep and pigs the same may be said, and the specialist in any one of these classes could not but be benefited by a close study of these Then in the dairy and in branches. other departments there was much to learn for the one so inclined. A great many whose intentions are good in this particular fail to gain much knowledge because they have not gone about visiting a fair with any system. To wander aimlessly about, taking in whatever may come in one's way, is not a satisfactory method, and while one may stumble upon something that will be helpful, the knowledge gained will not be so much impressed upon the mind as if he went with a preconceived plan as to the departments that would most interest him.

Such is our view of how the most benefit can be got from the big fall fair. We wonder how many who travelled long distances to the big fairs of the past few weeks gained anything more than a mere outing. We will leave that for our readers to judge and profit by in the future.

South African Trade

In 1900, Mr. W. W. Moore, of the Dominion Department of Agriculture, was sent to South Africa in connection with the shipment of military supplies, and while there, made a careful study of the market from a Canadian standpoint. He advises the employment of agents to represent Canadian business houses in South Africa. Other countries, more particularly the United States, have a big trade in that country, and Canadians will have to be on the alert if they wish to secure a share. But with a direct steamship service and keen business representatives Canada should be able to secure a goodly portion of this trade.

Mr. Moore points out that there is a splendid market in Durban for flour. The imports into Natal in 1898 were valued at \$1,123,435, the United States supplying 85 per cent. and Australia the balance. The duty on cheese in both Natal and Cape Colony is 6 cents per Some Canadian cheese is sold in Durban, but it is received from England. Direct shipments from England. Direct shipments would arrive in better condition. Our regular size of 70 pounds is too large, excepting for the retail trade in Durban, Cape Town and other towns. Smaller sized cheese are required for the country trade. Cheese weighing about 12 pounds each are best adapted for the up country trade. The duty on butter is the same as on cheese. The large 56-pound package is well adapted for the retail trade of the towns where cold storage accommodation is provided, but tinned butter is absolutely necessary for the interior trade. The duty on bacon and hams is 4 cents per pound. Canadian bacon, like Canadian cheese, reaches South Africa via England. When sold, however, it gives good satisfaction. One dealer in Dur-ban stated that Canadian bacon was the best on the market. Cape Colony there is a duty of 50 cents a hundred weight on wheat. The importation of wheat for milling in the Colony is encouraged by

the imposition of a duty of \$1.12 per cwt. of flour. Good potatoes are almost a luxury in South Africa and France and England ship large quantities every year. Canned meats from Chicago are on sale everywhere and Australian chilled and frozen meats are found everywhere where there is cold storage.

This is only a partial list of the food products consumed in South Africa, which Canada could supply. They are, however, the chief cues in which the Canadian farmer is interested and any movement that will help to extend the market in that part of the Empire for our wheat, flour, cheese, butter, bacon, etc., will no doubt receive his hearty support.

Bacon Exports Increasing

The imports of Canadian bacon into the United Kingdom for the month of July last were 66,092 cwt. against 42,895 cwt. for the month last year, showing an increase of 24,000 cwt. For the seven months ending July 31st last, the imports of bacon from Canada were 240,29 cwt. or 75,000 cwt. more than during the corresponding period last year. The shipments of Canadian hams have also increased about 34,000 cwt. during the same period as compared with last season. This is a considerable increase but not as much as the trade will stand.

Leaves for the West

Mr. A. P. Westervelt, Secretary of the Dominion Live Stock Association, left last week for the West in the interest of the Ontario live stock trade. He will be absent six weeks and during that time will visit the principal points in the Territories and British Columbia, where a market is likely to be found for Ontario pure bred stock. He will also look into the prospects for placing Ontario stockers on the Western ranches.

The Whitby Model Fair

The Whitby Model Fair takes place on Tuesday, Wednesday and Thursday of this week. A good program has been provided, the special attractions being purely of an educational character. The judging will be done by experts who will give reasons for their decisions. Lectures will also be given by a number of prominent Agricultural authorities. The Hon. Sydney Fisher, Minister of Agriculture, will formally open the fair.

Goes to Utah

The eagerness with which Canadians are sought for to fill important positions in Uncle Sam's domains was again demonstrated last



Prof. W. N. Hutt.

week. Mr. W. N. Hutt, B.S.A., for the past year assistant to Mr. G. C. Creelman in the work of the Farmers' Institutes and the Fruit Growers' Association received notice last week of his appointment as professor of horticulture in the Utah State Agricultural College. Mr. Hutt has lately had charge of the funigation of nursery stock under the direction of the Ontario Government. He has also been a prominent Institute worker, making horticulture one of the main topics of his addresses.

Mr. Hutt comes from Welland County having been brought up on a farm near South End, Ont. He was graduated from the Ontario Agricultural College in 1849 and is a brother of Prof. H. L. Hutt, of the college. Prof. W. N. Hutt goes to his work in Utah very well equipped and should be heard from in his new field. Mr. Percy W. Hodgetts B.S.A., fellow in horticulture at the Ontario Agricultural College, has been promoted to Prof. Hutt's place in the Department of Agriculture.

pears at \$2.00 to \$3.00 per box and peaches \$1.25 to \$1.50 there ought to be a fair show for the Ontario growers to get a decent profit.

Trade goes usually to the people who are looking for it. The people who push honest goods get the business. If there is no propelling power or if the goods are not as

forts to capture the British market

the Ontario iruit growers are so indifferent to the wants of the West. The September issue of the

Canadian Horticulturist (a misnamed journal, should be "Ontario" instead of "Canadian") deals

at great length with the requirements of the British market but never a word about a nearer and better one in Western Canada. As

for us we are not suffering. We are quite satisfied with California

and Oregon pears, peaches and apples, and now we have a chance to

secure a good line from British Columbia, whose growers are making a strong bid for our trade. With

Trade goes usually to the people who are looking for it. The people who push honest goods get the business. If there is no propelling power or if the goods are not as represented — well — the results are usually disappointing. When apples weighing one and two-fifths ounces are shipped as "Fancy Canadian" there is a very evident lack of honesty in the business.

A news dispatch says that Guelph moulders are on strike for 52.75 per day. The Guelph iron workers pay \$2.50 and the Manitoba threshmen pay \$2.25 will board. If the strikers will send half their number out to Manitoba on \$10 tickets they can earn enough to keep the strike going and get their board and lodging free.

The C.P.R. Co. are still haggling over grain rates to Fort William. The grain dealers are working for a two cent reduction, but it is somewhat doubtful whether this will be secured. The C.P.R. rate is two cents higher than that charged by the Canadian Northern Railway. We really hoped that the C.P.R. would meet the rates set by their competitors, and our disappointment will be shared by farmers in all localities off the line of the Canadian Northern Railway.

Our Western Letter

Crops in the Territories. Market for Ontario Fruit. Haggling over Freight Rates.

Winnipeg, Sept. 15th, 1902 September crop report from the Territories has just come to hand. This report, issued under date of September 1st, deals with crop conditions prevailing on that date. I quote the following summary from

the Bulletin:

"The leading feature of the crop situation is that the larvest is late. A frost occurred at the latter end of August which was general throughout the Territories, and while reports sent to the Department do not indicate that any damage has been done to the grain crops, there can be no doubt that at the time the frost occurred there was a considerable acreage in a condition very susceptible to injury from this cause. There is therefore a strong probability that crops on heavy lands, especially in low situations have been more or less affected.

"As indicated in the last Bulletin about 24 per cent. of the grain in the principal wheat districts was put in on stubble, and crops in such situations are reported thin. The magnificent weather which has prevailed during the regular part of the ripening season has, however, to a large extent counteracted this defect by causing the heads to be particularly well filled."

Wheat cutting was general throughout the Territories by the 25th August, having begun at some points as early as the 14th, in others as late as the 25th. Threshing will not be general before the 1st of October.

The Bulletin divides the Territories into fourteen districts, though the chief interests naturally centre in the five included in Eastern Assiniboia where the bulk of the Territorial wheat is grown and the Edmonton district (No. 12) already famous for oats. In these districts

the most favorable conditions are reported. Most of the unfavorable reports come from districts where little grain is grown.

The probable product of the principal crops is summarized as follows:

 Meat
 Acres
 Bushels.

 Oats
 276,942
 10,725,500

 Barley
 30,022
 844,000

A regrettable omission from the report is the expected average per acre. Of course we can figure it out for ourselves, but see no reason why the figuring should not be done where the statistics are compiled. It will be seen that the average, from above figures, is as follows:

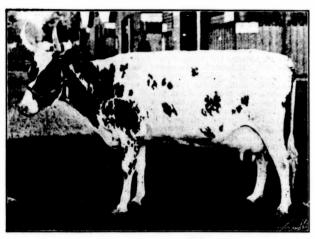
Wheat 25.3 bus. per acre. Oats 38. bus. per acre Barley 28.1 bus. per acre.

The Manitoba Government has issued no August crop report, but the inofficial reports place the probable yield of wheat between 24 and 25 oats 40 to 45, and barley 35 to 40 bushels per acre. There has not been, up to the present, damage from frost or hail, and as grain is now all in the stook there is no fear of loss from these causes. Threshing is now well begun, and if the necessary men can be secured and if the season continues as it has begun, every thing will be lovely in the Prairie Province.

We note with mingled regret and pleasure that the Dominion Fruit Inspector has caught a couple of apple shippers from Galt, we believe in the offence of falsely marking their packages. In two instances boxes marked "Fancy" contained specimens of the size of hen's ergs, and small eggs at that. It has been a cause of wonderment to us that, while making such ef-

Sheep Shearing Contest

The sheep shearing contest at the Industrial Fair was a most interesting one and aroused considerable excitement among the shepherds at the show. There was evidently some misunderstanding among the competitors as to the conditions of the test. Many were under the impression that quickness alone cousted as they hustled through the operation without any regard to the neatness and completeness of the clipping. The judge, however, decided otherwise and gave first place to Walter Fawkes, Mt. Vernon, who took 28 minutes to shear his sheep, second went to F. Silversides, Uxbridge, a fast worker and third to Thomas Butt, King, Ont.



Minnie of Lessnessock-9176-, Champion Ayrshire Cow, Toronto Industrial Fais, 1902.
Owned and Exhibited by W. W. Ogilvie, Lachine Rapids, Que.

The Western Fair

This is certainly a great year for fairs. Beginning with Ottawa the three important Fairs of Ontario have been most successful. The Western Fair at London last week was in several respects one of the best ever held in the Forest City. The attendance was good and the gross receipts far in excess of last year. The association will likely have a good surplus when all accounts are straightened. The exhibits were good, all the depart-ments being well filled. Like Toronto the absence of the larger implement manufacturers was not so noticeable as was the case a couple of years ago. This year the ma-chinery hall at the Western was well filled with a number of inter-esting exhibits, many of which were farm implements quite a few American firms being represented. Below we give a full report of the live stock and other departments of the show.

HORSES

The London district has long been famous for light horses. In the old days some very good Thoroughbreds were much in evidence at all the fall shows. The class of carriage horses was also good and many fine teams for city use were raised in the section of country tributary to the forest city. This year the show of horses was good and there were many fine light legged animals, but taken all in all the heavier classes were better by comparison than in former years.

Thoroughbreds were few. S. P. Thompson, Woodstock, was first in the class for aged stallions and W. Fitzgerald, London, was second. The former had third place in Toronto this year. W. J. Thompson had first for his three-year-old, son of Derwentwater. For the best mare and foal John Coventry, Woodstock, had the tickets with the only ones shown.

Hackneys were also few but had some very good animals. Bawden & McDonnell, of Exeter, had first and third for a good pair of im-ported animals. First went to the chestnut, a well made one and a good actor, but many thought he should have been below Jubilee Chief, the old Worid's Fair winner, who was placed second. He is owned by A. St. Clair, Aylmer. Third was a bay, stout and low set a good type of a hackney. In the two-year-old class T. A. Cox, of Brantford, showed a chestnut with four white legs and cream colored mane and tail. He is a gay horse and a good goer. For yearlings the same exhibitor had a dark brown, almost black, a likely colt. These were both winners in their class. For mare with foal S. L. Pound, Glencoe, was first, T. A. Cox se-cond with a bay with dark points and O. Sorby third. They were and O. Sorby third. They were only a fair lot. For three-year-old fillies Mr. Pound had one good enough to win from J. W. Coulter, Talbotville, who had second and third prizes. W. J. Travers, Bowmanville, had a nice pair for which he got first and third. Yearlings were a good lot. Oswald Sorby, Guelph, won first, W. J. Travers second and B. M. Wilson, Delhi, third. The latter had the best foal a very promising one with T. A. Cox second and W. J. Travers third. For stallion and his get, Jubilee Chief won for A. St. Clair, and the same exhibitor had the sweepstakes for best mare of any age. It may be mentioned that in several of the harness classes the get of Jubilee Chief were the winners and they had first for high steppers.

Carriage and Coach were a good class and there was keen competition for the prizes. In the aged stallion class, Bawden & McDonnell, Exeter, won with their Hackney stallion, "Clerkwell", 16 hands and half an inch, a horse with both

quality and size and an excellent type of a first-class harness horse. Second went to W. C. Brown, Meadowvale, for a bay of the style of a German coach and third to James McCartney, London. In the three-year-old class John Coulter, Talbotville, was the winner. The sweepstake ribbons were given to Clerkwell. There was an excellent class of brood mares. W. C. Brown captured first prize with Messrs. L. K. Wilkes, of Galt, a close second and J. J. Poole, Salford, third. For foals the order was reversed, Mr. Poole being first, Miss Wilkes again second, and Jno. W. Coulter in third place.

Three year-olds were a good lot as were all the filly classes and the awards were well distributed, no exhibitor in any of the three classes getting a second ticket. For yearlings, W. C. Brown had first, yearlings, W. C. Brown had first, A. W. Venning, Belmont, second and W. T. Fletcher, Talbotville, third. Two year olds were headed by Bert Kennedy, Ilderton, with A. Blakie, White Oak, and R. J. Hickey, Strathrov, following. Samuel Shephard, Forest, was given first for three year olds, A. J. Montague second and James McKee, Denfield, third. W. C. Brown had all the sweepstakes ribbons in the class. For best pair 16 hands and over a nicely matched pair of blacks shown by T. Hortop, St. Thomas, were first. They are mixed trotting and thoroughbred blood, both four years old. Second went to O'Neil &Co., London. In pairs under 16 hands, Mr. Adam Beck was first with a beautiful pair and the same exhibitor had first for both the single drivers over and under 16 hands. For single drivers, L. Don-ly, St. Thomas, was second and A. St. Clair, of Aylmer, third in the class under 16 with P. Farrell, Woodstock, third over that size. J. P. Beattie, Derwent, had third for carriage teams.

Roadsters were well represented in the aged class. Colin McKeigan, Strathroy, had the winner with S. P. Thompson second and Jas. McKie, Denfield, third. The latter horse won the sweepstakes for roadster and four of his get. There were a pair of two year-old stallions, W. Oke, London, got first, G. W. Kennedy, Ilderton, 2nd. For yearlings, Miss Wilkes, Galt was first and J. B. Moore, Delhi, second. Brood mares were led by G. W. Kennedy with a very choice animal showing good lines, Herbert Mathews, Meadowville, being second and B. M. Wilson, Delhi, third. For foals Miss Wilkes was first, S. P. Thompson, Woodstock, second and R. Paisley, Ilderton, third. Mr. J. Liddell, Denfield, got first for three-year-old filly, J. W. Prangley, Strathroy, second and P. Farrell had third for a 3 year old and second for a two year old, a fine pair. James McKie had the winning two-year-old, with J. B. Moore, Delhi, third and Edwin Phillips, Falkirk, won for yearling roadster filly. F. J. Thompson, Denfield, second and Chas. E. Trebilcock, The Grove, London, third. Dr. W. R. Watson, Burgessville, had

first for a fine speedy pair over 15½ hands with T. Horton, St. Thomas, second. For pair under 15½, H. E. O'Neil, London, had the winner, Peter O'Dell, Belmont, second, and Miss Wilkes third. For single roadsters, Miss Wilkes for over 15½ and J. A. Kelly, Listowell, for under that with his winning mare at Toronto which also won the sweepstakes here.

Saddle Horses and Hunters were a good lot. The prizes all went to the Adam Beck stables, Mr. Beck winning first and third for the saddle class and second for hunters. For heavy weights, Antelope, Plato and Glencoe, were winners and in light weight hunters, Solitaire, My Fellow and Dunkirk were the winners in the order named.

