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FOR FARMERS and STOCKMEN

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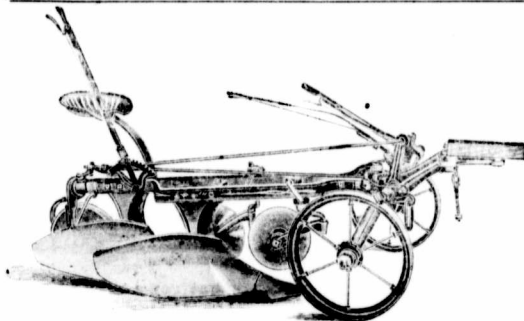
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Turn to pages 232 and 253 FARMING WORLD of September 3rd.



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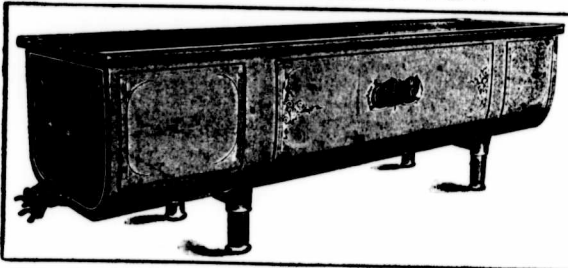
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The Farming World

For Farmers and Stockmen

VOL. XIX.

OCTOBER 1st, 1901

No. 14

A Kindly Word.

AT this season of the year when the busy rush of work is over, farmers have leisure to look around and consider new features in agriculture and better methods of doing things and we take this opportunity of asking our readers to kindly mention The Farming World to their neighbors and friends in this connection. The coming of The Farming World each week into the home, makes for better agriculture, better live stock, better method of work and a higher type of farmer, and consequently, it would be a friendly act to be able to confer these benefits on one's neighbors. A post card sent us, containing the names and addresses of any to whom copies of our Autumn number might be sent would be appreciated. We also take this opportunity of thanking our readers for their assistance in the past, which has aided very materially in increasing our subscription list up to its present large proportions. To produce a paper the size of The Farming World fifty-two times a year costs a lot of money and a gentle hint to examine the address label on this issue will be all that is necessary to secure the early remittance of your renewal for 1902.

Better Stock Yards Accommodation.

Farmers and stockmen throughout Ontario will be interested in the description given elsewhere of the new Union Stock Yards scheme for Toronto. This is not a local affair but a matter that concerns the live stock interests of the whole province. Toronto has never had, what might be termed, even reasonable accommodation for its live stock trade and it is surprising that she has held the position she has as the centre of this trade, so long. Had it not been for her central location, railway facilities, etc., this trade would long ago have drifted to other centres willing to provide first-class accommodation. But these advantages of position, etc., will not always make up for lack of proper accommodation for handling and disposing of stock brought here for sale. In fact for years there have been complaints on the part of drovers and others who are compelled to do business here, that the present city cattle markets are totally in-

adequate for this growing and important trade. And to-day a condition of affairs prevails in connection with the city's accommodation that makes it imperative that some radical change for the better takes place or the prestige and position of Toronto as the centre of this trade will be lost.

We welcome therefore the proposition which has come from purely independent sources and believe that a year hence when the company have the new yards in working order at the Junction, a fresh impetus will be given to the live stock trade not only of this city but of the whole province. These are days of larger things and more modern methods and no city can expect to hold within its grasp an important trade of this nature without providing adequate and up-to-date accommodation for it. True, efforts have been made by the city authorities to remedy matters but so far with little success. And so far as we are able to size up the situation there is no prospect whatever of anything being done on a scale that will provide the accommodation which this new scheme will furnish.

Then not alone are the proposed stock yards of importance. The building up of large packing establishments and abattoirs mean a great deal to the city and the province. The proposed live stock pavilion, which is likely to be added to the original plan, is also of importance. There can be no doubt that a large pavilion of this kind suitable for displaying live stock and for the purposes of a remount station would be of very great advantage to the whole country and might properly be considered by the local government as being worthy of financial assistance. A building of this nature would be valuable for holding large auction sales of pure bred and other stock. There are a few Canadian breeders who every year hold large sales of pure bred stock at Chicago. If we had the proper accommodation on this side, why could not these sales be held here and prospective buyers from across the line brought in. Then such a pavilion could be utilized for holding the public auction sales of stock which have already been established under Government auspices.

The whole proposition when looked at from these different points of view cannot but commend itself to the good judgment of everyone interested in developing the important live stock interests of the country,

and it is somewhat surprising that there should be so much opposition to the scheme from the city and many of its citizens. A canvas of the whole question must lead one to the conclusion that this opposition has its origin in purely selfish motives. As far as the city itself is concerned, as much benefit would be derived from stock yards at the Junction as within the city limits while the present cattle market would return as large a revenue if devoted to other purposes.

Another Big World's Fair.

The next big World's Fair takes place at St. Louis, in 1903. This Fair will be known as the Louisiana Purchase Exposition, and is intended to commemorate the centennial of the acquisition of the territory west of the Mississippi by the United States in 1803. This territory which Napoleon sold to Thomas Jefferson, then President of the United States for \$15,000,000, was shown by the last census report of 1900 to have had a taxable wealth of \$6,616,642,829.

Some three years ago a movement was started looking forward to the one hundredth anniversary of this purchase, and it was finally decided to hold a monster exposition, not only to show the progress that had been made in this territory since it became the property of the United States but the world's advance in civilization up to this time. Already marked progress has been made towards a consummation of this object and financially and in other respects, the St. Louis Fair of 1903, great advancement has been made. To begin with, the management have at their disposal a total of \$16,000,000. Of this amount the city of St. Louis supplied \$5,000,000; its citizens, \$5,000,000 by subscription; Congress voted \$5,000,000 and the State of Missouri \$1,000,000.

The Exposition will be opened to the world, and a fair on a par with the Columbian Exposition at Chicago in 1893, but more up-to-date, will be held. A special effort is already being made to have the Agricultural display and especially the live stock department ahead of anything of this kind that has ever been held. On August 30th last representatives from all the live stock associations in the United States met and appointed a strong standing committee from among their members to devise ways and means of bringing together the largest and best exhibit of live stock

ever seen at any large fair. This standing committee will meet shortly to formulate rules and regulations governing the live stock department.

Canada's relation to this big world's fair is of the greatest importance. She should be represented there, in no insignificant or small way. Preparations should be begun at an early date towards preparing exhibits and arranging for a big display of our live stock. There is a big market in the west for good stock which Canadians should look well after.

Ontario a Field for Settlement.

In our annual autumn number, Mr. Thos. Southworth, Director of Colonization gave a most interesting description of New Ontario and the lands in that portion of the province open for settlement. This article has attracted considerable attention. The title under which it appeared, instead of reading: "Ontario held for Settlement," should have read: "Ontario a field for settlement." Through some error in making up the page on which this article appeared the former heading was used instead of the latter. However, the article itself was in no way misleading and showed most clearly that in New Ontario there are splendid homes awaiting the steady, energetic young farmer who has little capital to expend on expensive lands in the older parts of the country.

Returned from Europe.

Mr. C. A. Zavitz, experimentalist at the Ontario Agricultural College, returned last week from an extended visit to Great Britain and the Continent. While there he looked into the work being done by a number of experiment stations and brought back with him many valuable suggestions which he will be able to utilize in connection with his work at the College. Mr. Zavitz started in Southern Europe and followed the harvesting of grain northward to Great Britain where he spent considerable time in visiting the agricultural institutions of the Old Land.

The Ontario Agricultural College.

The Ontario Agricultural College opened on September 14th under most favorable auspices. The improvements and additions to the dormitory sections provide accommodation for from 40 to 50 more students. These new rooms have all been filled up and some students have had to seek rooms outside, making the largest attendance in the history of the college. When the new laboratory and library are completed, the facilities for work will be greatly improved. As it is, the college ranks high as an agricultural, industrial institution.

Mr. Alazis Paikert, Royal Hungarian Agricultural Commissioner for the United States and Canada, who recently paid a visit to the

college, told Principal Mills that after visiting all the agricultural colleges in the United States he had no hesitation in saying that

the Guelph College was not only doing the best work but was organized on decidedly the best lines.

Our Western Letter

Live Stock Trade—Farmer's Institutes—More Men Wanted

Winnipeg, Sept. 23, 1901.

Among the points which the visitor to the West should see in Winnipeg the stock yards merit the first place on the list. There are very few periods of the year when they do not repay a visit. Nowhere else can so positive an indication be obtained of the magnitude of the cattle trade of this country. It is just at the present that they are most worth seeing, when they are constantly crowded to their full capacity. Trainload after trainload goes forward to Montreal on its way to the British market but the diminution in the number that remains is only temporary, the vacancies are promptly filled by new arrivals.

The present season's trade began about a month later than usual and this fact will seriously affect the gross volume of business done, unless it should by reason of favorable weather continue much later than usual. Nevertheless the season's business has been very satisfactory, and with a continuation of the present prices the ranchers will have a nice little surplus of cash for increasing their herds and their accommodations for feeding.

With the large crop of coarse grains and the plentiful supply of hay of the present season there should be a considerable increase in the number of cattle led this winter for the spring trade. The western farmer has in the past been badly handicapped by the want of proper stabling for winter feeding, but each year sees more buildings erected in keeping with the requirements of prairie farming. Another pitfall into which he has eagerly tumbled is the practice of selling the young cattle to the ranchers who find it pays better to buy stockers than to breed them. When the rancher can make a profit by finishing off the stocker and selling at the price realized for grass-fed cattle, surely the farmer with an abundance of coarse grains can do better still at the prices realized for stalled cattle on the spring market.

The new regulations for the government of Farmers' Institutes have been approved by the Lieutenant-Governor-in-Council and appear in the Manitoba Gazette of the 14th instant. They are evidently based on the old Act which was repealed in 1900, but contain some important changes. To entitle them to the government grant, the Institutes are now required to have a paid-up membership of at least fifty, and to hold at least five meetings in each year. The date of the annual meeting for election of officers is changed from the month of June to the first Monday in December. The new date will

undoubtedly be more convenient as most farmers are then through the fall work, while in June they are in the busiest season. Fifty members are required to organize an Institute and where there is an Agricultural Society no Institute may be organized. The Agricultural Societies are required, on a total of \$50.00 of their grant to hold at least four meetings for Agricultural discussions. There are fifty Societies and twelve Institutes in the province.

The persistent rains of the past ten days have lent a point to the argument urged by the best class of farmers against threshing from the stook. This practice has been on the increase the last few years, and the heavy crop of the present year has led many who usually stook to try the other plan. There is more grain unstacked this year than ever before. The men who hoped by this means to save a few days labor and a few dollars will be regretting their shortsighted policy when they come to sell their bleached wheat, if indeed they are fortunate enough to get it threshed. But that will not prevent some of them doing the same thing next year.

The prices for dairy produce continue to improve. Creamery men are this week refusing the top prices offered last week for their output, or are selling in small lots to meet pressing obligations. The present season promises to be the best for many years, both for quantity, quality and output. If the impetus thus obtained will only enable some of the creameries to continue operations through the winter a great and good work might be accomplished in proving to our people the profits of winter dairying.

The new grain is now fairly on the move. Receipts increase in volume daily. The number of cars inspected at Winnipeg and Emerson for the week ended September 21st, was 187; for the week ended September 14th, 198. The figures for the corresponding period of last year were 191 and 240 cars. Prices this year are about 15 cents lower than last, the closing price on September 21st being 69 cents as compared with 84½ cents last year—September 12th 69½ cents and 8½ cents respectively.

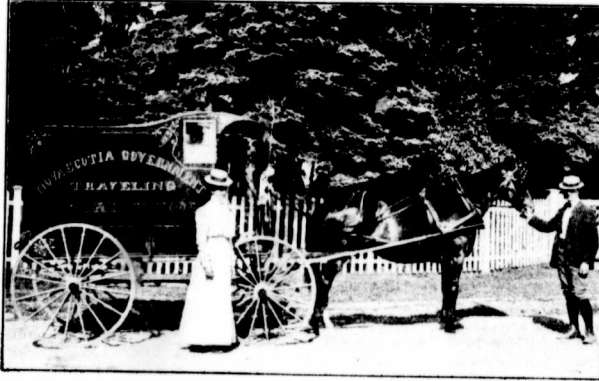
Send us some more men. Last week there was a train load came up but these were not nearly enough to supply the demand. And please take notice that it is not tailors and hair clipper peddlars that we need, but men who can take hold of a plow or pitch sheaves for a hard day without getting all the ailments in the almanac.

The New Era

Opportunities of the Present Day Farmer—Electric Railways, Rural Telephones, Etc.

These are the days when the farmer finds his buying powers increased, and this increase of buying powers means the possibility of comforts undreamed of on the farm of a generation ago. The farmer looking at life with a new confidence, is grasping at more of

such as good paving, cheap lighting, easy and good water supply. A great number of small conveniences, amounting in the aggregate to great comfort, arise from the extent to which division of labor can be pushed, the man who specializes upon an industry,



The Nova Scotia Travelling Dairy in charge of Miss Laura Rose, Guelph, Ont., who is starring by the wagon. See article by Miss Rose on page 284 September 10 issue of THE FARMING WORLD and in Farm Home Department this issue.

its good things. The advantages essential to life in the country have from time immemorial been his, and with the coming of the new wealth, aided by the advance of science, he is beginning to seize upon not a few of the advantages which from time immemorial have been regarded as peculiar to life in the city or the town.

The dwellers in towns have long enjoyed certain material comforts, which, on the whole, are due to the closeness of their houses. These advantages, until late years, have been quite beyond the reach of farmers, who live scattered over the face of the country, and persons who are not alive to certain great changes wrought by recent developments of science are apt hastily to conclude that the difficulty of distance is still insuperable. But no small portion of modern inventions have been directed towards the annihilation of distance, and modern society is equally fertile in expedients to use and supplement the triumphs of science in this direction. The farmer has, during the past quarter of a century made strikingly bold use of modern mechanical improvements in the form of labor-saving machinery. It is now time for him to see what use can be made in his home-life of trouble-saving, distance-destroying, comfort-bringing devices, whether mechanical, scientific or social.

Living in close proximity has enabled townsmen to acquire a number of great public conveniences,

naturally doing his work better than the Jack-of-all-trades. For instance the average city or town house has been built by a man who is more or less of an expert in house-planning. The close proximity of shop and house, again, greatly lightens the labor of living, which principally falls upon the



The Nova Scotia Travelling Dairy at work in Cape Breton.

women. There are the thousand and one conveniences, such as the daily mail, the newspaper, the keeping in touch with the great world.

A number of these advantages can be seized upon by the farmer of to-day. Division of labor will make its appearance with increased wealth. The farmer who builds

a house in these times need not, as his father was forced to, do the planning of it himself, or leave it to the carpenter. A house has to be lived in, and the misplacing of a door will mean thousands of needless footsteps in the course of a life; the architect whose business it is to plan houses, may surely be consulted when a new dwelling is to be erected. And it may be as well for the farmer to recollect that, as his work lies in the fields and barns, his wife's lies within the four walls of the house, and that an awkward arrangement means as much toil and nuisance to her as the cutting off by a railway of a corner of his farm does to him. A scientifically planned dwelling would reduce by one half the labor needed to keep a house in one of clumsy arrangement. From the milk pan to the barn all the appliances of a farm are scientifically constructed. Why not the house, in which all the household lives and in which half of the household works?

The closeness of shop and house, again, is an advantage of the town to-day quite within the reach of many wealthy farming regions. For one thing, the extension of the electric railway system, which seems but to be beginning, promises a means of rapid communication with city and town. Apart from its economic services, it should enable thousands of farmers and their families to gain access to the shop more quickly and more easily than before. Already there are districts of Ontario where farmers or villagers twenty miles away from a city can attend an unusually good opera, play, or lecture, or an important meeting, by arranging in sufficient numbers for a "late car." People with this new service at

their disposal occupy the position of dwellers in the suburbs, rather than of rural residents of the older and accepted type.

For the electric railway the farmer is dependent upon many considerations, such as his proximity to the highroad served by it, and the disposition of the capital-

ists who build and operate it. Another means of defeating distance, not subject to these drawbacks, is the rural telephone. It is a fact, that in the country a telephone service can be installed at comparatively slight expense. The rural districts of many portions of the continent of Europe are threaded with telephone wires, whose use can be secured at very reasonable cost. A considerable number of rural exchanges exist in portions of United States and in our own Northwest, at Yorkton, a prosperous rural exchange is working and extending its lines. This is a species of public service which lends itself peculiarly to co-operative or municipal effort: a large number of these rural exchanges are of this nature. Returns from sixteen independent telephone companies operating in the Western States, show that lines were found to pay when making charges of \$1 or \$1.5 a month for residences. In Grand Rapids, Wisconsin, one company has prospered upon a charge of 50 cents a month to residences, \$1.75 a month to stores.

The benefits which a telephone service connecting one at once with one's neighbors and with the adjacent town would confer are apparent upon the slightest consideration. There is the enormous business gain; the advantages in being able to learn the price of grain or live stock, to arrange for cars, to sell goods, to conduct the thousand and one business details of the farm without stirring out of one's house are apparent at a glance. In addition to all this, the convenience to the home would be great. The working of the household would be expedited immensely if the shop were within call, if the replenishing of the family stock did not mean a journey of miles. One of the greatest advantages of the town housewife over her country sister would be reduced to a minimum.

A development is now in progress in Ontario which attacks this problem of distance from another standpoint. In pioneer days the shop-keeper was more important than the farmer and the farmer had to come to the shop. Today the farmer is more important than the shop-keeper and the shop comes to the farmer. In a number of districts in Ontario the grocers have taken to sending out wagons to patrol the roads, stocked with staple groceries; in districts so remote from large cities as to render it impracticable to start local sub-markets, these wagons replace the market by purchasing the small stuff which the housewife has for sale. The butcher, and in some cases the baker, have long been sending wagons through the country. The extension of this system and the advent of the rural telephone would bring about in many a district the realization of the city luxury, of telephoning the order and having it delivered at the door.

These instances do but touch on the hem of the subject. The farmer of the present day enjoys great opportunities of adding to his enjoyment of life by a sober, business-like, well-thought-out appropriation of many of the comforts hitherto monopolized by the townsmen. As there is no reason why

he should not retain the advantages which are peculiar to his mode of life, the twenty-first century may see the farmer regarded with envy by all townsmen except the positively wealthy; may see him establish at the top of the great middle class which is the security of the state.

Some More Wins at Buffalo

In last issue we published some notes on the cattle display at the Pan-American in which the prize winners in the Shorthorn classes were given. Since then we have received further particulars regarding the other classes, in which Canadian cattle were also successful. In Herefords there were two Canadian exhibitors, H. D. Smith, Compton, Que., and W. W. Black, Amherst, N. S. H. D. Smith had first for bull three years old and sweepstakes for the best bull any age, and several seconds, while Black won a number of seconds.

In Galloways Canada fared a little better. The only Canadian exhibitor was D. McCrae, Guelph, who had sweepstakes for the best bull and three first prizes in addition. He also had second prize for herd and altogether made an excellent showing.

