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THE FARMER'S ADVOCATE & HOME MAGAZINE

THE LEADING AGRICULTURAL JOURNAL IN THE DOMINION.

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The FARMER'S ADVOCATE is published on or about the first of each month. Is impartial and independent of all cliques or parties, handsomely illustrated with original engravings, and furnishes the most profitable, practical and reliable information for farmers, dairymen, gardeners and stockmen, of any publication in Canada.

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Address—THE FARMER'S ADVOCATE, OF

THE WILLIAM WELD CO.,
LONDON, ONTARIO, CANADA.

Editorial.

Volume XXVII.

This issue closes the twenty-seventh volume of the FARMER'S ADVOCATE, which for over a quarter of a century has been doing battle in the interests of the farmer. From a small, unpretentious beginning it has yearly grown in strength and influence, until to day it has no superior among the agricultural papers of America. Its growth in popularity has not been of a spasmodic character, but steady and progressive. This is attributable to the fearless and independent course it has always maintained in all matters pertaining to the interests of agriculture. It has ever had an eye to the advancement of farm industry, which is of more importance than all others, and the farmers of Canada speak of it with pride as "our paper". Many of the advantages farmers now enjoy are directly traceable to its influence. By the many kind expressions which we are constantly receiving from all parts of America and Europe, we feel gratified and assured that our unceasing labor and heavy expenditure are being appreciated.

Great as have been the achievements of the past, we are determined more than ever to keep in the front rank of agricultural journalism, and 1893 will witness greater progressive strides than ever before made in the history of the FARMER'S ADVOCATE.

After the 1st of January it will be issued on the 1st and 15th of each month. It will be printed from particularly handsome new type, made expressly for it in Scotland. It will also be more handsomely illustrated than ever, and many new and original features introduced, and the paper correspondingly improved in every respect. As heretofore, it will treat upon all subjects pertaining to the farm. Our editors are all practical farmers, and we have also made arrangements with a large number of specialists to write on subjects relating to the various departments of the farm in which they are practically engaged, and who have made a success of their specific work.

Each number will bristle with such valuable hints and profitable information to its readers, as will directly result in putting money in their pockets. Farming has ceased to be looked upon as a plodding industry; some of the most eminent men on the continent are engaged in it, and what they have to say is that as an educator the ADVOCATE has no superior. We are already assured that our list of subscribers for 1893 will be many thousands larger than it has ever been, but we are sure there are hundreds of farmers in each county who would be benefitted and pleased to receive the FARMER'S ADVOCATE at the small sum of \$1.00 per annum, but it is impossible for us to reach these men by personal canvass, and we want the help of all our friends to assist us at once in doubling the circulation of your organ. Speaking favorably of the ADVOCATE among your neighbors may often be the means of inducing them to subscribe, and this will not only benefit them personally, but will assist us to promote the agricultural interest at large. We thank our subscribers for the generous support accorded us in the past, and solicit respectfully the same in the future.

As this number not only completes the present volume, but is also the last issue for the year, we take this opportunity of wishing our many friends and readers the compliments of the incoming season, and hope to renew our social intercourse with them all at the new year.

Bound volumes of the FARMER'S ADVOCATE for 1892 are now ready. Price, \$2.00 each.

Hereafter we wish it distinctly understood that no person will be allowed to take a subscription for the FARMER'S ADVOCATE at less than one dollar per annum.

Restricting Canadian Cattle.

The repeated clamorings of the British agriculturists for protection of their cattle-breeding interests have at length obtained their desired end, and Canadian cattle are placed upon a scheduled list, and henceforth are likely to be on the same footing as those of other countries where disease in every contagious form has been known to exist for generations. The British authorities have long been hunting around for a pretext for this movement, which every man who has read the English papers can very readily understand. The fact of the case is, that no administration of affairs in England has been able to relieve the British agriculturist from the burden with which he is loaded down, and some show of assistance had to be brought about. In this case Canada is the land that has to be sacrificed in order to appease the hunger of the agriculturists of England. The pretence that contagious pleuro-pneumonia is lurking among Canadian herds is as unfounded as the present restrictions are odious. The fact that Canada led the way in framing an Act that contained all the provisions for compensating stockmen for animals slaughtered whenever suspicion of disease exists, has thus far kept her skirts clean from the contaminating influence of foreign disease that might have been so easily brought in from the different countries of Europe, known to be reeking with infection and contagion in its worst form.

Just once, and that as far back as 1886, did Canada have a taste of what might have proved a serious outbreak, but the strong and thoroughly equipped Act was quickly put in force, and no influence could be brought to bear that would relieve one jot or tittle until assured immunity from disease allowed possibly tainted herds to move freely. At that time large importations from England were weekly arriving; many individuals suffered and suffered seriously. Cattle that had been released shortly before from quarantine were quarantined at home, and no stone was left unturned in order to free us again from the slightest breath of contagion, and since that date this disease has never been heard of throughout the length and breadth of the Dominion, and never has it existed outside the quarantine ground at Point Levi. But as hinted before, it is not contagion England is alarmed at, it is competition that from its first inception was odious to the British farmer. They have been told we have resources, yet undeveloped, that would furnish supplies up to the extent of her needs, and they fear the rivalry that has sprung up through the enterprise displayed by Canadians in importing the best blood that could be obtained to improve their herds. For in this particular Canadians have been no niggards, and no country has continued to purchase as freely year after year the number of pure-bred animals that have been brought to Canadian ports, and British breeders have enjoyed the benefit of this trade. Many of our shippers and cattle breeders claim that the loss will not seriously affect Canadian cattle interests, arguing that British breeders were getting the benefit by purchasing and finishing our best stockers, by which means they were enabled to sustain the reputation won long ago, while the Canadian feeder had to be content with second-rate feeding beasts, and thereby lost

credit he really deserved. Others also, with very much show of argument, contend that we have been all along losing much of our advantages of open British market, by having to pay higher freight from Canadian shipping ports. This we admit is true, that through the cupidity of ship owners, together with the buying and selling in space that has been carried on, much of the profit has been ground down that otherwise should have been realized by the free access to inland British markets. Again, we are surprised to see that numbers are advocating the development of a dead meat trade, which would doubtless prove a repetition of the swindling operations witnessed across the line among our neighbors, where millions of dollars are annually being wrung from the cattle breeders of the United States by the Big Four engaged in this trade. This is just another instance that may be cited in which our own cattle breeding industry may be crippled, if any of those rights are conceded to Canadian capitalists that they have been long applying for. Every representative of the county constituencies should study well this question. The ADVOCATE will discuss it fully later on. However, the point at issue is the trade which we understand we are about to lose, and which we wish to improve rather than decrease. Our American friends spared neither talent nor expense in trying to obtain what we have just lost, and none know better than they how this industry has been crippled by the restrictions under which their cattle have been received. Our readers are all conversant with the fact that during the last electoral campaign the strongest plank in the platform of the Government protective policy was supposed to rest on this very branch of the cattle trade, the contention being frequently made that we owed this advantage to our state connection. Both parties are a unit on this question as it now stands, and on no occasion within our remembrance has so little political capital been sought, the one idea very properly prevailing with them how to regain what we have just lost. Just here we might say so burning a question is this considered, that, if this unjust restriction had come in force previous to or during the last Dominion elections, when our trade relations with Great Britain were being publicly discussed, the result of those elections would probably have been very different, as nothing within the last few decades has happened that has so cruelly cut the ties that connect Canada with the Mother Country. Canadians consider well before they act, but at this present juncture they are in no humor to be snubbed by the country to which they are so closely allied, and if Great Britain persists in holding aloof and hesitates in encouraging a closer connection, she will awake to the fact that she has lost what she can never regain—a colonial connection that will affect her whole future advancement.

At His Old Tricks.

We published last week, page 559, an exposure of attempted fraud in the matter of a so-called "Black Pepsin" method of increasing the yield of butter. Information has since reached us that the author of the scheme is one James A. Bain, of Ohio, who has been up to tricks of a similar kind heretofore—notably of a swindle in the spring of 1882, in which he signed himself as secretary of a bogus "North American Poultry Association," and offered valuable information about incubators which proved to be worthless. Our correspondent states that Bain has been in State Prison for offences of the kind, but this we do not know to be a fact. The "Black Pepsin" stuff was to be obtained, for so many stamps, of "The Concord Chemical Co.," New York, but it is found on inquiry that no such company exists in that city, and that the postmaster of New York has been requested to forward letters directed to the company to the same post-office in Ohio which was Bain's location in 1882, on the excuse that a contemplated removal of the company from there to New York had been temporarily postponed. — [Country Gentleman.

The Provincial Fat Stock Show.

The Fat Stock Show to be held at Guelph, December 14th and 15th, under the auspices of the Agriculture and Arts Association, the Guelph Fat Stock Club, and the Sheep Breeders' and Swine Breeders' Associations, promises to be one of the most interesting events of the year to breeders and feeders, and should be full of lessons for the general farmer as well. For the first time in the history of this institution in Canada, the premiums offered are in some measure commensurate with the importance of the enterprise, something like ten thousand dollars being offered in the various classes. The prizes offered at the regular fall exhibitions have been so meagre in number and small in amount that the encouragement to feeders to prepare first-class specimens has been very scant, and the offerings at former Christmas shows for fat stock have been also very far from what they ought to have been to make it an object to give the necessary time and attention to the work of bringing out highly prepared animals. Let us hope we have entered upon a new era in the work of maintaining a first-class fat stock show, and that it may become a permanent institution, well furnished with the necessary means to hold out inducements to feeders to do their best to develop a high class of early maturing animals that will be a credit to them and to the country, as well as being important object lessons to the general farmer and the farmers' sons of the Dominion, proving the possibilities of bringing out the well-matured butcher's beast at an age which used to be considered only half way to the destination of all such flesh.