HEAVY HORSES

There was a good show, a very good show of heavy horses. In Clydesdales the newly imported horse Black Rod, owned by Oswald Sorby, Guelph, was first. He is a thick breasted, big bodied black with good legs and feet, nice pasterns and fine hair. He is near to the ground, his hocks very close to the ground. He is by the great Baron's Pride, the most celebrated sire in Scotland. Second went to the same owner for Pride of the Morning also by Baron's Pride, a bay with off feet white. He is heavily built and closely coupled. Third went to a very big horse shown by Bawden & McDonnell, Exeter, a four-year-old named Canongate and is said to weigh a long ton, 2,240 fbs. He has a great big body on heavy thick legs with lots of hair and massive bone. There were a lot more of very good horses shown.

J. B. Hogate, Sarnia, had a trio just newly landed and hardly over the hardships of the voyage. Royal Success (11513), by King of Kyle, is a big black with three white legs of good quality. Another very good black named Corner Stone (11016), by Carthusian, was sold by Mr. Hogate to Chas. Groat, Oshawa, Ont. The same exhibitor had the second prize for three-year-old stallion Kyle McNab (11389) by Prince of Kyle (7155). He is a big good horse with good feet and legs a bay with four white socks. First in this class went to James Henderson. Belton, and third to James Dalgety, London. Bawden & Mc-Donnell won for two-year-olds with O. Sorby second and James Dalgety third. This was a very good class full of promise. O. Sorby won first for yearlings with A. B. Scott, Vanneck, second and E. C. Attrill, of Goderich, third. Sorby won for mare and foal for yearling filly and both the sweepstakes prizes. There was a fine show of teams. The winners at Toronto were here shown by T. A. Cox and again put first while second went to O. Sorby for a good One of these, Montrave Geisha was sweepstakes mare. She is a very handsome mare and has a set of legs much admired by all. Third prize for team went to Ed. Sims, Thamesford.

Shires were not as numerous as the Clydes, but had the best of those shown at Toronto. Belshazzar was alone in the aged class. He is a line type of a heavy draught horse. The same owners Bawden & McDonnell had second pawten of altronner had second for two-year-old stallion and also second for foal. In the class for three-year-old stallions J. B. Hogate had first for Notely Monarch II (18967), a black with white on off hind foot. He was bred by Thos. Bradly. Alston. Preston. Thos. Bradly, Alston, Preston, England, sire Tartar 2nd (15385) dam by Eiffel Tower (9271). Se-cond went to Eli King, Crediton, all the other prizes for Shires went to Morris & Wellington, Fonthill, who had a fine lot. A pair of black yearlings are especially good and were first and second. General Favorite, by Lockinge Harold, is very good quality. They are both much alike and are not only out of the same sire but are from mares by the same horse. They are the best pair in the class. The two year old bay horse Bank Statesman, by Carltonite, was first in his class. The same exhibitors have a lot of good fillies. Moulton Marianne, a two year old, is very good. She was sweepstakes female.

SWINE

The swine exhibit was well up to the average. Like Toronto the display was for the most part confined to 3 breeds, Berkshires, Yorkshires and Tamworths. The entries in the other sections were little more than enough to take up the prize money. As at Toronto there was a class for other distinct breeds which had better be dropped another year.

Berkshires.—These made a very good show, the chief winner being Wm. Wilson, Snelgrove, Ont., with T. A. Cox, Brantford, a good second, he securing all the herd prizes. In the aged boar class the decision at Toronto was reversed, Durham's big boar which secured first there, only getting third place at London. Wilson's two boars being placed ahead of him. Wilson's Longfellow boar that did not secure a place at London. He is a good long, lengthy pig.

Vorkshires.—There were the same exhibitors out as at Toronto with the exception of Duck & Sons, who did not go to London. With the exception of the aged boar class, the chief awards as at Toronto went to D. C. Flatt & Son, Mill-grove. Joseph Featherstone & Son secured a number of minor prizes. In the aged class at Toronto, H. J. Davis' imported boar was thrown out, many thought unjustly so. At London the got first place, winning out against Flatt and Featherstone.

Tanworths.—The Tanworths made a good showing, the prizes being a little more evenly distributed than in the other sections. D. Douglas & Sons, Mitchell, had the larger number of firsts and all the herd prizes. Frank R. Shore & Sons, White Oak, came in for two firsts in the boar classes. For

boar under 6 months first honors went to H. C. Begg, Glanworth, with these three exceptions, Douglas & Sons had all the firsts with Shore & Sons a good second. Jno. Cr Nichol, Hubrey, had a number entered and though securing several prizes did not succeed in getting to the top in any class.

There was little competition in the other classes. W. E. Wright, Glanworth, had opposition in only two sections in Chester Whites, where Henry Harding, Thorndale, carried off one first and one second. W. M. Smith, Scotland, Ont.. was the only exhibitor of Poland Chinas and the same exhibitor along with W. N. Tape, Bentpath, were the only exhibitors of Duroc-Jerseys in which there was little if any competition.

POULTRY

The poultry show was a very good one and in several respects the biggest ever seen in the west. The farmers' fowl were out in strong force there being some very fine birds to choose from. The Barred Rock sections were fully up to the average with the quality good, though some of the younger birds were not so well grown as they might have been. The Buff Rocks were exceptionally good, the best ever seen at a London show. From the character and extent of the exhibit we should judge that the Buff Wyandotte was fast coming to the front. The White Wyandottes were among the best of the utility birds shown, the young winning birds being especially good. Light Brahmas were hardly up to The Leghorn class the average. though up to the average in number was not as well filled as might be considering the importance of this breed in the country. Quite a number of Buff Orpingtons were shown. The Orpingtons are coming to the front in Canada and the Western Fair people should arrange for a separate class for Buff Or-pingtons another year. This year there was only one class for all the Orpington varieties.

LIVE STOCK JUDGING

Dairy Cattle.—t, Reginald L. Moorehouse, Cairo: 2, J. O. Laird, Blenheim, 3, Duncan F. Stewart, Hampstead, 4, T. B. Dunkin, London

neim. 3, Duncan F. Stewart, Hampstead, 4, T. B. Dunkin, London. Beef Cattle—t, J. O. Laird; 2, Alf. Streeman Morgan, Kirwood.

Sheep.—1, Chas J. Shore, Glanworth; 2, T. B. Dunkin; 3, Reginald L. Moorehouse; 4, Frank Shore, Glanworth.

Swine.—1, Geo. Douglas, Mitchell; 2, T. B. Dunkin; 3, H. C. Begg, Mitchell, 4, Geo. A. Dewar, Kertch.

AGRICULTURAL AND DAIRY PRODUCTS

The building devoted to these branches was well filled with a very creditable display. There was a very fine show of fruit and flowers which attracted very much attention. The display of vegetables and grains was hardly up to what we have seen at former London shows. The backwardness of the season may have had something to do with it.

The dairy department was well filled. The amount of cheese and butter shown was about the same as last year. The quality, especially of cheese, showed marked improvement. The following are the winners in the six butter and cheese sections:

CHEESE

Sec. 1—Best. 3 August Colored.—1, M. Hamilton, Listowel: 2, John Frances. Eden: 3, Frank Traves, Courtwright: 4, J. W. Clarridge, Glen Huron: 5, Miss Mary Morrison, Newry. Sec. 2.—Best. 3 August, white.—1, A. E. Gracey, Tavistock, 2, Geo. G. Ludlow, Holmsville: 3, Geo. A. Boves, Putnam; 4, R. II. Green, Trowbridge: 5, W. P. Stacey, Fullerton. Sec. 3.—June and July, Colored.—1, Geo. A. Boves; 2, John Connolly, Malcolm: 3, S. P. Brown, Birnam: 4, J. W. Clarridge. Sec. 4.—June and July, White.—1, Miss Mary Morrison, 2, Geo. A. Boves; 3, Robi-Cuddie, Woodstock, 4, J. W. Clarridge.

BUTTER (CREAMERY)

Sec. 1.—Creamery Butter in Packages.—Win. Waddell, Kerwood; 2, Geo. Balkwell, Ladontaine; 3, A. A. Bobier, Exeter: 4, II. W. Parry, Compen, Que.; 5, James Ireland & Sons, Peachville. Sec. 2.—Creamery Prints.—(, James Ireland & Sons; 2, J. C. Bell, Winchelsea; 3, Geo. Balkwell. 4, Win. Waddell; 5, W. H. Brubacher.

FARM DAIRY

Sec. 1.—Best Package.—1, Chas. E. Rogets, Dorchester, 2, Miss M. Hunter, Rockton. 3, J. C. Love, Little-wood. 4, D. Stewart, Hampstead. Sec. 2.—Best Prints.—1, Miss M. Hunter, 2, D. Stewart, 3, Chas. E. Rogers 4, Mrs. E. Lawrence, London West.

Mr. I. W. Steinhoff, Stratford, acted as judge on cheese, and Prof. Dean, Guelph, judge on butter.

BUTTER MAKING COMPETITION

London followed the example of Toronto this year and held a butter-making competition which proved to be a strong drawing card. A portion of the old dairy building was set apart for this work, and though small served the purpose very well to begin with. A special building for this and the dairy products exhibit should be provided another year. There was only one class, that for the home dairy. There were seven competitors. Miss Mary Miller, Guelph, acted as judge. The following is the list of the winners:

1. Miss M. Green, Loyal, Ont.; 2, Miss M. Hunter, Rockton: 3, Miss Jeanette Stewart, Hampstead; 4, Miss E. Hewston, Mayfield, Ont.

The successful ones had previously been prize takers, at Toronto. Messrs. T. B. Miller and Robt. Ireland gave addresses during the competition.

Reports of Cattle and Sheep Departments will appear next

The Nova Scotia Provincial Fair

(Specially Reported.)

The cattle exhibit at Halitax was a decided improvement upon former years, both the quality and preparation showing marked improvement. In beef breeds, Shorthorns made the strongest showing, the principal exhibitors being C. A. Archibald, Truro, N. S.; F. E. Dickie, Canard, N. S.; L. G. Harris, Canning, N. S., and D. S. Collins, Port Williams, N. S. Archibald carried off championship honors on his aged bull, Robert the Bruce, and Dickie had champion female. In aged herd, Harris had first, Dickie second, and Archibald third. The breeders' young herd prizes went to Archibald and Collins, and the Dominion Shorthorn Breeders' special for bull and four females any age, also went to Archibald, with Harris a close second.

W. W. Black, Amherst, N. S., had the only Herefords on the grounds, with the exception of a good twocear-old bull shown by Wm. O Brien, Windsor Forks. The Black Herefords are a capital lot, and were shown in fine condition. Mr. Black can make it interesting for Western breeders any time he sees fit to bring his herd west.

Only one Aberdeen Angus was in evidence, and that was a cow shown by J. A. Magec, Port Williams, N. S. W. W. Pinco, Waterville, N. S.,

w. W. Pineo, Waterville, N. S., and Senator Ferguson, Charlottetown, P.E.I., divided the Galloway prize money pretty evenly between them.

A small herd of Devons was shown by G. W. Moses, Ohio, N.S.

Ayrshires came out in strong force and made a good show. M. H. Parlee, Sussex, N. B.; F. S. Black, Amherst, N. S.; C. A. Archibald, Truro, N. S.; and J. Me-Donald. New Glasgow, had the principal exhibits, but a number of others had entries of good quality. Parlee secured the championship diploma on his aged bull, though a number of onlookers would have given it to Black's two-year-old. Parlee also had the female championship, and first in aged herd, with Black second, and Archibald third. First for young herd went to Archibald, second to Parlee, and third to Black.

Jerseys made a capital showing. J. R. Starr, Lower Church St., N.S., W. McMonogle, Sussex, N.B.; W. S. Pipes, Amherst, N.S., and a number of local exhibitors, put up a strong fight. Starr carried of the male championship, and J. L. Harthem, Halifax, the female championship. Starr also got first on herd, the second and third places going to Pipes and McMonogle, respectively. The young herd prizes went to Starr and Pipes.

Four herds of Guernseys were on hand, the owners being McMillan & Dawson, Charlottetown, P.E.L.; E. R. Brow, Charlottetown, W. Mc-Monogle, Sussex; and S. J. Moore, Shubenacadie, N.S. Moore had champion bull, and McMonagle champion female. McMonagle had first in herd, Brow second, and McMillan & Dawson third. The young herd went to Brow, with McMillan & Dawson second.

Holsteins were out in good number and showed considerable quality as well. The principal exhibitors were Logan Bros., Amherst Point; F. E. Came, St. Andrews, N.B.; and Samuel Dickie, Central Onslow. Jas. McKenzie, Shubenacadie, had the champion bull, and Logan Bros., the champion female. Logan Bros. and Dickie stood first and second respectively in herds.

A few Quebec Jerseys were shown by J. E. Baker, Barronsfield, and E. Baker, Amherst.

Grade beef and dairy cattle were out in large numbers, and there were many entries of high merit.

SHEEP.

The sheep exhibit was well up to that of previous years, and, if anything, ahead of other years in quality. Shropshires and Oxfords made the strongest showing, and competition was very keen in both classes.

A. Boswell, Pownall, P.E.I., and M. H. Parlee, Sussex, had out some good Leicesters. Parlee's flock lacked fitting and Boswell captured all the firsts.

Cotswolds were shown by H. W. Corning, Chegoggin, and H. B. Parker, Sussex. Corning is a young breeder, but he brought out his stock in good shape, and won pretty much all the first ribbons.

A small flock of Dorsets was shown by J. M. McDonald, Hopewell, and a very good flock of Hampshires was brought out by A. Munro, Marshdale.

Lincolns were shown by A. Boswell, Pownall, and R. G. McLeod, Lansdowne Station, Boswell having the better of the argument.

Shropshires were in the hands of Logan Bros., Amherst Point; A. Boswell, Pownali; A. McPherson, Rocklin; W. Sharp, Windsor; J. McDonald, Shubenacadie; Logan & Harris, Pictou, and a few others. Logan Bros. captured the best prizes on a very uniform flock of good type.

Silas Lane, Southport, P.E.I.; J. E. Baker, Barronsfield, and F. S. Black, Amherst, had a hot time in Oxfords. Lane got most of the firsts and the flock prize, but he had to fight for it all along the line. S. J. Moore, Shubenacadie, had only two ram lambs, but they were good enough to win first and second in their section.

Only two flocks of Southdowns were out, the owners being R. Furness, Vernon River Bridge, and D. R. McKay, Hopewell, who ranked in the order named in their winnings. F. E. Came, St. Andrews, showed only a few specimens, but they were remarkably good ones.

There were three flocks of Cheviots, but they lacked fitting. The

exhibitors were D. Ballentine, Woodbourne, P. Adams, Plainfield, and H. Leithead, Logan's Tannery. Grades were out in good force, and made an interesting competi-

The swine exhibit was smaller than usual. M. H. Parlee, Sussex, Logan Bros., Amherst Point, and H. W. Corning, Chegoggin, showed Berkshires, and the honors were pretty evenly divided.

Yorkshires made the strongest exhibit among the swine, J. W. Callbeck, Augustine's Cove, P.E.L. had the best of the argument, though Logan Bros., C. J. Keeler, Dartmouth, M. H. Parlee, and F. E. Came, were in the fight all the

Small exhibits of Tamworths, Chester Whites, and Poland Chinas were made by J. McDonald, Shu-benacadie, H. W. Corning, Chegog-gin, and J. A. Gould, Aylesford, respectively, and a few Duroc-Jershown by J. E. Baker sevs were and E. Baker, Amberst.

There was also a considerable exhibit of grade swine.

What Should the Draught Horse Weigh?

This is a question that is not answered with definiteness. To decide upon a specific weight and say that all horses weighing that or over are heavy draughts and all below that not eligible to be classed among the heavy weights. And so the matter stands. A writer in the London Live Stock Journal deals with this question as follows:

"How heavy in muscle ought the fully-developed draught gelding to be? Such is a question one is often tempted to ask at the ring-side. As a rule the answer can only be obtained direct from the large contractors vards, where ever literal incident is marked in the horse ledger against every mile tramped, light or heavy, every bound of forage consumed or eaten, and every ounce of veterinary medicine dis-pensed. It is really only in this way of accurate registration that one can arrive at such correct deductions.