There were two Canadian exhibitors in the Aberdeen-Angus class, James Bowman, Guelph and P. W. Phillips, Oakville, Ont., who had a few animals out. Bowman won a large number of seconds including the herd prize and for aged bull, and did fairly well considering the competition he had to face. Phillips won a couple of thirds for young bulls.

In Devons, W. J. Rudd, Eden Mills, Ont., was the only Canadian exhibitor and carried off a few of the minor prizes.

It was in the Ayrshire class, perhaps that Canada made the biggest sweep, obtaining the lion's share of the awards, including the two sweepstakes and all the herd prizes. The following is a list of the awards in this class.

Herd.—1st prize, W. W. Ogilvie Co., Lachine Rapids, Quebec; 2nd prize, Robert H. Ness, Howick, Que.; 3rd prize, Robert Reford, St. Anne de Bellevue, Que. Bull, three years or over.—1st prize W. W. Ogilvie Co.; 2nd prize, Robert A. Reford; 3rd prize, Robert R. Ness; 4th prize, J. F. Converse & Co., Woodville, N. Y. Bull, two years and under three.—1st prize, Robert R. Topping, Amsterdam, N. Y.; 2nd prize, W. W. Ogilvie Co.; 3rd prize, Robert A. Reford; 4th prize, J. G. Clark, Ottawa, Ont. Bull, one year and under two.—1st prize, G. W. Bell, Rome, N. Y.; 2nd prize, J. F. Converse & Co.; 3rd prize, J. G. Clark; 4th prize, Robert R. Topping. Bull, under one year.—1st prize, Robert R. Ness; 2nd prize Robert R. Ness; 3rd prize, J. F. Converse & Co.; 4th prize, R. Reford; 5th prize, W. W. Ogilvie Co. Cow, three years or over.—1st prize, J. F. Converse &

Co.; 2nd prize, W. W. Ogilvie Co.; 3rd prize, W. W. Ogilvie Co.; 4th prize, Robert R. Ness. Heifer two years and under three.—1st prize, Robert R. Ness; 2nd prize, J. G. Clark; 3rd prize, Robert Reford. Heifer, one year and under two.—1st prize, Robert R. Ness; 2nd prize, W. W. Ogilvie Co.; 3rd prize W. W. Ogilvie Co.; 4th prize, Robert Reford; 5th prize, Robert R. Ness. Heifer calf.—1st prize, W. W. Ogilvie Co.; 2nd prize, Robert R. Ness; 3rd prize, W. W. Ogilvie Co.; 4th prize, W. W. Ogilvie Co.; 5th prize, W. W. Ogilvie Co.; sweepstakes, bull any age.—1st prize, W. W. Ogilvie Co. Sweepstakes, cow, any age.—1st prize, Robert R. Ness.

There were two Canadian exhibitors in the Holstein-Friesian class: G. W. Clemons, St. George, Ont., and Geo. Rice, Currie's Crossing. There was considerable competition in this class also, and honors were not easily won. Geo. Rice had the sweepstakes for the best cow, while Clemons had first in No. 1 special prize given by the American Holstein-Friesian Association, and first for bull calf. Heifer under two years and for heifer calf, Rice had second prize herd and was well up in the list in other sections. Altogether the Canadians won seventeen prizes in this class.

No Canadians exhibited in the Jersey section, but W. E. H. Massey Toronto, made a very good showing with Guernseys, securing first for yearling bull, and for aged cow and sweepstakes for the best cow, any age.

In the French Canadian classes, the Province of Quebec came out on top, securing all the sweepstakes and seven firsts out of nine offered. The most successful exhibitors were Arsene Dennis, St. Norbert, and James Dugas & Co., St. Jacques, Que. There were a number of other breeds shown, in which Canada did not compete.

Canadian Sheep at Buffalo

Judging of sheep at the Pan-American took place last week and Canadian exhibitors did well. In the Southdown class a Wisconsin exhibitor took first on the flock, while Senator Drummond of Montreal and Mr. John Jackson, of Abingdon won second and third respectively. The Messrs. Hammer of Mount Vernon, Ont., and John Campbell, of Woodville, respectively won the second and third prizes on their flock of Shropshires. A full report will appear in next week's issue.

The Union Stock Yards Scheme

Up-to-Date Accommodation of Vital Importance to the Ontario Live Stock Trade

The need of better accommodation and more up-to-date methods of handling the live stock trade at this city will be apparent to everyone who has looked at the matter with an unprejudiced mind. The accommodation of the present Toronto cattle market is wholly inadequate to meet the needs of this growing trade. This market, which is located in the western section of the city in the vicinity of the Exhibition grounds, contains but 11 acres and has been proven over and over again to be too small to accommodate the live stock trade of the city.

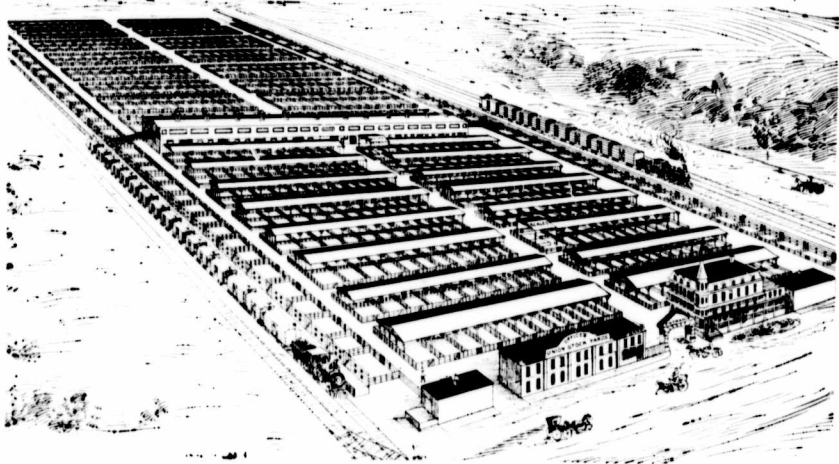
On nearly every market day, cattle have to stand in the alleyways and quite frequently numbers of carloads of stock remain for hours unloaded because there is neither the room nor the proper facilities

city derives a net revenue from the present market of \$17,000 a year, while the gross earnings are about \$58,000. If the ground now occupied were sold for dwelling or factory purposes the city could easily obtain a revenue of \$17,000 from it and do away with the expense and trouble of looking after it.

But a change in this order of things is likely to be effected before another year rolls round and Toronto will have in its vicinity one of the most modern and best equipped stock yards on the continent. Some months ago a strong company was formed with lots of good backing to organize a new stock yards on more improved lines. This company, which is known as The Union Stock Yards Company, Limited, Toronto has already made considerable headway towards ac-

commodating the live stock trade or abattoir that may locate on its lands. This franchise has been duly confirmed by the Legislature. The company may still further extend its limits to 150 acres in all and sufficient to provide all the accommodation in the way of stock yards, sites for packing house, abattoirs, etc., for all time to come. When one looks into the scheme it is surprising on what a gigantic scale the whole thing has been conceived.

The location is an admirable one, adjacent to both the G. T. R. and C.P.R. railways and within easy access from each. It is a sufficient distance from the city to insure no complaints in the way of bad smells, etc., on the part of people living in the vicinity. In fact if the general plan devised is carried out, there will be no ob-



Plan of New Union Stock Yards at Toronto Junction, Ont.

for unloading with despatch. Consequently drovers are complaining, and if they could avoid doing so would pass by Toronto altogether.

The city which owns and controls the market has made several attempts to enlarge the grounds and to improve matters, but so far with very little success. A scheme has been on foot to take in Stanley park which was given to the city on condition that it be used as a park, but twice has the city been refused legislation to utilize this piece of ground for increasing the cattle market accommodation. And even if it were taken in it would only increase the acreage of the market by 4 acres and would only relieve the present congested state of the market temporarily and by no means provide for future growth and expansion in the live stock trade of the country. The

completing its ideal. Its promoters who comprise men sufficiently conversant with the live stock trade of the country and what is required in the way of cattle markets, etc., to put the business on the best possible footing, have not gone into the matter blindly. Representatives of the company have made a thorough inspection of the leading cattle markets and stock yards both in Europe and the United States and are in a position to go ahead and equip a market on the most up-to-date plan.

Some time ago a special thirty-year franchise was secured from the town of Toronto Junction for the purpose of a live stock market. This franchise gives exemption from taxation for 30 years to the company on 100 acres of land and to any packing house

noxious smells to disturb the sensibilities of passers by. A complete system of sewerage disposal is included so that all danger from that quarter will be practically nil. The location is in easy reach of the center of the city by street or passenger railway, and seems to be in every way suited to a venture of this kind and the industries associated with it.

We illustrate elsewhere the proposed plan of the new yards upon which the company have had 70 to 50 men at work for several weeks back. This plan covers an area of 35 acres, or three times the extent of the present city yards. A change is under contemplation in connection with it, however, and a couple of the sheds to the front and the office building may be replaced by a large raised pavilion with which to show and exercise horses

and to hold large annual sales of pure bred stock. This pavilion will extend to the street and will have well fitted offices, etc., in the front and rear below. If we are fortunate to secure a remount station for Ontario, we know of no place better suited for such a purpose than being located in the yards and consequently this pavilion will serve a good purpose in more ways than one.

Another wise provision is also made. Under the sheep pens—the raised building in the centre of the plan—will be located stalls for feeding 1,000 head of cattle. These would be especially valuable to a shipper in getting together a large shipment. If he had had this accommodation, Mr. Joseph Gould who made the big shipment last week as noted elsewhere, could have got his lot together much more conveniently and with greater despatch than under present conditions.

The plan as shown in the illustration is nearly a mile in length, and is provided with all the requisites in the way of loading, unloading and handling stock necessary in an up-to-date stock yard. There will be track accommodation for unloading the longest train load of stock that it is practicable to operate. Each unloading stall will be the length of a car and when the gates are adjusted stock can be unloaded with quickness and despatch. A weighing scale will be provided with a capacity of 100,000 lbs. and on which 3 car loads of stock can be weighed at one time. It will weigh to a nicety from one animal up to three carloads. The yards throughout will be paved with asphalt or brick and the whole fitted up after the most approved plan.

The company so far has met with great success in carrying out its scheme and is receiving encouragement from every side, the only exception being those who are wedded to the old city market for purely selfish reasons. Three packing houses have expressed a desire to locate on the company's grounds, and only last week a large English concern wanted the first right to establish a big abattoir on its lands. So the whole scheme is meeting with great encouragement and is likely to go through on the large scale we have indicated. Among the franchises secured, is one to establish a beet root sugar factory. It is claimed that by having a factory in the vicinity of the market large quantities of the beet pulp could be utilized to advantage in fattening cattle.

A rather surprising fact in connection with this undertaking is that the new company intends to charge no higher rate to drovers and others for these privileges than the city does for the very poor accommodation which it provides. In fact it is so stipulated in the franchise obtained from the corporation of Toronto Junction, and the promoters are confident that they can provide this accommodation for a good deal less and still make good money on their investment.

It requires no special pleading to show the great advantages that will accrue to the city of Toronto and the province at large from the establishment of this new and up-to-date stock yards and the industries that will grow up around it. Something like this is urgently

needed in order to maintain the prestige and position of Toronto as the centre of the live stock trade of Ontario. We wish the new scheme every success and believe that when in full operation it will work lasting good to the live stock industry of the province.

Dressing Poultry for Market

No product sold off the farm will repay care and attention in preparing it for market better than dressed poultry. Neatness, cleanliness and skill should be exercised. It will add very much to the value of the dressed bird, make it more appetizing and more attractive to buyers. The Sprague Commission Company, of Chicago, in a circular addressed to the trade, give some practical information on this line which may be helpful to Canadian farmers, in preparing their poultry for the Thanksgiving or Christmas markets, and from which we take the following:

In the first place poultry should be well fed and well watered, and then kept from 18 to 24 hours without food before killing. Stock dresses out brighter when well watered and adds to the appearance. Full crops injure the appearance and are liable to sour, and when this does occur correspondingly lower prices must be acceptable than are obtainable for choice stock. Never kill poultry by wringing the neck.

To Dress Chickens.—Kill by bleeding in the mouth or opening the veins of the neck; hang by the feet until properly bled. Leave head and feet on and do not remove intestines or crop. Scalded chickens sell best to home trade, and dry pick best to shippers, so that either manner of dressing will do it properly executed. For scalding chickens the water should be as near the boiling point as possible without boiling; pick the legs dry before scalding; hold by the head and legs and immerse and lift up and down three times; if the head is immersed it turns the color of the comb and gives and eyes a shrunken appearance, which leads buyers to think the fowl has been sick; the feathers and pin feathers should then be removed immediately very cleanly, and without breaking the skin, then "plump" by dipping ten seconds in water nearly or quite boiling hot, and then immediately into cold water; hang in a cool place until the animal heat is entirely out of the body. To dry pick chickens properly, the work should be done while the chickens are bleeding; do not wait and let the bodies get cold. Dry picking is much more easily done while the bodies are warm. Be careful and do not break and tear the skin.

To Dress Turkeys.—Observe the same instructions as given for preparing chickens, but always dry pick. Dressed turkeys, when dry

picked, always sell best and command better prices than scalded lots, as the appearance is brighter and more attractive. Hubsava to market all old and heavy gobblers before January 1, as after the holidays the demand is for small fat hen turkeys only, old toms being sold at a discount to carners.

Ducks and Geese should be scalded in the same temperature of water as for other kinds of poultry, but it requires more time for the water to penetrate and loosen the feathers. Some parties advise, after scalding, to wrap them in a blanket for the purpose of steaming, but they must not be left in this condition long enough to cook the flesh. Do not undertake to dry pick geese and ducks just before killing for the purpose of saving the feathers, as it causes the skin to become very much inflamed, and is a great injury to the sale. Do not pick the feathers off the head; leave the feathers on for two or three inches on the neck. Do not singe the bodies for the purpose of removing any down or hair, as the heat from the flame will give them an oily and unsightly appearance. After they are picked clean they should be held in scalding water about ten seconds for the purpose of plumping, and then rinsed off in clean, cold water. Fat heavy stock is always preferred.

Before packing and shipping, poultry should be thoroughly dry and cold, but not frozen; the animal heat should be entirely out of the body; pack in boxes or barrels; boxes holding 100 to 200 lbs. are preferable, and pack snugly; straighten out the body and legs so that they will not arrive very much bent or twisted out of shape; fill the packages as full as possible to prevent moving about on the way; barrels answer better for chickens and ducks than for turkeys and geese; when convenient, avoid putting more than one kind in a package, mark kind and weight of each description on the package and mark shipping directions plainly on the cover.

"It's funny our minister never married," remarked the young husband, who had just refused his wife an Easter bonnet, in his endeavor to change the subject: "I think he'd make a good husband." "Well," replied the wife, warmly, "he didn't seem to make a very good one when he married us."—Yonkers Statesman.

Studies in Nature

A Review of Insect and Bird Life on the Farm

Edited by C. W. Nash

The editor of this department will be glad to identify for subscribers any specimens of natural history sent to this office for that purpose and will answer any questions on the subject that may be asked through *The Farming World*.

BIRD NOTES.

There are still a few of our soft billed birds of passage left in the woods, but they are only the stragglers following the army which has gone south. Yesterday, (Sept. 25th.) I watched for some time a mixed flock of these rear guard birds; among them were numbers of tree creepers, many red-eyed, and blue-headed vireos, some black throated blue warblers, golden crowned kinglets and to my great surprise a few redstarts, these last seldom being seen here after the end of the first week in September. It was interesting to note the different methods adopted by each of these species to obtain their insect food. The tree creepers work their way by little jerks from the foot of a tree spirally all the way up to the top of the trunk, searching every crack and crevice as they go, almost every foot they cover, furnishes them with one or more of the tiny insects upon which they feed. When they reach the top they seem to throw themselves off and fall almost to the ground and then give a quick stroke or two of their wings which serves to carry them to the base of the next tree they propose to examine. The vireos and warblers work over the branches, searching every twig and leaf for caterpillars and beetles which seem to be their favorite diet. The beautiful and restless little redstarts combine the methods of half a dozen species in their hunting; at one moment they are twisting their way through the twigs after the manner of the warblers, the next they dart out from the end of a branch and capture some moth on the wing like the flycatchers making the same loud snap with their beaks when successful, as they do. Scarcely have they returned to the tree, when something on the ground attracts their attention, when more like a ripe autumn leaf than a bird, down they fall and lightly run over the earth for a few yards, make a capture and return again to their airy hunting ground. All day long every part of a redstart's body is in motion, even the wings and tail are continually opened and closed and twined about as if the birds were conscious of their beauty and desirous of showing it off to the greatest advantage. The contrasting colors of black, gold and white,

worn by the male make him very conspicuous, the female and young are less so, the black being replaced by brownish grey and the rich gold by yellow. They breed with us quite commonly in the woods and not rarely in shade trees about lawns and orchards and are among the most useful as well as beautiful of our birds.

INSECTS.

The following extract which I took from the Toronto "Globe" the other day shows that although the people of the old country may possibly be rather slower than we are in some things, yet that both they and the British Government are very much more wide awake to the necessity there is for protecting themselves against the introduction of injurious insects from other countries than we are and that they fully appreciate the force of the old adage that "prevention is better than cure".

"If the Colorado beetle (potato bug) had been royalty it sell they could not have paid him more obsequious attention than when he landed the other day in England from a manure ship in which he had just performed the adventurous passage of the Atlantic. The visitor in his usual unobtrusive way had at once taken up his quarters in a patch of potatoes on allotments occupied by employees of a dock company at Tilbury. Immediately the noise of his arrival was bruited far and near. The Government Board of Agriculture sent up orders all the way from London as to the ceremonial proper to his reception. The public was formally notified of the event and a general invitation issued to join in the campaign against the invader. The result seems to have been his speedy and entire discomfiture. As it happened the area over which he had established himself was isolated from other land and the crops of grass within the whole of it were promptly destroyed. The pest has failed to re-appear in the surrounding country and is probably again confined to his own and our side of the earth. But Great Britain has had a fright as is shown by some of the official enactments which have been revived of the subject. Growers are informed that all persons are required under a penalty of £10 to report to the police immediately on finding a specimen of the insect, while the police in their turn are required to communicate with the Board of Agriculture by telegraph. There is a penalty of £10 added for keeping any living specimen of the beetle at any stage of its life. The press teems with descriptions of the insect and its habits a special ar-

ticle of *The Times* in its most oracular view being copied on all sides. The occasion undoubtedly gave reason for alarm. It is the first time the Colorado potato beetle has been known to breed in England and even the instances in which it has been imported have been thus far few and far between."