The fat stock show is, in many respects, the most important to the farmer of all the shows held. There are good reasons to doubt the wisdom and the profitableness of forcing young animals intended for breeding purposes into the high condition necessary to win at the ordinary exhibitions for breeding stock, but this objection does not apply to fat stock intended for the block, and it does seem that this is the proper sphere in which to test the capabilities of animals of the various breeds to attain great weights at an early age, and at the same time to maintain the smoothness, firmness and quality of flesh and lack of offal which should characterize the model butcher's beast and the profitable shipper.

It has always been a matter of surprise to us that with such scant encouragement such really good shows have been made in former years, and the lateness of the notice of the determination of the joint management to offer largely augmented premiums may possibly be the means of a less extensive exhibit than the prize list would seem to call for; but we may safely count on a good show as far as it goes, and the future will, no doubt, under such promising auspices bring out such a display as will be gratifying to all concerned. Canadian feeders have the necessary enterprise, skill and judgment, as well as the courage and pluck, to compete successfully with the continent, as they have more than once demonstrated at the American Fat Stock Show at Chicago, where, for the limited number that has been placed in competition, they have been eminently successful in winning highest honors, and with proper encouragement they are capable of doing yet better work than they have hitherto accomplished.

The people of Guelph have manifested a greater sense of appreciation of the importance of this institution than any other of the cities, and are deserving of generous commendation for the part they have taken in giving encouragement to the management to locate the show in the Royal City. We understand that the new skating rink recently opened in that city will be placed at the disposal of the directors, and that the accommodation will be immensely in advance of anything heretofore enjoyed.

The Board of Agriculture will meet at Guelph during the show, and the annual meetings of the Sheep Breeders' and Swine Breeders' Associations will be held the day previous to the opening of the show. We understand that there will also be a convention of delegates from the

various cattle breeders' associations held on the same date, with a view to organizing a national cattle breeders' association charged with the interests of that great industry.

When the objects and aims of the management are fully matured, we hope to find that the annual Christmas Fat Stock Show, and the annual meeting of the breeders' associations, will be regarded as the "round up" of the breeders and feeders of the Dominion in each successive year, and that it will prove to be one of the most interesting and profitable gatherings of stockmen and farmers we shall have. It comes at a season of comparative leisure for the farmer, when the outside work of the farm has been wound up and the stock has been placed in winter quarters, and the husbandman ought to feel entitled to a breathing spell—an opportunity to take notes of the year's work and to take counsel with his fellow-farmers. We hope to see a large gathering at Guelph, and the ADVOCATE will do its best to secure and distribute all the lessons available for the benefit of its large and important constituency.

Freeman's Potato Contest.

It is seldom that a more interesting task falls to the lot of the members of the staff of an agricultural journal than that which was entrusted to the editors of the FARMER'S ADVOCATE deciding between the contestants for the handsome prizes offered by the Freeman Fertilizer Works, of Hamilton, Ont. As published in our advertising columns, the sums of \$50 and \$25, respectively, were offered for the best and second best yield from one acre of potatoes, the growth of 1892, obtained by the use of the special potato manure manufactured at their works.

One of the rules of the contest was that stable manure or any other fertilizing material was not allowed to be used, which appeared to have been overlooked by some of the parties who had entered for the trial.

The potato crop is one of the most profitable that can be grown on the farm, and when a suitable soil is found a good deal more money can be made than in growing any of the grain crops. The principal difficulties that present themselves are the labor required at digging time, and the manure that must be supplied from some source. The latter is always a perplexing problem when the crop is intended to be sold from the farm, for when barn-yard manure is systematically applied and the crop produced from it sold, there can be no more certain way of impoverishing the farm, unless some means of supplying the loss thus sustained is provided for.

Although the potato crop is not generally considered very exhaustive to the soil, still it requires a liberal application of manure in some form to obtain a good yield, and few farmers produce sufficient barn-yard manure for their general crops without applying it where no return is intended to be given to the farm.

If we can judge from the reports in this contest it will pay and pay most liberally to use largely of a special fertilizer to the potato crop, and, what is still better, the land will be left in a richer condition after the removal and sale of the potato crop than it was before the application of the fertilizer. If we take the greatest yield given in this contest, according to the computation of the most skillful analysts there is \$14.26 in value taken from this acre of soil in producing this crop of 315 bushels of potatoes; and again, calculating at the lowest estimate given by the government analyst of the value of elements left of the 1,200 pounds of Freeman's potato manure after producing this crop, we find there is still several dollars' value in these essentials remaining after producing this crop of potatoes more than it contained before the application of the fertilizer. It must also be remembered that after producing this crop the land is in far better mechanical condition than before, and should be quite equal in this respect to the most approved summer-fallowing.

Many of our best farmers are of the opinion that cattle feeding is the only practical plan of supplying the necessary fertilizing elements to the soil, but in order to add to the store of fer

tility the feed must be purchased, for if that which is grown on the farm only is consumed nothing is added to the resources it already contains. Therefore, the only feasible plan that can be devised is to buy the amount of fertilizer that will be required to produce the crop intended to be sold, or the farm will be just the amount short that it required to produce the crop grown.

The practice of growing potatoes for sale is really worse in one particular than producing wheat, for here the straw is left to be returned to the land; therefore, it is more on a par with growing grain and selling both straw and grain from the farm. Here also the greater the yield in the crop sold a larger amount is sold from the producing power, and it is only a question of time until a farm under this management will not pay for the expenditures required in growing the crop sown on it. The advantages of the experiments that have been conducted through the prizes offered in the contest we are about to review must be of untold benefit to all agriculturists. If it can be proved that a fertilizer can be supplied at an expenditure that the crop will warrant, the tables are then turned the other way, and the crop thus produced is a material advantage to the land it is produced upon, for the potato crop is one that gives the best results as a cleaning crop, and it is also one of the most useful to follow with grain.

It must be borne in mind, in estimating the results obtained from any commercial fertilizer or stable manure, that it requires a moderate amount of moisture all through the growing season. In order to receive the best advantage from any fertilizer, the elements contained in it must be made soluble under a moist condition of the soil to which it has been applied. Therefore, the extremely dry weather experienced at the most critical period prevented the crop in this contest obtaining the benefit that it otherwise would have derived. Taking it all round we must consider that the results obtained were astonishing, as it is generally conceded that last season was the most unfavorable for potato production we have had in many years.

The following are the yields per acre reported, together with the mode of working the land adopted by each of the most successful contestants:

David Quantrell, Cobourg, grew 315 bushels of potatoes, of which 15 bushels were small, comprising two varieties, viz., Burbank's Seedling and Rural New Yorker No. 2. The land was prepared by plowing (in the fall of 1891) out of sod off which had been cut one crop of hay one year after being seeded. The land was replowed May 12, 1892, and thoroughly harrowed and drilled; then 600 pounds of Freeman's potato manure was applied in the drill and mixed with the soil, an additional 600 pounds having been sown broadcast, thus 1,200 pounds was used on this acre. The seed was planted whole (medium-sized potatoes being selected), and 960 pounds to the acre, and planted May 24th. The vines appeared above ground June 3rd. The cultivation consisted in harrowing the ground three times, twice cultivating between the rows; also hand hoeing, to effectually kill the weeds among the plants. The crop was harvested September 20th by hand digging with potato forks. Mr. Henry Pickett, Clarkson, grew 281½ bushels of potatoes, of which 30 bushels were small, comprising two varieties, viz., Freeman and Rural New Yorker No. 2. He used 2,200 pounds of Freeman's potato manure, and prepared the land by applying first 400 pounds before plowing, which was performed May 16, then 600 pounds were sown broadcast and the land harrowed and drilled, and another 600 pounds applied in the drill, and a fourth application was made after by working around the hills. The seed on this plot was planted May 20, and cut two eyes to the set the day previous to planting, 930 pounds being used. The plants appeared above ground June 11, the ground having been harrowed twice and cultivated between the rows three times, and hand-hoed three times, drawing a little earth to the plants the last time. The crop was dug with potato forks on the 20th to 24th of October and weighed and pitted. Jno. Armour, Victoria Road, grew

264 bushels and 20 pounds of potatoes, one variety, viz., Rural New Yorker No. 2, and used 1,800 pounds of Freeman's potato manure, 1,200 pounds of which were applied in the drill after planting and covering one inch deep with the hoe, balance when the potatoes were six inches high—the land having been cropped with potatoes, corn and turnips for the three previous years. In his case the land was plowed in the fall of 1891, and harrowed and drilled in the spring. Francis Peck, Ameliasburg, Albury P. O., Prince Edward County, grew 189 bushels on his acre, of which 13 bushels were small, the land having been cropped with potatoes for three years previously without manure, at this time having been plowed from an old pasture. Four different varieties had been tried in this contest, of which Munroe County Prize did the best. The land was plowed the 7th of May. In this test 1,350 pounds of Freeman's potato manure were used, 600 of which were applied after plowing and harrowing, the balance being applied in the drills. Equally good results were obtained by other parties in this competition, but they were disqualified by applying stable manure to their plots, which the rules strictly forbid, the object being to find out the benefit to be derived by applying the fertilizer alone.

It is evident that all the contestants did not apply the fertilizer by methods through which the greatest efficacy might be traced, but in these cases there would be a large proportion of fertilizing elements left over for the next crop.

The subjoined table gives the names of the four highest competitors, the amount in pounds each applied, the amount in bushels in the different yields, money value applying, money value obtained at 60 cents per bushel—the current prices at this writing, profit between the value of manure applied and the crop obtained. The rent of land and work required each can easily figure for themselves:—

Name of Contestant.	Amount Applied in Lbs.	Amount of Yield in Bush.	Money Value Applied.	Money Value Obtained.	Money Value by Crop.	Profit.
D. Quantrell.	1200	315	\$24.00	\$180.00	\$14.25	\$156.00
Hv. Pickett.	2200	281½	44.00	168.90	12.75	124.90
Jno. Armour.	1800	264 1/5	36.00	158.52	12.02	122.52
Francis Peck	1350	189	27.00	113.43	11.31	96.40

As this contest will be continued in 1893, we hope to see a still larger number of competitors enter the next time.