Those wh engage in the purely gelding extention business judge of coming young horses only as they see them in the so-called showyard flesh. Things rule out very differently in the brewers' or contractors' yard, where no honors have to be awarded, and the upvard, where no honors turning of a director's thumb on a Monday morning means relegation to the knacker's yard, and, in downright fact, practical extermination.

'As a rule Shires are well up to weight. The problem of the utili-ization of the horse's weight per gravity against its power in overcoming the vis inertiae comes, however, in turn to be considered. Pound for pound, all three breeds will pull against each other to an ounce, and the economy of using either is merely a matter of keep and climate. A weighty Shire or

Clydesdale with nice flinty, clean bone and a little silky fringe of feather in the legs, is hard to beat, however, under any circumstances, Weight in all modern horses, we are of opinion, ought to be set low, so that the difficulties of modern street journeys may be overcome. Weight in what might be called the hams and hocks is too readily lost sight of in view of a good middle-piece and fore-end. Power in the quarters is a grand point in any draught horse required for actual draught work and every one would like to see the draught horses fill their breeching more than they do at the present time. Good backing action with weight always tells in the powerful lorry horse, and breeders should never neglect the importance of this."

Strength of Bone in Swine

No animal kept on the tarm is more dependent upon the kind of food it gets for its health than the hog. Many farmers fail to recognize this and, consequently, are troubled with sick bogs. A few years ago an interesting test was conducted by the Indiana Experiment Station, in which hogs were fed four different rations, namely, lot 1, corn: lot 2, dry wheat; lot t, corn and wheat, half and half, and lot 4, soaked wheat. During a period of 105 days the four hogs that were fed corn consumed 1.588 pounds, while the lot that received dry wheat consumed 1.591 pounds. Those that received a mixture of corn and wheat, equal parts, con-sumed 1,591 pounds, and of the sumed 1,591 pounds, and of the soaked wheat the same quantity. During the period the corn lot gained 487% pounds, while the pure dry wheat lot gained 433% pounds. dry wheat lot gamed 4334 pounds. The soaked wheat lot gamed 442½ pounds, and the mixed corn and wheat lot gamed 472½ pounds. These figures indicate that the corn fed lot made the largest gain, while the corn and wheat lot made the next largest, the soaked wheat the next, and the dry wheat fourth.

At the conclusion of the experiment a test was made in order to ascertain the comparative strength of bone of the hogs in these four lots. For this purpose two arm bones were taken and after remov-ing from them all flesh they were placed in a testing machine and subjected to a test of their crushing strength. Separate tests were made of each bone in each animal, with the result that the bones from the corn-fed lot crushed much more readily than did those of the remainder. The crushing strength of the ulna of the corn-fed lot represented as 750, while the dry-wheat lot was 808.3. The soakedwheat was the highest, being represented by 1,105, the corn wheat lot being next at 969.6.

Correspondence

Commuted Statute Labor in Orillia Township.

Editor THE FARMING WORLD:

The system of commuted statute labor has been in force in the Township of Orillia for three seasons now, and has given general satisfaction at least in so far that there are few who would propose a return to the old method of buildeg roads by statute labor. During the first year there was considerable grumbling because certain sections of the township and par-ticularly the back parts considered that they were being entirely ne-glected, the money being largely glected, the money being largely concentrated on the "front" roads, on the principle that all who came to market, whether from far or near, would benefit by the improved roads. The question of the lay-ing out of the road moneys became a very live one in township politics at the close of the first year of the commutation experiment, but it was significant that, while a number of speakers and candidates condemned, at the nomination meeting, the council's management of the roads, not one declared himself in favor of a return to the old system. Since then there has been very little friction, the council having succeeded in so arranging the allotment of moneys as to overcome the objections raised the first year, recognizing that there was force in the contention that "front" roads which would enable farmers to carry large loads were of little

use to those living on "back" roads which were impassable in the spring and fall. Aside from this feature, (which could probably be avoided in other townships, particularly in those where there is less new country and fewer new roads than Orillia) the new system seems to give very general satisfaction. I have frequently heard it said that Orillia roads have improved more during the past three years than in the previous twenty under statute labor. It is the universal testimony of those who have much driving to do that Orillia Township roads are improving faster than those of any of the surrounding municipalities which stick to sta-tute labor. At the same time, while commuting the statute labor at fifty cents a day, the council is spending rather less than more money in addition to statute labor tax than they did before.

At first the Township Council employed only four overseers for the whole municipality, but this year they have increased the number to nine. Whether this is working better, I have not yet had opportunity to learn.

I am told there is some dissatisfaction in certain sections of the township this season, arising from alleged neglect of their roads; but on the whole I think I am right in saying the new system is considered a satisfactory advance on the

Yours truly, C. H. Hale. Orillia. Ont., Sept. 9, 1902.

The Toronto Industrial Fair

(Continued from last issue.)

Grains, Roots and Vegetables

The Agricultural Hall this year was well filled with grains, roots, etc., from Old Ontario. All the classes were well up to those of last year in both quality and quantity, with the exception, perhaps, potatoes and tomatoes, which were below the average. were some of the best samples of grains shown in years. An exhibit of white oats was the best we have ever seen. The roots were of better quality than last year. being more solid and not so spon gy and better keepers. Cabbage were particularly fine. play of tobacco was much larger than last year. The building was well decorated with bunting and showed off to good advantage.

New Ontario and Western Canada

New Ontario showed up in splendid style at this year's show. One building, formerly occupied by the bicycle exhibit, was given up to this part of the province and the West Indian exhibit. The latter was most interesting and attracted a lot of attention. The New Ontario exhibit was in charge of Mr. R. A. Burris and Mr. D. A Burk, of Port Arthur, Ont. former is the Dominion Government agent in New Ontario, and to him is largely due the collection of grains, grasses, etc., shown at Toronto this year. In the centre of the building was a neatly-made of the bulling was a heatly man-hut, built of poplar, and named, "Poplar Hall." This showed very strikingly the kind of wood grown in the Northwestern portion of the province and the style of house built by settlers. The collection of grains, etc., comprised specimens from the valleys of the Rainy River; the Slate River; the Whitefish River; the Kaministiqua River and the Oliver River. The quality was very good. 150 varieties of native grasses were shown, a special feature being the display of clover and timothy, which grow most luxuriously west and north of Lake Superior. In one corner of the building was a neatlyarranged exhibit of the products of Temiskamming district in the remiskamming district in charge of Mr. Armstrong. The cost of the exhibit from New Ontario was borne by the Ontario Government.

In the C.P.R. building a most attractive display of the products of Western Canada is shown. It comprised grains in straw and otherwise, grasses, etc., grown in Mani-toba and the Territories.

Agricultural Machinery

Since the leading Canadian farm implement manufacturers refused to exhibit at Canadian fairs some few years ago, the machinery halls on the grounds have been gradually filling up with new exhibitors, the smaller concerns taking advantage

of the absence of their larger competitors to display their goods to the public. Since the withdrawal of the larger firms a large number of American concerns have come into the field. This was specially noticeable this year, there being half a dozen firms from Uncle Sam's domains filling up space that should be occupied by Canadtans and others with established trades in Canada. We are glad to see these exhibitors here and vet it is a matter of regret that our larger Canadian manufacturers stand aloof and are not present to show off their goods alongside of their competitors. There is strong effort being made now to induce Canadians to buy Canadian goods, but how can our larger agricultural implement concerns expect this advice to be taken in respect to their wares when they make no effort to bring their goods before our own people at the larger fairs. To the farmer the agricultural implement display the most interesting at the fall fair. If he does not buy, he sizes up the different exhibits and forms some definite ideas from what he sees as to the machine, he will buy when ready. Another phase of this question is worthy of attention. The number of foreign visitors at the Industrial is growing larger every year. What kind of an opinion will these form of Canadian manufacturers if they abstain from exhibiting? They will return home with a very poor conception of what Canad is capable of doing in this particular. Should a Dominion Exhibition be held here next year, some effort should be made to bring the implement men into line. If they are faithful to their trust as Canadians, they should be represented at our leading fairs. POULTRY

The exhibit of poultry at the Toronto Exhibition was certainly a grand success, the largest ever held there, being nearly 6,000 birds including pigeons and canaries, there not being nearly room enough to accommodate all the birds. There is certainly great need for a new building, the poultry one being the poorest on the grounds. When the exhibitors view the magnificent building the howling dogs occupy and then go into the cluttered-up place the poultry have, they feel as though some steps should be taken to effect a change. A large num-ber of the birds had to be left in their shipping coops and placed on the floor or on top of the other coops, not doing justice to the exhibitor or to the public. The two tier system is out of date, especially in a place where there is not light enough. Why should the dogs, which are owned largely by wealthy people of the cities, and returning comparatively no revenue to the country(compared with

poultry), have the best. As the poultry industry is becoming one of our leading industries it should have more consideration at our Fair Boards. There has been a very important step taken along this line by the Board in the dressed poultry and eggs department; the cold storage case in the new dairy building proving an excellent place for the exhibit, although it would have been much better to have had a single tier case, as the dressed stuff was too low to be seen to a good advantage and the eggs were altogether too high. hope this will be remedied before another season. However, we are not finding fault, only making suggestions, as it was certainly very educational as it was.

DRESSED POULTRY

Although there was not as good a display as might have been expected, it being the first time, no doubt, another year will witness great improvement in this line. There were a few very nice specimens in the Barred Rock, White Wyandottes and Dorkins, Mr. Teale, of Guelph, and Mr. Arm-strong, of Fergus, obtaining most prizes in these classes. A very fine bird of the Buff Orpington class was sent from Quebec, but being packed in with eggs in shipment, had started to decompose, and had to be thrown out. Peo-ple sending dressed poultry this time of the season should exercise

great care in cooling and packing.
The turkeys, ducks and geese
were in small numbers and only fair specimens, it being rather early for 1902 turkeys, but ducks and geese could have been improved, both in quantity and quality.

The egg classes were well filled, there being a good display from all breeds. The dressed poultry and eggs were judged by W. R. Graham, poultry manager, O.A.C., who was quite competent for the task. The eggs were judged by color, weight, and freshness. Some extra large ones were on exhibit, the largest being in the White Leghorn and Minorca classes, the Leghorn coming out ahead by one ounce, the 12 eggs weighing 2 lbs. 4 oz., and the Minorcas 2 lb. 3 oz. Mr. Graham remarked that they were the heaviest he had ever weighed. There were certainly some large ones in many of the other classes, but upon the judge breaking them it was found that they had been held too long; some lots had not been gathered regularly, as many eggs had the embryo started, which would have won would have won first place on their size, but were thrown out. There is no excuse for this kind of work. Eggs should be gathered regularly in the warm weather, as very little heat will develop the germ and when the egg cools off the germ dies and it soon loses its flavor.

LIVE POULTRY

The Barred Rock class was certainly a very hot one, there being over 100 birds present, probably

the largest exhibit ever held in this class at the Toronto Industri-al. The Barred Plymouth Rock is pre-eminently the general purpose owl of to-day, though other birds have their admirers; but in Canada and the States they are a long way in the majority as a utility fowl. There were some extra fine specimens in this class. Newton Cosh & Co. having an extra fine cock, winning 2nd place, a grand bird with extra full breast and short, well-set legs, the proper type to select for breeding table poultry. He also had 1st hen and 1st pullet, of splendid shape and color; he also won silver cup for best Barred P. R. J. K. Millard, Dundas, won 1st cock, a good bird; R. B. Millard. London, winning 1st cockerell, a well feathered bird.

The Wyandottes came next in number, there being 78 birds present. This favorite variety, as a general purpose fowl was quite equal to the Barred R., both in shape and feather. Some of the experters favor this breed, as they are inclined to be a more compact and smaller bird maturing earlier. They have the advantage over the B. P. R. in color when dressed, as they do not show the dark pin-leathers, which the Rock often does, giving them quite a dark ap-pearance. The principal winners in pearance. The principal winners in this class were R. B. Millard & Son, London; J. F. Kingsmill, London; L. H. Baldwin, Deer Park. The White Rocks were out in good numbers, there being 57 present. Some fancy the White Rock in preference to the Barred. The only advantage they have as a utility fowl is the white pin-feather. There were some exceptional fine birds shown, some that had made a record in some of the American shows.

The Silver Dorkin came next in number, 54 birds being there. This is undoubtedly a great favorite in England as a table fowl, but does not seem to have the constitution to stand our climate very well. The Light Bramhas made up a strong class of 53 birds. This seems to be the favorite of our Asiatic class Some years ago they had the reputation of being great sitters, but fortunately most of our breeders have bred this desire out and made them more useful, but I do not think they answer our requirements nearly so well as some of our American classes. They have too large a frame to make from 3 to 5 lbs. matured birds. The feathers on the legs are also objectional in dressed stuff, as also is the Cochins and Langshangs, which were not out in very strong competition. The Buff Orpington, though not a strong class, there being 26 birds on exhibition, attracted considerable attention. This new comer promises great things as a winter layer and table fowl for export. Our shippers are all anxious to get this new breed to the front as soon as possible as they possess white legs and white flesh, which John Bull so much admires. The breed-

ers of this favorite variety find considerable difficulty in getting true type, as they breed back quite readily, only having been originated a few years ago. They are a cross between the Buff Cochin, Dorkin and Hamburg. The Dorkin seems to be the hardest feathers to breed out, especially the black and white. The Black Minorcas made a very nice class of 28 birds, most of them extra fine specimens. Leghorns were out in strong force, there being over 100 in the white and over 75 in the brown classes, some grand birds in all four classes and hard to beat. The Indian Games made a very nice display, the 1st cock and 1st hen especially being well marked. The Buff and Silver Wyandottes made a handsome showing, although not large as also did the Buff Rocks, which numbered 47, and quite a number being perfect specimens of the breed. This class won the challenge trophy for best Plymouth Rock, which was taken by G. A. Johnson. The Polands, La Fleche, Creve Coeur, Black Spanish and Andalusions seem to be kept more for exhibition purposes than anything else.

The water fowl department was well filled with some extra fine birds, some ducks being almost as large as common geese. The goose class was a large one. One pair, exhibited by A. Bogue, were record breakers for size, winning 2 firsts. The turkey department was too much cluttered up for a fair exhibit: though not large, some good birds were to be seen.

The incubator men were out in great force, with their machines and poultry supplies. Mr. C. J. Daniels, the genial superintendent of the poultry department, had machines hatching and rearing chickens in the buildings. This seemed to interest a great many people who never before saw incubators at work. A J. Morgan, of London, had a fine display of incubators, brooders, poultry supplies. The Canadian Incubator Co., of Toronto, had a small exhibit of their machines, as did two American manufacturers, the Cyprus Co. and the Sure Hatch Co. Mr. Daniels had on his table a monstrosity, a chicken half grown with 4 legs and which had a crowd around most of the time anxious to J. W. C. see it.

The Branch Experimental Farms

Dr. Wm. Saunders, Director of the Dominion Experimental farms, who returned recently from a visit to the branch farms in the West, reports the crops, etc., at these farms as being very good and espe-cially so at Indian Head, where it is expected wheat will average 40 bushels, barley 50 to 60 bushels and oats 80 to 100 bushels per acre. At Brandon and Agassiz all cereals promise well. At the latter farm where considerable fruit is grown, the apple crop was scarcely an average one, but that of plums

was good though the plum rot prevailed to some extent.

American Crops

The Crop Reporter for Sept. published by the United States Department of Agriculture gives a summary of crop conditions on Sept. 1st, 1902. The average condition of the American corn crop was 84.3 on Sept. 1st, as compared with 86.5 on August 1st and 51.7 on Sept. 1st, 1901. In many of the Western States, though the outlook is good for more than an average yield, the crop is so late that the final yield will largely be dependant upon weather condi-

The average condition of spring and winter wheat at harvest was 80 against 82.8 last year and a ten year average of 78.9. The average condition of oats when harvested was 87.2 against 72.1 last year. While a large crop has been harvested there are indications that the crop will be deficient in qual-The average condition of barley was 89.7 against 83.8 last year and a mean average of 82, for the last ten years.

The average condition of potatoes on Sept. 1st was 89.1 against 94.8 on August 1st. The acreage of clover seed has been considerably reduced since last year only two states reporting small increases. Of the states having four million trees and upwards in apples, eleven report an improvement in condition during August. All but six of the important apple growing states report conditions ranging from 7 to 32 points above their ten year averages. On the whole the peach crop will be an average one though in the important peach growing states the production of peaches as compared with a full crop ranges from 10 per cent. in Illinois to 99 in Oklahoma. In all the states in which grape growing is of more than local importance with three exceptions the present condition is about that of Sept. 1st, 1901.