It would seem from the above that the British people and their Government are not above taking warning from the experience of the people of this country. They have not as yet suffered from the ravages of the potato beetle but they know something about the terrible loss the United States and Canada have suffered by reason of our carelessness in allowing it to become established all over the country, and so they put in the proper "stitch in time" to prevent its becoming established there. The worst of our insect pests have been introduced into this country from abroad and most of them could without much difficulty have been exterminated at the time of their first introduction had proper steps been then taken. Many of them could even now, be severely checked and perhaps in time entirely eradicated if the matter was intelligently and persistently looked after. The Colorado potato beetle, pea weevil, hessian fly, codling moth, tussock moth and some others are allowed year after year to inflict great damage to the crops of this province. Yet these insects could by co-operation on the part of the people and the Government be so far checked that in a few seasons their ravages would be hardly noticed. Others there are equally injurious that are much more difficult to deal with, yet ways and means for checking them will undoubtedly be found when their life histories have been more thoroughly studied. With regard to the Tussock moth, it seems strange that no proper effort should be made to prevent it from spreading all over the province. For many years it has been steadily increasing in Toronto and it is now to be found for a long distance out in the surrounding country. This is the season of the year year when it can be most successfully attacked and some serious effort should be made at once to destroy the eggs and so cut off the source from which they spring.

I see in the market reports of the various daily papers that the pea crop has again been seriously injured by the pea weevil and the suggestion is made by some of them that pea growing should be entirely prohibited in this province for two or three years. There is no occasion for any such radical measure as this. Pea growing need not be feared if the farmers will only work together for its extermination. Next week I will give the life history of this insect and the best means of dealing with it. In the meantime every farmer should thresh his peas at once if possible and put them in tightly tied bags or some other receptacle from which the bugs cannot escape should they emerge from the peas.

Central Canada Exhibition

The Ottawa Exhibition this year was again somewhat unfortunate in the weather—wet and cold were too frequent in the record of the days of the show to get out the great crowds that have been seen in former years. Notwithstanding this the attendance was wonderfully good and above that of last year. Somehow all the leading Canadian fairs have suffered this year; Toronto was decidedly behind, and blamed the Pan American for keeping away many of its good Canadian customers. London followed and was no better, and now Ottawa has to take up the cry, and the presence of the Duke of York and Cornwall and the Duchess, brought the people to Ottawa, but inasmuch as he set the fashion by not attending the fair, so did they follow his example. His august father has always been a great patron of the agricultural shows in the home land, and not only as a director and exhibitor, but often as a visitor has he helped forward British shows. This year the Ottawa show had not the crowds it had expected, and who were in the city, but it did very well so far as the attendance went.

There was a good show in the Ottawa grounds. Many good cattle, horses and other farm stock, but not as many as could have been wished. The prize list this year has been cut down so low that it does not pay breeders from a distance to attend. The result was a few good herds and a good many empty stalls. Few of the leading breeds had more than a herd or two out to compete. Quebec this year has a Provincial fair at the old city and some good herds went there in preference to attending Ottawa.

LIGHT HORSES

Thorough bred were few—very few. Quite a contrast to the old days when June Day or other sires had a long string of good foals as a following. There was not an aged stallion shown. One entry of a two year old colt by H. Alexander, Grand Union Hotel, Ottawa, was good enough to win the diploma and gold medal, and one brood mare made up the thoroughbred show. Carriage horses were out in numbers, but only about half of the third prizes offered were taken. Francis Henry Brook, Peterboro, had the winning stallion in a dark dapple bay named Boston Wilkes. Second went to a chestnut owned by Frank Brunet, Moose Creek. The former won the diploma for the carriage class. A. R. McCallum, Martintown had the winning three year old with G. C. Boyd, Eastman's Springs, second. For best brood mare with foal at foot, Norman F. Wilson, Cumberland, was first with a very nice bay mare, W. C. Edwards & Co., Rock-

land, being second. They had also first for foal with Samuel Duncan, Eastman's Corner, second. Thos. Irving, Winchester, had the best three year old filly. John Minoque, Cumberland, won for two year olds and Robert Gill, manager of the Bank of Commerce, Ottawa, was first for a very handsome yearling. The pair of matched carriage horses in harness, 15½ hands and over, Crow & Murray, Toronto, were first with their Toronto winners, and W. C. Edwards & Co., a good second. James Irving, Cass Bridge, won for single carriage horse with W. Cunningham, Ottawa, second. Crow & Murray won for the 15½ and under class for best team, with E. S. Skead, of Riverview Farm, second. Mr. Skead won for single horse under 15½ hands with George Pepper second, and he had some good ones out. Thomas Irving won diploma for best carriage mare, any age. For the best high steppers Crow & Murray had a fine lot and won, with Mr. Skead second for a pair and first for tandem. There were no Cleveland Bays, French or German coach horses shown. The whole of the coaching horse stalls were clean. For standard bred horses, Alex. McLaren, Buckingham, had a brood mare and foal, and John M. Morgan, Ottawa, showed Ambrosial, 2.15¼, a grandson of Red Wilkes, and won in the stallion class. These two very good specimens made up the standard bred class. There were enough roadsters to capture the prize money offered. John A. McGregor, Brimston's Corners, South Branch P.O., had a great stepper, a fine bay who got first honors. He also won special for best pair roadsters and for single roadster in harness. W. C. Edwards & Co. had the winning pair for 15 hands and upwards, and Alex. McLaren won for best brood mare, and had the second place for their stallion, Duke of Arklaw, 2.29¼. The gold medal went to John A. McGregor for his speedy bay stallion. There were few Hackneys. The Shelbourne Farms, Shelbourne, Vermont, made a good display, and won three seconds. Dr. Jno. Watson won for his Bell Boy the Toronto Sweepstakes Hackney. The Shelbourne Farms were second, both for aged and two year old stallions. Oswald Sorby getting first for his two year old, Guelph Reformer, and Graham Bros., Claremount, had the winning yearling. Miss Baker, for O. Sorby, captured all the first for mares and her foal was also first in its class. Geo. Pepper, Toronto, won all the firsts for saddle horses and hunters, with his Toronto winners.

HEAVY HORSES,

There were three classes of heavy draught horses; one for pure

bred imported or their descendants, either Clydes or Shires, the second for Canadian bred, being those foaled in Canada, and third, a local class, open only to the adjoining counties. In the imported class, Graham Bros. were first for their horse "Burnbrae," bred by N. P. Clarke, St. Cloud, Minn., and "Cloth of Gold," bred by Col. Holloway, and owned by Oswald Sorby, Guelph, second. This was reversing the Toronto decision. In three year olds Graham Bros. first for Royal Cairnton, Robert Ness second for Copyright, a son of Baron's Pride (9122). The same order was followed in the two year olds, and a yearling, O. Sorby was first and Graham Bros. second. There were a good lot of mares and fillies, Graham Bros. won for brood mare with their Cherry Sweet, a good little mare of fine quality. Three year olds, Graham Bros. first, James Bowman, Guelph, second. Two year olds, Sorby first, R. Ness second, and J. Savage, Gourcock, was first for yearlings. Graham Bros. got the gold medal for best stallion, two years old and over. For Canadian bred class J. G. Clark, Ottawa, had first for a good thick bay horse. Second prize went to Andrew Spratt, Johnston's Corners. Dr. John Watson, Howick, had the best three year old, and O. Sorby won for two year olds. Andrew Spratt had first for brood mare, with a broad chunky bay with dark legs. James Tierney, Twin Elm, was first for three year old filly, and J. G. Clark for a very good yearling. Andrew Spratt had the winning team, bays with white behind. Daniel McIntyre, Kenmore, had first for a yearling colt, and Graham Bros. had the winning two year old filly, with James Tierney a close second. There was a fair class of general purpose horses, but not as many out as is usually seen. James Callander was first for a stallion, and James Tierney for a brood mare. M. Sharpley, Gatinou Point, had a good three year old, and won for best mare, any age. There were a couple of French-Canadian horses entered.

CATTLE

The numbers were disappointing but the quality was good. Seldom was there more than one herd in a class. In Shorthorns W. C. Edwards & Co., Rockland, had the herd, and won nearly all the prizes. James Leask, Greenbank, had his wonderful bull calf, and was first. He is unbeaten this year; he had also first for yearling heifer. With a single other exception, a second for yearling bull, W. C. Edwards & Co. got all the Shorthorn prizes. Galloways were shown by D. McCrae, Guelph, who had out part of his Toronto winners, the sweepstakes cow Jewel and calf being specially good, as also the imported bull Viceroy, of Castlemilk, a thick bull with a well fleshed back. There were no Herefords shown. Walter Hall, Washington, had all the Polled Angus, and a good lot

he has. Some of them would have had a good place at Buffalo. In grade beef cattle James Leask, Greenbank, had all the prizes and all the firsts for fat cattle. B. Slattery, Ottawa East, showed a car load of good rough steers.

DAIRY CATTLE.

The Ayrshires easily took the lead, and made a good show. Watt Bros., St. Louis, near Howick, Que., had the winning aged bull, Lord Rifton, a big white with black spots on neck and head. J. Yuill & Son, Carleton Place, had first for two year old, and he came in for sweepstakes. This is Cock of the North of St. Ames 13718, a white with red spots on his neck, a gay, good bull. They had also firsts for bull calves in both ages and for heifer calf under six months. Wm. Wylie, Howick, Que., had the winning yearling bull, they showed 12 head, and were very fortunate in getting first for best Ayrshire herd with but few first tickets, but a good lot of animals, including Nellie Osborne 2nd in second place, and Nellie Osborne 5th in first place as yearlings. Wm. Stewart & Sons' Menie had the first prize cow, the first prize three year olds, second and third prize two year olds and third only for herd with the sweepstakes female and third prize two year old bull. There were a good many changes in the order of standing, though in that respect Ottawa could not excel Buffalo. W. Stewart & Son had first for May Mitchell, the three year old first everywhere this year where shown, but their two year old bull, first at Toronto and London, was only third here. Jean Armour, their red and white cow unplaced at Toronto, but first at London, won here. J. W. Logan, Allan's Corner, Que., had second prize herd. He had first two year old heifer and first for heifer calf, second for yearling heifer and for two year old bull. His heifer Alice, of Sunnyside, which won as a two year old, is a big, well grown white with a few red spots about her neck.

Jerseys were shown by B. H. Bull & Sons, Brampton, who got all the prizes but one, which went to P. Clark, Ottawa; second prize for aged bull. He bought the big Ayrshire "Sir George," a two year old for a big price. There were two exhibitors of Canadian cattle, the prizes being pretty well divided between Jos. Dugas & Son, St. Jacques, Que., and Louis Thorn, Reptingy, Que. In grades the Ayrshires had nearly all the prizes. J. W. Logan winning most of them with Watt Bros. winning for a herd all Ayrshire grades. Holsteins were shown by Rettie Bros. Norwich, and C. J. Gilroy & Son, Glen Buell. The former had ten firsts and seven seconds. The latter four firsts and two seconds. Jno. A. Richardson, South March, also won three seconds.

SHEEP

In Cotswolds John Park & Son, Burgessville, had the winning flock,

Alfred Dennison, Metcalfe, getting a couple of minor prizes. In Leicesters, J. M. Gardhouse had the only flock shown. In Lincolns, J. T. Gibson, Denfield, had a lot of good ones. In the short wools, Southdowns, Teller Bros., Paris, had the winning flock, with Hon. G. A. Drummond, Beaconsfield, getting one first, two seconds and three thirds. T. Lloyd Jones & Sons, Buriord, had the Shropshires, with A. M. Stuart, Dalmenev, winning two firsts and several seconds, and J. Yuill & Son, Carleton Place, winning for aged ram. Dorset Horns were shown by M. A. Empey, Napanee, who had all the firsts and seconds, with Jno. A. Richardson, South March, getting three thirds. Oxford, Suffolk and Hampshire Downs were grouped. J. H. Jull, Mt. Vernon, had Oxfords, and got most of the money. Teller Bros., Paris, had first for ewe, two shears and over, and second for aged ram. C. W. Neville, Newburgh, had first for aged rams and first for ram lamb. In the class for fat sheep, Jno. Parks & Son, with Cotswolds, J. T. Gibson with Lincolns, and Teller Bros., Paris, with Southdowns, had each a first prize.

SWINE.

Much the same state of affairs existed amongst the hog pens. Some one herd got most of the prizes, except in one or two classes. In Duroc Jersey Red, W. M. Smith, Scotland, got all the first prizes. Wm. Tape, Ridgetown, seconds and thirds. In Tamworths, R. Reid & Co., Hintonburg, got all firsts. Jno. A. Richardson, South March, two seconds, and W. M. Smith one second prize. Poland Chinas, W. M. Smith and J. C. Smith, Fairfield Plains, divided the money. In Chester Whites there were two herds out. J. D. Deeks, North Williamsburg, had the best of the firsts, but closely followed by Robert Clark, Ottawa. Improved Yorkshires had W. Slack, Merivale, near Ottawa, leading, with R. Reid & Co., Hintonberg, and J. G. Clark, Ottawa, close behind; J. H. Skuce, Carsonby, having also secured some awards. For Berkshires, Geo. Green, Fairview, had the best, with six firsts. Durham & Carven, York, had two, and H. Plannet, Northcote, and R. Reid & Co., one each. The show of Berks was very good.

POULTRY.

There was a great poultry show. Fine birds well brought out. C. J. Daniels, Toronto, had Wyandottes, Rocks, Game, Java and Leghorns. Hamilton & Lee, Toronto, Hamburgs and Wyandottes. Archibald Drummond, Montreal, Wyandottes and Rocks. G. S. Oldrieve, Kingston, some fine specimens of game and bantams. Chas. Larose, Cornwall, had some fine barred Rocks, while Devlin and Jacques, Ottawa, won the bronze medal for this very popular breed. Geo. Higman, Ottawa, had Wyandottes and Cochins. W. B. Nantel, St. Jerome,

Quebec, got the meda, for game. W. H. Reid, Kingston, had many prizes for Langshans, Dorkings and other classes. A general exhibitor, S. W. D. Frith, Winchester, showed Orpingtons, as did also C. S. Schroeder, Olten. Turpin & Driver, Kingston, and H. Warrington, Cornwall, were also prize winners. McKinstry and Mutchmore, Ottawa, showed game and pigeons, as did also E. H. Benjamin, Ottawa. D. McKellar, White Leghorns, G. I. White, Hamilton, and R. K. Bowker, Toronto, had also prizes for pigeons; also N. McPhee, Hamilton, and W. J. McBride, Montreal. Wm. Osborne, Brockville, had black Leghorns; Rorke Bros., Prescott, games; I. Ishell, Toronto, a fine lot of Bantams and Cochins. A. Thompson, Allan's Corners, had turkeys and geese; McMaster Bros., Laggan, geese and ducks, and there were many others also exhibiting.

CARRIAGES

The show of sleighs, waggons and carriages was very large; was, indeed, one of the best that has been seen anywhere this year. Other implements were not numerous, but had a few good things. One man showed a patent he had got out for threshing grain and cutting straw at one operation.

AGRICULTURAL PRODUCTS

These were a fairly good show. Not over numerous, but some very good roots were shown and the vegetables were good and creditable. Apples and other fruits were not out in quantities that have been seen in the past, as most of the leading fruit exhibitors were doing their very best at Buffalo, and succeeded in putting Ontario well to the front as having the best fruit on the continent. The cut flowers were very good and in great quantity and variety. Plants in pots were fair, and the general display was very good in the Horticultural Department.

Cost of Growing Manitoba Wheat

The cost of growing wheat is a question very often discussed and one upon which very many people are not reliably informed. An interesting and instructive experiment has been made by the Superintendent of the Experimental Farm at Brandon dealing with the cost of growing an acre of wheat. The experimental acre on which the test was made gave a yield of twenty-nine bushels at a cost of \$7.76. This included every possible item of expense and also two years' rent, or interest at 6 per cent. on land valued at \$15 per acre. The items were:—Ploughing once, \$1.25; harrowing twice, 20 cents; cultivating twice, 40 cents; seed (1½ bushels), 75 cents, drilling, 22 cents; binding, 33 cents; twine, 10 cents; stoking 16 cents; stacking, 60 cents; threshing, \$1.46; teaming to market, four miles, 29 cents; rent or interest, \$1.80; wear and tear of implements, 20 cents.

Many farmers, however, estimate that \$7 an acre pays expenses.

The Sugar Beet World

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

Edited by JAMES FOWLER

ONTARIO BEET SUGAR ASSOCIATION. OFFICERS FOR 1901.

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Sugar beetlets.

For no other product from the farm is there such a sure market, and it is merely a matter of business on the part of the farmer that this great industry should be fostered in a proper manner.

The only thing necessary for absolute success in the growing of beets in this country is the plowing of the land in the fall, and the proper preparation of it as early as possible in the spring, so that the beets may be planted, and may be up and thinned before the hot weather comes.

When beets are turning yellow, and showing signs of ripening a spell of wet weather gives them a second start in growth which is detrimental to the sugar content.

W. H. Gilbert has leased 600 acres more of land in Saginaw county and has ten or fifteen teams at work plowing the land for next season's crop of beets.

Don't try to grow a crop of weeds and a crop of beets on the same land—it can't be done successfully and the weeds will win out sure.

The Loveland Reporter, tells of a young lady in that vicinity who is cultivating eight acres of sugar beets and the Reporter says: "She takes the hoe, goes to the field and superintends the work herself. We'll guarantee she makes a success."

Van Wert county, Ohio, farmers are giving their attention to a thorough test of the rich black soil and its adaptability to raise sugar beets. Between six hundred and seven hundred acres have already been planted in sugar beets.

From 3,000 to 4,000 acres devoted to beet raising will justify the building of a factory. This requires co-operation on the part

of the farmers, as there are few farms large enough to be devoted exclusively to the raising of beets.

The farmer by pressing water out of the pulp would be able to pile it up in a crib as he does oil cake, to be fed to the dairy cows in the winter as required. The by-products should belong to the farmer who grows the beets. He should sell only the sugar to the factory.

The farmers themselves could build factories, but this is a new business and they hesitate to embark upon it. The requirements of a neighborhood are that enough acres be planted and cultivated to justify the erection of a factory. There must be cheap fuel, limestone must be within reasonable reach, and pure water obtainable.

A tremendous impetus would be given to a dairy neighborhood by each farmer growing enough sugar beets to give him pulp enough to feed his dairy cows. He would then not be put to the expense of buying mill feed, oil cake, bran, glucose factory meal, and would thus make the neighborhood independent of mills located long distances away. When once this combination is brought about it will continue.

A ten year old daughter of Will Church, of Ascoda, worked in the field thinning beets and earned enough to buy a \$15 wheel. Others are doing the same thing while still others contracted an acre of beets so as to be sure of the money for a wheel or an organ or some of those things that children sometimes like to earn themselves.

Old men and children, working in the beet fields thinning, are said to have made as high as \$1.75 per day, and housewives about Marine City are complaining that their servants are deserting them to work in the beet fields.

Communication.

Editor Sugar Beet World:

Dear Sir.—As you are doubtless aware, we are enthusiastic over the prospects of securing a beet sugar factory for our town, and while I am terribly in earnest over the matter and have a few dollars to invest, am not so sure that the plan proposed is a proper one in the interests of the shareholders in this section, who are supposed to take stock to the extent of \$100,000 in the enterprise. The plan as laid out is about in this way: The promoters propose to take preference stock to the extent of \$100,000, the people of this vicinity to take the same amount, each to receive the same amount of common stock as a bonus. Bonds to the extent of \$400,000 to be issued, which are to be disposed of in New York, the bond holders to receive an equal amount in common stock as a bonus with the bonds, and to have voting powers. Would you consider this a fair deal? Can not some better plan be proposed? And, what would be the legal standing of such a transaction?