A Few Points on Horse Breeding.

Perhaps there is less judgment shown in horse breeding than in that of any of the animals on the farm, and those engaged in this interesting work must be again reminded that all success in the breeding of animals is based on the selection of the parents and on the treatment of the progeny. We again lay down the fundamental principle that "like produces like," and this maxim applies not only to the production of the qualities of external form and utility, but to the constitutional vigor and the predisposition to disease. Experience has most fully shown that no animal we breed is more liable than the horse to transmit blemishes as well as beauties, and that diseases of all sorts are transmitted to the progeny; if not in the first generation, they very speedily appear in that immediately succeeding. This consideration increases the necessity of a judicious selection, for the propagation of diseases of any kind is even worse than the continuation of unsightly form and of condemned points.

The mare from which the breeder intends to breed must be free from disease of any kind; carcass roomy, barrel wide, large and round form, with ribs curving from the back, the short rib well "home," or leaving a short space between it and the hook bone; thighs deep and muscular, bone of hind legs flat and thin, and must have no appearance of swelling or any kind of thickness; feet clean, firm and sound; pasterns oblique; the arm in front wide, chest deep, shoulder oblique and sloping backwards at the withers and shortening the back; top of the shoulder narrow, neck rising in an arched form from the

withers and drooping a little from the set on of the head; crest strong and firm, and thickening downwards; ears long and fine, and quick in motion; eyes prominent, quick, bold and lively; face broad between the eyes and tapering to the muzzle; cheek bone not very broad, which shows coarseness; muzzle small, lips short and thin, nostrils expanded but neat; foreleg standing well forward, and not under the belly of the animal; bone clean and short in hair, feet standing concave and not flat, knee joints flat and broad.

The most objectionable points that the breeder has to guard against are heaviness of form and dullness in action, and round, bound legs. These indicated disease, and never fail to constitute a dull, lumbering animal with a sluggish motion and with funeral tastes. In order to remedy this defect, ample elements exist, so soon as the breeder is able to divest himself of the idea that bone and flesh constitute strength. A heavy belly is also objectionable, showing a great quantity of offal to be carried about in a loose shape. A main point in breeding lies in reducing the size of useless parts and in getting rid of unnecessary appendages. A leading point with our first breeders is to reduce the size of the animal, in order to acquire symmetry and compactness.

The productions of nature are so varied that ample store of elements almost everywhere exist; one animal is found of a finer form than another, produced by nature or by chance, and these varieties afford the instruments with which the further improvement is effected. No organ in the animal body shows the result of a superior organization more quickly or more durable than the eye; in every case of breeding it is prominent, pert and lively, and forms a point of great importance in the selection of animals. When the body is in a state of inaction the visual organ should appear placid and easy; but when any symptoms of exertion are required, the eye must give the first signal, and communicate to the other parts the intelligence that the time of action has arrived, and these parts must be ever ready and willing to obey the summons by being closely knit and joined in combination, compact and ready for action, and not loose or disjointed or far between. A horse may be called society in miniature, the component parts of which must be refined for action and polished for use, and adjusted so that each part assists the other in the most direct, the most rapid and the most precise combination. These qualities are obtained under the name of "spirit and action," and proceed from a superior organization by assorting and joining the similar parts in combination.

The qualities of the male require a similar examination, for though the best animals are usually kept for the purpose of propagation, yet a discrimination is essentially necessary. The animal must be clean-legged, with a flat, thin bone, barrel rounded, and carcass rather light; lofty oblique shoulders, tapering withers, arched neck and small head; eye impetuous, but at the same time placid; ears fine, but quick in motion; color, bay or brown. It is a sign of hardihood when the legs are darker in color than the body. The brown or dark bay seems to be the hardest of all colors, and an animal of that sort, when well-bred and of a uniform color throughout, shows a production of skill and judgment.

The breeder having by the exercise of his professional skill obtained a valuable progeny, the rearing of it demands equal care and attention with the propagation, or his purpose is only half effected, and the neglect of one part will render the other useless and of no avail. The finest forms are destroyed, the most unbounded spirit and action are broken down and annihilated, by bad usage and carelessness. An ignorant consorting of the elements of propagation and a starvation in the rearing produce a race of animals to be seen in our fairs—a specimen of ignorance and a disgrace to the agricultural occupation. Breeders are possessed with the idea that animals must be starved in order to be reared and kept at little cost; and certainly a more fallacious idea cannot be entertained on any subject of the kind. Ample feeding and comfort are essential to the rearing of animals of any sort; feed the dam while she is employed in suckling, and she will nurse her progeny.

In subsequent years the young animal must have an ample supply of food suitable for its age, and enjoy at the same time the accommodation, comfort and warmth that are necessary for developing the effects of the food it eats, as without the latter provision the former may be in a great measure paralysed. The successful rearing of animals also requires a suitable provision of accommodation in the shape of farm buildings, without which the food cannot be economically used or administered, nor the animal derive the full benefit. The want of suitable accommodation is very justly urged as an impediment of good farming; in point of good breeding and rearing forms a very serious obstacle.

The Pleuro-Pneumonia Scare.

The pleuro-pneumonia scare in Canada is now an undoubted fact. We have long urged upon the authorities to take more care in the shipping of live cattle across the ocean, and Professor Brown, of the Privy Council Department of Agriculture in England, has ordered the slaughter of the whole stock, numbering over 100, which had been in contact with an animal said to be imported from Canada, and all stock owners who bought animals out of the same shipment are warned that they cannot remove a single beast off their farms.

The great majority of stock importers is firmly of opinion that the particular animal did not suffer from pleuro-pneumonia, because the disease is not known in Canada. Professor Brown, Messrs. Cope and Duguid, all experienced veterinarians, say:—We have here a disease which so much resembles contagious pleuro that we will have no doubt on the subject. The British Government have spent thousands and hundred of thousands of pounds sterling to get rid of this bovine scourge, and being free are determined to abolish and prevent, if possible, a fresh importation. In the City of Glasgow alone the annual loss from the disease to the dairymen reached the large sum of £4,566, and for the past two years there has not been a single case in any cow-shed within the municipality.

Professor Williams, of Edinburgh, the well-known author of veterinary works, stakes his reputation as a veterinary authority that this case is one of broncho-pneumonia, or corn stalk disease, and not a case of genuine contagious pleuro at all—so that one is led against their own inclination to believe that there must be some reason for this sudden hostile attitude towards the cattle from the Dominion of Canada. Whether the new Minister of Agriculture, Mr. Herbert Gardner, a country gentleman of whom very little is known as an authority on agricultural affairs, has been forced to adopt this step, we can only surmise. The fact is that never before has such a disease been proved or even suspected to exist in this country, and we regret that there is now the stigma of exclusion put on our cattle, or that they are suspected of having pleuro pneumonia.

This disease never has been seen in this country, and indeed diseases of the respiratory organs are very uncommon. Fortunately this is so, when we consider that Canada is essentially an agricultural and stock-raising country, for, according to recent statistics, there are more people engaged in farming than any other occupation. In the United States there are 44 people in every 100 who are engaged in agriculture, as compared with 56 in Canada, 7 in England, 16 in Germany and 48 in France.

Speaking practically of pleuro-pneumonia, during the whole course of the existence of this bovine malady, until very lately it had been but little understood.

All that could be said of the matter was, that such and such an animal was a "lunger," meaning that the animal in question was suffering from pleuro-pneumonia. It is only quite recently that it had been shown to be a germ disease or micro-organism.

The fact that the disease was confined to the lungs and pleura, or pleura (a serous membrane which lines the inside of the chest or thorax), somewhat prevented the external manifestation of the complaint, and thus there was no possibility of its escaping from the system by any other channel than the lungs. A great number of experiments or attempts have been made to communicate this disease by indirect means of food and water, but the gross results tended to show that independently of natural infection the means by which the disease was propagated were very doubtful and difficult to determine. Having gained access to the air passages, the germ or organism must either produce its effects on some part of the lung tissue through the bronchial tubes or gain access to the blood in the circulation and there multiply, producing in its effects the process of inflammation, then depositing its material in the pulmonary apparatus (lungs) secondarily.

This germ, when fully established, tended to spread, though curiously enough it seems to be limited in its attack to some particular spot.

This limiting character of the disease was of the utmost importance, for it is only by this means we can understand or explain why it was so prolific in carrying the infection from stock to stock. Those who followed in our paper the articles written by Dr. Mole, N. S., on "Inflammation," will remember that in speaking of lymph being thrown out as a result of inflammatory action, it was always the product of injury to a tissue. Immediately after the inflammatory process was perfected and its extension arrested, the damaged portion of the lung became surrounded by coagulable lymph, which acted as a temporary capsule, and so long as this encapsulating wall was preserved the subject remained harmless.

After a time—weeks or months—active changes again take place; as a result the imprisoned lung became softened and liquified in this way; the expired air became charged with the micro-organisms ready to invade a fresh subject.

The most potent factor in the spread of this malady was the actual cohabitation of diseased with healthy animals.

Bad ventilation, insanitary surroundings, over-crowding, moist condition of atmosphere, and warmth were all favorable to the propagation of pleuro-pneumonia, and no where are they more exposed to these conditions than on board cattle ships.

We are not in a position to speak of broncho-pneumonia, as the disease has never come under our immediate observation, and therefore it would be idle to speculate as to the exact conditions as seen in the living animal, but according to the reports recently received on this matter the characteristic symptoms of broncho-pneumonia and true contagious pleuro-pneumonia are very similar to the naked eye and require accurate microscopic examination to separate. But there is one test by which it may be clearly proved whether any suspicious case like the case of the Canadian stocker be really contagious pleuro or not; that is, by inoculation of some healthy animal with the lymph from the lungs of the suspected one. If the disease be really contagious pleuro the animal will have a modified form of that complaint, but if the disease is not no such results will follow.