There is a decrease in the number of stock hogs now being fattened as compared with the number a few years ago in every important hog-raising state, except Pennsylvania where an increase of 1 per

cent. is noted.

Fruit Inspector for B.C.

Mr. Maxwell Smith, of Vancouer, has been appointed inspector under the Fruit Marks Act for British Columbia. The Pacific province sends most of its fruit to Territories, but in developing that trade supervision of fruit products is just as necessary as in the other provinces.

The fruit inspectors in Montreal are still finding packages of apples which are not packed or not mark-ed as required by the provisions of the Fruit Marks Act. The Depart ment of Agriculture has decided to employ extra assistance for a time in order to cover the work of inspection thoroughly during the busy season.

The Sugar Beet World

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

Edited by JAMES FOWLER

Beet Sugar at the Trans Mississippi Commercial Congress, St. Paul.

The thirteenth annual session of the Trans-Mississippi Commercial Congress, one of the most important organizations of the kind in the United States, was held at St. Paul, August 19-22.

The beet sugar interests were ably presented by Mr. Truman G. Palmer, of Chicago, the well-known

beet sugar authority.

Below we give a portion of Mr. Palmer's address as published in

the Beet Sugar Gazette.

The development of the manufacture of sugar from beet roots is one of the marvels of the nineteenth century, and represents an investment in factories alone, mostly in Europe, of between six and seven hundred million dollars.

To consider the beet sugar industry intelligently, a word should be said concerning the history of cane sugar, the production of which supplied the world's markets for centuries, before it was known that sugar could be produced, commercially, from beet roots.

CANE SUGAR

The original habitat of sugar cane is unknown, but is supposed to be in the country extending from Cochin China to Bengal.

The art of boiling sugar is men-tioned as early as the seventh century, the art of refining was dis-covered in the fourteenth century, Venice became the great European centre of the sugar trade in the fifteenth century, and during that century a Venetian received a reward of 100,000 crowns (\$111,940) for the invention of the process of making loaf sugar.

One of the earliest references to sugar in Great Britain is that of fifty tons being shipped to London in 1319, to be exchanged by a merchant for wool. At that time sugar sold for 43 cents per pound, and continued to be used only as a luxury and for medicinal purposes until the eighteenth century.

HISTORY OF BEET SUGAR IN EUROPE

After the fall of the Roman Empire, the barbarians took to Bohemia a so-called beet root, containing a few saccharine elements, but not enough to attract attention at that period.

The beet root is not mentioned again until 1705, when Oliver De Serre discovered that alcohol could be obtained from the fermentation which convinced him that sugar existed therein.

In 1747 the Prussian chemist, Marggraf, director of the physical classes in the Academy of Science at Berlin, obtained sugar from the

common beet root, possessing all the properties known to exist in cane sugar.

In 1801 Franz Carl Achard, the pupil and successor of Marggraf, erected at Cunern, Silesia, the first beet sugar factory in the world.

During the Napoleonic wars, when the British blockade deprived France of sugar, and the price had risen to \$1.00 per pound, Napoleon appropriated a million francs (\$200,000) with which to experiment with beet roots.

In 1810 the first French factory was erected at Lille, and produced sugar at a cost of 30 cents per pound, the beets at that time averaging but 6 per cent. of sugar.

Encouraged by Napoleon and by Frederick the Great, the industry gradually assumed commercial proportions, and from 1822 to 1825 over one hundred factories were erected, while by 1830 nearly all the European countries were taking an active interest in the in-

By systematic, fostering legisla-tion, Europe has secured the investment of \$630,000,000 in an industry which annually distributes over \$200,000,000 to its farmers and \$100,000,000 to other home in-

Based on the average price which the United States has paid foreign countries for refined sugar during the past eleven years (.0315 cent per pound), the beet sugar producing countries of Europe keep at home \$213,587,000 which they would otherwise send to the tropics for the 3,076,000 metric tons of sugar which these countries now annually consume.

But for the establishment in Europe of this great industry, which now produces two-thirds of the world's supply of sugar, the present prices of that commodity would undoubtedly be more than double what it is, and Europe's importa-tions would be costing her nearly five hundred million dollars a year.

In addition to making this enormous reduction on her importation of footstuffs, and the consequent distribution of this money among European farmers, manufacturers and miners, the surplus sugar product which sells abroad, largely to England and the United States, annually refills her treasuries to the extent of one hundred and fifty to two hundred million dollars in gold. Were it not for this industry the great countries of Europe would be more than bankrupted to-day.

In 1840, 39 years subsequent to the erection of the first beet sugar factory, the total world's produc-tion of cane sugar was 1,100,000 tous, and of beet sugar 50,000 tons, beet sugar forming 4.35 per

cent, of the total world's production.

In 1900, the total world's production of cane sugar was 2,867,-041 tons, and of beet sugar 5,607,-944 tons, beet sugar forming 66.17 per cent. of the total world's production, an increase of 11,100 per cent. in sixty years.

The transference of the sugar in-dustry from the tropics to the temperate zone is largely due to.

five causes:

First-Intelligent, fostering legislation for the home beet sugar industry by nations within the temperate zone.

Second-Scientific culture of beet roots, which has more than doubled the sugar content therein.

Third-Failure of science to perceptibly increase the sugar content of cane.

Fourth-Abolition of slave labor in the tropics.

Fifth-The habitat of the sugar beet being in the most highly civilized portions of the world, has brought to its manufacture the concentration of the highest scientific investigation and achievement.

Each of the following fifteen European countries produces all the sugar that its people consume, and all but four are exporters of sugar: Germany, Austria, Hungary, France, Russia, Belgium, Holland, Spain, Italy, Norway, Sweden, Denmark, Roumania, Bulgaria and Servia.

The above countries have a combined population of over 330,000,ooo people, their total sugar product from 1,511 factories is 5,926,-980 tons, of which 3,076,000 tons are consumed at home and 2,850,-980 tons are exported.

The non-sugar producing European countries are the free trade British islands, mountainous Switzerland and the non-progressive states of Portugal, Greece and Turkey.

As we must pattern after one class or the other, the question na-turally arises as to which class it is wise for us to follow, from a purely economical standpoint.

Experts of both Europe and America agree that the sugar beet area of the United States is many times greater than is that of all Europe, and that it is but a question of a very short time when we will be able to produce sugar as cheaply or cheaper than it is being produced in any beet sugar country in the world.

What the beet sugar industry means to Europe can be seen at a

United States Census Bulletin No. 59 for the year 1899 shows that per each ton of daily beet capacity, the investment in American beet sugar factories is \$1,097,-000. In the following estimate the

investment of European factories is figured at \$1,000 per ton of daily capacity. The average acreage yield is placed at to tons, the cost of beets at \$4.00 per ton, the "fac-tory expense" at \$2.00 per ton, and the extraction of sugar at 12 per cent.

Number of factories... Capital invested \$625,000,000 Tons of beets worked

Acres cultivated to beets..... 5.159,840

Paid to farmers for beets \$206,393.600

Paid for labor, fuel, limerock, coke, limestone, mill supplies, etc \$103,198,800

Total annual expenditures \$309,592,400

BEET SUGAR IN AMERICA-FAILURES

The first attempt to produce beet sugar in America was made in Philadelphia in 1830, and proved to be an utter failure. Subsequent attempts were made at various times from 1837 to 1878 at Northampton, Mass., Chatsworth Park, Ill., Freeport, Ill., Fond du Lac, Wis., in New in New Jersey, California and Portland, Me., it being estimated that over two and a quarter million of dollars were sunk in these experiments.

FIRST SUCCESSFUL PLANTS.

In 1879 the first successful American factory was erected at Alvarado, Cal. In 1888 we had two factories, and for the first time in our history produced 1,000 tons of beet sugar in a single season. When the Dingley Bill was passed five years ago, we had six factories, which it had cost two million dollars to construct.

ENPANSION UNDER THE DINGLEY

Since the passage of the Dingley Bill we have erected 36 factories and enlarged the other plants at a cost of over \$30,000,000

In addition to this, the Department of Agriculture in January of this year gave out a list of 86 factories, which were projected and would require an expenditure of \$49,000,000 in construction work alone.

The production of beet sugar in the United States in 1900 was 76,-659 tons; in 1901, 185,000 tons; an increase of 140 per cent. in a single year, and the plantings this year are reported to be 85 per cent. greater than in 1901.

FUTURE EXPANSION.

The United States importations of sugar last year, in excess of what we produced at home and received from our island possessions, were over a million and a half tons. produce this sugar at home would mean the construction of 500 new factories at an expense of \$275,000,000 and the cultivation of over 1,600,000 acres to beets, for which our farmers would receive about \$70,000,000 annually. As the sugar consumption in the United States is increasing at the rate of over o per cent. per annum, sixteen years hence we should provide

for the production of another two and one-half million tons annually which would return \$100,000,000 more to our farmers, or a total of \$170,000,000 each year.

EARLY MISCONCEPTIONS.

We have had, and still have, many things to learn concerning the industry. I remember very well that when I commenced to investigate this subject, the prevailing opinion was that California was the only state in the Union in which beets could be grown successfully. To-day, we have a chain of 45 factories, stretching from ocean to ocean.

It was but six or eight years ago that the officers of the Chino, Cal., factory, learning that some of the farmers were irrigating their beets. sent out notice that no irrigated beets would be received, no beets ever having been raised by irrigation, and the supposition being that they would be of low sugar To-day, our richest beets content. are grown by irrigation.

TEN YEARS' PROGRESS AT LEHI.

In 1891 the acreage tonnage at Lehi, Utah, was 6.6 tons per acre; in 1901 11.50 tons per acre, an increase of 74 per cent. in ten years. In 1891, the sugar content of the Lehi beets was 11 per cent.; in 1901 15.20 per cent. an increase of 38 per cent. In 1891 the sugar extraction at Lehi was 110 pounds per ton of beets; in 1901 it was 235 pounds, an increase of 114 per cent. In 1889 the "factory expense" in working up a ton of beets at the Alvarado, Cal., factory, was \$6.57; in 1897, \$2.71, a decrease of 58 per cent.

It will thus be seen that we are making rapid strides in the right direction, and it is only a question of time when the American farmer and the American artisan will be able to compete with the world.

LABOR-SAVING APPLIANCES.

Europe has cheap labor and dear horses, and hence has not the American incentive to decrease the labor of the former and increase that of the latter. With us the reverse condition is true, and hence more and more of our field work is being done by horses. In all parts of the beet belt, various experiments are being made, the success of which will still further reduce the hand labor. In Kansas they are trying a new method to avoid much of the hand work of weeding and thinning; in Michigan, they are experimenting with ridge planting to accomplish the same purpose, and various experiments are being made whereby the beets are lifted, topped and loaded into wagons entirely by machinery. years from now but little hand work will be necessary, and therein lies one of the most important points in the development of the industry.

(To be continued.)

A showman to the jungle went And caught a fierce young gnu, Said he: "I'll teach him to perform, And sell him to the Zoo.

This man was very much surprised, And quite delighted, too, For, lo! each quick and novel trick The new gnu knew.

-St. Nicholas.

Booth Copper Co., Limited COPPERSMITHS



Sugar Houses Breweries Distilleries, Etc.

115-123 Queen Street East.

TORONTO, CANADA

The Kilby Manufacturing Co.

FOUNDERS AND MACHINISTS

Corner Lake and Cleveland, Ohio

New York Office: 220 Broadway.

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.

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

Zach member receives a free copy of each publication issued by the Association to which he belongs, during the year in which he is a member. In the case of the Swine Breeders' Association this includes a copy of the Swine Breeders' Association is allowed to receive refer to the the swine Breeders' association is allowed to receive refer to the swine Breeders' Association is allowed to receive refer to the swine Breeders' Association is allowed to receive refer to the swine Breeders' Association is allowed to receive refer to the swine Breeders' Association is allowed to receive refer to the swine Breeders' Association is allowed to refer to the swine Breeders' As

Zach member receives a free copy of each publication issues by the extern's Association this includes a copy of the Swine Record.

A member several which he is a member. In the case of the swine Breeders' Association this includes a copy of the Swine Record.

A member of the Swine Breeders' Association is allowed to register pigs at 50c, per head; non-members are charged \$1.00 per head.

A member of the Swep Breeders' Association is allowed to register sheep at 50c, per head, while non-members are charged \$1.00.

The name and address of each member, and the stock he has for sale are published once a month. Over 10.00 copies of this directory are mailed monthly. Copies are sent to each Agricultural College and each Experiment Station in Canada and the United States also prominent predicts and protable buyers resident in Canada, the United States and elsewhere.

Super resident in Canada, the United States and elsewhere.

Super resident in Canada, the United States and elsewhere.

Super resident in Canada, the United States and elsewhere.

Super resident in Canada, the United States and elsewhere.

Super resident in Canada, the United States and elsewhere.

Super resident in Canada, the United States and elsewhere.

Super resident in Canada, the United States and elsewhere.

Super resident in Canada, the United States and elsewhere.

Super resident in Canada, the United States and elsewhere.

Super resident in Canada, the United States and elsewhere.

Super resident in Canada, the United States and elsewhere.

Super resident in Canada, the United States and elsewhere.

The International Canada in Canada and the Canada and the Canada and the Canada and elsewhere.

The International Canada and the Canada and the Canada and the Canada and the Canada and elsewhere.

The International Canada and the Canada and th

List of Stock for Sale.

DOMINION CATTLE BREEDERS' ASSOCI-

Clifton, Wm., Appleby.-Rams and ewe lambs, shearling and aged ewes.

FARM HELP EXCHANGE

The Farm Help Exchange has been started with the object of britingin pacture employers of farm and domestic labor and the employees. 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, so the property of the property of the following, should be given: perticulars as to the kind of work to be done, protable length of engagement, 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 received together with particulars with be published FREE in the two following issues of the "Agricultural Gazette" and will afterwards be kept on file. Upon a request being received the particulars only will be published, the names being kept on file. Upon a request being received the particulars only will be published, the names being kept on file. Upon a request being received the particulars only will be published, the names being kept on file. Upon a request being received the particulars only will be published, the names helig kept on file. Upon a request being received the particulars only will be published, the names helig kept on file. Upon a request being received the particulars only will be published, the names helig kept on file. Upon a request being received the particulars only will be published, the names helig kept on file. Upon a request being received the particulars only will be published, the names helig kept on file. Upon a request being received the particulars only will be published, the names helig kept on file. The name helic helic

Help Wanted.

Wanted.-Man to work on a farm by year. Either single or mar-ried. Steady job and good place. No. 131.

Wanted .- A good stockman with considerable experience with beef cattle, sheep and hogs and capable of taking full charge of stock. Englishman preferred. Must supply references. Yearly engagement to proper person. No. 132.

Wanted-Man or boy to work on a farm till Dec. 1st. Prospects for further employment. Apply at once, stating qualifications, etc., to G. C. Good, O.A.C., Guelph. b.

Domestic Help Wanted

Wanted a situation as housekeeper in a respectable family. Ready to take position immediately. No. 607.

Situations Wanted

Position wanted in the West by a young man 20 years of age on a farm where he can gain more experience in dairy work. Can give good references as to character and ability. No. 608.

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 one head the Superir, endent of Farmer Institutes will each week publish matter relating to Institute work. This will include instruction to secretaries and other officers, general informa-tion about 'ustitutes and, Institute work, suggestion about Institutes and Institute work, suggestions to delegates, etc. Il evil also from time to time review some of the published results of experiments conducted at the various Agricultural Colleges and Experiment Stations of Canada and the United States. In this way he hopes to give Institute members some valuable agricultural information which they might not cherwise receive, on account of not having access to demonstrate of the original publications. If any member at any time original publications, and may member at any time original publications, if any member at any time of seasons, by different communicacy or the first discussed, by direct communicacy entrethed the stitution that has carried on the work.

Surerintendent Farmers' Institutes

Address to the Canadian Horticultural Associations

BY PROF. HUIT, AGRICULTURAL COL-LEGE GUELPH

I am pleased to have this opportunity of addressing your association because I have a few fatherly suggestions to offer, which I think are of importance to you.