R. M. C.

Galt, Sept. 25th.

While we are always willing to give our advice and experience in connection with anything of interest to the Beet Sugar Industry, we would hardly be justified in criticising a plan or scheme until we had an absolutely correct copy of the proposition, and in this matter you have given us some thing pretty hard to answer, especially as part refers to a question of law upon which authorities differ, i. e., in regard to stock issue. The general act prohibits the giving of stock for nothing, and if the case is as you state, we can see no way legally that the stock can be given, without being liable to be called upon for the full face value of the common stock, which you might hold. Our legal adviser informs us that shareholders receiving stock in this way, that is one share of common stock given with one share of preference, makes the holder liable to the creditors or bondholders for the full face value of both, and that any creditor can take action to recover the amount or to have the stock cancelled. We would advise you to consult your solicitor in the matter, or send us a "certified copy" of the proposal and we will publish our solicitor's report upon it.—Editor.

The Ontario Sugar Company

The Ontario Sugar Company, Limited, of Toronto are still undecided as to the location of their factory. Several places have been visited the second and third time and every possible effort is being made to secure just what is required for the success of the enterprise. Experts have been engaged to go carefully over the territory to amine the soil, the water and drainage facilities, the railway facilities, the question of limestone, fuel, and, in fact, even the roads are being considered. Few people realize what good roads mean to an enterprise of this kind, 400 to 500 teams per day hauling beets during the fall and early winter, and the company is looking into that feature pretty closely.

Dunnville.

"Shall Dunnville Get It," is the heading in one of the city papers. Representatives of the Ontario Sugar Company with two "agricultural experts" have again visited Dunnville, and after looking carefully over the ground expressed themselves as being very favorably impressed with the location. Some of the conditions are almost ideal, but some other features are not to their liking, and they have not as yet committed themselves. Will Dunnville get the factory, is a question they are anxious to have decided.

Sugar Beets Successful.

The success of the extensive sugar beet experiments throughout Ontario this year is now assured, and a considerable impetus must be given to the industry. Prof. Shuttleworth of the Agricultural College, who has charge of the experiments, called on Hon. Mr. Dryden and informed him that the quality of the beets now ap-

pears to be considerably above the standard. There is yet two or three weeks before harvesting, in which the beets may accumulate sugar. The department arranged in the spring for the planting of beets by about two score farmers at each of fourteen centres, so that when the reports are in in a fair idea of Ontario's capability in this direction may be gained. Already a number of companies have been formed for the purpose of establishing factories.

What Advantages Do You Possess?

Municipalities desirous of securing a beet sugar factory are invited to communicate with this journal, setting forth the advantages of their localities for the establishment of such enterprises. The chief essentials are:

- 1st. Character of the soil for the growing of sugar beets.
- 2nd. The quantity of "beets" the farmer would be prepared to produce.
- 3rd. Supply of suitable water and drainage.
- 4th. Transportation facilities for delivering beets to factory and for distribution of finished product.
- 5th. Cost of limestone of a suitable quality.
- 6th. Cost of fuel.
- 7th. Condition of roads.

Points in Harvesting.

GREAT CARE SHOULD BE EXERCISED IN THE TOPPING.

For the hundred of new growers of beets who will for the first time harvest the crop this fall we submit the following instructions:

To avoid disappointment, the grower of sugar beets should be impressed with the importance relating to the proper cutting off of the top and to the clean condition of the beets. Insufficient topping and careless shaking off of the

dirt and improper cutting of the top and dirt left on the beets makes the loss that has to be deducted at the factory from the gross weight of the beets.

Only beets that are topped at the proper place and are free from dirt, produce the amount of sugar that will correspond to the price paid for the same. From tops and dirt no sugar can be extracted and therefore, payment for such should not be expected.

The place where the beets should be topped is at the base of the lower leaves. To deliver your beets in a clean condition, avoid pulling the same when the soil is wet and sticky. When beets are pulled from a dry field and thereafter well shaken and properly topped, hardly any tare will result.

The greatest tare in any of the factories comes from imperfectly topped beets. To have all topped alike, is, of course, a difficult problem, where several hands are employed in the operation. One person may be able to do it just right and the others employed may be doing it just wrong, and in consequence your tare may be higher than is necessary. Few beets that find their way to the tare room are properly topped, and it is necessary for the company to hire a man whose business it is to properly top the beets before they are tested. This is done by removing all portions of the neck or crown, i. e., that portion of the beet from just below the lowest leafbud. The cut should be made at the line shown in the figure.

It is important that the tops of the beet be cut off down to the neck so as to include with the top portion of the beet to which the stem of the leaves has been attached. The object of removing this portion of the beet is to prevent the mineral salts, which have accumulated in large quantities therein, from entering the factory. The mineral salts exercise a very deleterious influence on the crystallization of

BEET SUGAR MACHINERY

ESTIMATES AND INFORMATION

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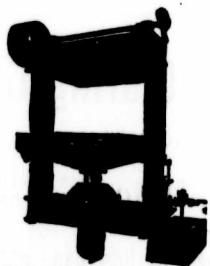
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the sugar and it is absolutely necessary that they should be removed. They are well fitted for fertilizing purposes and are of more value when left upon your soil than when carted to the factory and thrown to waste. Some tell us that these tops with the leaves are admirable for young stock, but not so good for milk cows.

Your company is probably now engaged in making tests to ascertain when the crop is ready for the harvest and when the test shows a sufficient sugar content you will be called upon to make a delivery. In the harvesting of the crop the beets are first to be lifted from the ground with some implement.

In small acreages, where the farmer does not wish to purchase a litter, a common plow can be used, i. e., one in which the mould board can be taken off without interfering with the handles, and then break off a few inches from the shear of the plow point. A right hand plow run on the left side of the row keeping far enough from the beets so the plow does not touch them, merely presses the dirt against the beets sufficient to raise them a couple of inches, breaking them loose from the soil, and leaving them standing in the ground. It would be necessary to have the eveners three times as long as the rows are apart, so the horses can walk between the rows. Then the beets can be easily lifted by hand, and men could lift two rows at a time and lay them in a row crosswise of the row of beets. It is policy to put eight to twelve rows into one row of pulled beets.

The topping process is done by taking hold of the beet with the left hand and cutting the top off with a knife held in the right hand, cutting as near the base line of the leaves as possible, and the beets can easily be thrown to the left in a row of crates. In this way the two rows of pulled beets would form one row of topped beets, which would include sixteen to twenty-four rows of beets. The knife commonly used for topping is a curved knife with a curved handle, which can be secured at the hardware stores. A very good knife can be made from the scythe of a grain cradle by taking a section of about ten feet long by cutting off the rib or back and fitting on a handle. After the beets have been thrown into rows in this manner, they should be covered with tops to protect them from the sun unless they are to be immediately hauled to the cars or factory.

How To Pit the Beets

As to the best method of doing this when necessary we would suggest the following plan:

In the first place do not harvest your beets until they are ripe, as green beets do not keep as well in the pits as ripe ones, and besides, should you harvest when too green they might contain less than the necessary 12 per cent. of sugar with purity of 73 per cent.

In an average season no beets should be pitted before October 15, and if the weather is warm, it would be better to wait until the 20th, but in no case should the beets be allowed to remain unharvested—and not pitted—until the ground freezes. All beets that you pit must be free from frost and be covered up the same day they are harvested.

We would advise making five to seven pits to the acre, placing not less than two tons in each pit.

When ready to pit, lift the beets from forty to forty-five rows with a horse harvester. The loosened beets must then be pitted out of the ground by hand and thrown in piles. It is advisable, in case the strip you have lifted contains forty-five rows, to make a pile every six rods, the length of the strip, and as the section of forty-five rows is about four rods wide and six rods long, each pit would thus contain the beets from twenty-four square rods (about one-seventh of an acre). To prevent unnecessary handling it is advisable to first pull out the beets from the middle of the marked twenty-four square rods, placing them in such shape as to make a vacant place in the centre, of about one rod and two rods long, then to pull the balance of the beets, throwing them into a windrow close to and surrounding this vacant spot. When this is finished, top the beets (at the base of the bottom leaves) with one stroke of the knife and throw them into a vacant place, (with the roots lying toward the centre of the pit) making a slanting pile four feet wide and not over three feet high, the length of the pile depending entirely upon the yield. After all the beets are topped and piled up in proper shape, cover the pile with six inches of dirt, being careful not to have any leaves or straw on the beets or mixed with them.

It is generally advisable not to put more than six inches of dirt over the beets in October, but to keep them free from frost, you should cover the pit before the weather gets cold, say about ten days or two weeks after harvesting in any case before hard frosts set in, evenly with five to six inches of loose straw, and place about two

inches of dirt on top of the straw to prevent it from blowing away and for the purpose of packing it, as when well packed it will best keep the cold air out of the pit.

Thus the covering in the end will be composed of six inches of dirt, two inches of packed straw and then two inches more of dirt.

In an ordinary season such covering should keep your beets from freezing, but should there be exceptionally cold weather you might find it necessary (in case you have not ordered all your beets delivered to the factory by that time) to cover the remaining piles with long manure.—Michigan Sugar Beet.

Contract Prices.

Near Shelby, Ind., farmers let out a portion of the work by contract. Their prices are \$6 per acre for bunching and thinning; \$5 for hoeing and weeding whole surface; \$6 for topping and pulling after the plowing up of the rows, making \$17 per acre. The work is done by Germans principally. The women and children working in the fields and making good wages.

Beet Growing and Dairying.

Mr. C. O. Townsend, of Michigan, a practical farmer and stock-raiser, in giving his experience to a local paper, writes as follows: I wish to say to your readers that in my opinion they should keep cows upon their farms as well as to raise beets, I was brought up in a dairy country and know from over thirty years observation that the dairy farm does not lose its fertility like the grain producing farm, but on the contrary I know of farms in New York State that forty years ago "before the cheese factory days" were of very poor soil are to-day rich producing farms. On the other hand I have seen here in Michigan the very best of soil made almost worthless, certainly non-productive in a very few years by raising oats, wheat and timothy. Roots are not so hard on land, not even beets. Then what should we do? Let's see, a man with an eighty acre farm, not light sand but good clay loam mostly cleared, should be able to

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raise 10 to 20 acres of beets each year, two years in succession on the same ground, now don't come at me with pitch forks for saying two years in succession, but rather go to your manure pile, draw out and dress lightly with rotted manure before plowing for the second crop; and this is just where your cows come in handy: rightly cared for with a fairly good season this should mean to that man from \$450 to \$675 clear from expense, allowing \$30 per acre for expenses. On this same farm should be kept at least 15 cows besides young stock and horses; 20 cows would be better; 15 cows should be placed in the milk in a cheese factory, bring to the farmer \$375 or better. But, says some one, you cannot keep 30 such stock on 80 acres. Yes, you can, perhaps not the first year, but it can be done and more than that, it is being done every year. Go to Madison, Lewis, Jefferson or St. Lawrence counties, New York State, and you will find it being done every year, but, say, you won't find the farmer there, as a rule, raising wheat, oats or timothy and selling off his farm. Everything that is cut on the farm is put back upon the land, and the same can be done here. Raise 10 acres of sowed corn and see what that will do for you. Sow barley or oats with a few peas in them on your beet ground when you wish to seed it; put six pounds clover and 1 pound timothy seed to the acre, never follow beets with corn, cut and feed to your stock the first crop of clover, plow under the second crop, put all the manure your stock makes upon your farm and you will find your land growing richer; you are growing richer and you can laugh at the man who told you that your farm was being run out and ruined by those beets. Compare the quality of your soil with his who has raised and sold timothy, oats and wheat. Ask the buyer to bid on the two farms and see which one will bring the most. Feed your hogs and cattle the beet tops also all beets pulled out when hoeing and see how much they will save.

California.

The Oxnard Courier says: "The way beets are running here this year is a great joy to the grower and sugar maker. The average is between 18 and 19 per cent., and at the rate they have been showing it has been inexpedient to raise the capacity of the factory over 1,600 tons per day. At a lower percentage of sugar in the beets the factory would be grinding 2,000 tons and still be turning out no more dry granulated at the business end. The best beets come from the Patterson ranch, Revelon's place and Sucrosa. A wagon load received from the former place averaged 27.9 per cent. sugar and a load seldom goes below 22 per cent. These beets which go so

high in sugar are small, weighing only twelve ounces or such a matter, while the big two-pound beet at which the uninitiated looks with wondering eye, usually shows up at 13 or 14 per cent. saccharine content. The beets running high in tonnage are those which have been irrigated, and this proves conclusively that irrigation is possible for beets and pays in the long run. The tonnage can be increased a third by water. Beets have come into the factory for which the grower has been paid \$7.25 per ton. At an average of 20 tons per acre this would be fairly remunerative—\$145. The beet pulp is being siloed at the factory. There are four excavations that form the silos, the two larger ones being on an average of 250 feet long 45 feet wide and 9 feet deep. The two smaller ones, 250 feet long, 25 feet wide and 9 feet deep. The two smaller ones were the only ones filled last season, and contained 224 cars of pulp, or approximately 6,000 tons. The two larger ones will hold in the neighborhood of 7,500 tons, thus giving the four a capacity of about 13,500 tons of pulp, enough to feed thousands of head of cattle for a number of months."

Wiarion

Plans are being prepared for the factory at Wiarion, and it is expected work upon the building will soon be started. In the meantime, representatives of the company are engaged in securing further stock subscriptions and acreage contracts.

Do Sugar Beets Exhaust the Soil?

This is a question that frequently arises when considering whether to grow sugar beets or not. The direct answer is "yes," the same that one might give in reply to the question were it asked of almost any other crop. In the case of clover there is so much left in the soil in the form of roots, stubble and leaves that its growth, even though harvested for hay, generally leaves the ground in better condition than before it was grown. Wheat, oats, corn, timothy, beans, peas, millet, and, in fact, all farm products, except, perhaps, clover are exhaustive, and their continued production year after year on the same ground will eventually result in complete loss of fertility.

How exhaustive, then, is the sugar beet crop, and is it more exhaustive than any other crop, are the questions that naturally follow. Two experiments the past season give us results suggesting a reply, one in connection with the soil test experiment on the College Farm and the other with a similar experiment on the farm of L. B. Walton, Dryden, Mich. The soil on the college experiment was a loam, and so far as the comparison is concerned was very uniform. In

1899 a strip two rods wide running across the 13 plots of the soil test experiment, making a strip 2 rods by 26 rods, was sown to sugar beets; an adjoining strip of the same size was planted to potatoes. In 1900 the 2-rod strip, occupying one-half of the potato ground and one-half of the beet ground of the former year, was devoted to the beet crop. Aside from the fact that one strip grew beets last year and received then the cultivation required for sugar beets, and the other grew potatoes with normal potato culture, the other conditions, such as fertilization, character of the soil, previous treatment and management, this year were exactly the same. It was observed all during the fall growth that the beets on the ground that produced beets the previous year were much inferior to those grown on ground raising beets for the first time.—Sugar Beet Gazette.

Drying and Packing the Sugar.

The sugar as it comes from the centrifugal machine is moist and must first be passed through the "granulator" before it is ready for packing. One form of "granulator" is shown on pl. 33 of the exhibit. It usually consists of a revolving drum through which the sugar is made to pass in contact with a current of hot air. The sugar is packed for the market either in barrels or in burlap sacks lined with muslin. The packing room and a train load of sugar are shown on pl. 34 of the exhibit.

A farmer is a partner with the capitalist in the establishment of a factory. Without the farmer a factory cannot exist.

You must take into consideration the value of beet pulp and beet tops for feeding purposes as well as the value of the crop for factory purposes.

A Georgia judge warned his people with regard to coming into court intoxicated, and used these words: "I wish to put everybody on notice that if they come into this courtroom while I am sitting on this bench drunk, they had better look out!"—Short Stories.

E. H. DYER & CO.
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The Agricultural Gazette

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

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

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

Each 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 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 Sheep 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 10,000 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 to prominent breeders and probable buyers resident in Canada, the United States and elsewhere.

A member of an Association will only be allowed to advertise stock corresponding to the Association to which he belongs; that is, to advertise cattle he must be a member of the Dominion Cattle Breeders' Association, to advertise sheep he must be a member of the Dominion Sheep Breeders' Association, and to advertise swine he must be a member of the Dominion Swine Breeders' Association.

The list of cattle, sheep, and swine for sale will be published in the third issue of each month. Members having stock for sale, in order that they may be included in the third issue of each month, the undersigned by letter on or before the 10th of each month, of the number, breed, age, and sex of the animals, should a member fail to do this his name will not appear in that issue. The data will be published in the most convenient form.

A. F. WESTERVELL, Secretary.
Parliament Buildings, Toronto, Ont.

FARM HELP EXCHANGE.

The Farm Help Exchange has been started with the object of bringing together 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. F. Westervell, Secretary, Live Stock Association. In the case of persons wishing to employ help, the following should be given: particulars as to the kind of work to be done, probable 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 expected and where last employed.

These names when received together with particulars will 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.

Every effort will be made to give all possible assistance, to the end that suitable workers, male or female, may be obtained. Every unemployed person wishing to engage in farm or dairy work is invited to take advantage of this opportunity.

Help Wanted.

Wanted a good man to work on a farm in the County of Dufferin. Must have a thorough knowledge of feeding stock and taking care of horses, must be able to milk and do all kinds of farm work. Will pay \$250.00. Free house and wood, potato patch and cow kept. No. 95. a.

Boy wanted 14 to 16 years of age to work on farm, milk and do chores around house. Family of three. Apply stating age, wages and experience. Address M. N. Overholt, Rainham Centre. b.

Two first-class milkers wanted on a farm near Toronto. Good wages, steady employment, with comfortable quarters. Applicants must be single. No. 948. b.

Situations Wanted

A position wanted in a Christian farm home as mother's help. A true home being object most desired. Strong, active, cheerful. Would go to Manitoba or North-West. No. 949. b.

A situation as housekeeper on a farm by a competent woman, references exchanged. Address Mrs. E. Ross, Walkerton. b.

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

Farmers' Institutes.

Under this head the Superintendent of Farmers' Institutes will each week publish matter relating to Institute work. This will include instruction to secretaries and other officers, general information about Institutes and Institute work, suggestions to delegates, etc. He will 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 otherwise receive on account of not having access to the original publications. If any member at any time desires further information along any of the lines discussed, by applying to the Superintendent he will be put in direct communication with the Institution that has carried on the work.

G. C. CHELMAN,
Superintendent Farmers' Institutes.

Home and Home Influences

By Mrs. G. W. Lapp, Uxbridge, Ont.