We would urge on the authorities to at once institute a commission on the whole subject of the prevalence of contagious diseases in Canada, to investigate the method of collection and devise means of identification, for by these means alone can the confidence of those in the Old Country be restored.

Stock.

Scheduling Canadian Cattle.

BY J. C. SNELL.

The order of the British Government scheduling Canadian cattle may and no doubt will for a time have a depressing effect upon this great trade, which has been so full of interest to the farmers of the Dominion, as well as to the men who have been engaged in exporting cattle, yet we believe it is safe to counsel our friends to take a hopeful view of the outlook. We have still equal privileges with the rest of the world, inasmuch as our cattle may go to the ports of England to be slaughtered if they may not go inland alive, and if we give more attention to the quality and condition of the stock we send over we can hold our own against all comers. There is no doubt that the shipment of dressed meat is the safest and the most economical mode of disposing of our surplus cattle, as probably five times as much meat can be shipped in the same space, and the expense of feeding and care will be saved while in transit, but with the experience in this line that our American friends have had with the mammoth dressed meat companies, it behooves the representatives of our agricultural constituencies to use every exertion in preventing a repetition of this monopoly. The shipment of "stores" or "stockers" to be fed in Britain, while it has been the means of bringing in a little ready money to those who were not prepared to feed their cattle here, has been in the long run a source of loss and a detriment to the farmers of Canada. It has been a huge mistake to sell cattle at such low prices as have been received for this class to be shipped to the Old Country, where our coarse grains, and in some seasons our hay, also sold at low figures, is shipped after the cattle, to be fed to them over there to fatten them, to be placed in competition with our own beves in the markets of that country. How much wiser it would be to feed the cattle at home, and get the advantage of the increased weight and the improved prices which prevail in the spring, besides making a large quantity of the best manure to keep up the fertility of our farms. In the average of years we think it is safe to say that the steer that will sell for only \$30 to \$35 in the fall will, if fed well, bring from \$60 to \$70 in the spring. Surely this is a more profitable way of disposing of the hay and grain we raise than putting it on the market in competition with the cheaply grown product of our Northwest provinces.

Another point which needs to be particularly emphasized, if we would hold our own or take a high place in the markets, is the necessity for improving the quality of our cattle. It is a constant complaint of drovers and feeders that they cannot find a sufficient number of well-bred cattle that promise to give the best returns for feeding and handling. It seems unaccountable, after the innumerable examples of the fact that well-bred animals make a vastly greater return for the feed they consume, that so many of our farmers yet fail to avail themselves of the privilege of improving their stock. It surely is not because the cost of pure-bred males is high, or the charges for their service exorbitant. We venture to say that at no time in the last thirty years have the rates been more moderate, and yet we regret to say that we hear the remark frequently made that our cattle are not as good as they used to be, and that it is more difficult to find a good selection for feeding purposes than formerly.

If it were not for the immense importance of the subject, and our intense interest in it for the sake of all concerned, we would be disposed to grow weary in the work of urging the farmers of Canada upon this point, but it is too serious a matter to be dropped, and we are constrained to repeat it "line upon line, here a little and there a little." We must, if we would make the best use of our privileges, have better cattle and more good cattle. To this end let every man who reads these words, and who has given thought to the subject, resolve to do his part by precept and example to bring about the desired result.

Greenhouse Farm Shorthorns.

The accompanying illustration represents four animals that have made the round of the shows during the past season, and although this has been the initial attempt at competing for honors at the great shows by their proprietor, Mr. W. B. Cockburn, Greenhouse Farm, Aberfoyle, Ont., he has met with a success that a young breeder seldom attains.

The bull portrayed in the foreground is Greenhouse Chief, and sired by Mr. Arthur Johnston's imported Sittyton-bred bull, Indian Chief. Greenhouse Chief has only met defeat once during the late show campaign, and this in the ring for sweepstakes at Ottawa, while at Toronto and Montreal, as well as at the former city, he won first in his class, while at both latter-mentioned places he won sweepstakes as

judgment in selection, and bid fair to be the foundation of an exceedingly good herd.

Among the young things are an exceedingly good lot of young bulls that are now ready for service.

Mr. Cockburn has a nicely chosen lot of Shropshires, embracing a very even flock of the best type, most of which were selected from the importations made by Mr. Hawkshaw.

The Greenhouse Farm is situated 7 miles south-east of Guelph, and is two miles from the Corwin station on the C. P. R., and is therefore conveniently situated for high-class herd and flock.

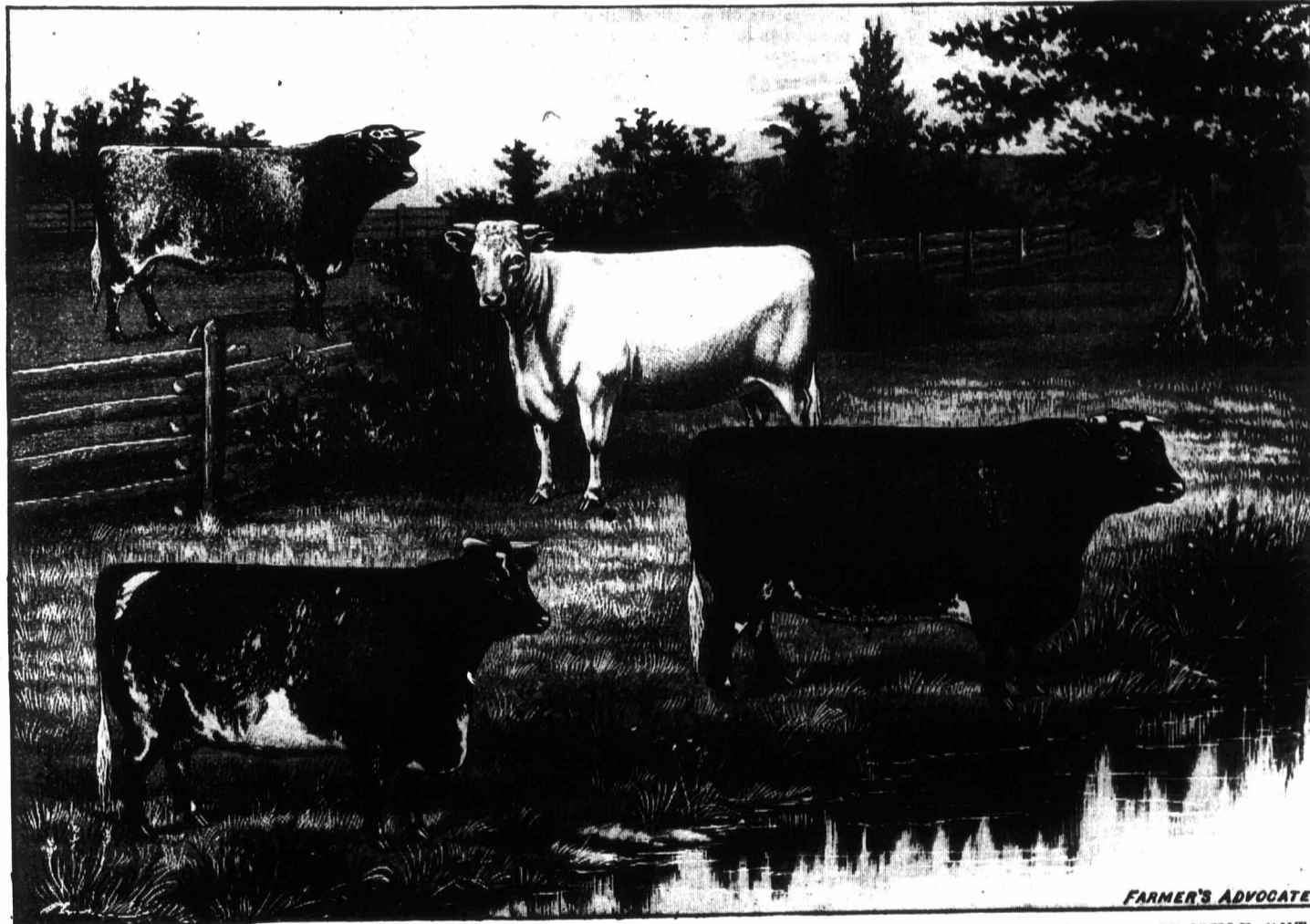
Price of Pork.

BY SANDERS SPENCER, HOLYWELL MANOR, ENGLAND.

"Best hogs are selling at \$5.50, about the same as a year ago." So wrote, in your October number, your correspondent who each month

from the chief bacon producing markets on the continent.

Bacon has been making extravagant prices of late in London, providing the sides are long and deep, thick in the flank, light in the shoulder, heavy in the gammon, and not over fattened; for such there has been a wonderful demand, and at prices which must have brought large profits, either to those who produced the pigs, manufactured the bacon, or, it is to be hoped, to both. A good many of the Irish pig feeders grumbled terribly last autumn at the miserable prices offered by the bacon curers for fat pigs, and one of the effects is evident in the enormous reduction in the pig production in Ireland. In the Irish Farmers' Gazette of the 5th ult. is given an extract from the Registrar General's returns, which shows that the decrease in the number of pigs is over a quarter of a million, the exact figures being, for 1891, 1,367,712, and for 1892, 1,115,888. One particularly noticeable feature is the very great reduction in pigs over one year



A GROUP OF PRIZE-WINNING SHORTHORNS, THE PROPERTY OF MR. B. COCKBURN, GREENHOUSE FARM, ABERFOYLE, ONT.

the best bull of any age. Greenhouse Chief is a remarkably smooth and handsomely finished bull, and is a strong candidate for future honors. During his two-year-old form he has competed at a disadvantage, being only two years old in June.