In the first place I wish to suggest a change in the name of your association. Your membership am told, is made up largely of the professional florists of Ontario. Why not call yourselves, then, the Ontario Florists' Association? Such a name defines your position among the many organizations in this country better than any other. If you had in your association members from all of the other provinces there might be no objection to the use of the term Canadian instead of Ontario, but not having these, you are making the mistake of spreading over too much ground, a mistake which florists as a rule are not guilty of. A good strong provincial organization would, I think, carry more weight than a weak organization spread over the

whole Dominion. And the fact of your being a provincial organization need not in the least prevent you having members from any of the other provinces.

There is one other reason why I think your association should fall in line with the other Provincial Associations, and that is because you might then, like them, look for a little assistance from the Provincial Government in aid of your work. I may say, however, that I am not authorized by the Minister of Agriculture or any of his department to make this statement, but do so entirely upon my own responsibility. If you can show that your Association represents one of the important horticultural industries of the province—that is, endeavoring to educate, uplift and benefit the people along the line of beautifying their homes-I see no reason why you should not ask the Department of Agriculture for some substantial assistance in aid of such work as well as the

Fruit Growers' Association, Dairymen's Association, Horse Breeders' Association, Cattle Breeders' Association, Sheep Breeders' Association, Swine Breeders' Association, Poultry Associations,

Beekeepers' Associations, and about 200 agricultural and horticultural societies, most of which are probably doing good work, but none of them doing any more for the general welfare of the people than you could and should do, if you put yourselves about it.

My preference for the term florist instead of horticulturist is, because this is an age of specializa-tion rather than generalization. The term horticulture is a broad general term which includes fruit growing, growing, vegetable gardening, landscape gardening and horticulture. For nearly thirty-five years we have had an active Provincial Fruit Growers' Association. You might be proud of being known as the Ontario Florists' Association. There is plenty of room for a live Provincial Market Gardeners' Association and the time will come when we will have a Provincial Landscape Gardeners' Association, and all of these would properly be known as horticultural associa-tions. This is enough on this point at present. I suggest the change of name because I think it would be for your benefit.

Now I wish to say a few words with reference to your relation to what are known as the Local Horticultural Societies. We have now in this province over 50 horticultural societies, most of which have been organized during the last few years through the efforts of the Ontario Fruit Growers' Association. The greater number of these societies are town societies, and they are quite properly called horticultural societies, because their membership, which now numbers 5,000,

is largery composed of amateurs interested in horticulture in several of its branches. Some are interested more or less in fruit growing, others in vegetable gardening but by far the greater number are particularly interested in floriculture.

These societies are doing good work in fostering a love for flowers and giving the people information about how to grow them. It is along this line that you as an association and as individuals might do good work in assisting them. You are both interested in the growing of plants and flowers, the chief difference between you being that they are amateurs and you are professionals. They are growing plants for pleasure while you are doing it for money, and the more pleasure there is in it for them the more money there is in it for you. It is to your interests, therefore, from a business standpoint to stimulate trade by encouraging the amateur in his love for flowers and by teaching him how to care for them. I have heard some professionals say that they did not believe in telling the amateur how to grow flowers, that this was giving away trade secrets, but if the amateur's plants failed, he would be willing to sell him more. I can tell you this is a very short sighted policy. The secret of the professionals success is in in-creased demand for plants and flowers. This increased demand depends largely upon the pleasure that the amateur derives from them. And the more successfrom them. And the more success-ful the amateur becomes as a grower, the more plants he will want. You are widening your market by giving information about growing plants.

There are a number of ways in which you as leaders in floriculture may assist the amateur. In the tirst place, become a member of your own local horticultural so-ciety. If there is not one in your locality, organize one as soon as possible. Encourage the members from time to time to bring out a good display of flowers at your meetings, and give all the information you can about them. Whention held in your locality get your horticultural society to co-operate and bring out as fine a display as possible. Most of our fall fairs are weak along just those lines where you can do the most to strengthen them.

I have spent a good deal of time during the last year in preparing a model prize list for fruits, flowers and vegetables, which if adopted generally by township and county fairs would help very much to en-courage horticulture along these These lists will be published in a short time, and may be obtained from Mr. G. C. Creelman, Secretary of the Fall Fairs Association, Parliament Buildings, To-ronto. Get one of them, examine it carefully, improve or modify it, if you think necessary, to meet the requirements of your own exhibition. Get your society to adopt it, and encourage all the competitions vou can among your amateurs. Do not make the mistake of trying to win all the prizes yoursell. That might be gratifying in one sense, but it would pay you better to get as many amateurs competing as possible, and you can make your little pile furnishing them with plants.

In conclusion, I would ask you to give all of us the benefit of your experience by contributing an ardian Horticulturist, which goes to all the members of the Local Horticultural Societies. Our friend Mr. Hunt has been doing nobly in this respect for the past two years, and his articles have helped your trade much more than you imagine. But a number of short articles by ditierent members of your associations would be welcomed not only by the editor but by all of us.

• • • What Canadian Holstein Cows Can Do.

A couple of years ago the Canadian Holstein-Friesian Association decided to establish a record of merit in which a cow may be entered only after making an official test for production of butter fat. The standard requires that a twoyear-old heifer shall produce in seven days at least eight pounds of butter-lat, a three-year-old heifer ten pounds, a jour-year-old cow eleven and a hali pounds, and a mature cow thirteen pounds. This is the highest standard adopted by any association and it will doubtless have a very beneficial effect on the butter producing qualities of the breed in Canada.

Some of the tests made by Canadian Holsteins, nearly all under the supervision of Prof. Dean, of the Ontario Agricultural College, are given herewith. These are all for a period of seven days. The amount of butter may be computed approximately by adding one-sixth to the amount of butter fat, since good butter averages about 85 p.c. fat

		Lbs. Milk.	But	Lbs.
1.	Jessie Veeman A	584 S		20.00
2.	Calamity Jane	572.5		20.0
3.	Kaatje DeBoer 2nd	115.1		10 1
4.	Aalteje Posch 4th	494. 2		10.0
5.	Carman Sylvia	529.1		15 46
6.	Daisy B. DeKol	426.1		15 2
7.	Rideau Dellah's Lena	367 €		15 2
8.	Gilly Flower	345 0		15 20
9.	Ruby Gretqui	453.5		128
10.	Fanny F	481.1		136
11.	Jemima Wayne	413 5		13 56
12.	Lady Pietertje	397.3		13.30
13.	Lorena Diamond Nether-			3 3
	land	361.7		13.3
14.	Winnie Win	400. 3		13.00
15.	Violet of Lulu	430.2		13.00
	FOUR YEARS (OLD		

1. Toitilla Echo DeKol.... 511.9 .. 16.17

6. Edgely Frena 341.3 .. 12 38 7. Lady Grace of Avondale 370.4 .. 11.73

THREE YEARS OLD

antha 462 7 .. 14.92

Clothilde Belle....... 505 0 ... 14 60 Woodland Molly DeKol. 368 7 ... 14.42 3. Woodland 3. 421.9 14 22 4. Axie DeKol. 421.9 14 22 5. Kaatje DeBoer 3rd 347.2 13 19 6. Edgely Frena 341.3 12 38

5. Daily Texal 2nd	179 0 137 0 398 7 460 1	: ::	14.49 14.44 14.06 13.82
9. Daisy Soldene Clothilde, 10. Lady Acme 3rd 11. Tidy Abbekerk DeKol.	\$51.2 323.5 367.7 381.0	::	12.20 11 61 11.20 10 99
TWO YEARS OL	D.	::	10.65
2. Nancy Wayne of River-	86.1		21 65
3. Belle DeKol	411.3 376.1 363 7 357-5	:: ::	12.04 11.51 10.96 10.71
7. Emma Abbekerk 8. Dewdrop's Clothilde 9. Netherland Crony	270. 3 316 4 267 0 320. 5	·· ·· •·	9.73 9.52 9.50
11. Princess Posch	357.5 258 7 285.0 236 9	::	9.19 9.11 9.11 8.71
15. Lottie of Lulu	322. 1 335. 8 182. 1	:: :	8 89 8.63 8.58
18. Queen DeKol 2nd 3	214.6 304 0 241.5		8 41 8.38 8 31
20. Rideau May 21. Daisy Texal 31d	257.4 250.7 260.3	::	8.21 8.04 8.02

A Successful Sale.

On Wednesday, September the tenth, thirty-six mares and geldings were sold at Grands' Repository, Toronto. They were consigned by Mr. G. H. Hadwin, Kamloops, B.C., and were a useful lot of blocks. The following list of prices they brought shows that there is a ready market in Toronto for this class of stock. Some of the horses were haiter broken and a few had been worked a little. Mr. Walter Harland Smith, the proprietor of the Repository, reports a good demand and that any number of this sort weighing from eleven to fourteen hundred can be sold at paying prices. This lot, as will be seen, averaged about \$103. A number of the younger ones being poor brought the average down.

Bay mare, 4 years, \$95.00. Bay mare, 4 years, \$107.50. Bay mare, 4 years, \$115.00. Bay mare, 4 years, \$112.00. Bay gelding, 5 years, \$80.00. Bay gelding, 3 years, \$92.50. Chestnut gelding, 3 years, \$100. Bay mare, 4 years, 577.50. Chestnut gelding, 5 years, \$87.50. Bay gelding, 4 years, \$115. Pair chestnut mares, 5 and 6 years, Pair chestnut mares, 5 and 6 years, \$320. Pair of chestnut mares, 5 and 4 years, \$255. Bay mare 5 years, \$132-50. Chestnut mare, 4 years, \$132-50. Chestnut mare, 4 years, \$130. Chestnut mare, 4 years, \$130. Chestnut mare, 4 years, \$130. Say mare, 7 years, \$1250. Bay mare, 7 years, \$120. Bay mare, 5 years, \$115. Bay gelding, 3 years, \$82.50. Bay mare, 2 years, \$750. Bay mare, 2 years, \$77.50. Buy mare, 2 years, \$62.50. Bay years, \$62.50. Bay mare, 2 years, years, \$82.50. Bay mare, 2 years, \$9.5. Brown gelding, 2 years, \$65. Bay mare, 2 years, \$90. Brown mare, 4 years, \$82.50. Bay mare, 5 years, \$90. Black mare, 2 years, \$97.50.

The Farm Home

Apple-Picking Time

'Long in apple-pickin' time there is somethin' 'bout the weather That'll set your spirits dancin' till

they're lighter than a feather; You can hear it in the music o' the neighborin' rooster's call,

You can see it in the squirrel carryin' nuts along the wall:

An' the rustle, An' the bustle.

An' the hurryin' in o' crops, An' the weedin',

An' the seedin', An' the drain' o' the hops; There's a broy feelin' in the air that se your soul a-rime

In the hearty, healthy workin' day o' apple pickin' time.

Wher the crib is full o' corn an' the at-bin runnin' over,

" , ricket finish chirpin' in the straw stack an' the clover.

n the echo on the mountain sends your voice a callin' back .n' vou hear the far-off rumblin o' the freight train on the track;

An' the lowin'

In the mowin' Where you turned the cows to browse.

An' the hurry, An' the flurry,

An' the bankin' up the house; you'll laugh at wind an' weather when the snow's a driftin' in

If the mows are full o' fodder an' there's apples in the bin.

Every critter is a stir with the news o' changin' weather,

You can hear the wild goose honk as he calls his flock together.

An' the hounds are on the mountain an' the woodchuck's in his lair,

An' the squirrel fills his cellar in the hollow hemlock, there;

An' the singin', An' the ringin'

O' the axes on the hill; Gettin' ready,

Workin' steady

All the empty bins to fill; An' when youth has crept behind you an' your life is past its prime,

You will feel your boyhood comin' back in apple-pickin' time.

-Youth's Companion.

Th. Grand Bend, a Lake Huron Resort.

Many summers ago, with child-ren and lunch basket, with team and wagon the farmer would drive to The Bend, as it is locally named and onward, by a namow, winding road, cut through tangled evergreen woods, until he reached Lake Huron and the many fish shanties built at intervals along its wide, sandy beach. His object was the taking home a wagon load of white

Or, he may have turned at The Bend and have driven a half a mile below, to Brewster's saw mill on the banks of the Aux Sauble river.

get a load of lumber. Here, while his team is resting he may have been paddled about the wide mill pond in a birch canoe, little thinking that where his canoe is floating his children will one day walk with dry feet on a grassy plain.

He may have wondered why the river is compelled for twelve long miles to run parallel with and separated only from the lake by a few uneven, sandy, tree-grown

He may have thought that some hundreds of years before the lake covered a wider area and had formed these sandy ridges as barriers before the mouth of the river, thus gradually forcing it to seek its entrance farther down.

He did not think that men we ld cut a channel through these riders to allow the waters of the rive: :. again flow directly to the lake and thus more quickly drain the "drowned" land and that the late and river would again raise sand bars at its mouth, repeating what ages earlier had probably been done.

Nor did the busy fishermen dream as they milled their loaded sweep nets on the wavewashed shore, that a day would come when all these reels of nets would disappear, when a wagon load of fish would not be found, that their shanties, too, would belong to the past and that picturesque cottages, partly con-cealed, partly revealed, would stand among the trees.

Nor did they think as they unonsciously watched their children digging and rolling in the clean warm sand or saw them wading and swimming in the rippling lake that some day, hundreds of children and men and women, too, would travel many miles from country, town and city; from Canada and distant States and stay for many weeks making these plays there chief employment. Nor could they foresee boys and girls in picnic attire, filling many graceful row boats which would float where only heavy fishing boats are toiling on the waters of the Huron.

Yet within the memory of the middle aged, these changes have taken place and The Grand Bend has become an ideal resting place, where the society belle may throw aside the costume with the customs of modern life and can return to the ways of the Indian, traces of whom are still found in nearby fields and woods, and who once camped, fished and cooked beside these waters.

Here, she will probably be found either fishing, rowing, swimming, sitting in the sand or gathering wave-worn pebbles. Or perhaps in morning dress she may wander through the woods, which, in places yet are tangled, thick and almost impassable, and again are pruned, freed from underbrush and logs and made into extensive shady parks, or she may be seen seated in the branches of "the twisted

oak," gathering aromatic needles of the pine to fill souvenir pillows, wandering towards the river to gather fossils and clam shells, to search for the few remaining birch trees or with rod and line to fish from the pool below the ruined dam which is all that is left to mark the place where stood the Brewster saw mill. Or she may be found lounging lazily and cultivating the acquaintance of the familiar squirrels which chatter near the out door tables.

She may row or walk until out of sight or sound of human being, seeing only trees and lake and sky, being alone in silence and solitude, vet be just around a corner from noise, laughter, music and merri-

Or if it is nearing evening, she will in company with many others who are interested in the outer world go down the shady drive way towards the post office where is found the letters, daily city papers, a supply of groceries, bread and such provisions supposed to require.

M. E. Graham. such provisions as campers are

Sponge Cream Cake.

Put one cup of thick cream in a bowl, surround it with ice water, grease and flour slightly two jelly cake pans. Be sure that there is some boiling water, and have all the necessary ingredients ready before beginning to mix the cake. Put one cup of flour, two level teaspoons of baking powder, and onefourth teaspoon of salt into a sieve and sift them into the mixing bowl, then turn it back into the and into the mixing bowl sieve. put two eggs and three-fourths of a cup of fine granulated sugar. Beat with an egg beater until very light; add five tablespoons of boiling water (not merely hot, but boiling) as quickly as possible, beat it slightly, and then sift in the flour mixture. Flavor with one teaspoon of lemon extract or a few gratings of nutmeg. Beat until the water is well mixed in, using the egg beater through the whole process. Pour the batter, which will be very thin, into the pans and bake in a quick oven twelve minutes. While the cake is baking whip the cream stiff with a wire spoon or beater, adding powdered sugar, one tablespoon at a time until it is sweet enough. Flavor with vanilla or lemon.

When the cake is done invert one taking the poorer baked if there be any difference) on a plate, cool it quickly, spread with part of the cream, lay the other cake on, with the ton up, and decorate the surface with scrolls and dots of the cream, using a pastry bag with a star tube in the end.

This may be varied by spreading jelly between the cakes and using all the whipped cream on the top and dotting the cream with jelly .-American Kitchen Magazine.

Hints by May Manton.

WOMAN'S PLAITED SHIRT WAIST 4195
To be Made With or Without the
Fitted Lining.