Home is one of the sweetest words in the English language. In a properly conducted home, it is a world of strife shut out, and a world of love shut in. It speaks of father's care and mother's love, and wife's tenderness and devotion. The home is the safeguard of the nation. The happiness of home depends largely upon what you take into it. Sometimes we get glimpses into homes where there are apparently very few, if any, of the real blessings which go to make up a happy home. And what is the reason? There are different causes. In a great many cases it is the lack of confidence between man and wife, and if such an important thing as that is lacking what happiness can we expect in the home. Where there is no confidence there is no love.

To make happy homes we must practice a great deal of patience and forbearance. I think every housewife finds a great deal to try her patience. If we give way once we are apt to give vent to our feelings more strongly the next time.

Health is one of the first requisites of a happy home. We should therefore take the best possible care of ourselves in order to perform the duties of our homes. Young men and women marry and make homes for themselves in cheerful ignorance of the many duties and responsibilities that marriage brings to them. I think perhaps this may especially apply to young girls who have never had any opportunity to become good house-

wives, no matter how much they desire to learn the art; girls who have gone from the school room to the work room or factory, and who are so inexperienced in home work that when marriage comes to them they know very little about home making. I do not mean that they are the only ones that are ignorant of housework, for now-a-days the mothers do the work in order that their girls may enjoy themselves, and the girls are allowed to grow up without learning how to manage a house. There are some who know the theory very well, but who find the practice very difficult.

I read not long ago that if all women were, by custom and usage, compelled to show proof that they were prepared to enter upon a line of duty and employment that so largely affects a nation, it would work a moral elevation the magnitude of which can scarcely be conceived.

I also think we ought to teach our children to spend money while quite young, so that as they grow older the knowledge may grow with them. No doubt most of us have seen disturbance raised in the house over the way money is spent. We should always teach and practise the habit of living strictly within the limits of our purse.

The influence of the home is seen, first, in the child, second, in the youth, and third, in the man or woman. Never break a promise to a child, no matter how trifling it may be. Carelessness on the part of a parent in this respect is a source of evil influence which warps the character of children. Educate the boys and girls on the same moral plan. Right is right and wrong is wrong. The parents cannot be too careful in regard to the language that is used at home, for all children think that whatever they hear father or mother say, they can say with perfect safety. If mothers would get so acquainted with their children, particularly when they are blossoming into womanhood and manhood, that they could influence and encourage them to confide in them, there would not be so much cause for anxiety in our homes. And when we get their confidence, let us be sure and guard it well, and show pleasure in whatever pleases them. If a child gets in the habit of making his or her mother their confidant, there need never be much anxiety about their going far astray. Encourage your children to bring their companions home with them, so that you may know their associates. It may be a little extra trouble to entertain their friends occasionally, but it will abundantly repay you in the opportunity of judging the character of the companions. Give your children the best education your means will allow. Our education can never be too broad.

Bennie—I suppose that the favorite vegetable of a duck is a mandrake.

Bobby—And that of the hen is chicken-weed, of course.

Bennie—It might be the egg-plant.

Annual Meeting of the American Association of Farmers' Institute Workers

Held in the City of Buffalo, September 18-19, 1901

REPORTED BY THE SUPERINTENDANT.

This was one of the most profitable meetings we ever had the privilege of attending. Representatives were present from a great many of the United States, as well as from Canada. Of our own workers the following were in attendance.

Supt. Creelman, Toronto.
Dr. James Mills, O.A.C., Guelph.
John McMillan, Seaforth.
Alex McNeill, Walkerville.
Robt. Thompson, St. Catharines.
Henry Glendenning, Manilla.
F. A. Sheppard, Queenston.
W. S. Fraser, Bradford.
Wm. N. Hunt, Southend.
T. G. Raynor, Rose Hall.
Miss B. Maddock, Guelph.
Mrs. A. Kinney, Grand View.

It will not be possible to furnish our readers a detailed statement of all the papers read, addresses delivered and the discussions that followed, but we give below a few of the good things that were heard at the meeting.

Address of Welcome.

F. A. Converse, Superintendent of Live Stock, Pan American, Buffalo.

Mr. President, Ladies and Gentlemen;

It gives me pleasure to welcome the representatives of this work, from so many States and Provinces, because I realize from practical experience, and also from observation, that there is no more potent factor along the line of agricultural education than the Farmers' Institute. It has been my privilege since my connection with the Pan-American Exposition, to meet all kinds of Associations and workers, and I may say to you that in all the States where they have a good live system of Farmers' Institutes, we find a better condition of things so far as the general education of men on the farms is concerned.

I would like to call your attention to another fact. As you go through the buildings at the Exposition you will find that the States with the best exhibits and best representatives are Institute States. I do not know how much of this is due to the gentlemen whom I see before me, but it is a thing that has been called to my attention time and time again.

My pleasure in greeting you at this time is, however, just a little marred at the accident which happened in our city a few days ago, and one which we all deplore, especially every citizen of Buffalo, as the President was the guest of the Exposition at the time he gave up his life. It is, to my mind, one of the most horrible tragedies in the history of the Republic.

I would like to say a word of the need of more thorough and bet-

ter work along the line of Farmers' Institutes, because it is the only organization which is ready to take information to the class of people who need it most. Agricultural Colleges are good; Experiment Stations are necessary, but men that you cannot get within the scope of these two Institutions can be reached by bringing them together and disseminating information, as is the custom and work of the Institutes. I believe more can be done in reaching the farmers under the present system of Farmers' Institutes, giving them a hand shake; giving them information, than in any other line. Newspapers cover a valuable field, and are a splendid help, but the real way to help is by getting right alongside the farmer, as we do in Institute work in our States and Provinces.

I believe the successful Institute worker must be in every sense a man of affairs. He must be well versed in his own business. I have known cases where an Institute worker has not made his own business a success. Sooner or later the public get to know this of his individual character, and as soon as they know that his teaching does not amount to anything. We must have trained men for Institute workers, just the same as for anything else. We must have men who are able to stand before a meeting and express themselves intelligently and practically. I believe it to be the best thing for a man to stick to his farm while in Institute work. Sometimes a man leaves the farm and settles in the village or town. He soon loses touch with the details, and the man who remains on the farm will distance him every time.

Gentlemen, it gives me great pleasure on behalf of the Exposition to welcome you here. I hope that as you go through the Exposition you will take the opportunity of noting the interest that is manifested in our work. There has never been an Exposition that has done more for agriculture than the Pan-American. Note the Agricultural Building. Everything has been done that could be done with the means available to illustrate in the agriculture, dairy and live stock divisions those things which have largely been the results of the teachings of the gentlemen before me. It is not necessary to go into particulars regarding the various exhibits of cattle, live stock, etc., from the various States. As you go through the various buildings make yourselves perfectly free to gather all possible information to carry away with you; anything that will help you in your work.

I am glad of this opportunity of appearing here to welcome you, and wish you God speed. I believe

the success of American agriculture has been largely due to the work of the Farmers' Institutes.

Response to Address of Welcome.

Dr. Jas. Mills, Agricultural College Guelph, Canada.

First of all, allow me as a Canadian to unite with you in the expression of our horror at the basely treacherous and diabolical murder of the President of your Republic. Our people were stunned by the crime; and their sympathy with you is genuine and far-reaching. Memorial services were held in our churches; and for the last three or four days, flags have been at half-mast all over the country.

Then, Mr. Converse, on behalf of the Farmers' Institute workers of America, from the Atlantic to the Pacific and the Georgian Bay to the Gulf of Mexico, I beg leave to assure you that we appreciate your welcome. The pleasure of a visit, wherever one may go, depends very much upon the heartiness of the welcome, and it is so in this case. "Welcome ever smiles," says Shakespeare, and Homer declares that "the law of friendship is to welcome the coming and speed the parting guests."

In speaking for the Farmers' Institutes of the State of New York, you represent a numerous and very important body of workers, men and women who are contributing a large share towards the enlightenment and progress of the American people. We may not, I presume, speak of them as engaged in university extension work; but we must admit that there is a striking resemblance between their work and the courses of extra-mural lectures given by Oxford, Cambridge, and other great educational institutions. This difference, however, is to be noted: University extension work proper is mainly for the inhabitants of towns and cities; the work of Farmers' Institutes is for a different but no less important section of the community.

Already the Farmers' Institutes have done much valuable work.

1st. They have created a widespread interest in agricultural pursuits, directing attention everywhere to Agriculture in its different branches, agronomy, horticulture, animal husbandry, poultry raising, beekeeping, and dairying.

2nd. By systematic and repeated instruction and discussion on the question of methods, covering the whole field of agricultural practice, they have done much to increase the quantity and improve the quality of agricultural products from north to south throughout the States and provinces of North America.

3rd. They have done a good deal towards the development, and in many cases the creation, of a respect for farmers and farming, a work which is much needed among farmers themselves.

4th. They have, perhaps, done something towards improving farm homes, lightening the burden upon farmers' wives, and brightening the surroundings and outlook of boys

and girls on the farm.

The work of the Farmers' Institutes is education on practical lines, education of the best possible kind. They are teaching the farming community to observe, read, and think for themselves; and in their work is involved the whole problem of production. The requisites of production are land, labor, and capital. Wherever we may live, our natural resources of soil, climate etc., are a fixed quantity. We cannot change them. By applying labor to land, or raw materials, we produce wealth. Of what is thus produced, we save some for use in further production, and what is saved we call capital. Hence the amount of capital clearly depends upon the ability to produce and the disposition to save. In other words, it depends on the industrial qualities of the laborers. So the problem of production resolves itself into the problem of how to improve the industrial qualities of the people—how to make them more industrious, skilful, progressive, sober, and thrifty.

In an international competition, such as you have at your Pan-American Exhibition, what is the main factor in determining the awards that go to different states and provinces? Is it splendid natural resources? Rich soil and a fine climate? Is it not rather the industry and skill of the people who enter into the competition? It is the people, the man or the men always, everywhere, and in every line of life. Hence the great importance of the work done by the Farmers' Institutes, which labor so directly and effectively to make our farmers more intelligent and skilful workers and managers, more progressive, more successful.

But the Farmers' Institutes still have a great work to do. Farmers as a class have many virtues and some vices, or rather we should say, many strong points and some weak ones.

In brains and morals, farmers surpass all other classes; they are the most brainy and most moral people in the country. They are also the most economical. Where do your leaders in professional, industrial, and commercial life come from? Is it not generally from the farms of the country? We need not speak of the moral stability and economical habits of farmers, nor of their many other virtues, but may say a word about some of their weak points.

For the most part, farmers are poor business men, lacking in punctuality, push, and enterprise. They are conservative, apt to get into ruts, follow the old paths, and do pretty much as their fathers did. They are often careless about their personal appearance. Hence such uncomplimentary words as hayseed, mossback, etc. The average farmer is untidy and does not seem to notice when things are out of order. Hence the tumble-down, zig-zag fences, dead brush in orchards, sticks and stones in door yards, and rails, boards, and broken or worn-out implements around farm buildings.

I hope the Farmers' Institutes may yet succeed in stirring up our farmers so that they will all see the importance of—

(1) Observing, reading, and thinking for themselves.

(2) Doing everything at the right time.

(3) Cultivating the soil so thoroughly as to get rid of the foul weeds which at present are a disgrace to farmers, here and there, all over the country.

(4) Beautifying their farms and homes by planting trees; straightening and repairing fences; removing piles of stones from fields and all dead trees, dead limbs, and brush from orchards; and tidying up in lanes, in yards, and around farm buildings.

(5) Being wide awake, prompt, and up to date in the business of the farm.

(6) Being particular about their personal appearance and the appearance of their horses, harness, carriages, etc., and, with it all, keeping out of debt.

Again we thank you for your kind and cordial welcome.

Five-Minute Reports from Each State.

INDIANA.

Prof. W. C. Latta.

I have prepared no summary of work being done in our State, but will make a brief statement.

Work has been going on for twelve years. We have now an appropriation of \$10,000. The law requires that we hold an annual meeting in each county in the State. We organized in each place as soon as possible, and I think in four years after inauguration we were holding these meetings in every part of the State. We have 92 counties. We have held each year, in accordance with previously arranged schedule, occasional additional meetings. We set apart from the fund a certain portion for each county to meet the local expenses. The rest is reserved for sending speakers, etc. In some cases they do not use this appropriation for the annual meeting, and then we give the privilege of a second meeting, and so I suppose we have held too meetings under State control. In addition a number of independent meetings have been held for which no State appropriation is made. Our general plan may be outlined about as follows:—

The management of the work rests with the Agricultural College. The Board have placed the immediate executive of the work in the hands of the Faculty. The Professor of Agriculture has been the field man in the work. At first he went over the State attending these meetings and getting them organized. (By the way, we have permanently organized meetings.) When that was done he kept his thumb on the button and directed the work from the office. He has not been in the field since the first two years. This is what we call "long range" work and it is not ideal.

We assign two speakers to each meeting. The chairman of the local county with his committee arranges the programme and assigns two local speakers, and these combine their labors with those assigned from the State—the workers being about half and half, sometimes more sometimes less. We leave the details of conducting the meeting to the local chairman. We send out blanks to the speakers we assign and they fill in reports of each meeting, so that we are enabled to keep very close track of the work done.

This, I think, in brief outlines the work as carried on in our own State. The law requires that we hold one State. With increased appropriation we shall increase the meetings, in each county, which we call the annual meeting. We shall aim to hold supplementary meetings throughout the state so as to reach a different class of people, and will arrange the meetings so as to best suit the general management in order to economize funds. We arrange our meetings in a series, which of course is not a new idea. It economizes time and money.

MARYLAND.

Supt. W. L. Amos.

Our Institute work is under the direction of the Agricultural College, and management of the Director. We have an annual appropriation of \$4,000. We formerly had but \$3,000, and have not yet had the use of the four thousand, because we had to use part of it last year to pay for experiments in Institute work the year before.

We have tried very many experiments in Institute work suggested by these meetings, and in a way they have all been successful. The farmers in our State are not organized as a class, as they are in many places. When we began work it was under great difficulties; not receiving any assistance at all in many of the counties, and in some instances had to go where the people were actually prejudiced against us, and in the face of this make it a success. We are obliged to hold one meeting in each county and more if the funds will justify it. We have held one-day meetings; we have held two-day meetings, and we have held five-session meetings; summer meetings and various kinds of meetings in the winter, and have now decided that the best time is soon after the first of January. We think it is best not to attempt a summer Institute when our people are busy, as we have a harvest in nearly every month in our State.

I like a five-session Institute, to begin in an afternoon, and hold an all-day and night session. A second night session is sometimes an advantage. I once held one-day meetings throughout the State, going right through every day and night. As I travel with my men I know something of their hardships, and had an opportunity of sympathizing with them, as they were nearly all sick afterwards, and I shall never do it again nor ask any

one else to do it. I believe it is necessary to give workers some rest, and think the first forenoon should be given to a speaker to go into the community and prepare for his work; receive his letters, answer correspondence, and if he desires to rest let him do so, and not be rushed out to a meeting at ten o'clock, which, as a rule, is poorly attended. I think it better to begin the first afternoon and treat the subject more thoroughly, and have an opportunity of meeting the farmers and becoming acquainted with the men and the neighborhood.

I would like to hold a five-session Institute in each county, and then the next day divide our forces and hold two meetings the same day in different parts of the county. In other words I would do missionary work. Usually we would be assisted by some local workers. Even if we did not reach more than one or two dozen in a new place, it would give them a chance to meet our men and to learn that they are practical fellows who know what they are talking about from what they have done. In this way the interest would spread, and our five-session Institutes would be better attended.

We have been obliged to hold our meetings in the county towns because they were on the railroads. We had accommodation for guests as well as for workers. They are also central and anyone who wants to attend an Institute meeting can get there. We have been able to get the use of the Court House free, after they got to know who we were. At first the farmers were suspicious of us, but when they found we were in earnest and wanted to do them good, they compelled the county authorities to give us the use of the Court House. We bear all the expenses, advertising, hotel bills, etc. In some places the Court Houses have not been large enough, and where this has been the case I have required that they provide us with a hall if they want us to move out of the Court House. I also insist that they have good comfortable accommodation for the men who address them. I see no reason why they should put up with bad accommodation. I know the successful farmer is well provided for, and if they cannot provide good accommodation for delegates we do not go to that place.

Our meetings are successful and the work is growing. We are satisfied with the progress thus far, but we want all the suggestions we can get from our fellow workers, and will weigh them well and put in practice those which commend themselves to our judgment.

Q. Prof. Hutchinson. How many men speak at a meeting?

A. We select two practical men who work on their farms and are able to explain their methods to the farmers. Then one or two from the Experiment Station or Agricultural College, or sometimes we get them from the Department at Washington. So we take four

men. I always refer questions to the men who are specialists in that particular line. I say to the workers, it is not so much to make an address at a meeting, but to give the people information and answer their questions. This makes a meeting successful. I find it a good plan to call on the practical man to give his experience as well as the man from the Experiment Station or Agricultural College.

Q. Dr. Mills. Do you hold meetings a day and a half?

A. A day and night session. The people in the towns are not interested in agriculture. We have the opportunity of getting very good speakers; in fact it has been said to me that we can get the best talent in the world. Now, I go into a town that has not given us an audience, and say to a committee "I will send you whoever you wish, that I can possibly get, to interest your people and also instruct them." I want to leave out amusement and make a meeting thoroughly instructive. The local committee will usually work it up and get people interested; thus the work grows, and it is a benefit if you can get the town people to attend. Our strong point is not to let a man go inside a meeting without getting some information, so that he may tell it to the farmer who makes enquiry.

MISSISSIPPI.

Prof. W. L. Hutchinson.

I do not know that I can give you a better idea of Institute work in our State than to recite just what we did during the last Institute season, which was during July and August. We have held about fourteen meetings; nearly all of them one-day meetings, with a total attendance of about 10,000. This is about five times as many as we have had in any previous year. Four years ago a report of the Institute work in the State would have shown an attendance of about 200.

The first time the State appropriated anything for such work was two years ago when they gave us \$1,000. The work is done entirely by College and Station men, and while Professors and Experimenters do not seem to be particularly in favor with this audience I feel that they have done a great deal for Institute work. The success of Institute work in many places was made by such men. One man cannot do everything, however, and there comes a time, it has come in Mississippi, when I do not care longer to have the direction of the work, simply because it has reached that stage where I cannot discharge properly my other duties and do what ought to be done for Institute work. (President Smith, here's another.)

Regarding large audiences. If I had a large auditorium where the acoustics were perfect I might speak to 1,000, but when I am addressing a farmers' meeting I want to talk to them, and the very minute the audience is so large that it has a tendency to make me

money to speak, I feel that it is a disadvantage. It is wonderful to see how an audience of from one to two hundred will listen to a man talk to them for a long time.

We are taking steps which I hope will succeed to give us a Farmers' Institute Superintendent or Manager, in order that the work may be carried forward. We have not been able to undertake all the work asked for, but have done all we could.

MINNEOTA

O. C. Gregg.

In Minnesota we have more money than men. Our annual appropriation is \$13,500. Last year we held 80 Institute meetings, with an aggregate attendance of 20,000. During the past year we had two meetings which were attended by over 1,000.