Wimple of Halton, the two-year-old heifer at the left, belongs to the Kinnellar family of that name, and unites both orthodox breeding and show yard quality, having also won third place at the three above-mentioned exhibitions.

The white yearling heifer is among the best that have appeared at Canadian shows in several years, as her record for the last show season testifies. Altogether Mr. Cockburn is to be congratulated upon the success that his first campaign has met, and the great number of prizes won will doubtless encourage him to continue another year in an enterprise so aptly begun. The Shorthorn herd comprises 20 head, which are of superior type, displaying great

furnishes the FARMER'S ADVOCATE with a few most interesting notes on the state of affairs in the States. May I ask, is there not here some slight error. In the telegraphic market reports in the Times of to day, the 5th of November, I read:—"Chicago, Nov. 4th.—Bacon is steady at nominal rates. Hogs are unchanged. The hog receipts at the eight western cities, including Chicago, since November 1st, amount to 219,000, against 277,000 a year ago. Values to-day: Light, \$5.30; previous day, \$5.30; same day last year, \$3.65. Heavy, in same positions, \$5.35, \$5.35, and \$3.95." In the last copy of the Breeders' Gazette to hand, October 19th: "It is evident farmers anticipate continued good prices, for they are making the hogs good before turning them off. Rarely has the average quality been as good at this time of year."

In Ireland a wonderful increase in the value of pork has taken place. It is now selling some 30 to 40 per cent. dearer than a year since; at least the same advance is noticeable on the English markets, and similar reports are received

old, of which we may safely assume that breeding sows were the chief proportion.

In the Munster News the Limerick reporter states: "The current price of hogs is 48s. for bacon pigs, whilst Berwicks, being very scarce, command the absurd addition of 5s. or 6s.—absurd because they are not in the fairs to be bought, and price does not enhance their supply." About this quotation there is a strong flavor of Irishism; but I believe the meaning of it, put into plain English, is that bacon pigs are 16s. to 18s. per cwt. dearer now than at this time last year, and that the lighter weights and choicest pigs are scarcely obtainable at any price. It would thus appear that all the world over really good fat hogs are exceedingly scarce, and compared with the prices of other meats, relatively dearer than at any other time for a great number of years. The prospect must then be a good one for all those who have any number of hogs of the right sort, since with the high price of pork we have also all feeding stuffs at an exceedingly low level as regards value.

The Cattle Situation.

BY G. F. FRANKLAND.

The scheduling of Canadian cattle has created much bitter feeling, not only in Canada but in Scotland also, and from all the sources I have been able to gather knowledge in regard to the unfair and high-handed proceeding of the English Agricultural Bureau, I still remain of the opinion that the flocks and herds of the Dominion are free from contagious disease. If I thought otherwise I would hardly have dared to purchase 500 feeding cattle for the British market. Eighteen years ago the markets of Canada were filled with animal food, with few customers, and the prices were disastrous to our farmers. Pork, \$4 to \$5 per hundred, sheep and lambs from \$3 to \$4 per head, and beef from \$2 to \$5 per hundred, and it was lying in stacks around the St. Lawrence market here, while in Great Britain it was selling at \$18 per hundred, sinking the offal. At that time the United States had a big surplus, and was looking for markets; therefore Canada, having no other resource, entered upon the ocean cattle trade, which, with the clean bill of health enjoyed, has continued to the present and has ever been increasing in volume. It is true that from the beginning our live stock had to undergo twelve hours' quarantine, and a close examination from the local veterinary surgeon appointed by the Privy Council even, and were occasionally detained on suspicion while the lungs were sent to the great authorities in London, yet we retained our clean bill of health. Since those days great changes have taken place in supplying animal food to the millions of people of Great Britain. Refrigerators and cold storage have been brought to great perfection and, as a consequence, America has flooded the country with large shipments of dressed meat, at a serious loss to the American farmer, while millions of carcasses of mutton from Australia have found a market at some price in Britain, which the manufacture of ice has enabled them to take advantage of. At one time these were melted down simply for the extraction of fat. South America has also become a great factor, so that England at the present time is reaping a rich and cheap harvest from almost every part of the world, and the price of animal food, with the exception of the very best quality, is selling at a lower price in Britain than in any part of Europe. During all these years the thoughtful farmer will readily understand that England, Ireland and Scotland have been handicapped in their agricultural industry, rents have been lowered, farms abandoned, and as a result everything is being tried to place the British farmer in a position to compete with foreign supply, and that is the reason, in my opinion, why Canada is shut out from the markets of Britain. From what I have heard, while engaged in conversation with those supposed to know, during my transactions of the last four years, I have been expecting what has happened. Britain is over-supplied, and they can without alarming the masses depend upon a steady supply, no matter what obstruction is placed on foreign supplies. I have certainly depended much on liberal treatment for this great, loyal Dominion, which would be a source of comfort and strength to Britain, in case of war with America or continental nations, by supplying food in abundance. I can only reiterate what I have often written: Canada must gird up her loins and take advantage of her improved breeds and feed liberally, grow high-class cattle and finish them not only for May, June and July, but arrange to have cattle for every month in the year.

Our Government must admit corn into Canada free, or anything else the farmer requires for cattle feeding, for the success of the Dominion depends largely on a successful yeomanry.

If Canadian cattle are not permitted to go further into Britain than the port of debarkation, surely arrangements can be made that will enable them to have separate stables and slaughter houses established at such points as close to Manchester as possible, and also another at or near Deptford-on-the-Thames, London, as the present buildings, both in England and in Scotland, are occupied to their fullest capacity by cattle from the United States. There are

times when ships heavily laden, full of cattle, have to anchor in the Mersey, waiting for room to debark their hundreds of cattle. But let me warn Canada against the idea of any profit being formed in shipping dead meats. We have only to look at what the cattle men of the United States have lost through this means. Many of our prominent men are reported as saying that the scheduling of our cattle will lead to good results. I would fain hope so, but I think otherwise. However, we must battle with the new regulations as best we can. Canada can hold her own, if every appliance is made to work, in the production of cattle that can be marketed at the same price as the markets of Chicago. For it is acknowledged on all hands that that great market dictates the price of all animal food, not only in their own country, but also in Great Britain.

Our Scottish Letter.

THE CO-OPERATIVE PRINCIPLE IN HORSE BREEDING.

The system on which stallions are hired in Scotland has long been a subject of interest to those engaged in the breeding of horses in every part of the world. The patriarchal oversight exercised by continental government, with the institution of national haras, has not done nearly so much to promote horse breeding as the voluntary associations which have so long held sway in Scotland. It cannot be said that horse breeders were the first to adopt the co-operative system, and there is some reason to believe that the famous Robert Bakewell, of Dishley, is entitled to the credit of its inauguration. It is at least certain that about the close of last century societies were formed amongst sheep breeders for the purpose of hiring the Leicester rams owned by Bakewell, and that he derived a princely revenue from this source. The Scottish stallion-hiring system is, however, an ancient one, and may very well have come into existence as the result of a general feeling in favor of improved horses, and without reference to any other scheme of a like nature. Several of the local societies or clubs have existed for over thirty years, and are still in a healthy, thriving condition. This result can only be attained by the exercise of mutual forbearance and generous charity amongst the members. The usual method of procedure is this:—A local banker or lawyer summons a meeting of those interested in horse breeding, to be held on a given day and hour at his office. Those who assemble form themselves by resolution into a society or association, the object of which is defined in some such terms as these: To improve the breed of horses in the locality by the introduction of a superior class of travelling stallions, this object to be attained by the hiring of the best horse attainable, at reasonable terms. A sum is fixed as the amount payable by each member as an annual subscription, say 5s. or \$1.25. In addition, the members agree to endeavor to raise funds to augment the capital of the society, and to use the horse or horses that may be selected. Frequently the land owners within the radius of the society's operations subscribe to the funds in sums from £3 up to £10 per annum, and some, like the Duke of Hamilton, the Duke of Argyle and the Marquis of Bute, subscribe as high as £80 and £100 per annum, merely stipulating that an effort be made to hire a horse at terms that will be within the reach of all the tenants on their estates. Funds having thus been raised, the executive meets and a statement is made to them of the financial status of the society. The questions of the kind of horse that is to be chosen, the lines of breeding, and the terms on which he is to be hired, are all discussed, and in the end a committee of selection is appointed. Sometimes the amount that they are to pay in premium, and the fees they are to guarantee, and the number of mares to be served, are expressly stipulated—at least the maximums are named; in other cases the committee, having full cognizance of the financial state of the society, and the character of its membership, are given a free hand, and told to make the best selection possible on the easiest terms. In other words, the instructions given are general, and not

particular. Sometimes there is a difficulty in regard to the number of mares. Where the membership of the society or club does not exceed eighty, each member is under obligation to give the horse one mare; and if he does not like the horse, he must find one who does like him and is willing to give a mare. Failing this, should he not use the horse, he must pay the owner of the horse the amount of service fee for one mare. In cases where the membership is varied, the committee may guarantee a definite number of mares, the usual figures being sixty for a three-year-old horse and eighty for an aged horse; and should the horse prove popular, the right to his services is balloted for, each member being entitled to one service to begin, and should this not fill up the guarantee, the ballot decides who are to have further use of the horse. In such cases the terms agreed on may be something like this: A premium of £80; a guarantee of eighty mares at £2 10s. each, payable at the close of the season, and other £2 10s. about the month of February for each mare that seems to be in foal. The owner of the horse agrees to give free service of one mare to each of those farmers at whose places the horse stays when on his rounds. The terms now quoted are regarded as good terms. They mean an income from one horse of about £400 at least. This, however, is an exceptional figure; more commonly the rates will run thus: £100 premium, no guarantee of mares, but a maximum of 100 named; fees to be £1 at service, £1 10s. additional for each mare proving in foal. These terms mean in the average cases an income of not less than £250 from a horse. In the majority of cases in which terms such as these rule, the horses hired are animals with an established reputation as fairly good breeding horses and approved foal getters. They are generally horses not in the front rank, but of better than average merit—useful horses that are known to leave stock that finds a ready market.