Shirt waists with deep overlapping plaits, that are stitched with one or more rows to form tucks at the edges of the plaits, are much in style and are exceedingly effective. This smart example is made after one of the latest models and is admirable for the many wool and silk waistings as well as for cotton and linen tabries, but as shown is of white mecerized cheviot and is worn with a tie of blue edged with white and a blue belt. The original is unlined,



32 to 40 bust.
of washable material, but th

being of washable material, but the fitted lining will be found an improvement to both silk and wool.

The lining is cut with fronts and back only and is fitted by means of shoulder and under-arm seams and single bust darts. The waist is laid in deep plaits at front and back that can be stitched one quarter of an inch from each edge to give an effect of tucks or left plain as preferred. The sleeves are in the new bishop style, small at the shoulder and forming big soft puffs above the cuffs. The cuffs are straight and narrow and are buttoned over at the inside seams.

To cut this waist in the medium size 44 yards of material 21 inches wide, 34 yards 27 inches wide, 23 yards 32 inches wide or 24 yards 44 inches wide will be required.

The pattern 4195 is cut in sizes for a 32, 34, 36, 38 and 40 inch bust measure.

The price of the above pattern post-paid is only 10 cts. Send orders to The Farming World. Confederation Life Building, Toronto, giving size wanted

A Fable for Spinsters.

BY HELEN PLUMB.

There was once a maiden whose many charms drew scores of suitors from far and near. All actre goodly youths, some wealthy and handsome, and bringing rich gilts; others well-born and bred, others still, amiable and generous; but all alike bowed ever to lightest wish, were it even to giving up

clubs, smoking, or the newspaper habit.

The maiden was sore perplexed to choose from such fair-speaking vouths, so she thought, "I will take counsel with Goody Wiseacre. Six times has she renewed her vows to Hymen. Surely, her experience will tell which gifts wear best in a husband."

The old Goody listened as the maiden told over the claims of each suitor then solemnly shaking her head the dame answered thus:

"Choose as you will, my child, you will find that men are different, but husbands are all alike!"

A Practical Creed.

I believe that "man is what he eats": i.e., that the kind of food going to make up the physical body reacts upon the nervous system, affecting mind and character.

I believe that man is "the noblest work of God" only when he uses his look as a means of expression of high ideals and not as a means of gratifying momentary desires.

I believe that "he that ruleth his own spirit is greater than he that taketh a city"; to control one's appetite in view of the aims in life which one holds up to the inner vision; to so order one's life that one has a tair chance of attaining one's ideals is man's prerogative, and differentiates him from the beast of the field.

I believe that man's efficiency in this world, if not his happiness in the next, is mainly due to the precautions he takes to use suitable food, and to avoid dangerous combinations.

I believe that "the duty that lies next" is the instruction of all the beople in food values, and the inculcation of a respect for the body, and the office of food as a means to an end—the highest duty of man.

Well Made.

Pure flour and pure yeast do not necessarily mean good bread. It may be spoiled in the making. Just so: material is not everything. Prof. W. Hodgson Ellis, Official Analyst to the Dominion Government, after a number of analyses, reports that "Sunlight Soap is a pure and well-made soap." "Well made" means more than you think. Try sunlight Soap—Octason Bar—next wash day, and you will enjoy the benefits of a "well-made" soap, and will see that Prof. Ellis is right. No one should know better than he.

FALL TERM Opens Sept. 2nd

for all Departments of the

Central Business College

Our New Catalogue contains all information about our work. Write for it. Address W. H. SHAW, Principoal, Youge and Gerrard Sts., TORONTO

FARM FOR SALE CHOICE LOCALITY RARE OPPORTUNITY

Farm in Township of Blandford, in the County of Oxford, 300 acres, brick residence and large frame outbuildings, about 200 acres cleared, 100 acres beautifully wooded, suitable for stock farm: part of old Vansittart Estate at Eastwood, four miles east of Woodstock; schools, church, post-office, stores and all conveniences in village adjoining. Will be sold on easy terms. Apply to

E. W. NESBITT, Woodstock; or JOHN MASSEY, 14 Toronto St., Toronto

I believe that good food habits can be formed in childhood, which will carry the man through life in as great a degree of safety as other good habits early formed may do.—Ellen H. Richards, in The Cost of Food.

British American Business College

Y. M. C. A. Building,

Yonge Street, Toronto

Principal DAVID HOSKINS. Chartered Accountant, Vice-Principal—J. W. WESTERVELT, Chartered Accountant

The only college in Toronto afficiated with the Institute of Chartered Accountants, or having Chartered Accountants on its staff. Our Penmanship teachers are acknowledged by those who know to be the best in Canada.

An Equipment of 85 Typewriters, valued at over \$10,000, is an indication of the completeness of our Shorthand and Typewriting Department

Students may enter at any time. Handsome catalogue and specimen lessons in Penmanship will be sent to any address free of charge.

Six Hundred Positions Offered Our Students Last Year

The Farming World.

A PAPER FOR FARMERS AND STOCKMEN.

D. T. McAINSH, D. T. McAinsh, - - Publisher

J. W. Wheaton, B. A. - - - Editor

The Parming World is a a paper for farmers and stockmen, published weekly, with illus-trations. The subscription price is one dollar a year, payable in advance.

rage is prepaid by the publisher for all sub-scriptions in Canada and the United States. For all other countries in the Postal Union add fifty cents for postage.

ange of Address.—When a change of address is ordered, both the new and the old addresses must be given. The notice should be sent one week before the change is to take effect.

week before the change is to take effect.

capits are only sent upon request. The date
opposite the name on the address label indicates the time up to which the subscription is
paid, and the change of date is sufficient
acknowledgment of payment. When this
change is not made promptly notify us.
scontinuances.—Following thegeneral desire of
our readers, no subscriber's ropy of The FARM180 WORLD is discontinued until notice to
that effect is given. All arrears must be paid.

to Remit.—Remittances should be sent by cheque, draft, express order, postal note, or money order, payable to order of The Farmina World. Cash should be sent in registered

vertising Rates on application.

stee.

see should be addressed:

THE FARMING WORLD,

CONFEDERATION LIFE BUILDING,

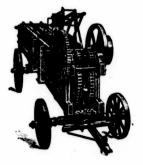
TORONTO.

Manitoba No. 1 Hard.

We have received through the ourtesy of the Winnipeg Free we have received through the courtesy of the Winnipeg Free Press a very fine sample of Mani-toba No. 1 hard of this year's growing. The grain is plump and hard and the sample clean with the grains even in size. Sixty-five mil-lion bushels of such wheat, the estimated yield for 1902, should bring much prosperity and wealth to the farmers of western Canada.

Hay Presses.

Probably no other machine at the exhibition attracted so much attention and favorable comment as the Columbia Steam Power Hav Press made by the Ann Arbor Ma-



chine Co., Ann Arbor, Mich., and sold by Mr. E. J. Wigle, Kingsville, Ont. Mr. Wigle is agent for Onta-rio and Quebec. He is well pleased with the business outlook for the press in Canada and will be at exhibition next year.

Keep your eyes open and be sure that ben you ask for Perry Davis' Painkiller you get st that and nothing else. Use it promptly to cure amps, diarrhora and all other bowel complaints in

A Disc Harrow on Wheels

The Superior Disc Drill and Disc Harrow on wheels exhibited at the Toronto and London Fairs by the Superior Drill Co., Springfield, Ohio, attracted considerable at-tention and their travelling men were kept busy explaining its new leatures. Some points showing its superiority over other disc rows are, the discs are all indepen-dent, pressure on each disc is the same, the centre cut for cutting centre ridges rides on its own wheels, angle and disc never change, making a lighter draft and ensuring the best of work.

Pointers for Sheep Raisers

Some of the more prominent deductions from the work of the experiment stations are given by Mr. C. B. Smith, of the U. S. Department of Agriculture, as follows:

Care in the selection of the ram at the head of the flock oftentimes doubles the profits made from the lambs.

Dorset ewes breed earlier and are more prolific than Shropshire ewes, and hence, are more valuable in growing winter or hothquise lambs. The prolificacy of Dorset ewes is transmissible through the ram to other breeds of sheep.

Merino or other wool flocks of sheep can be converted into mutton flocks in three or four years by keeping a pure mutton ram at the head of the flock.

It pays in dollars and cents feed lambs grain from birth, whether they are to be sold at weaning time, later in the fall, or fattened in winter and sold in spring.

After weaning lambs it does not pay to feed more than one-half pound of grain per head per day

Poultry and Eggs

Advertisements under this head one cent a word Cash must accompany all orders under \$2.00. No display type or cuts allowed. Each initial and num-ber counts at one word.

BROWN Leghorns, Prolific early layers; Strain won at Pan-American. Stock for sale—Minor-cas, Barred Rocks, Choicest Strains, Eggs in season. IOHN B. PETTIT, Fruitland, Ont.

BUFF ORPINGTONS, imported this season from England, 8 birds costing \$128. Solid buff eggs \$3 per 13. Also breeder of frown Legborns, continuous layers. Barred Rocks, E. B. Thompson's White Wyandottes, Indian Games, true blckey type for export. I won leading prizes and sweepstakes at the Ottaria and Bentiford shows. Incubator eggs \$2.50 per 100. J. W. CLAPK, Importer and Breeder, Onandage, Ont.

BUFF ORPINGTONS—For sale, choice breeding stock. Prices on application. Alo Cockerels of value to breed with ordinary farm fowl, especially Barred Rocks. Price \$1.50 each.

R. F. HOLTERMANN, Brantford, Ont,

M UNDRED'S Pheasants for sale - Goldens, Silver, Swinboe, Versicolor, English, Chinese, Am-bersts and Reeves. Send stamp for price list. CANADIAN PHEASANTRY, Hamilton, Can.

GET Free Catalogue on Fattening Poultry.
MORGAN'S INCUBATOR WORKS, LONDON.

until the fattening period begins in fall or winter.

Lambs with Down blood in them fatten much more rapidly than Merino lambs.

Sheep can be fattened on grain alone without any coarse fodder whatever.

Large lambs make gains faster than small ones. Lambs are much more profitably fed than yearlings. Ewe lambs fatten about as rapidly as wether lambs and bring just as good prices in the market.

When well-cared-for ewes raise twin lambs without losing any more flesh than when nursing a single lamb, and under such conditions twin lambs nursing one mother gain as rapidly as when there is but one lamb nursing.

Soiling can be practiced with sheep the same as with other

FEEDS AND FEEDING

A Handbook for Stockmen

By W. A. HENRY

Dean of the College of Agriculture, and Director of the Agricultural Experiment Station, University of Wisconsin.

The basis of Feeds and Feeding is the extensive invastigations in the feeding and management of live streck conductes by the agricultural colleges and experiment stations of the New and Old World. Millions of dollars titerally have promoted in these invastigations. In no other single work can a summary of this vest according to the found. To this information has been added the practical supervience of social magnitude from many sources. The writer of Feeds and Feeding has given the facts, figures and experience as found and reported by investigators and stockmen in condensed, carefully arranged form, and then discussed these in a plain, helpful manner. The subject-matter is arranged in paragraphs for easy reading and induced for quick reference. The subject-matter is arranged in paragraphs for easy reading and induced for quick reference to what precedes or places, and professly girl is book which the stockman can take up at any time, open at any place, and professly girl is book which the stockman can take up at any time, open at any place, and professly girl is book which the stockman can take up at any time, open at any place, and professly girl is book which the stockman can take up at any time, open at any place, and professly girl is book which the stockman can take up at any time, open at any slace, and professly girl is book which the stockman can take up at any time, open at any slace, and professly girl is book which the stockman can take up at any time, open at any slace, and professly girl is book which the stockman can take up at any time, open at any slace, and professly girl is book which the stockman can take up at any time, open at any slace, and professly girl is book which the stockman can take up at any time, open at any slace, and professly girl is book which the stockman can take up at any time, open at any time,

One new subscription to The Farming World and Feeds and Feeding . \$2.50 Une renewal . .

Cash must accompany the order

Address THE FARMING WORLD Confederation Life Building, TORONTO stock, but it is generally much more profitable to 1:t the sheep gather their own forage.

Lambs fall-pastured on rape and given some grain gain from two and one-half to three pounds per week. They also fatten more rapidly during the feeding period following than grass-pastured lambs.

Sheep fatten most rapidly when allowed constant access to fresh

water

Lambs can be successfully fattened by means of a self-feeder, but it is an expensive process, and larger and cheaper gains can be obtained by feeding at regular intervals.

There is no profit in shearing sheep during the fattening period. Early shearing of lambs in October has given favorable results in some instances.

The cheapest grain ration for lambs, either before or after weaning is corn; but it is not so safely fed or so greedily eaten as when oats or peas are added.

It requires 12 to 16 weeks to put lambs that have never had grain in good condition for market. Under good management, lambs will gain one-quarter to onehalf pound per day, or 25 to 30 pounds during the feeding period. It requires eight to nine pounds of dry feed to produce one pound of gain.

Palatable rations suitable to growth as well as fattening are of more importance than the chemical composition of the ration.

The German notion, formerly much taught here, that the best results are obtained only when the rations are so compounded as to contain a certain definite proportion of protein to carbohydrates, is not borne out by the results sccured in the station feeding experiments.

The meat of sheep fattened on silage or roots is more watery than when the sheep have been fed on dry foods

DEAL

COOK Book.

Corn silage has no special advantage over cut dry feeds as a feeding stuff for sheep, and is about equal in feeding value to roots; but it is very much cheaper than roots and most dry lodders.

Sugar beets give from 6 to 20 per cent, better returns in fattening sheep than other roots; and stand about on a par with corn Not more than three silage. per head should be ad pounds daily.

Exports of Farm Products

Some unrevised figures made public at Ottawa last week show some large increases in the exports of Canadian agricultural produce for the fiscal year, ending June 30th, 1902. The wheat exports were, 36,446,357 bushels valued at \$26,410,101 as compared with 18,936,252 bushels, valued at \$13,662,930 for the year previous, an increase of 92 per cent. was exported bacon to the value of \$12,163,505, an increase of \$666,-025, as compared with the preceding twelve months. Butter exports show an increase of \$2.311.-000, the total for the year ending June 30th last, being \$5,667,150. The value of the cheese exports was \$19,870,072, a decrease of \$1,-250,000 compared with the preced-250,000 compared when the sing year. The exports of eggs reached the sum of \$1,736,141, being an increase of \$43,845. The total poultry exported was valued at \$238,175, or \$96,653 better than in 1901.

Pound Cake Wafers.

RECIPE ONE HUNDRED YEARS OLD

One-half pound of butter, threequarters pound of sugar, four eggs, one-half teaspoon of soda, one third of a nutmeg, one teaspoon of caraway seeds, flour to roll thin as possible, sprinkle with sugar. Bake quickly.

Contains Over 1.000 Recipes

The most practical cook book in the world. The receipts are of a kind that appeal to the common sense of the housekeeper, Grouped together in black-face type at the commencement of each receipt is a statement giving the kind quantity of ingredients required. The chapter on "The Sick" is itself worth the price of the book, Bound in substantial oilcloth cover for the kitchen. the kitchen.

A Copy of the Ideal Cook Book will be sent free to any present subscriber sending one new subscription to THE FARMING WORLD, or to any subscriber not in arrears for 50c. The published price of the book is \$1.00.

THE FARMING WORLD. Confederation Life Building, Toronto.

Enclosed find \$1.00. Send FARMING WORLD for one year to

Name	(New subscriber)
	P.O
Send Cook Book	free to

STOCK

DAVID McCRAE, Janefield, Gueiph, Canada, Importer and Breeder of Galloway Cattle, Clydesdale Horses, and Cotswold Sheep. Choice animals for sale.

HERMANVILLE TAMWORTHS—Largert breeder and exporter pure bred Tamworths in America.—Hermanville Farm Co., Hermanville, P.E.I.

Chester Whites and English Berkshires

Choice Young Stock of both breeds, six weeks and older. Write for prices.

!TILLMAN E. BOURMAN, Berlin, Ont.

IOHN DRYDEN BROOKLIN, ONTARIO

REFEDER OF

CRUICESHANK SHORTHORNS and CHOICE SHROPSHIRE SHEEP

Choice Young Bulls and Ram Lambs for sale. Write for prices.

QUEENSTON HEIGHTS SHORTHORNS.

Scotch and Scotch-topped choice young cows and heifers for sale at moderate prices.

> HUDSON USHER. Queenston, Ont.