Management. It is under the one-man power. Those who like Institutes like them well. Our work began without prejudices. That is, we did not have anything in the way except the general indifference of the farmer. We did not have to attempt holding meetings with old institutions.

Classes of speakers. We lay great stress upon the men being practical men. I have a profound respect for our teachers and experimentalists at our Stations. I have obtained much good from them, but my experience is that the average Station man is not a good Institute worker. Now the reason to my mind is manifest. A man cannot talk long to an audience before they know that he has been there or he has not been there. He is inclined to use language which the average farmer does not understand. It may be, and is, all right in the class room but is not intelligible to the farmer. We have men who can adapt themselves to an agricultural audience, but they are few.

I would lay stress on another thing. I want a man who has enthusiasm; fire in him. A man must be intensely interested in his subject and have the power of imparting this to his audience. We must put fire on the hearth of agriculture which is dead. Men say, "I am a farmer just because I have to be one." Such men need new life. Do they not? A competent Institute man is a rare thing to find. Why? He must have a large fund of information, and when questions are put he must be able to deliver himself so clearly that the questioner is satisfied with the reply. He has to be a scholar and a laborer. Then he has also to be apt to teach. Just think of all the combination. And withal he must be a man of enthusiasm. These are the facts as I see them.

A few words as to success. Study the people; study the conditions. Some people talk as though it was an unknown problem. Why, it is an open book. There are always ways of getting hold of people if you will just find it out. You remember Sam Jones said it was a good thing to get the people laughing sometimes, because he was then

able to "ram in a rock." Make it a point to study your audience.

Q. Prof. Hutchinson. What do you do with a crowd? Can you handle 1,000 in a meeting?

A. Yes, if you have them in a hall. The larger the numbers the greater the enthusiasm. Every public speaker knows the value of a large attendance.

Q. We have trouble in getting the crowd together. Can you handle them in the open?

A. Yes, in the Western lands we handle them in all places. I find a blackboard or roll a good plan. Demonstration of a subject where at all possible is a splendid aid in fastening the attention of a rural audience. I would repeat it. Study human nature.

NEW JERSEY

Hon. Franklin Dye.

There are greater States that are doing a larger work than in New Jersey. Institute work in New Jersey has been an outgrowth of the State and County Board of Agriculture. Our system is a little peculiar. The law permits and encourages the County Boards of Agriculture, which are auxiliary to the State Board of Agriculture. These hold four meetings—sometimes more—a the year, which are somewhat of an Institute character. Having been associated with the Board for 14 years, I saw the Institute work was an important one, so prepared an additional sentence in our law which permits of an appropriation for the holding of Institute meetings. The Executive Committee of the State Boards gives the secretary full control. We are not troubled with the large audiences to which Mr. Gregg refers. Sometimes we fill a fair sized opera house, but more frequently our audiences number from 50 to 150.

We aim to hold from three to five meetings each year in each county which is organized. Our Institutes are of one and two-day duration, comprising of course three and five sessions. We have a night session in each Institute. We have practical questions on agriculture treated and endeavor to make the subject bear on the locality. If the meeting is held in a market garden centre we endeavor to have speakers who are capable of dealing with the problems of such a community; and so in other sections.

We also present the home subject; different phases of home improvement and adorning the buildings and beautifying the surroundings. In closing an Institute we usually press home moral questions, of which the farmers are the safeguards of this country. We appeal to the farmers not only to stand for practical agriculture, but for the preservation of our noble institutions, the family, the Sabbath, faith in God and the Bible. Thus we not only bring before them the practical part of life, money making, but the very important part, character making as well. This, in general, is the way we are able to build up our work.

One speaker has remarked that he does not wish his workers to make an address, but rather to give information by answering questions, etc. I appreciate that fully, but realize that it is usually the practical forceful address which brings out the questions. It is often difficult to get any questions unless a good address has been presented.

We have a total appropriation of \$6,000. Each Institute costs from \$40 to \$60. We are doing good work. The Institutes are popular in most places. I strongly believe that if the people of a community are desirous of having an Institute they will provide good, comfortable accommodation. I have in mind now three places which I dropped off my list last winter, and when they desire another Institute meeting I will let them know why they were dropped. If they will provide a comfortable hall we will go again. It is humiliating to all concerned to meet in a miserable building when there are, maybe, two good churches in the neighborhood.

NEW YORK.

Supt. F. E. Dawley.

The Institute work in New York State is, I may say, unhampered by politics or law. We have a section which states that the Commissioner of Agriculture may appoint a Director of Farmers' Institutes; and a further clause which states that they may spend \$20,000. We have nothing, therefore, to hamper us as regards the law. Some of our best workers are from one party and some from the other. We try to get the best we can for the subjects we wish to discuss, endeavor, as Mr. Dye has said, to adjust the subjects to the needs of the various sections. In fact we ask the local correspondents to let us know what subjects they wish discussed, rather than what men they wish sent.

I think our system in New York State is somewhat different to the methods as outlined by representatives of other states. We try to concentrate the management of the Institutes in the home office. Our work is held under a Bureau of the Department of Agriculture. All that the Department of Agriculture has to do is to audit the bills. Our system of doing work is to receive applications from the localities where Institutes are to be held. To show you that the Institutes are popular I may say that the applications for the past two years have been 1,200 each year, when we can only hold about quarter of that number. These applications are then noted on a map of the State. We mark these new applications on a map which has been used before, so that we may know where meetings have been held before, and are thus enabled to arrange the meetings so that the ground may be well covered. The central office prepares printed programmes and in many cases printed posters, which are sent out to the local committees, and they adver-

tise the meetings as they see fit. We try, as far as possible, to send short notices to the papers in the vicinity where the meeting is to be held, and in some cases for the larger meetings, send notices to the Agricultural papers having the largest circulation in the State. We also try to keep in these papers a list of the meetings which are being held.

The details of running the meeting are delegated by the Director to one who is known as the Conductor. This man represents the Director at the meeting. Of course the Director is somewhat at a disadvantage, as he does not come in contact with the people, but with the office work, etc., this cannot be avoided. The Conductor acts as local chairman. Some like a local chairman. We do not. Some are all right, but they are few. The Conductor sends the account for all expenses to the Director.

It seems to be the aim of all Directors to get as large an average attendance as possible. This is right, but at the same time I have ceased trying to do it. I believe the Institutes do the most good where we have an audience of maybe fifty men. We have had remarkably good meetings in dairy sections, where we have spent very little time on anything else. The same is true of special poultry meetings. I think, however, that the most successful in the series of special meetings were those of the Bee Keepers. Two years ago we held seven; this year 12, with an average attendance of 100. With that number of bee keepers you are bound to have an enthusiastic audience. Sometimes we have gone outside the State for speakers; some one in whom the keepers have confidence.

Our State Dairymen's Association some years ago got to a very low ebb. It had an appropriation but was unable to hold meetings without the aid of the Institutes. The Institutes took hold, officers were elected from among the Institute workers and arrangements made whereby we simply hold the meetings with Institute funds. We did that for three years, and they could now get along without the Institute, but we do not want them to. This is true of several of our Horticultural Society meetings and of our State Breeders' meetings. We have large audiences who listen attentively to our speakers.

PENNSYLVANIA

Supt. A. L. Martin.

The Institutes of Pennsylvania have been placed under the charge of the Department of Agriculture since 1895. For the past two years the State has been divided into five distinct sections, beginning about the first of December and running through to the first of March, there being five sets of State lecturers in the field continuously. During this season we held 321 days of Institutes at a cost of \$37,500 a day per Institute. The entire cost is borne by the State. Institutes were held in the

67 counties of the State. A schedule for a given county is fixed by the number of farms in the county. In this way we try to arrange the meetings on an equitable basis, last year we reached more than 150,000 people at these meetings.

Each county has what is called a local chairman of Institutes. He is usually elected by the Agricultural Society of the town, if there be one. If not he is appointed by the Director of Institutes. There is placed in the hands of this chairman the sum of \$12.50 for a day meeting and \$25 if there be a two-day meeting. This is used for advertising, procuring a hall, etc., and has to be accounted for to the Director of Institutes. We find this works well in Pennsylvania.

The State provides for all the Institutes, at least three lecturers who attend the meetings. We are aided very much by the State Agricultural College. We are privileged to procure from this institution men who are versed in scientific knowledge along certain lines, and able to answer just such questions as puzzle the average farmer in his life upon the farm. The farmer comes to the meeting full of questions about this obstacle and that and we find it a good thing to have the man of science ready to give a satisfactory explanation. We are trying more and more to make these Institute meetings an actual school for the farmer. I believe in a large and enthusiastic audience at an Institute meeting. It is not encouraging to the workers, either Government or local, to go to a place where a meeting has been advertised and find in the rear of the hall a few men, when the influence of that meeting ought to reach for ten or fifteen miles around. When I come to a place of that kind I realize that something is wrong and strive to ascertain what it is. There is a field for thought along this line.

I also believe that one of the secrets of success in Institute meetings is that those who have them in charge keep in touch with the people, and then gather together such workers as will take to the people the information for which they are seeking, and which will elevate agriculture to the plane which it ought to occupy. In our State we are striving to mingle with the farmers and give them practical scientific knowledge along the different lines of Agriculture carried on in the State. We have 321 Institutes scheduled for next year, while we have applications for over 1,200.

We have an annual appropriation of \$15,000 from the State for this work. In 1895 the appropriation was \$7,000, which has been gradually increased to the present allowance, showing something of the onward march and permanent grasp the Farmers' Institutes are getting on the people of Pennsylvania.

FLORIDA.

Supt. H. E. Stockbridge. The work of the Institutes in Florida is very much like that in other States, and I shall not go

into detail more than possibly to give a few words of explanation as to one or two features of work.

First, as to the physical conditions, regarding which people of other States are largely misinformed. Florida is a country with a great range of agricultural adaptation and products. Possibly the range of crops produced is greater than in any State in the Union. We grow most things, from apples to coconuts; Florida being the only State which produces the staple agricultural crops, and also the distinctively and emphatically tropical crops, especially pineapples. Now, because of this diversification in our State our farmers are unavoidably specialists. The people engaged in agriculture in one part of the State have entirely and absolutely different interests to those in another section. Therefore almost all our meetings are "special." For instance there is one section in which for thirty or forty miles the only product with which the people are familiar is pineapples. And so in that section we hold a pineapple Institute. The same applies to the dairy, and so on. There is one section which is practically all Irish potatoes, and this section holds the largest shipping point for potatoes in the world.

Now, a word as to the origin of the work. To the present time there has been no regular official in charge maintained by State appropriation. The Agricultural College has been giving short courses, but owing to the extensive area of the State and the comparatively poor transportation facilities it is difficult to get an attendance of farmers at these sessions. So we said "If Mohammed will not come to the mountain the mountain will have to go to Mohammed," and so we left the short courses entirely out of the work of the College, and disseminated as far as possible the same knowledge and information at our Institute gatherings.

This year we had at our disposal an appropriation of \$2,500. The way in which our work is organized may possibly interest you, as it differs in one or two points from the work in other places. Now, with no regular income whatever at our disposal the matter of economy in Institutes was of paramount importance. How could we defray the actual expenses of the Institute without drawing from the College and Station funds,—which must be used in other directions—and yet not call upon private donation or upon charity? The largest number of employees in the State are railroad laborers. Each railroad in Florida maintains an agricultural department, and a so-called Commissioner of Agriculture, and recognizes that the land-interests and the agricultural interests of the State are so important, that this Commissioner gives his whole attention toward furthering agricultural industries. We interested the railroad authorities in our work. It was necessary to get transportation for our delegates, so I laid the matter before the rail-

roads, pointing out the fact that our interests were theirs. Improved methods of agriculture would mean more travel. The result of it all has been that in the entire history of Institute work in Florida we have never been obliged to pay money for transportation. At first it meant a great deal of work with the railroad authorities, but to-day it is simply necessary to inform the head of the traffic department that on such a date at such a place there will be a farmers' meeting, and we would be obliged for transportation for such and such men, and without a single exception we get as many passes as we ask for. We are in this way relieved from the chief item of expenditure, as incurred in other States, and are able to accomplish with a comparatively small outlay the same work as they carry forward each year. \$2,500 allowed us by the State will probably go as far as double the amount in another State where transportation has to be considered.

Now, as to the selection of an Institute force. We have the one-man system. We have the addresses of 1,000 progressive farmers with whom I am acquainted. If I wish to hold an Institute meeting I write to perhaps 20 parties and ask them to get the co-operation of each other and decide on a date and select the subjects they wish treated. The management of the meeting is entirely in the hands of men on my programme. I do not think it advisable to go into a county with a set programme and give the people the idea that you have a programme which must, for some unknown reason, be carried out. We do not want them to think we are getting them to swallow a pill. We want subjects that are of local importance. We usually hold but one-day sessions.

I do not put College or Station men on my programme. I do not wish to be understood as throwing any reflection upon these men. Many of them are the best to be found anywhere, but as a rule the College and Station man is not a good Institute worker. I put on the programme a practical man, whose experience enables him to give very emphatically the information the people of a certain locality are seeking. For instance in a bee section I place on the programme the best man I can find to give information on bee keeping. It may surprise some of you to know that Florida has the largest apiary in the world, owned and operated by a woman. Where it is possible we group the meetings and make an Institute tour, but this is not always possible.

One point upon which I am emphatic is that no man with a manuscript goes on my programme. If he has it in his pocket it must stay there. If he does not know his subject well enough to talk it he does not get on my programme more than once. I believe this is an essential factor in our success. It impresses the audience with the fact that the speaker has been there himself.

The Farm Home

Keep A Goin'!

If you strike a thorn or rose,
Keep a goin'!
If it hails or if it snows,
Keep a goin'!
'Tain't no use to sit and whine
When the fish ain't on your line;
Bait your hook and keep on tryin';
Keep a goin'!
When the weather kills your crop,
Keep a goin'!
When you tumble from the top,
Keep a goin'!
'Spose you're out o' every dime
Gettin' broke ain't any crime;
Tell the world you're feelin' prime!
Keep a goin'!
When it looks like all is up,
Keep a goin'!
Drain the sweetness from the cup,
Keep a goin'!
See the wild birds on the wing!
Hear the bells that sweetly ring!
When you feel like singin'—sing!
Keep a goin'!

Down in a Coal Mine.

BY LAURA ROSE.

Cape Breton Island.

Sept. 18, 1901.

I've sat beside the cheerful grate when the winds were wailing their dismal music and Jack Frost stole in through the smallest crevice; I've watched the blue and yellow and red flame as it darted from the heaped-up coal, but it was merely with a feeling of bodily comfort and pleasure.

Now that I have seen the home of these dusty diamonds, and learned a little of their life history it will be with a deeper and wiser appreciation that I will hereafter enjoy the heat and light product Dame Nature has stored up for us.

A few weeks ago I was in Upper North Sydney, and as I had no meeting that Saturday afternoon, some friends asked me if I would like to go down the Sydney coal mines. I was delighted to have the opportunity, so after an early dinner we got into a waggon—everything is a waggon in this country—and were soon on our way to the mines, five miles distant.

We passed through North Sydney, with its long narrow street. Many vessels were in the harbor and at the wharf. The large sailing vessels under full sail have a great fascination for me, and I saw more of them in Sydney harbor than anywhere. They glide over the water in such a graceful, swan-like manner, not leaving in their wake a waving train of black smoke like their more modern sister boats. As we drove along by the sea shore many points of interest were shown. Here was the very spot where our present King, many years ago, landed; a little too soon for the reception committee. An old Irish woman happened to be passing, and true to her country,

took in the situation, went and shook hands with the young prince, and in her Irish brogue welcomed him to Cape Breton.

In that field up yonder the soldiers used to drill. These houses long ago were occupied by the gentry, mostly military men out from England, and many of them bearing titles—and so on until we reached the village lying just this side of the mines—a typical mining town, with its long rows of low-roofed dingy tenement houses, each house numbered as a means of identification. To me the place was dreary and cheerless: the streets black with coal dust, the poorness and similarity of the houses and the lack of gardens giving it an air of poverty, still I am told the people live a happy, contented life. The men make good wages, but do not save much money, nor better their conditions to any extent.

When we arrived at the mines we reported at the office, got permission to go down, and were provided with a guide. We then went to the lamp house, where a man and boy were busy cleaning the miners' lamps. How carefully they brushed and polished all parts. The man was specially kind in explaining the particular kind of lamp used in mines. There is first a heavy glass cylinder which fits down air-tight on the bowl of the lamp. Each lamp after being lighted is tested, and if the flame flares it shows a leak and the glass has to be tightened. Up past the glass is a double cylinder of very fine wire. This admits sufficient air to keep the lamp burning, but prevents gas, which might be in the mine, from reaching the flame and causing combustion. The wick, in fact the whole lamp, is small, yet it holds sufficient oil to burn twenty hours. The oil is manufactured in England especially for this purpose, it is as clear as water and not explosive.

After our lamps were lit and locked with the company's lead seal, for which there is a heavy penalty if broken, we were each handed one, and off we started for the hole in the ground. As we neared the shaft I'll confess I felt a little shaky, for I knew when once I stepped into the cage I could not get out until I landed seven hundred feet below where I got in. But I made up my mind I wanted to see where coal came from, so with the rest of the party got into the little black, rough elevator, and lo! at a given signal we were gently lowered down, down, down. Our lamps shed a feeble ray on our descent, and we clung to each other, though there was really not any cause to, for that rising up, not easy to go down, feeling which you frequently experience in store elevators, was totally absent.

We stepped out into the darkness and then our surroundings

forced themselves upon us. Mother Earth gave us no warm and bright welcome, but rather seemed to frown upon us for intruding into her hidden chambers.

The first place we were taken, to was to the office or mess room—and such a room—dark as Egypt, and about ten feet square, with floor and ceiling of rock, and walls of solid coal. In this dungeon—I can use no better word to convey my impression—any business is transacted, and some of the men eat their dinners there.

I just hadn't any idea what a coal mine was like. I never knew the coal lay in such immense quantities. For nearly one hundred years coal has been taken from this mine. The first shaft is three miles back from the present one. It is estimated that the mine will hold out for forty or fifty years yet. There is great system in working a mine. It is really an underground city, only laid out with far more exactness. The streets are made by removing so many feet of coal. Then there are streets branching off from the main streets, and so on until the whole area is tunneled. Only about one-third of the coal is removed, the two-thirds left acting as supports or pillars. When a mine is all worked, then they start at the farthest end to remove the pillars, putting in temporary wooden posts as supports. When a spot weakens the rock caves in with a tremendous crash.

We did not go to the end of the mine, as it was nearly two miles under the sea, but we walked out until our guide told us we were under the old Atlantic, and there broke off a piece of coal for ourselves. The miners say they can hear the ships when they cast anchor over their heads. It must give them a rather creepy feeling I should fancy.

As we stumble along over the tracks laid in the "streets," we would hear in the distance the rumble of a coal train coming along, then we would make for a man-hole—cubby holes I called them—and wait for the long train of small, low cars to go thundering by. I counted forty cars in one train. There was always that sense of danger due to the darkness and strangeness of the surroundings that kept your ears and eyes wide open, and your nerves at their highest tension. I noticed the contrast when a new shift of men came along, how with lamps in hand they fairly ran, while we stumbled and groped like so many blind people.