Of course there are horses engaged on terms that exceed those quoted, and there are horses engaged on terms that are less than those quoted. A number of breeders, say three, or four, or six, sometimes club together and hire a horse on their own responsibility. They guarantee the owner a number of mares, say seventy at £7 apiece, payable at service, and leave him free to take other twenty mares if he can find them. They then set to work to find subscribers to take up nominations for the seventy. In such cases the hirers are usually men who have a large number of mares of their own. One may have seven, another five, or another two, and when such men take the lead in supporting a horse it is usually easy to get up the necessary quantity of mares guaranteed. I should have mentioned that when a society hires a horse and gives no guarantee of mares, it is understood that each member of the society is under obligation to use his influence in support of the horse, and usually a horse owner is well content to take this. This course has some recommendation from a horse owner's point of view. This arrangement is a little loose, and hence is favored by the horse owner because it does not bind him too tightly either. The one great drawback in the case of horses hired in this way is, that if the selection be not popular, the district in which the horse travels is usually short in foals, as many do not use him, and the horse owner also suffers. This unfortunate state of matters often gives rise to heart burnings, and more than once has been the means of wrecking a society or club. I would be strongly in favor of a rule in all such societies binding the members to support the horse selected. If a mistake is made, it is unfair to make the horse owner suffer. He only did his best to get his horse let. The committee were under no obligation to take him, and his owner should not suffer because of a mistake for which he was in no way responsible. Be the choice bad or good, the committee should be supported so long as their term of office lasts. Only thus is it possible to keep such societies or clubs alive. A committee that errs need not be re-elected, and in most cases that have come under my observation, the effective method of silenc-

ing a critic is to place him on the next committee of selection. In nine cases out of ten the eager critic of the action of others himself proves the most incompetent committee man. The great hiring fair for the season is the Glasgow Spring Stallion Show. It is divided into two sections, one for horses competing for the Glasgow district premiums, the other for horses competing for certain graduated prizes. All entered in the first section are under obligation to accept the premium of the society, and travel in the district round Glasgow during the season. Those entered in the other classes are under no such obligation. The winner of the Glasgow premium may, however, compete in the other section. The secretaries and committees of other societies are invited to make their selections at Glasgow, and on intimating their intention to be present, free passes to the show-yard are sent to them, and a ring reserved for their special use, in which they can obtain a favorable view of the competing horses. This is a system that should be adopted at the Toronto Spring Stallion Show. It does not preclude societies from making arrangements beforehand, but it affords special facilities for making local selections. As a matter of fact in Scotland a good many selections are made before the Spring Show is held. Already, e. g., for the season of 1893, the Stranran District Societies have secured Handsome Prince and Mains of Airies; Stirling has got hold of Bolvidere; the Strathmore Horse Breeding society have hired Prince of Carruchan; Lower Wigtownshire secures Orlando; Ayr and Kilmarnock has got hold of Crusader of Orchardmains; Lord Polwarth has hired Prince Alexander for thirty mares at £10 10s., payable at service, and £10 10s. additional for each mare proving in foal; and Eirvan and Ballantrae District has secured the H. & A.'s first prize horse Goldfinder.

SCOTLAND YET.

Should Farmers Grow More Pork?

BY WM. DAVIES.

Many of your readers suppose that we have "an axe to grind" in urging farmers to raise and feed more hogs, sell them alive, and at the proper age and weight. We own "the soft impeachment"; we are desirous of having a regular supply, in order that we may keep our expensive plant and extensive staff of men fully employed.

In our last we mentioned the experiments of Prof. Robertson, at the Experimental Farm, Ottawa, and his remarks thereon, and it is abundantly clear that all we have been advocating for the last few years is in the interests of the farmers as well as pork packers, and we give the following extract from page 93 of his report:—

"The Danes have learned to cater for their customers, and have not believed in trying to sell hard to a man who wants to eat lean pork. So it will pay us to get leaner and less lardy hogs. The quality that is wanted is lean pork from dairy fed swine. To meet the requirements of the English markets, larger numbers of our swine should be sold by our farmers alive. They could then be slaughtered at packing houses, where the carcasses could be treated and cured in a uniform satisfactory manner. As a rule, it pays the farmer and feeder better to sell his swine on foot than to market them as dressed hogs. Canada competes in the English market with the United States, which sent to England the largest proportion of the bacon she imports. We can increase the profit by reducing the cost through economical fattening and selling the animals before they are too large and old. In the course of feeding experiments at the Experimental Farm, Ottawa, six pens of pigs were fed for over five months. The experiments at the farm at Ottawa show that four and one-half pounds of grain will give one pound of increase in live weight of swine, and that it is not profitable to fatten swine for any market after the weight of the animal exceeds 200 pounds alive. In some feeding tests, during the first month of feeding, when the pigs weighed from 77 to 103 pounds each, only 3.31 pounds of grain were required for each pound of increase in weight. During the next month, 3.07 pounds of grain

were consumed for every pound of increase in live weight. During the third month, 31 per cent. more grain was consumed for every pound of increase, 86 per cent., 110 per cent., and 125 per cent. more grain was consumed for each pound of increase during the next three months, respectively. At the end of the test the pigs weighed an average of 231 pounds each. For the last month's feeding 6.93 pounds of grain were consumed for every pound of increase in live weight."

All who read the newspapers will see that there is a probability of an extensive export pork-packing establishment being operated in London, Ont. The firm contemplating this venture, of course, expect to have a supply of hogs, and as matters now shape they can only obtain them by abridging the supplies of others, there being no surplus at present raised in Ontario, hence we again urge and entreat farmers to pay more attention to this branch of agriculture. The universal testimony of those who have done so is, that it is profitable. Your readers should bear in mind the difficulties attending the future of the cattle trade, the fact that even if the course is clear for their selling, they are unavailable till they are from two to three years old, whereas pigs can be bred, fed and sold without any difficulty at the age of at most seven months. Then, why should so many farmers stand in their own light by refusing to embark in an enterprise in which we and one or two others are engaged by slaughtering their hogs? Messrs. J. L. Grant & Co., Ingersoll, have made an affidavit, which they have printed in circular form, with results of the loss in weight from live to dressed weight on a number of lots of hogs they have bought. These circulars have been scattered far and wide, and any reasonable man may see from them that export packers are paying considerably more dressed weight for the hogs they buy alive than dressed hogs are selling for on the market. It is time this back number, old fogey business was stamped out, for no matter for what market the product may be intended, it is infinitely superior when manufactured from hogs slaughtered on the premises of the packer, to what it is when killed by the farmer, drawn miles through the mud and rain to a rail road warehouse, piled up like cordwood for a week or more, then again piled into the cars, and on arrival in Toronto or Montreal dragged out and tramped on in the delivery wagons, to receive the same treatment in the warehouses where they are chopped up.

Twenty years ago dressed hogs could be found piled up in cords by the acre in Boston and New York, sent there from the West. We believe we are safe in saying that the business in this line is now defunct.

Cows for More Than One Purpose.

BY A STOCK BREEDER.

Dairy men or, more properly speaking, dairy writers, who breed dairy cattle, are exceedingly fond of heading their articles under such captious titles as "More special breeding," "The day of the general purpose cow is gone," and other equally appropriate headings, each suggestive that neither milk, butter nor cheese can be profitably produced except from a cow of one of the modern dairy breeds, and not unfrequently before the end of the article the writer comes down with a clincher in which abnormal yields at the pail and churn are given as a matter of every day occurrence, where cows of his or her favorite breed are the reigning belles, proving by figures, if not by facts, that the ordinary one-pound-of-butter-per-day cow or the thirty-pound-per-day-of-milk producer is a thing of the past, only to be forgotten with the obsolete implements of the early days.

Now this indiscriminate varring against breeding cattle that will fill the bill for more than one purpose is the correct thing for the champion of the little Jersey, which cannot be fed for beef, or the notoriously hard-keeping

Holstein, that must be supplied with immense quantities of bulky food, and whose flesh is of mediocre quality at best. It may suffice for the dairy writer in the dairy paper, who incessantly harps on this well-worn string, but it is a question if the general farmer is of this opinion. He is not yet satisfied that every calf born will prove a heifer, and that every heifer will become a cow, and every cow (even if she is bred in strictest line of the highest producing blood) will become such an exceptional milk and butter producer.

Only a few amid the rank and file of patrons of creameries and cheese factories ever hope or expect to own a pure-bred herd of cattle. With them the high grade is as high a notch as they expect to attain, while more farmers expect to make no special effort at supplying either, but rather breed with a view of producing large shipping steers to sell or feed, as the case may be. Therefore they are careful how they throw away the substance to grasp the shadow, and find, when too late, that they have retained nothing but a bag of bones. Again, in repeating here the argument, "Better throw away at the latter end an unprofitable feeder than keep an unprofitable milker," which is a "werry pretty sentiment" as Mr. Weller would say, but is there not really a lack of truth and excess of poetry in the everlasting hash that is served up by a few of the writers of this day? One would really think they could at least control the sex, and that all heifers are sure to breed, and that bad quarters and blind teats were not known in their vocabulary, nor any other of the ills that dairy cattle flesh is heir to, and that no one ever heard of a proper dairy cow that did not give churns full of milk up to the day she was ready to die of old age.

But those stubborn things which are commonly called facts point in a totally different direction; and when we come down to the realities of cow life, we find that there is a large proportion of those which we have had every reason to believe have been bred in the line of record breakers that are after all rather inferior; and many of their sisters, for some inexplicable reason, have gone wrong in some of the above particulars, and that after all they must be consigned to an ignominious death, and their carcasses hung up in the shambles, and before they will make even a moderately presentable carcass they must be fed. And just here a few common-sense points present themselves. Beef will be wanted as long as the world lasts, and is one of the articles that cannot be substituted with a shoddy imitation, like the other productions from the cow. Beef is as much in demand as butter and cheese, and even the special beef cow must give a little milk at certain periods, and in such quantities that it will not pay to throw it away; therefore, after all, we must have milk and beef combined, and although the former may not be obtained in immense quantities, yet both may be profitably produced from cows not belonging to the special dairy breeds.