Large English Berkshires

LONG BACON TYPE

C. R. DECKER, Chesterfield, Ont.

Maple Lodge Stock Farm

Scotch Shorthorns, Choice Milking Strains, Prize Winning Leicesters, Young Stock for sale-imported and home bred.

A. W. SMITH, Maple Lodge P.O., Ont.

Live Stock Ear Labels

Send forcircular and price list and tack it upon the wall, where you can see it when you want it.



R. W. JAMES, Bowmanville, Ont.



Toronto Salt Works, Toronto car lots.

BRANT'S OXFORD DOWN SHEEP



registered. Extra type and style. Prices Brant Stock Farm
J. H. JULL & SON,
Butford, Ont.
Burford Station
T'graph & Phone

PURE-BRED STOCK

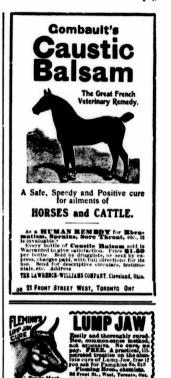
NOTES AND NEWS FROM THE BREEDERS

These columns are set apart exclusively for the use of breeders of pure-bred stock and positivy. Any information as to importations made, the sale and pur hase of stock and the condition of bords and flocks that is not in the nature of an advertisement will be melcomed. Our desire is to make this the medium for conveying information as to the transfer of pure-bred animats and the condition of live stock throughout the country. The co-operation of all breeders is sarrestly excluded in making this department as useful and as interesting as possible. The editor reserves the right to eliminate any matter that he may consider better suited to our advertising columns.

Prof. John A. Craig, writing to the Chicago Live Stock Report, gives the following items of inter-est to Canadian breeders in describing the Shorthorn herd of David Harrell, of Durham Park, at Liberty Hill, Texas:

"The young heifers of the herd are nearly all of Canadian breeding. From the herd of J. & W. B. Watts, of Salem, Ontario, noted for being headed by the famous Barmpton Hero and the producer of Young Abbottsburn, two heifers have been selected: Minnie 3d of Linden by Royal George 149933 and tracing to Crimson Flower by Refiner 21773, and Matchless 30th by Royal George 14993 and tracing to Imp. Matchless 16th by Senator 274411. The first mentioned is an exceedingly smooth heifer with an abundance of style and finish and at the same time possessed of level lines and even proportions. Her companion is an attractive white heiler of a high order of merit. She was one of the four that won first place at the International last year in the class for four the get of one sire. From the herd of J. & W. Russell, Richmond Hill, Ontario, there are also two representatives. This firm has to its credit the fact that they had first prize on herds at both the Centennial and the World's Fair. The heifer at Durham Park, Centennial Isabella 63d, is of the strain that distinguished itself at the Centennial, being sired by Golden Measure 138676 and tracing to Imp. Louisa by Nobleman (26967). This heifer is pure white and like many of that color nowadays she is a splendid individual. In form she is level, straight and deep, with an even covering of sappy flesh added to by a mossy coat. She is very stylish, which in conjunction with the other useful qualities make her a very popular member of the herd. The other heifer of Russell breeding is one of a very useful kind, Nompareil 60th by Golden Measure 138678 and tracing to Imp. Nonpareil 31st by sire Christopher 22895. A beautiful Miss Ramsden heifer, Queen of York 5th by Royal Standard 157232, is another member of the Canadian contingent, having been bred by John I. Howard, of Sutton West, Ontario. Another red heifer very similar in type to the fore-going is Pride of Highfield, bred by John Gardhouse, Highfield, Ontario, sired by Prime Minister 129938 and tracing to Imp. Wallflower 5th by Gauntlet 10260. A splendid individual is Rosy Ann by First Choice 171411, and bred by R. Somerville, of Elders Mills, Ontario. A two-year-old heifer with a very attractive head has been named Orange Maid. She is by Baron Sale 122369 and out of Orange Miss, a get of Master of the Rolls 99463, that sold for a high price at the Donahey sale. This heifer was bred by Baer Bros., of Summerfield, Ill. There is an uniformity of type shown by most of these heifers that should be a valuable feature considered as a foundation on which to build. Mr. Harrell has already made his se-lection for a Canadian importation this year. They are eight calves, including four Missies, two Clarets and two Floras. With these and the young heifers he now has the female side of the herd will be greatly strengthened by individuals of fashionable Scotch breeding.

"There are four stock bulls in use but two of them were out of condition from fever or other causes. Gloster King 172737, at one time a bull of rare promise, has greatly suffered by the fever. He was bred by David Birrell, of Greenwood, Ontario, and represents an unusual combination of the most fashionable of present day blood lines, being by Imp. Blue Ribbon 165102 out of Duchess of Gloster, by Dunblane 65995 and so on, finally concluding by Imp. Duchess Gloster 12th by Champion of England 17526. A red roan bull of promise was Royal Hope 176234 bred by J. & W. B. Watts and sired by Royal George 149933 and out of English Lady 10th by Barmpton Hero 58813. When eleven months old this bull weighed 1,180 lbs. but the fever ravages laid hold on him. A stock bull that is used liberally is Imp. Count Mysic. imported Shorthorn bull to come to Texas. He was calved December 3, 1899, and was sired by Count Amaranth 144608 and out of Imp. Mysie 54th by New Year's Gift 144749. He was bred by George Campbell of Aberdeenshire, Scotland. Though somewhat thin in flesh owing to the fever's effect this bull is one that promises well as a stock sire and Mr. Harrell is giving him the premier place in the herd. He is well formed, with straight back, level lower lines and long level quarters.



Utilize Fall Pasture

to pasture stubble or meadow.

BEAVER POST-HOLE DIGGER ma
fencing easy. The best and m
economical Fence machine
the market. Railways
contractors use it.

The... BEAVER DIGGER

Hall & Son, so Bay St., Toronto



"Didn't I promise you a whip-ping if you disobeyed me?" asked his mother.

"Yes; but I will release you from the promise, ma" replied Johnnie diplomatically.

Ask a person: "What kind of a noise annovs an ovster?"

After the victim has given it up, he is told: "A noisy noise annoys an oyster." It's awful when you say it quick.

OAK LODGE YORKSHIRES



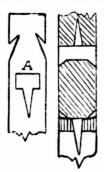
Years of CAREFUL BREEDING have made the OAK LODGE YORKSHIRES the Standard of Quality for IDEAL BACON HOGS.

The championship against all breeds has been won by this herd for 4 years at the Provincial Winter Fair, on foot and in dressed carease competition.

J. E. BRETHOUR, Burford, Ont

When a Buckle is Lost

The accompanying illustration shows how to join the ends of the driving reins together when the buckle has been lost. With a pock-et-knife cut the end of each rein, as shown at a; then, by slipping the extreme end of each through



the tack-shaped opening of the other, a reasonably firm union is effected. The necessity of always keeping the reins fastened together cannot be too strongly emphasized. If a horse becomes frightened, and one rein is dropped, there is no possible way of recovering it, if it is not fastened to the other.



A Stake Puller

The illustration shows a simple, effective, and very convenient implement for pulling up stakes when removing an old fence. A stout pry has two round iron arms attached by staples to its end, as shown. The iron has its ends turned in and drawn to a point so that it can be driven into the stake, when the latter can be pulled up with ease. If the stake is large, the arms can easily be sprung apart so that the points can be driven in on each side

A New Feature in Agricultural Shows

At the recent Royal Counties Show in England, prizes were given for herds of dairy cows giving the largest profit. The herds were divided into two sets: One where more cows than fifty were kept and the other for smaller herds, com-prising from 20 to 30 cows. The competition was restricted to tenant farmers and there were three entries in the class for large herds and eight in that for the smaller ones.

Teacher's Bible



Exact size of Book 51, x 8 inches

ARGE, new, clear type. Bound in Egyptian seal flexible, yapp edges, round corners, red under gold edges, head bands, special fine thin paper. References.

This is a most beautiful and perfect copy of the Holy Scriptures.

Job's innocency.

JOB 23, 24, 25, 26. Judgment for the wicked.

CHAPTER 23.

THEN Job answered and said,
2 Even to day as my complaint bitter:
1 my stroke is heavier than my groaning.
3 Oh that I knew where I might find
41s. 57. 16. 1 There makes out within their waits stroke is heavier than my greatman.

3 Oh that I might come erea to his and the stroke is heavier than my greatman.

4 I would order my cause before him and fill my mouth with arguments.

5 I would newer me, and understand what he would say unto me.

6 'Will he pleud against me with his great power? No; but he would show the adaptive stream in me.

7 There the righteous might dispute with him; so should I be delivered for ever from my judge.

8 Techold, I go forward, but he is not before, and backward, but I cannot precieve him:

9 On the left hand, where he doth work.

(Exact Size of type)

Cheb my hand. 11 Whech make oil within their walls, and treat their walls, and the said the

This Beautiful Bible contains besides the authorized text of the Old and New Testaments with references,

with subject index and index of proper names. This COMBINED new concordance contains a number of features which CONCORDANCE combine to make it one of the most useful and handy concordances ever published.

Another important section of the book is

A COMPLETE This new Dictionary is writen by leading scholars in BIBLE Great Britain and America, each one a recognized authority on his own subject. Contains short articles about the Bible, its contents, language, text, Life of Christ, etc., with numerous beautiful illustrations.

Then there is another valuable feature, viz. :

A PERFECT This Atlas contains twelve beautiful maps specially BIBLE ATLAS engraved from latest surveys and printed in colors. The position of Bible places can be easily found by the complete reference index which accompanies the atlas.

This splendid volume is worth \$3.00 in the regular way, but read

OUR TWO GREAT PREMIUM OFFERS.

OFFER No. 1

One copy New Teacher's Bible . . **BOTH FOR \$2.00** \$4 00

OFFER No. 2

Any old subscriber paying two years (arrears or advance) \$2 co BOTH FOR \$3.00 ADDRESS

THE FARMING WORLD

TORONTO

Market Review and Forecast

Office of The Farming World, Confederation Life Bldg.

Toronto, Sept. 22, 1902.

The business outlook keeps bright with every prospect of a good fall trade. Wholesale houses report better business in many lines than at this time last year. The money market keeps firm at 5 per cent. on call, though some of the larger banks have refused 5½ per cent. Discounts remain at 6 to 7 per cent. as to name and nature of the account.

Wheat.

There is little that is new in the wheat situation and the only excitement has been in the speculative market. At Chicago last week owing to reported falling off in receipts at primary points, the shrinkage shown in the United States Government crop report, prices ran up to 74½c only to fall back again just as quickly owing to favorable reports from the wheat growing centres of the West. The Price Current of last week deals with the wheat situation as follows:

"The wheat market reached its highest prices on last Friday, the market having been supported by a 'bullish' government report, cold weather in the spring wheat States, high cables and large exports. Subsequently, the market has been easing off moderately, due to increased movement of spring wheat, weaker cables, fair weather in the Northwest and more free offerings. In the speculative market there has been fair trading on both sides. The week closed on Wednesday with prices fractionally nigher in nearly all markets. Min-neapolis, however, showed, cash wheat, which has been at a premium, sc lower, and Liverpool sd per 100 pounds lower than the previous Wednesday."

vious Wednesday."

Locally, conditions remain the same. New Manitoba No. 1 hard sold at Winnipeg up to 71c for Sept. shipment, but dropped 'g-cent later on. Here the market rules steady at 66c for red and white east, and 65c middle freights, goose at 62c, and spring at 65c outside. On Toronto farmers' market red and white sells for 68c to 69c, goose 63c to 65%c, and spring fife 64c per bushel.

Oats and Barle.

The oat market continues easy, tending to lower values. Prices here rule at 28c to 29%c at outside points and on the farmers' market at 40c to 43c for old, and 35c to 35%c for new.

Barley rules quiet at from 38%c to 40c, as to quality and point of shipment. On Toronto farmers' market barley brings 44c per bushel.

Peas and Gern

Though peas are quiet now they are likely to rule stronger later on

Poultry and Eggs Wanted

OBIOEDNS
DUCKS
TURKEYS
GEDSE

Empty crates forwarded on application.

Highest market prices paid.

Correspondence solicited.

Toronto Poultry and Produce Co.

Office 470 YONGE ST., TORONTO

as this year's crop will be smaller than expected. They are quoted here at about 70c at outside points. Owing to reported frost in the Western States there was a flurry in corn circles during the week, but a quieter feeling prevails now. At Montreal, corn in store is selling for 70c to 71c in car lots. Canadian yellow is quoted here at 61c west and American at 69c for No. 3 vellow on track, Foronto.

Bran and Shorts

Ontario bran is selling at Montreal at \$14.50 to \$15.00, and shorts at \$22.00 in car lots on track. City mills here sell bran at \$15.00 and shorts at 20.00 in car lots 1.0.b., Toronto.

Potatoes and Beans.

Carlots of Ontario potatoes are selling at Montreal at 66c to 70c per bag of 90 lbs. Here prices are still high, owing to the shortness of supply, at \$1.20 to \$1.25 per bag out of store. On Toronto farmers' market good potatoes bring 80c a bushel.

The bean market is quieter at Montreal at \$1.35 for primes and \$1.25 in larger lots.

Boods

Seed prices are unchanged at \$14.00 to \$17.00 for alsike, \$9.00 to \$10.50 for red colver and \$8.00 to \$9.00 per cwt. for timothy. Alsike is easier here and 75c per bushel lower, at \$5.00 to \$6.25. Timothy is sold by dealers at \$1.75 to \$2.00 per bushel.

wav and Straw

The hay market is quiet, the export demand having fallen off, owing to increased supplies of homegrown in England. At Montreal, quotations are: \$9.00 for No. 1 and \$7.50 to \$8.00 for No. 2 timothy, and \$7.00 to \$7.50 per ton for clover. New loose hay is selling there at \$7.00 per load of 100 bundles, and dark hay at \$6.00 to \$6.50. Car lots of No. 1 timothy on track here are quoted at \$9.00 and baled straw at \$5.50. On Toronto farmers' market timothy sells at \$12.00 to \$16.00, clover at \$8.00 to \$10.00, and sheaf straw at \$5.50 to \$11.00 per ton.

Eggs and Poultry.

The feature in the egg situation is the falling off in receipts, as compared with this time last year, a shrinkage during the past few weeks of 43 per cent. A year ago fresh candled eggs were selling at Montreal at 14c, as against 17c at present. The demand in England keeps good. Selects are firm here. selling at 17c. Comparatively few are being offered, though plenty of inferior quality are coming forward. On Toronto farmers' market, new laid bring 18c to 20c, and held stock 14c to 16c a dozen.

The demand is good here for choice poultry and the supply is light. In a jobbing way, dressed chickens and ducks sell for 85c to 90c, and turkeys at 11c to 12c a b. On Toronto farmers' market, live chickens bring 50c to 85c, dressed 60c to \$1.00, and ducks 55c to \$1.00 per pair, and turkeys 11c to 13c a lb.

Until further notice the Toronto Poultry and Produce Co., 470 Yonge street, Toronto, will for poultry and eggs pay the following f.o.b. at shipping point:

Chickens (this year's) per fb. 8c, chickens (last year's) per fb. 5c, chickens (last year's) per fb. 5c, turkeys (this year's) per fb. 9c, ducks per fb. 7c, eggs per doz., 14c. Empty crates, egg cases and butter boxes are supplied free of charge, the outgoing charges being paid. The net express charges are paid on butter and eggs.

Fruit

According to reports, too many early apples are sent to Great Britain, returns of which have not been satisfactory. A few lots

100,000

CHICKENS, DUCKS and TURKEYS wanted for local and foreign market. We pay highest price, supply crates and remit promptly by P.O.O. Correspondence solicited

The Ontario Poultry Produce Co.

17 Carlaw Avenue

that arrived early in good condition brought good returns, but later sales have not been so favorable. At Ontario points spotted fruit is selling in the crehard at 75c, good stock at \$1.00 and fancy stock, such as Spies, at \$1.20 to \$1.25 per bbl, for the time. Montreal choice Duchess have sold at \$1.50 to \$1.75, and other less desirable kinds of early fruit at \$1.00 to \$1.25 a bbl. On Toronto truit market apples are quoted at \$1,00 to \$1.50 a bbl. Peaches are easier and the market dull.