We stood for some time near the shaft where the coal is raised. Men ran to and fro, each with a light, those at the entrance to the mines are allowed to have a torchlight in their caps, and the effect was most weird and fascinating. We watched the car loads of coal arriving at

the shaft. How dexterously the men swung them around into the cage, where they were hoisted up the seven hundred feet to see again the light of day after thousands of years of darkness and imprisonment. On reaching the top each load is weighed, the tag with the number corresponding to the miner's name removed, and he is credited with mining so much coal. I learned they got 49c. per ton, and the average amount mined per day by each man was between four and five tons. After the coal is weighed, it is dumped into a shoot and passes over a screen in its descent to the empty cars below, and is then drawn away by an engine to the wharf to be loaded into ships.

The vein of coal is between five and six feet deep—solid coal—and I believe it is considered the best soft coal on the continent. Imagine miles and miles of coal six feet through, that was the surprise to me. Our guide told us it took eight feet of vegetable matter to form one foot of coal. When and where did the forty or fifty feet of vegetable matter come from to make this splendid layer of coal? An older and wiser head than mine must answer. We got a couple of pieces of rock with impressions of ferns and leaves on them, and they are the same kind of ferns and leaves which abound all over this island at the present day.

There are about seven hundred men and boys employed in the Sydney mine. There are also sixty horses underground. When once a horse goes below it stays there until unable to work.

The system of ventilating the mine was good, and I was told the work was not unhealthy. There is much I have left yet untold, but I fear I have already written at too great length. When I see in my travels so much that is surprising and wonderful how forcibly the words are brought home—

"Marvelous are Thy works and Thy ways past finding out."

Hints by May Manton.

WOMAN'S BLOUSE. 3926.

Shallow round yokes are very generally becoming and are among the latest designs shown. The model illustrated is made of sky blue louisiane silk with the yoke of cream lace, over white, trimming of black and blue cording, which is attached beneath the edges of the tucks and finishes the round neck, and buttons of turquoise matrix. The design is eminently simple, yet effective, and in the height of style, both for the odd waist worn to the theatre, informal dinners and the like, and for the entire costume. Silks of various sorts and all light weight wools are appropriate, and the cording can be varied by the substitution of contrasting pipings or the tucks left plain as preferred.

The lining fits snugly and closes at the centre front and on it are arranged the yoke and the waist.

The back is smooth across the shoulders but drawn down in slight gathers at the waist line. The front is tucked in groups of three each and with the yoke closes at the left side. The sleeves are in bishop style, the cuffs stitched and edged with cording and the belt of the material is similarly finished and held by an ornamental clasp.

To cut this waist for a woman of medium size, 3 3/8 yards of material



3926 Woman's Blouse.
32 to 40 Bust

21 inches wide, 3 3/8 yards 27 inches wide, 2 7/8 yards 32 inches wide or 2 yards 44 inches wide will be required, with 1/2 yards of all-over lace for yoke and collar and 6 1/2 yards of cording to trim as illustrated.

The pattern 3926 is cut in sizes for a 32, 34, 36, 38 and 40 bust measure.

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

Tomato Catsup.

Make the tomato catsup as early in the month as possible, while the tomatoes are at their best. Many persons defer this and the canning of tomatoes until too late, and then are not careful to use only perfectly ripened (but not too ripe) and perfectly sound fruit. Portions of decayed or over-ripe pulp may be cut out and the remainder of the fruit stewed for immediate use, but such fruit should not be put in with the sound specimens of canning. Wash and remove the stems from one bushel of ripe tomatoes, cut them up and put them into a porcelain kettle; let them stew until very soft, mashing them frequently, then turn them into a sieve and press the pulp through, leaving the skins and seeds in the strainer. Put it on to boil again and let it reduce to about six quarts. Add two quarts of best cider vinegar and boil again. When sufficiently reduced to a smooth pouring consist-

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ency, add the seasoning. This is largely a matter of taste, as many prefer a hot seasoning strong with pepper, and others like the milder flavors of spices. Here are two mixtures from which to choose, or to use as a guide with variations according to your individual preference.

Succotash

Boil the Lima, Sieva, or any preferred green shell bean until nearly tender. Pour off the first water if the beans are very strong, then add more, and let it cook nearly all away by the time the beans are done. Allow an equal amount, or more if preferred, of the corn, which must be raw and scraped or cut from the cob. Mix it well with the beans, and let it cook five to eight minutes, or until there is no raw taste to it. Long cooking makes it hard. Add cream or milk to thin the mixture, and season highly with butter, salt and pepper. A little sugar is also needed. If you like the flavor, boil a piece of nice sweet salt pork with the beans. Many prefer this to butter as a seasoning for succotash. A second serving of this dish is always acceptable, therefore be generous with the amount provided.

Crab-Apple Marmalade.

Wipe the apples, cut in two and remove the cores and stems, but not the skins. Put them in a preserving kettle with as little water as possible, merely enough to keep them from burning. Mash them as they soften, and when all are tender turn them into a coarse sieve and press the pulp through. Measure the pulp and put it over the fire to boil until quite thick, stirring frequently. Allow one and one-half cups of sugar and the juice of one lemon to each pint of the pulp. Mix thoroughly with the pulp and let the whole boil until thick and shiny. Turn into glasses as usual and seal with paper.

Mistress—Polish this furniture so as you can see your face in it, Bridget.

Bridget—Sure, mum, there's no need to. O'ive got a lookin'-glass to see me face in, mum.—Pick-Mc-Up.

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QUESTIONS AND ANSWERS

SICK TURKEYS.

Mrs. J. D. Riverview, Ont., writes: "I have sixteen turkeys with swelled heads. First one became affected and then the whole flock. The disease seems to be contagious among them."

Answered by W. K. Graham, B.S.A.,
Manager Poultry Department, Ontario Agricultural College.

I am of the opinion that the trouble with your subscriber's turkeys is a severe cold, perhaps a mild type of roup, due to the birds roosting in exposed drafty places. It is not advisable to shut turkeys in closed houses at night time unless well ventilated, and when roosting outside they should be where the air has a free circulation, not where it is in any way drafty.

The best cure or preventative I know of for the above trouble is Conkey's Roup Cure, sold by C. J. Daniels, Toronto. I have had fair success by feeding sick birds with raw onions, say one onion to each turkey every day. The onion is, of course, cut into small pieces, and the bird forced to eat it if it does not offer to, naturally.

The following treatment has been recommended by many:

Add $\frac{1}{2}$ of inch coal oil to the drink water and give no other water to drink, as the oil will always be found on top of the water the bird necessarily is forced to take its own medicine. Another treatment, and a very good one, is to catch each bird and immerse its head into a 5 per cent. solution of permanaganate of potash. The whole head should be placed in the solution for a short time, or

until the bird draws more or less of the fluid up its nostrils.

In all cases it is necessary to remove the cause of the disease before treatment will be very satisfactory, and if only a few fowls are sick it is much wiser to kill and burn the carcasses than to run the risk of the disease spreading.

The North York Fair.

September 19-20 were gala days at Newmarket, the occasion being the annual exhibition of the North York County Fair. Though the management had provided extra space for exhibits in the way of tents, at the last moment temporary sheds had to be erected to accommodate the exhibits. Creditable displays were made in every department and the live stock classes were well filled, a number of animals shown being fit to enter any show ring in the country. There was a large attendance throughout the days of the show and the climax was reached on the last day when the town, the grounds, and everywhere were filled with delighted sight-seers. On the evening of the 19th a banquet was given to the North York Old Boys, when some five hundred guests partook of the hospitality of the old and historic town of Newmarket.

The early history of Newmarket, and the district surrounding it, is dealt with in the last week's issue of the Express-Herald. From this source we learn that the first Shorthorn cattle and Leicesters were introduced into North York by the Hon. Peter Robinson, away back in the thirties. Truly great things have been accomplished since those early days.

A Big Shipment of Cattle.

Over sixty-five thousand dollars' worth of export cattle were shipped from Toronto last week for the Old Country Markets by Mr. Joseph Gould, a well-known exporter of this city. The shipment, which comprised one thousand head of choice export steers, is said to be the largest single shipment ever made from Toronto. It took Mr. Gould nearly ten days to collect these cattle from various parts of Ontario and centre them at the Toronto live stock yards. The thousand head were loaded on 58 cars, it taking two trains to transport them to Boston, where they were put in one vessel, the Dominion Line steamship Northman, which sailed from Boston on Saturday for Liverpool. The cattle averaged 1,400 pounds each, and cost at Toronto $4\frac{1}{2}$ to 5 cents per pound.

Anthrax in the West.

The following press despatch, which went the round of the dailies early last week, has created no little concern among live stock dealers. A great many Eastern dealers do business in the West, and shipments from the West are constantly passing through to

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Eastern points and many come by way of Toronto. The despatch, therefore, had more than ordinary significance for local dealers, and consequently the directorate of the Live Stock Dealers' Association was called, and action taken with a view to preventing shipments of cattle from the West from coming this way. What effect it has had we cannot say, nor have we had any further information as to the spread of the disease in the West. If correct, a most serious state of affairs exists, that should be looked into at once by the proper authorities. The despatch reads as follows:

"Swift Current, N. W. T., Sept. 22.—This vicinity of the Northwest Territories is infested with anthrax, a deadly and malignant disease, chiefly among sheep. Over four thousand sheep belonging to one company have already died from its effects, and other ranchers are suffering from loss of cattle and horses. Ranchers are greatly alarmed over the disease appearing among their stock, and it is feared extreme difficulty will be experienced before it is exterminated. Anthrax comes upon the animals in a short time. The first sign of it is observed in a slight swelling of the throat, gradually forming into a lump, afterwards both sides of the throat swelling, death resulting. Twenty-four hours is the time given for the development of this disease, and when fully developed it is instant death. How it came to Canada is explained by the fact that a sheep shearer from Australia was engaged in shearing sheep with a pair of shears that carried the disease. The authorities are now taking active measures to have the plague removed. Quarantine has been ordered, and all sheep are to be vaccinated. It will also be necessary to set fire to all the grass in the sloughs and gulches in all affected parts. News comes from the River Saskatchewan Landing that cattle are dying in that vicinity. Only by the efforts of the owners who are now engaged in preventing its spread can the ranches and sheep owners be relieved from this scourge. If their efforts are not successful all can expect a general outbreak and a loss of thousands of dollars."

Worth Noting

A representative of The Farming World lately called upon Messrs. E. Leonard & Sons, engine and boiler manufacturers of London, Ont., and in conversation with them as to trade prospects, he found that they had done a very large trade during the year in all their lines, but they especially noted the steady influx of orders for their Standard Engines and Boilers for cheese and butter factories, which have been distributed to all parts of the Dominion, and are apparently giving the utmost satisfaction.

The inspection of their works and products would lead us to con-

clude that such satisfaction was but a natural result of the use of their goods.

We would advise our readers who may need such to correspond with this firm and obtain a copy of their latest catalogue which covers engines and boilers for almost every purpose, and we believe that the prices will be found to be as satisfactory as the goods.

Sale of Thoroughbreds

The chief event at Grand's Repository last week was the big sale of thoroughbreds made by Wm. Hendrie, Hamilton, Ont. Mr. Hendrie's consignment comprised 20 head in all, 17 horses and 3 foals. These sold at remarkably low prices, averaging about \$60 each. The breeding was of the best, and we are glad to report that the bulk of the sales were made to farmers and breeders, who will utilize their purchases for breeding purposes. Mr. Hendrie breeds and raises horses for the race track, and those not showing any great speed are auctioned off in this way without reserve. But if not of the fastest type they serve a good purpose in the country in introducing as good blood as could be found anywhere. This class of horse is splendidly adapted for producing cavalry and army remounts. Mares were sold at about \$75 that cost Mr. Hendrie \$2,000 to import. Two 2-year-old stallions of good shape and well bred, sold at \$55 and \$65 each. Several of the mares sold are in foal to Morebattle, and Mr. Hendrie has given a guarantee to each purchaser of these that he will pay \$150 for each foal at weaning time. Some of these mares sold for from \$65 to \$75 each, so that the buyer has a good chance of doubling his money on the foal alone. An imported German coach mare was sold for Mr. Robt. Davies for \$95. This mare cost Mr. Davies \$1,000. A number of other horses were sold at fair prices; a chestnut saddle mare, 15.2 hands high, sold at \$125. General purpose horses are going fairly well at \$100 to \$115 each.

Two English Agriculturists

Two distinguished English agriculturists visited Toronto last week, Miss Powell, secretary of the Women's Agricultural and Horticultural International Union, and Miss Wilkinson, a landscape gardener, and sister of the principal of the Horticultural School at Swanley, Kent. Their mission to Canada and the United States, is largely to interest people in the international organization and to establish branches here. The plan included sending women from the Old Country to lecture on horticulture, butter-making, etc. After an interview with C. C. James, Deputy Minister of Agriculture, and G. C. Creelman, Supt. of Farmers' Institute, their plan was abandoned, it being thought that the work could be better done through the Ontario Women's Institutes.

Sheep

SHROPSHIRES

Bred from the best Imported Stock.
Also Silver and White Wyandottes.

W. D. MONKMAN, Bond Head, Ont.

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50 Superior Yearling and Two Year Rams.
2 Extra Fine Imported Lambs.
100 Ram Lambs.
And a number of good Yearling Ewes and Ewe Lambs.
—PRICE REASONABLE.

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Durham Cattle, "Milking Strains"; Yorkshire Pigs; Plymouth Rock Poultry.
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All kinds of Poultry Supplies.
CATALOGUE FREE.

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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 poultry. Any information as to importations made, the sale and purchase of stock and the condition of herds and flocks that is not in the nature of an advertisement will be welcomed. Our desire is to make this the medium for conveying information as to the transfer of pure-bred animals and the condition of live stock throughout the country. The co-operation of all breeders is earnestly solicited in making this department as useful and as interesting as possible. The editor reserves the right to abridge any matter that he may consider best suited to our advertising columns.

Cattle

In last week's issue we mentioned the fact that Mr. Arthur Johnston, Greenwood, Ont., had recently landed with a valuable importation of Scotch Shorthorns. Since then we have received more detailed information regarding this importation which quite bears out what we have said in regard to it. Mr. Johnston's importation which consists of fourteen head of very select Shorthorns, landed at Quebec on Sept. 11, and will be followed by others in October. We have only to mention the breeding of some of the animals to show the fine strains represented. The lot includes among others one Marr Missie; two Marr Marygolds; 3 Cruickshank, Brawith Buds; two Kibblean Beauties; one Cluny Castle Flora; one representative of the royal herd at Windsor and a representative of the Cruickshank, Flagrant Tube, a capital young bull; one very excellent Prince Augusta; one Lord Lovat Wimple, and other equally well-bred ones.

We understand that the animals of this importation are not in show form but are in the very finest breeding condition. They are certainly one of the very best lots ever purchased by Mr. Johnston in Scotland as well as being individually excellent.

On Saturday, July 27th, Messrs. Alfred Mansell & Co., Live Stock Exporters, of Shrewsbury, shipped per ss. "Marina" from Glasgow on account of Mr. Robert Miller, of Canada, 8 well bred Shorthorns, viz.—a fine heifer "Broadhooks 2nd", and her cow calf, and 2 heifers "Golden Rose 2nd" and "Golden Rose 1st" from Mr. Craigie of Fraserburgh; a grand heifer "Flower Girl 12th" and bull "Prince of the Forest" from Mr. R. Copeland; and a "Missie" cow calf and a "Butterfly" heifer from Mr. Marr of Uppermill. These cattle were all put on board under the personal supervision of Mr. Alfred Mansell of the above firm.

We hear of high prices for cattle these days, but none of the high figures paid on either side of the Atlantic in recent years come up to what were paid over a quarter of a century ago. The celebrated Shorthorn bull, Duke of Connaught was purchased at Earl Dunmore's sale, held at Dunmore near Stirling, Scotland, August 25, 1875, by Mr. James Peter, for the Berkeley Castle herd. The price paid was 4,500 guineas, equivalent to about \$22,500. This is the highest price ever paid for a bull, of any breed, on either side of the water. Duke of Connaught was bred by Lord Dunmore out of the famous cow Duchess 108th. His sire was Duke of Hillhurst.

On Friday, Mr. J. H. Grisdale, of the Guelph Agricultural College, shipped at Glasgow, to the order of the director of the Dominion Experimental Farms, Ottawa, two very fine cows, purchased from Mr. Wm. Stroyan, Culcaigrie, Twynholm. One of these cows, was the famous Jessie A. of Culcaigrie, 11445, the other being Maggie of Culcaigrie, 13044. The former—Jessie A.—won first prize as the best three-year-old Avyrshire quey in calf at the Castle-Douglas Open Show, of 1898, and was second in the Derby at the same show, being only beaten by her half-sister and byre companion Nell Kennedy of Culcaigrie. Jessie A. was also one of the pair which won the Queenshill Challenge Cup for the best pair of three-year-olds. She also won the Dowdney Plate for the best single three-year-old, but has never been exhibited since, as, being one of the favourite strains in the Culcaigrie herd, her owner decided to devote her to breeding purposes. The other cow—Maggie of Culcaigrie—won second this year at the Castle-Douglas Open Show. She was also one of the pair which won outright the Queenshill Challenge Cup, this being the third occasion on which it was won by Mr. Stroyan. Jessie A. and Maggie of Culcaigrie are two grand cows, which will worthily maintain the reputation of the Avyrshire breed at the Dominion Experimental Farms.—North British Agriculturist.

Sheep.

The big dispersal sale of Harrington Hall Shropshires, on August 29th last, was a red letter day for the Shropshire breed of sheep in Great Britain. This flock was owned by Mr. A. E. Mansell. Mr. Mansell has long been respected as one of the most successful breeders of the popular Midland short wools. His flock has risen to an eminence unapproached by any other of the breed, and when it was known that he had resolved to settle in Tasmania, a decision that necessitated the dispersal of his flock, speculation was rife as to the result of the sale. During the show season just closed, Mr. Mansell brought his show-ward career to a close with the most brilliant record in the whole history of the flock, and even though the sheep trade was somewhat depressed it was confidently anticipated on all hands that the sale would be a record. So it proved, for the company that faced the Auctioneers on Thursday was in a business frame of mind, and at no period of the sale did bidding flag. The Argentine, of course, has ceased for a time to take English stock, and was almost unrepresented, while North America was represented by only

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For Best PORTLAND CEMENT

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Spooner's "PHENYLE" Powder GERMICIDE DISINFECTANT..

KILLS CHICKEN LICE

and Lice on Horses and Cattle, and Ticks on Sheep. Keeps them Healthy, Easily applied; no dip required.

60lb. boxes, 1lb. packages,.....25c. lb.
70lb. pails.....10c. lb.
400lb. barrels.....10c. lb.

If your Druggist does not sell it, send direct to

ALONZO W. SPOONER,
Laboratory, PORT HOPE, Ont.
It will cure and prevent hog cholera.

a few commissions. It was the Australian buyers, however, who made the sale such a conspicuous success, for many of the choicest lots were secured by them.