Ontario has had four annual public trials at the Industrial Exhibitions, and the figures taken from the tests indicate that the so-called general purpose cow does not suffer by comparing them. The first three of these tests I refer to are for the prize awarded by the FARMER'S ADVOCATE, for which all breeds were invited to contest.

In 1889 Ayrshires and Jerseys alone came forward.

In 1890 three herds, consisting of three cows in each, two herds being Jerseys and one of Devon cattle, competed.

In 1891 six herds in all competed, three of which were Jerseys and three were Ayrshires.

In 1892 prizes were offered by the American Shorthorn Breeders' Association, and for Shorthorn cows, three years and over, which would make the most butter in a ten days' test.

The following are the results of each year:—

In 1889 six cows competed, comprising two herds, three Ayrshires and three Jerseys. The former averaged 27.22 pounds of milk per day, which produced .7631 butter fat per day, the highest Ayrshire giving 27.75 pounds of milk. .793 butter fat. The latter averaged 19.5

pounds of milk and 914 butter fat; the highest Jersey 20.25 pounds of milk, which produced .935 of butter fat.

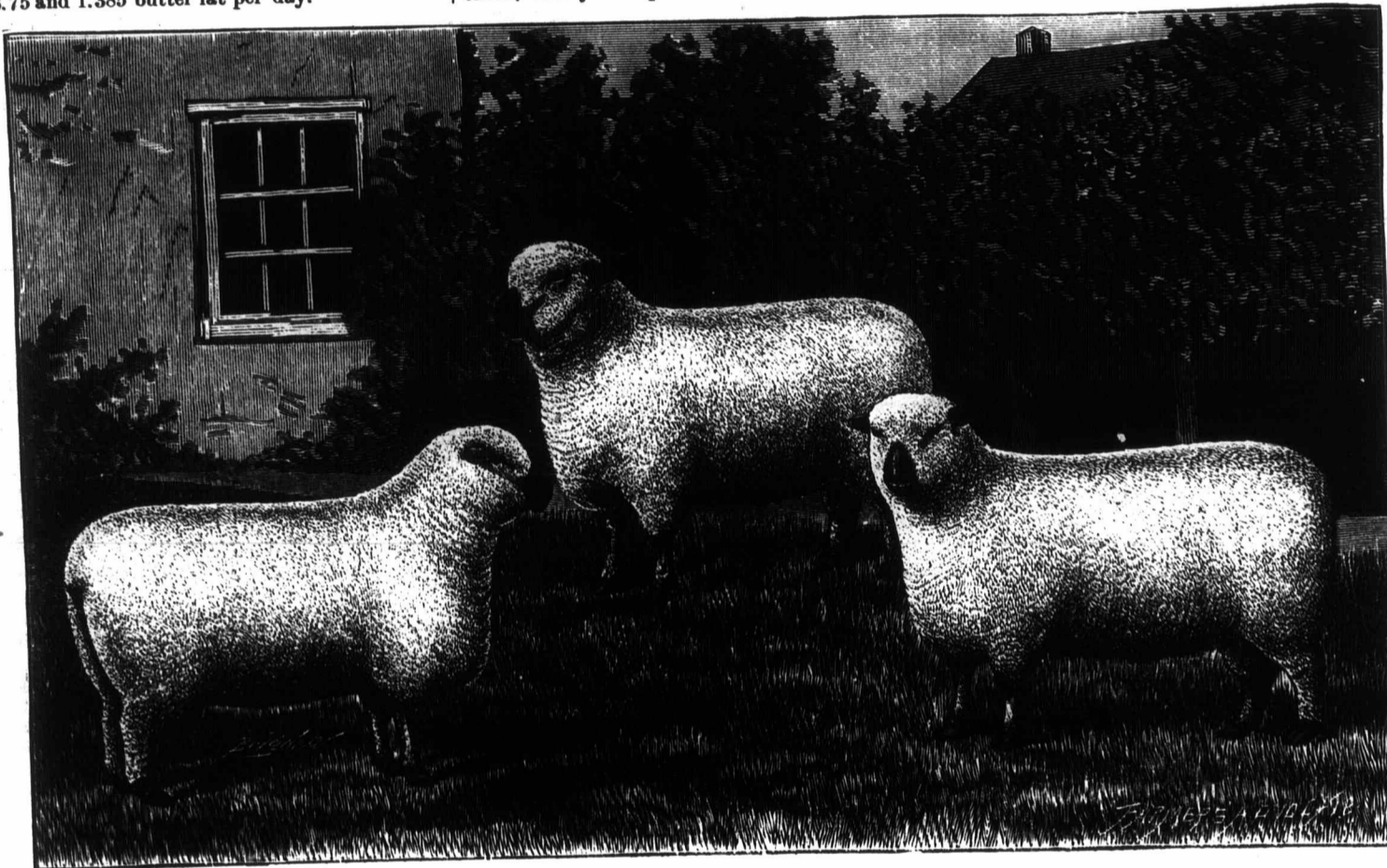
In 1890 three herds competed, comprising two herds of Jerseys and one of Devons. In this year's test the highest Jersey herd averaged 17.62 of milk and .949 butter fat, the highest Jersey giving 20.12 pounds of milk per day, which produced 1.124 of butter fat. In this test the Devons averaged 20.17 pounds of milk and .796 butter fat, the highest Devon giving 34.43 pounds milk per day, which produced 1.294 butter fat.

In 1891 six herds competed, comprising three herds of Jerseys and three of Ayrshires. In this year the highest Jersey herd averaged 17.66 of milk and 1.053 butter fat per day. The highest gave 21.75 milk, which produced 1.105 butter fat per day. The highest Ayrshire herd averaged 26.62 pounds of milk per day and 1.281 butter fat per day. The highest Ayrshire cow gave 28.75 and 1.385 butter fat per day.

Prize Winning Shropshires.

The accompanying illustrations are specimens of the class of Shropshires lately imported by Mr. J. N. Greenshields, of Isaleigh Grange, Danville, P. Q. The three ram lambs here portrayed were winners of first prize at the Royal Show at Doncaster last year, where they were exhibited by their breeder, Mr. Richard Brown, of Ruyton-Eleven-Towns, Salop. Mr. Brown's flock, which is well-known in English show yards, and which has often sent representatives to do battle on this side the Atlantic, has long been famous for its fleeces, there being no flock in England, perhaps, in which more care has been paid to the production of heavy, dense fleeces of the best quality, together with a thick, compact carcass on short legs. St. Leger, the ram selected from this trio by Dr. Ormsby, Manager of the Isaleigh Farm, is a typical Shropshire, a thick, heavy sheep on the shortest of legs,

In selecting the ewes, as well as the rams, particular attention has been paid to obtaining good fleeces, together with a thick, heavy, compact carcass on short legs, and certainly a visit to Isaleigh Grange will convince any one that he has succeeded in his object, the whole flock being characterized by a wonderful uniformity of type, although containing representatives from six or seven different flocks. Messrs. Brown's and Thonger's advertisements will be found in another column, and we can confidently recommend those of our readers who intend paying a visit to England in search of stock to call on these gentlemen, while to those who do not wish to go so far afield, a visit to Isaleigh Grange, which is located close to Danville, a station on the G. T. R. 90 miles east of Montreal, will be found both interesting and profitable, as Dr. Ormsby tells us that his motto is now, as of old, "Good stock, straight pedigrees and fair prices."



GROUP OF THREE SHROPSHIRE RAM LAMBS.

Winners of 1st at R. A. S. E. Ex., Doncaster, 1891. Bred and exhibited by R. Brown, Ruyton-XI-Towns, Shropshire, England, including "St. Leger," as shown in the centre, imported and owned by The Isaleigh Grange Farm, Danville, P. Q.

In 1892 two Shorthorn cows from two separate herds competed, which averaged 38.18 pounds of milk and 1.670 butter fat per day, the highest cow giving 39.25 pounds of milk, which produced 1.761 butter fat.

In no year have the Holstein breeders thought it worth their while to compete, the excuse being that the rules were not satisfactory, but the breeders of other cattle give the Holstein men credit for more acuteness than to show representatives of their herds in public trial. On paper their cows have given anything from 50 to something over 100 pounds per day of milk, and butter by the week at anywhere over 20 pounds, and the actual yield would probably conflict sadly with these figures at a public trial. In these tests I have every reason to believe that the breeders of the special dairy cattle mentioned above brought out their very best cattle. Of course we shall hear all about the sensitive organisms of special dairy cattle, that make it so difficult to obtain a proper test, as a reason they did not excel, but until they make a vastly better showing than they heretofore have done the conclusion that all sensible men must arrive at is that even the two-purpose cow is worth breeding and milking.

showing all the points of a mutton sheep, with a grand fleece and a beautiful head, the face a nice, soft black, and the covering as perfect as possible; a winner at England's greatest show and, therefore, justly entitled to rank as one of the best lambs of 1891. St. Leger has continued since then to improve steadily, and promises to make a grand two year-old. When mated with such ewes as the Isaleigh Grange flock contains, of which the other illustration shows specimens, he should produce some very valuable stock. The three ewes, shown in our other illustration, are also domiciled now at Isaleigh Grange, having been purchased last August by Dr. Ormsby from their breeder, Mr. Jno. Thonger of the Wolf's Head Farm, Nesselcliff, Salop, a gentleman not by any means unknown to Canadian and American breeders, and who has already earned a reputation for handling none but good stock. The ewes shown in our illustration were exhibited last year at the Shropshire and West Midland Show, perhaps the greatest Shropshire Show in the world, where they won first prize in the open class, Mr. Thonger also winning first prize in the tenant farmers' class with another pen of three, two of which have also found their way to Isaleigh Grange.