The cheese market is firmer and stronger, and prices have advanced from to be per fly during the week. The English demand is good and at the moment the mar-ket is firm with a prospect that prices will not go any lower. Stocks are well cleaned out and the way seems clear for disposing of the fall's make at satisfactory prices to the farmer. Sept. goods are now being offered. At Montreal finest Westerns are quoted at 101,c. and Easterns at 101,c. At the country markets during the week, and especially the latter part of it, prices ranged from toc to lobe, equal to lobe to lobe at Montreal

The creamery butter market is firmer and prices higher. The price beyond an export basis, which will in the United States has advanced shut off exports so that Canada from this side. The Trade Bullewill be the chief source of supply tin of last week says

"The market has ruled very firm since out last report and values have moved up fully 's on the week under fairly good buying for local as well as English account. The shipments during the past week were about 33,000 packages against 17.037 packages for this week last year, showing an increase of nearly 100 per cent. Stocks, however, in this city are heavy, although a few more shipments such as those of the past week would materially reduce them. Factory men are beginning to complain of the big decrease in the supply of milk, which, they say, is much but this may only refer to some larger than at this time last year: sections, as the shrinkage in the West is said to be no more than usual at this season of the year. Besides, it is too early yet to calculate with any degree of certainty what the fall make will be. To-day business was put through at 201/c to 2014c for choice Eastern Townships creamery, and a car of cream gathered Western sold at 1814c; and a lot of over 100 boxes of very fine Western brought 1912 c. In dairy butter a car of selected Western sold at 14 c f.o.b. West of Toronto, and the culls of the lot sold at 12'2c f.o.b. In this market straight lots of Western have been placed at 14c to 14% and selected at 15 c to 16c.

Creamery is steady here and

there is a good demand for choice dairy. Quotations are: Creame 19c to 20c for prints, and 18c 18 c for solids; dalo: 15c for tr Quotations are: Creamery, 150 for tubs and 15c to 16c for choice lb. rolls. Toronto larmers' market, Ib. rolls bring 18c to 20c, and crocks 15c to 17c a lb.

Cartle

The markets have maintained a steady feeling during the week especially for good quality. Cables rule firm. At Toronto cattle market on Friday the run of stock was large, comprising 1,000 cattle, 1,522 hogs, 1,900 sheep and lambs and 50 calves. The quality showed little improvement over late deliveries, few well finished loads of either butchers' or exporters' being offered. Trade was generally good, with prices for the different classes of butchers and exporters fairly steady at quotations. A large number of feeders and stockers, the bulk of which were of common to inferior quality, were delivered on the market. All choice quality were quickly picked up at good prices. Many farmers looking for thrifty-looking steers 900 to 1,000 lbs. each had to go without because of the scarcity of this class. A large number of off-color and ill-bred light bulls were offered and sold at \$2.00 to \$2.25 per cwt. Many of these were bought for the Buffalo market for distillery byres the distillery byres. Very few milch cows were offered. Veals are in good demand

Export Cattle.-Choice loads of heavy shippers are worth from \$5.50 to \$5.90 per cwt., medium exporters \$4.85 to \$5.00. Heavy export bulls sold at \$4.50 to \$4.75 and light ones at \$4.00 to \$4.25 per cwt., choice export cows

sold at \$4.00 to \$4.30 per cwt. Butchers' Cattle.—Choice picked lots of these, equal in quality to the best exporters, weighing 1,075 to 1,150 lbs. each, sold at \$4.85 to \$5.25 per cwt. Choice picked lots of butchers' heifers and steers, 950 to 1,055 lbs. each, sold at \$4.65 to \$5.00, good cattle at \$3.85 to \$4.30, medium at \$3.40 to \$3.65. and inferior to common at \$2.75 to \$3.25 per cwt. Loads of butchers' and exporters' mixed sold at \$4.40 to \$4.65 per cwt.

Feeders. -Steers, 1,000 1,100 lbs. each, are worth \$4.50 to \$5.00 per cwt., and light feeders, 800 to 900 lbs. each, \$3.75 to \$4.00 per cwt.

Stockers.-Well bred young steers weighing 500 to 700 lbs. each, are worth \$3.25 to \$3.00, and off colors and those of inferior quality at \$2.50 to \$3.00 per cwt.

Calves .- At Toronto market good to choice calves bring \$3.50 to \$5.50 per cwt. and \$3.00 to \$10.00 each.

Milch Cows .- These sold at \$30 to \$46 each.

Sheep and Lambe

Sheep rule steady at \$3.40 to \$3.60 per cwt. for ewes and \$2.50 to \$2.75 for bucks. Owing to the large run on Friday prices for lambs dropped from 15c to 25c to

THE BEST
BUTTER

Can only be secured by close attention to every secured by close attention to every secured by close attention to every sold as vectable parched butter. We import large quantities of the genuine article direct from Germany. We supply it plain or printed. Write for samples and prices.

Sentinel-Review Co. Ltd., Box 724, Woodstock, Ont.

NO HUMBUG STRUKENESISIO





M-T-T Published monthly, 52 pages. Tells all about Hunting, Trapping and Raw Furs. Sample copy loc. Hunter-Trader-Trapper, Box F, GALLIFOLIS, OHIO.

WANTED Reliable Men in every locality throughthrough through through the wear locality of throughshow cards on trees, fences, along roads, tacking upshow cards on trees, fences, along roads and all conspituous places, also distributing small advertising matter. Commission or salars 450 (00 per month and
salpetass, not to exceed \$2.20 per day. Stephen employment to good, housest reliable men. Noemployment to good, housest reliable men. Noemployment to good, honest reliable men. No experience needful. Write for full particulars THE EMPIRE MEDICINE CO., London, Ont

WILSON'S HIGH-CLASS SCALES

SPECIAL PRICES THIS MONTH On 2,000 lb.

Diamond Steel Rearing SCALES

Write To-day.

C. WILSON

50 Esplanade St. E., TURONTO, ONT.

Dissolves Easily....

Windsor Salt is very soluble. Its pure, white, delicate crystals are quickly absorbed in the butter. It makes butter making easier and more pro-

WINDSOR SALT.

When writing to advertisers always mention THE FARM ING WORLD.

\$3.65 to \$3.75 per cwt, from what they had been earlier in the week. Efrick Bros., East Buffalo, in their circular to drovers of Sept. 18th, re Canada lambs, say:

"The supply continues fair—there are not too many coming to weaken the market, and it has held up remarkably well in face of the decline of the natives. The best ones have been selling at \$5.60 to \$5.65, with the extreme heavy bucks and common lambs out, which are generally selling at \$c. The close was strong to-day with a good clear-ance and some good lambs wanted at the prices. I don't look for any material break in prices for the immediate future, and think it sale to operate on the basis of 4c in Canada for ewe and wether lambs, and \$1.50 for the bucks, especially the extreme heavy ones—buy them on that basis."

Hogs

The run of hogs was large and prices took a tumble to \$7.00 per cwt. for select bacon hogs and \$6.75 per cwt. for lights and fats.

For the week ending Sept. 27th, The Wm. Davies Co., Toronto, will pay \$7.00 for select bacon hogs, \$6.75 for lights and \$6.75 for lats.

The Montreal market is active. Packers there are paxing \$7.00 to \$7.12\frac{1}{2}\$, per cwt. for bacon hogs.

The Trade Bulletin's London

The Trade Bulletin's London cable of Sept. 18th, re Canadian bacon, reads thus:

"The market is firm with good demand at the advance cabled you last week."

Horses

Business at Grands' last week was only fair, the prices paid being on the decline making it almost impossible for dealers to make money by buying horses in the country for market. Many of them teel like giving up business for a month or two till business settles down more. Farmers are buying lots of work horses which helps to keep up values, while those having horses do not care to sell unless they get a good figure. During the week quite a number of horses sold; first-class general purpose horses selling for \$110 to \$140 each or lower than many farmers are asking in the country, and draft horses 1,400 to 1,600 lbs. each at from \$130 to \$190 each.

Low Rates Every Day

Every day during the months of September and October, 1902, the Union Pacific will sell one-way settlers' tickets at the following rates:

MISSOURI RIVER TO

Ogden and Salt Lake	\$25.00
Butte and Helena	20.00
Spokane	22.50
Portland and Ashland	25.00
Tacoma and Seattle	25.00
San Francisco	25.00
Los Angeles and San Diego	25.00
Correspondingly low rates	from
intermediate points.	

For full information call on your nearest agent or address G. G. Herring, G. A., 128 Woodward ave., Detroit, Mich.

...NEW FARM BOOKS...

THE SOIL: Its Nature, Relations and Fundamental Principles of Manage ment. By F. H, King, Professor of Agricultural Physics in the University of Wisconsin.

303 Pages-45 Illustrations-75 Cents.

"A new book of first importance to every farmer. Its importance cannot be overestimated."

ERTILIZERS: The Source, Character and Composition of Natural, Home-Made and Manufactured Fertilizers; and Suggestions as to Their Use for Different Crops and Conditions. By Edward B. Voorhees, Director of the New Jersey Experiment Stations, and Professor of Agriculture in Rutgers College.

Second Edition-335 Pages-\$1.00.

This book discusses the difficult questions of fertilizers in such plain and untechnical language that shows who are wholly unlearned in chemistry (an use it. There are no elaborate tables) the control of the control

THE PRUNING BOOK: A Monograph of the Pruning and Training of Plants as Applied to American Conditions. By L. H. Bailey, Professor of Horticulture in the Cornell University.

Third Edition -545 Pages - 331 Illustrations -\$1.50.

Until the appearance of this bock, there had been no complete and consistent discussion of pruning. Professor Bailey considers fully the philosophy of the subject, showing why we should pune, with such statements of experience and observation as will enlighten the reader. It states principles; and then the various practices of pruning are considered in full detail, and a vast fund of carefully collected data is and eserviceable to the reader. The illustrations are numerous and

MILK AND ITS PRODUCTS: A Treatise upon the Nature and
Qualities of Dairy Milk, and the Manufacture of Butter and Cheese. By
Henry H. Wing, Assistant Professor of Dairy Husbandry in the Cornell
University.

Third Edition -311 Pages -33 Illustrations -\$1.00.

In this volume the whole field of dairying is intelligently considered. The production and character of the lacteal fluid are first discussed, and then in order are taken up the marketing of milk, the production and handling of butter, cheere, and all the products of the dairy. Although the book is up to date in its science, it is none the less a complete guide to modern dairy practice. The illustrations serve to point the practical recommendations of the text. No recent work on dairying has been so well received as this.

THE FERTILITY OF THE LAND: A Summary Sketch of the Relationship of Farm-Fractice to the Maintaining and Increasing of the Productivity of the Soil. By I. P. Roberts, Director of the College of Agriculture, Cornell University.

Third Edition-421 Pages-45 Illustrations-\$1.25

This work, written by one who has been termed "the wisest farmer in America." takes up the treatment of the soil from the standpoint of the farmer rather than that of the scientist. It embodies the results of years of careful experimentation and observation along practical lines, and will be found helpful and inspiring to a marked degree. No other one book could be so heartily recommended to the progressive farmer as this fresh and interesting series of talks—for Professor Roberts seems to be personally addressing the reader.

THE PRINCIPLES OF FRUIT-GROWING. By L. H. Bailey Professor of Horticulture in the Cornell University.

Third Edition-516 Pages-120 Illustrations-\$1.25.

There have been manuals and treatises on fruit growing, but this volume is the first consistent presentation of the underlying practiples affecting the growth of the various fruits. It is thus unque, and it eccupies a field of the greatest importance. It jims science and practoce, for it not only discusses the reasons for certain operations, but presents the most approved methods, gathered from the successful fruit growers of America. It appeal especially to the horticulturist who is willing to have his brain direct and supplement the work of his hands, and to acquire a knowledge of principles rather than a mere memorandum of their application.

GARDEN-MAKING: Suggestions for the Utilizing of Home Grounds. By L. H. Bailey, aided by L. R. Taft, F. A. Waugh, and Ernest Walker.

Fourth Edition-417 Pages-256 Illustrations-\$1.00.

Here is a book literally "for the million" who in broad America have some love for growing things. "Every family can have a garden. If there is not a foot of land, there are porches or windows. Wherever there is sunlight, plants may be made to grow; and one plant in a tun-can may be a more helpful and inspiring garden to some mind than a whole acre of lawn and flowers may be to another." The illustrations are copious and beautiful.

FREE BY MAIL ON RECEIPT OF PRICE.

The Farming World

Confederation Life Building.

TORONTO

ANADIAN PACIFIC

Sept. 30

Winnipeg Waskada Estevan Elgin Arcola

Regina ... \$30 Moosejaw \$30 Yorkton...

Rigin Arcola Porkton.

\$28 Fr. Albert State McLood Calgary \$35 Grand View Swan River

Strath-

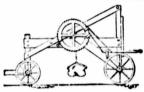
From all points in Canada, Azilda, Sault Ste Marie, Windsor and East. For pamphlet giving full particulars, apply to the nearest Canadian Pacific Agent or to A. H. NOTMAN.

Asst. Gen'l, Pass, Agent, 1 King St. E., Toronto



We send our I ustrated Catalogue free on receipt of 2c, atoms to help pay postage.

With it you can choose your equipment for Field, or In-thorr sports, just as well as by calling at any store and cheapter—as we make special prices for our catalogue goods, and our trade is so large we can sell year almost as cheap as some desires pay for their goods. CLATHER, Targets, TRAPS, Golf, POOT BALL, Boxing Grove, PUCHING BAOS, FOIL, SKATES, Skating Boots, SNOWSHOES, Moccosine, Tolb GOLANS, Skin COCKEY STPILES, Billaged, PING FOOK, etc. T. W. BOYD & SON MONTREAL, P.Q.



THE NEW STONE AND STUMP ENTRACTOR BREVETED BY LEMIRE—Capable of lifting 18,000 lb. Has no equal for lifting and carrying stones, etc., for placing stones so as to build up fence to 5 feet high and leave the ground in a condition fit for mowing and reaping machines. After the hooks are adjusted on the stones, the only thing to do is to pull the lever. You can lift up a thing, carry it and place it on a stone fence in 10 minutes. The agricultural societies and cline of farmers should all boys to the stone of the control of the stone of the control of the stone of the control of the cont

Guaranteed as mentioned above. Agents wants A. LEMIRE, Prop., WOTTON, QUE, or PLES-ISVILLE FOUNDRY, SOMERSET, QUE.

WOOD AGRAVING, PHOTO RAVING. HALF TONES J.L. JONES ENG.CO

BELL. 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

NATIONAL" **Cream Separator**



The "National" is a purely Canadian made machine throughout, which cannot be said of some others. Intending purchasers are invited to call at our factory in Guelph, where they may see the machine and all its parts in course of construction.

Superiority of the "National"

It possesses all the strong poin's found in other Cream Separators, while it is free from objection-able points that make other machines hard to run, and a source of trouble to those who operate and clean them.

The National is simple in construction, handsome in design, and finely finished; easy to operate, and few parts to clean; a perfect skimmer with a larger causacity than any other separator at the same price. Every machine guaranteed to do good work.

Capacity of No. 1 .- 330 to 350 lbs. per bour.

Capacity of No. 1 A-450 to 500 lbs. per hour.

Give the "National"

a Trial:

GENERAL AGENCIES-

Creamery Supply Co., Guelph, for South-western Ontario. T. C. Rogers Co., Guelph, for Ontario North and Bast. Jos. A. Merrick, Winnipeg, for Manitoba and N. W. T.

ANUFACTURE The Raymond Mfg. Co. of Guelph, Limited GUELPH, ONTARIO.

Exhibit in Dairy Building, Toronto Exhibition.

CHAMPION EVAPORATOR



Save Your Fruit and dry it with

Champion Fruit Evaporator

Evaporator

Dries all kinds of fruit
and vegetables, producing a superior quality of
clean white fruit. It is
made of galvanized iron,
is lined throughout with
asbestos, is fire proof and
portable. Made in five
sizes. Catalogue for the
asking.

Maple Syrup Evaporator.

Not a single feature of the "Champion" Evaporator could be dispensed with and Not a single feature of the "Champion" Evaporator could be dispensed with and leave a perfect Evaporator. Durability, rapidity, and blight quality of product, with saving of feel, are its features. Our sectional pan system makes it easy to handle, and everlasting. Write for catalogue, st at a number of trees you tap, and an estimate of your requirements will fol-

THE GRIMM MFG. CO., . 84 Wellington St., MONTREAL.

When writing to advertisers kindly mention THE FARMING WORLD.