The sale commenced punctually at 12.30 and concluded about 5.30.

654 sheep of both sexes and all ages averaged £6.18. 10d. Of this total 120 sheep were bought for Australia, Tasmania, New Zealand, South America, and Canada, and 71 sheep were bought for Ireland.

Another important sale of Shropshire was that of the Sherlows flock, the property of Messrs. P. A. and G. Evans, Sherlow, Eng.

The averages were as follows:—
48 rams..... £25 18. 0d.
60 ewes..... £4 98. 10d.

The first five rams to enter the ring averaged no less than £60 118. 0d.

Swine.

We have received the following communication from England in reference to the recent importation of Mr. H. J. Davis, Woodstock, Ont.:

Messrs. Alfred Mansell & Co., the well known live stock exporters, of Shrewsbury, have recently shipped on behalf of Mr. H. J. Davis, of Canada, per the Donaldson Line, some choice Large Yorkshires comprising, 1 large white boar and 2 sows, from Mr. P. L. Mills, 1 sow from Mr. D. R. Daybell, and 2 sows from Lord Rosbery's Dalmeny Herd. They were a fine lot of animals, and should do well for Mr. Davis in Canada.

Fruit Harvesting, Storing, and Marketing

This work just issued by the Orange Judd Company, New York is intended as a practical guide to the picking, sorting, packing, storing, shipping and marketing of fruit. It is compiled by F. A. Waugh, who is well known as more than a mere local Horticulturist. The book is amply illustrated and contains in all 250 pages. It sells for \$1.00.

The subjects covered by this book are the fruit market, fruit picking, sorting and packing the fruit package, and fruit storage, with a large appendix giving useful statistics of the fruit trade, fruit package laws, information concerning commission dealers, and dealing, etc., etc. The important subjects of the fruit package and fruit storage by refrigeration, ventilation and mechanical means, are especially well treated.

The subject has been treated strictly from the standpoint of the fruit producer. The commission business, for instance, is thoroughly and fairly discussed, and the commission men can hardly help but be pleased with the advice given, yet it is all plainly directed to the benefit of the fruit grower. Evaporating and canning are handled in the same way—not by telling how to run a canning factory or a commercial evaporator—but by explaining those points which are of interest to the man who grows the fruit. The whole subject is tersely, plainly put and adequate ly illustrated.

ALWAYS MENTION THE FARMING WORLD WHEN WRITING ADVERTISERS.

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J. A. RICHARDSON, South Marsh, Ont., Breeder of Hot tans, Dorset Horned Sheep, Tamworth Swine.

E. PANNABUCKER, Fairview Farm, Hespeler, Ont., breeder of reg. Holsteins. Stock for sale.

DAVID McCRAE, Janefield, Guelph, Canada, Importer and Breeder of Galloway Cattle, Clyde dale Horses, and Cotswold Sheep. Choice animals for sale.

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10 Young Bulls from one month to four months, bred from Winnie K's De Kol.

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

RETTIE BROS. HOLSTEIN-FRIESIAN BREEDERS

A few choice young animals for sale. RETTIE BROS.,
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SHORTHORN BULLS

Two choice bulls about a year old

FOR SALE
JOHN McNAB,
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Glen Crescent Shorthorns and Oxfords.

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

J. W. WIDDIFIELD,
Uxbridge, Ont.

MAPLE LODGE STOCK FARM.

Shorthorns For Sale.

A few choice young bulls, and some excellent heifers and young cows. Our cows were awarded first prize at Prov. Dairy Test, 1899 and 1900. Imp. Knuckle Duster, and Imported Sir Wilfrid, at head of herd. Leicester sheep, imported and home bred. The best. **A. W. SMITH**, Maple Lodge P. O., Ont.



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Send for circular
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FATTENING AND CONDITION POWDER

THE great Blood Purifier for Cattle, Horses, Sheep and Hogs. A handful of this wonderful Purina mixed with the usual feed strengthens the nerves, hardens the muscles, and generally invigorates. Recommended by eminent veterinary surgeons in Canada and United States.

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OAK LODGE YORKSHIRES



are acknowledged to be the best type of bacon hog to produce the ideal carcass for the best English trade. **CHAMPIONSHIP HERD AT TORONTO INDUSTRIAL EXHIBITION FOR NINE YEARS** also sweepstakes on Dressed Carcass at Provincial Winter Show. We have on hand now a large herd of different ages. Our prices are reasonable and the quality is guaranteed to be choice. Write

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AYRSHIRES AND YORKSHIRES FOR SALE.

PURE-BRED AYRSHIRE BULLS coming 1 year old, fit for service, and one coming two years old. All sired by "White Prince" (Imp.) except the one coming 2 years old. As I am about renting my farm these bulls will be sold cheap if taken at once. Also a number of fine pure-bred Yorkshire Sows from one to four years old.

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The Up-to-date Herd Tamworths

Bred from sweepstakes herd.
Young stock of both sexes for sale.

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MAPLE LEAF HERD OF LARGE YORKSHIRES

...Young Stock for Sale

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Large English Berkshires

Young Stock For Sale from noted imported winners.

Shropshire Sheep and Pedigreed Collie Dogs

From the most fashionable breeding stock and all for sale at reasonable prices. If you cannot come in person to select, we are always willing to ship C.O.D., so that you may see what you are getting.

DURHAM & CAVAN,
East Toronto, Ont.

Market Review and Forecast

Office of The Farming World,
Confederation Life Building,

Toronto, Sept. 30, 1901.

While there are complaints in some quarters of trade in wholesale lines being slow and remittances slacker than usual at this season of the year, this is looked upon as only temporary and the general outlook is good. There is a slackness in the grain trade due to the shortage in the American corn crop which is causing some uneasiness in shipping circles. Money continues steady at about 5 per cent. and discounts at from 6 to 7 per cent. as to the name and nature of the account.

Wheat.

There is little material change in the wheat situation, if there is any it is in favor of an easier market. Already about three months of the present cereal year have elapsed and it is becoming more evident that there are ample supplies of wheat to feed the world's population till next harvest. The shortage in the American corn crop may have some effect in improving values but this is even doubtful just at the moment. The visible supply of wheat in Canada and the United States east of the Rockies has commenced to show weekly increases, the last returns showing an increase of 1,753,000 bushels to 32,655,000 bushels as compared with 54,993,000 bushels a year ago at this time. The shipments of the world's wheat from July 1st to date shows a decrease of 10,000,000 bushels as compared with the same period last year, and yet England is complaining of full supplies.

Local markets are quiet but steady at about last week's quotations. Red and white are quoted here at 65c to 67c middle freights; goose at 60c and spring at 67c to 68c east. No. 1 Manitoba hard, is quoted at 80c and No. 1 northern at 78c, grinding in transit. On Toronto farmers' market new red and white, bring 60c to 62c, and old 60c to 73c per bushel. Goose brings 65c to 67c and spring 60c to 70c per bushel.

Oats and Barley.

The oat market keeps steady and the general feeling in the trade is that all coarse grains for feeding will be high. Oats are steady here at 44c to 45c east and middle freights. On the farmers' market, old oats bring 42c to 44c and new 40c to 41c per bushel.

There is a good export demand for malting barley. Quotations here are 43c for feed barley up to 47c for best quality middle freights. On Toronto farmers' market barley brings 47c to 55c per bushel.

Every Housekeeper must often act as a family physician. Pain-Killer for all the little ills, cuts and sprains, as well as for all bowel complaints, is indispensable. Avoid substitutes, there is but one Pain-Killer, Perry Davis'. 25c and 50c.

Peas and Corn

The market for peas continues firm with car lots selling at Montreal at 81c afloat. Locally the market is unsettled at 70c to 71c north and west for bugless peas. On the farmers' market here small peas bring 66c to 69c per bushel.

The corn market is beginning to feel the shortage in the American corn crop more and more, and is still firm with prices advancing. American No. 3 yellow is quoted here at 64c, Toronto and Canadian mixed at 54c and yellow at 55c west.

Bran and Shorts.

Ontario bran is quoted at Montreal at \$15 to \$15.50; Manitoba at \$15.50 to \$16 and shorts at \$17.50 to \$18.00 in car lots. City mills here sell bran at \$15.00 and shorts at \$16.00 in car lots f.o.b. Toronto.

Potatoes and Beans.

The potato market is firmer and higher east. Montreal quotations bring 60c to 65c per bag in car lots on track. There is more inquiry here for car lots but none have reached this market yet. About 60c per bag is the quotation for car lots on track. On Toronto farmers' market potatoes bring 60c to 70c per bushel.

The bean market continues firm and Montreal quotations are \$2.20 to \$2.30 per bushel for primes. There seems to be very little business doing in beans here owing to the scarcity.

Hay and Straw.

The baled hay market keeps steady and active and American buyers continue to pay about \$7 f.o.b. at country points east. There seems to be a scarcity of cars for shipping purposes which makes business a little slow. The outlook for exporting about all the Canadian surplus is bright. Montreal quotations for baled hay in car lots are \$8.00 to \$8.50 for No. 2, \$9.00 to \$9.50 for No. 1 and \$7.00 for clover on track. The market keeps steady here with a fair enquiry at \$8.50 to \$9.00 in car lots on track. Baled straw is quoted at \$5.00 to \$5.25 in car lots on track. On Toronto farmers' market hay brings \$10.50 to \$12.00, sheet straw \$10 to \$10.50 and loose straw 80 per ton.

Eggs and Poultry

The egg market is firmer and higher under lighter receipts and a

better export demand. Fresh candled selects are quoted at Montreal at 17c to 18c in a jobbing way and straights at 15c to 16c in case lots. The demand here is good and the market firm at 13½c to 15c for best selected and 12c to 12½c for ordinary in case lots. On Toronto farmers' market, new laid bring 15c to 16c per dozen.

Poultry is only in fair demand here at 40c to 50c per pair for live and dressed chickens in a jobbing way, and 12c per lb. for choice young turkeys. On the farmers' market live chickens bring 40c to 70c, dressed 40c to 60c and ducks 40c to 80c per pair and turkeys \$1.00 to \$1.50 each.

The Canadian Produce Co., 36 and 38 Esplanade East, Toronto, will pay up to Oct. 10, for spring chickens, 6c per lb. For hens (including last year's birds) 3c per lb. For ducklings 5c per lb. Crates supplied free and express paid up to 50c per 100 lbs. of birds. These prices are for live weight.

Fruit

Referring to last week's apple trade, the Montreal Trade Bulletin says:

"Prices of winter fruit are so high in the West, that neither local dealers nor English buyers care to invest. A considerable portion of the crop is now believed to be in the hands of shippers and speculators, although there is quite a lot still in growers' hands, as advices from the West state that farmers are now writing buyers to go round and see them. In this market No. 1 hard fall fruit such as St. Lawrence, etc., have sold at \$2.75 to \$3.00 per bbl. and fair to good qualities \$2.25 to \$2.50. Fancy red stock is quoted at \$3.25. Winter fruit is expected in next week."

On Toronto fruit market, apples bring from \$2.00 to \$3.00 per bbl. Peaches per basket, Crawford bring 75c to \$1.10 and whites 30c to 50c, and pears 20c to 35c or \$2.00 to \$2.50 per bbl. Grapes bring 15c to 25c for small basket and 20c to 30c for large.

Cheese.

Though the cheese market opened up brisk early in the week at from ½c to ½c per lb. advance on the previous week, there has not been very much activity. Cable quotations show the English market to be quiet but steady. Towards the end of the week there was a collapse in the boom the

OUR PRICE FOR CHICKENS HAS GONE UP

Our demand has doubled. Deal with a reliable firm; be careful of strangers. See our prices on this page.

THE CANADIAN PRODUCE CO., TORONTO

English buyer refusing to follow the advance on this side and the market closed easier. Montreal quotations are 10c to 10½c for finest western and 9½c to 9¾c for finest eastern, which are from 1½c to 1¾c lower than at this time last year. Stocks are reported to be about the same as usual at this season and shipments from Canada and the United States from the beginning of the season to date, show a falling off of 388,500 boxes. The situation then is not a weak one and if the fall make should not prove as large as many anticipated, higher prices should prevail. The present prices, in our opinion, are very reasonable when all things are considered. The ruling price at the local markets during the week has been 9½c with quite a few selling.

Butter

The London, Eng., market is firm and 2s. up. Choice Canadian creamery is quoted at 108s. to 108½; fancy at 108s. to 112s. and fine at 108s. to 102s. The Trade Bulletin has this to say regarding last week's trade: "The shipments of butter from this port during the past week were 27,425 pkgs., making 44,462 pkgs. for the past two weeks and 276,000 for the season to date, against 207,000 pkgs. for the same period last year. The large exports of the past two weeks seem to accord with the advance in prices as reported in our regular market column. The American markets have advanced ½c to 1c on the week, and there is a firm feeling all round. Sales of about 700 pkgs of choice late made creamery were reported to us this morning at 21½c to 21¾c for export, a few special fancy lots bringing 21¾c to 22c. Good to fine 19½c to 21c. Western dairy butter is as dull as can be, and it is difficult to get over 16½c for selections."

Creamery butter is steady here at 18c to 20c for tubs and 21c to 21½c for prints. Choice dairy pound rolls are in demand and local dealers quote 17c to 18c for the best. Choice dairy tubs bring 16c to 16½c for which there is a good demand. There is a great deal of poor quality being offered. On Toronto farmers' market pound rolls bring 18c to 20c and crocks 16c to 17c per lb.

Cattle

The general trend of the live stock market continues the same. While prime cattle of nearly all classes are steady with firm prices, other grades are duller and easier. At some of the markets in the Western States the supply of medium and common grades are increasing, owing to the scarcity of the corn crop, farmers evidently preferring to sell off their stock early. The supply of really good cattle has been light at all the leading markets, which has tended to increase the price for prime quality. There was a fairly large run of live stock at Toronto cattle market on Friday, comprising 966 cattle, 1,000 hogs, 1,142 sheep and 79 calves. Generally speaking the quality of the fat cattle was poor.

Salt In Butter

When you buy Salt for butter-making you want Salt, not lime or other impurity. You want Salt that dissolves quickly, Salt that will give a delicate flavor to the butter. YOU GET ALL THIS IN WINDSOR SALT.

Windsor Salt

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

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EVERY PATRON OF EVERY FACTORY

Should insist on receiving a monthly statement of the milk delivered from his farm. Our Ideal Milk Ticket is used by all the best factories. 25c. a hundred, \$2.00 a thousand.

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**CHICKENS
DUCKS
GEESE
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WANTED

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

Toronto Poultry and Garden Produce Co., Limited Davisville P.O.
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IT IS CHEAPER THAN SHINGLES.

Waterproof

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

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Is put up in rolls of one square each, 40 ft. long by 32 in. wide, and costs only \$2.25, including nails, thus affording a light, durable and inexpensive roofing, suitable for buildings of every description—especially flat roofs—and can be laid by any person of ordinary intelligence.


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TOLTON'S No. 1 Double Root Cutter

POINTS OF MERIT

1. To change from pulping to slicing is but the work of a moment.
2. There are two separate wheels, one for pulping and the other for slicing.
3. 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 SHAPING, and all that is latest and best in principle, material and construction.



TOLTON BROS., GUELPH, Ont.

Trade was slow and prices easier, with the exception of a few picked lots. There were several export dealers there to purchase, but the quality was not good enough to suit the trade, only one load of exporters sold at \$5 per cwt. A few rather poor milk cows were offered. There were very few stockers and feeders of good breeding offered, though there were many farmers on the market looking for them. Good stockers and feeders are wanted here, though they are somewhat draggy at Buffalo.

Export Cattle.—Choice loads of these are worth from \$4.80 to \$5.00 per cwt., and light ones \$4.25 to \$4.50 per cwt. Heavy export bulls sold at \$4.00 to \$4.25 and light ones at \$3.60 to \$3.75 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 \$4.25 to \$4.50 per cwt., good cattle at \$3.90 to \$4.25, medium at \$3.40 to \$3.65, and inferior to common at \$2.50 to \$3.15 per cwt.

Feeders.—Heavy, well-bred steers from 1,100 to 1,200 lbs. each, sold at \$4.00 to \$4.25, and other quality at \$3.50 to \$3.75 per cwt. Light steers, 900 to 1,000 lbs. each, sold at \$3.25 to \$3.40 per cwt.

Stockers.—Yearling steers, 500 to 800 lbs. each, sold at \$3.00 to \$3.25, off colors, and inferior quality at \$2.50 per cwt.

Calves.—These are strong at Buffalo. Good to choice veal brings \$8.00 to \$8.25 per cwt. At Toronto market ordinary calves bring \$2 to \$10 each.

Milk Cows.—Milk cows and springers sold at from \$25 to \$42 each.

Sheep and Lambs.

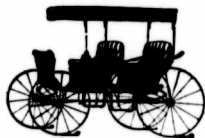
Erick Bros., East Buffalo, N.Y., weekly circular of Sept. 25, re Canadian lambs, says: "Market ruled strong and higher to-day on light receipts—up to time of going to press there were only about eight loads on sale, and with an exceptionally good demand the good lambs sold at \$5.50, with the fair to good kinds at \$5.25 to \$5.35. The close was steady with a good clearance and the prospects are fair for the balance of the week."

At Toronto market there was an easier feeling and lower prices, with ewes selling at \$3.35 to \$3.40, and bucks at \$2.50 to \$2.75 per cwt. Lambs sell at \$2.50 to \$3.00 each, and \$3.50 to \$2.80 per cwt.

Hogs.

Good hogs continue scarce, not only on this side, but at Buffalo, where strictly good quality is hard to find. On Toronto market select bacon hogs sold on Friday at \$7.37½ and lights and fats at \$7 per cwt. in car lots on track. Unculled car lots sold at about \$7.25 per cwt.

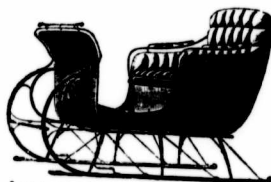
The Wm. Davies Co., Toronto, for the week ending Oct. 5th, will pay \$7.37½ per cwt. for select bacon hogs, \$7.00 for heavy hogs, and \$6.87½ for lights.



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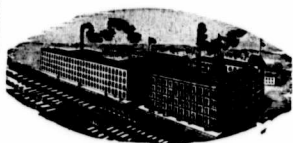
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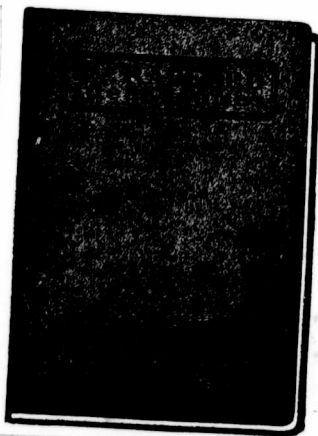


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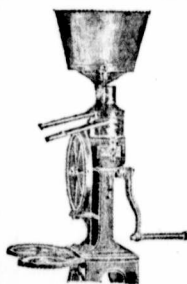
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