Chatty Letter from the States.

Hogs have lately been selling at \$5.00 to \$5.95, being \$1.50 per 100 lbs. higher than a year ago. These prices are very disappointing to packers, and correspondingly agreeable to owners. The pork packers are surprised at the light marketing of hogs, and are not salting or smoking much meat—using everything to supply the current fresh meat trade. That will leave their cellars empty when hogs do come. There is good reason to believe that live stock will be considerably delayed in arrival at markets next year, owing to the right of way being given to passenger traffic. There was a good deal of disappointment at the postponement of the Fat Stock Show, but the Illinois State Board promises something very fine in 1894. Next year the Show will be merged into the Columbian exhibit. It is said Nelson Morris is feeding about 40,000 cattle in the distillery sheds. There are about 100,000 on feed at different points in the country, chiefly at Peoria, Ill., St. Paul, Minn., Terre Haute, Indiana, and Louisville, Ky.

The question of the effect of the embargo placed by the Mother Country on Canadian live cattle has been freely discussed. There seems to be a widespread opinion that the change will not materially affect United States cattle. It is surprising how the great slaughterers are spreading out. They own ranches and farms; have buyers at all principal points, and often scattered through the country; own and control live stock cars, refrigerator cars; and run thousands of retail butcher markets, usually in the names of trusted employees. The late prices for American live cattle in Liverpool and London have ranged at 10½c. to 11½c. per lb., against 12c. to 12½c. a year ago, while export cattle are costing in Chicago \$5 to \$5.25, against \$4.50 to \$5 a year ago. These facts account for the apathy of American live cattle exporters.

The change of administration, of course, will put an end to Mr. Secretary Rusk. He has made some great efforts in behalf of the American live stockmen, and there is considerable interest manifested in his probable successor.

The Farm.

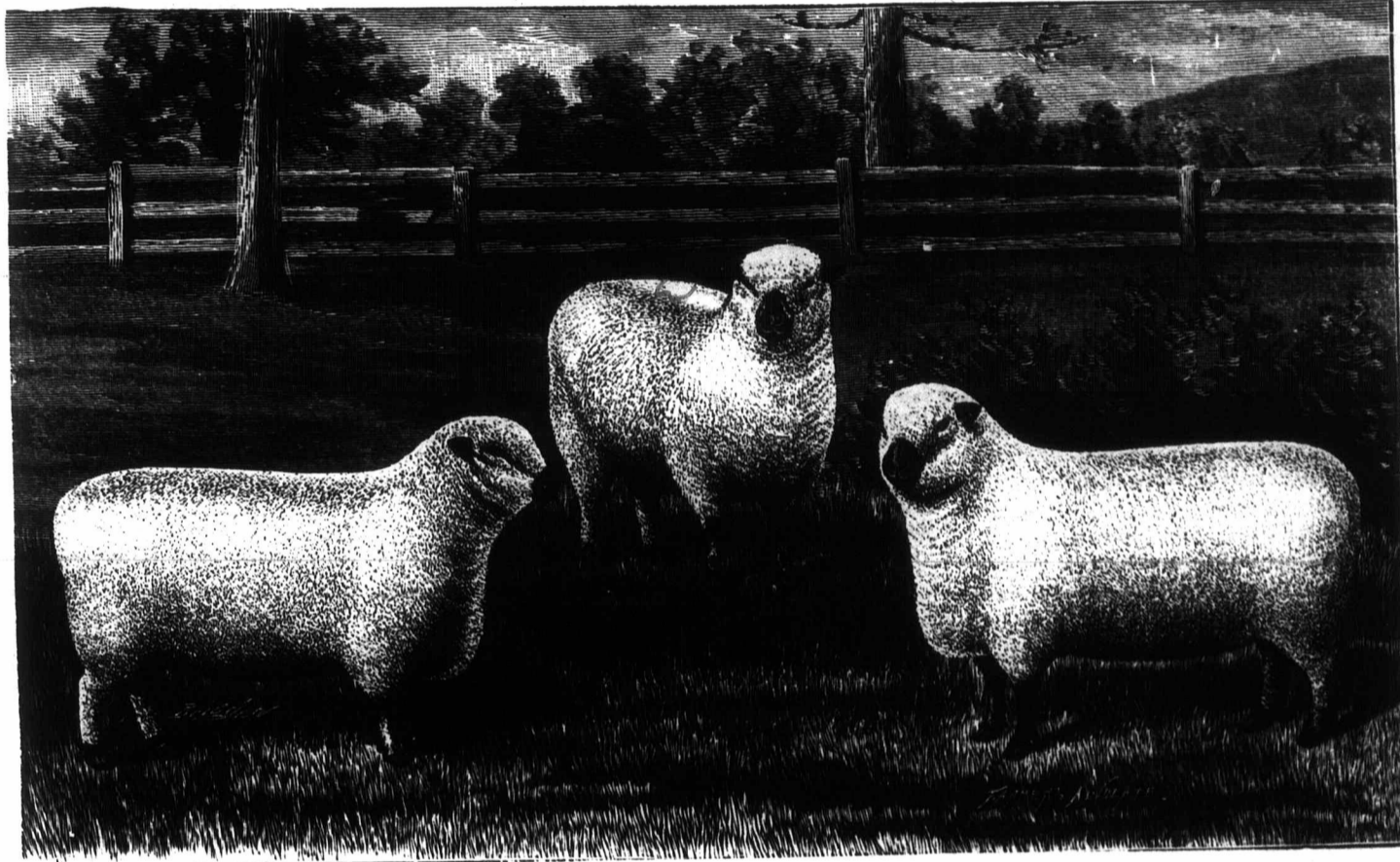
Alberta Territory.

BY T. F. PATERSON.

The Ontario farmer on his trip westward is apt to be disappointed with the appearance of the country around Calgary, after leaving the fertile plains of Manitoba and Eastern Assiniboia. Nothing but a seemingly endless prairie meets his gaze in every direction, with a rancher's dwelling here and there to break the monotony of the scene. Arriving at Calgary (a most beautiful town situated about the centre of Alberta) he naturally asks, Is this a first-class agricultural country in every respect? Some will say yes, while others candidly will say no. The season being comparatively short, and the climate dry, wheat and coarse grains as a rule

in proportion to the number of cattle he owns, each cowboy generally supplied with six or seven horses. The ranching grounds are then scoured far and near and the cattle corralled for the purpose of branding and castrating. All the mavrocks (or cattle which had escaped the branding operation the previous year and have consequently no owner) are put up at auction, and sold to the highest bidder; these being branded, they are then turned loose for the winter, and rounded up the following spring, to recount them and ascertain the losses, if any. The cattle, sheep and horses as a rule do well, and are generally in good thriving condition in the spring. The losses generally occur among the cows that have been suckled late in the fall. Last year the losses were considerable. On going down the C. & E. Railway great numbers of them could be seen lying dead, killed by the blizzard of last April. This is a rare occurrence, so we were told, but there is always more or less loss among such large herds of cattle.

In the High River and Willow Creek districts,



GROUP OF THREE SHEARLING SHROPSHIRE EWES.

Winners of first at the S. & W. M. Show, 1891, in the open class for ewe lambs. Bred and exhibited by John Thonger, Wolf's Head Farm, Nesseliff, Shropshire. Imported and owned by The Isaleigh Grange Farm, Danville, P. Q.

Among other matters not yet settled, the Secretary of Agriculture is conducting the experiment to determine the curability of lumpy jaw or actinomy cases by use of iodide of potassium. One disadvantage of having the chief of the Agricultural Department in the Cabinet is that a change is sure to be made with every administration, and political changes come faster than it is desirable to change officers who have important agricultural experiments and tests in hand.

The choicest native corn-fed heaves lately sold at \$5.75. A lot of 1,600-lb. steers sold at \$3.45, and 84 corn-fed Colorados, 1,520 lbs., sold at \$5.60. The 1,400 to 1,500-lb. steers sold at \$4.10 to \$4.90; 1,300 to 1,400 lbs., \$3.40 to \$4.90; 1,200 to 1,300 lbs., \$3.10 to \$4.55; 950 to 1,190 lbs., \$3 to \$4.40. Native cows sold largely at \$1.75 to \$2.45. Texas sold at \$1.25 to \$2.40 for cows, and \$2.65 to \$3.25 for steers. Western rangers sold at \$2.25 to \$2.60 for cows, and \$3.30 to \$4.45 for steers. Stock cattle sold at \$2.20 to \$3.25.

Western range cattle have not been marketed as freely as a year ago, and ranchmen are disposed to think they will make money by holding stock till next year.

do not yield paying crops, but in some seasons they have a fair average, should they be fortunate enough to get copious showers in June. But taking the country between Fort McLeod and Calgary, a distance of 104 miles, as a land of cattle ranches, it is not surpassed in the Dominion of Canada or United States. On looking at the prairie grass an Ontario farmer would naturally say it was worthless as far as fattening properties are concerned, but such is not the case. It is generally of a reddish color, and has the appearance of the wiry red top, well-known in Ontario, but does not grow over four inches long (except in sloughs, where it attains the height of five to eight inches, and is cut and used as hay).

The cattle and sheep on the various ranches were extremely fat, especially steers and calves; cows and suckling calves were in good winter condition. The different stock companies and ranchers turn out their cattle on the vast prairies, each having their particular brand. In the fall the Stock Association gives notice to its different members that the time for the roundup has been set. Each man then sends cowboys

and in the vicinity of Fort McLeod, were to be seen the largest herds, numbering from a few hundreds up to forty or fifty thousand. It was a pleasing sight, and one to be long remembered, to see such large herds of fine cattle. We were cautioned by the ranchers never to go among them on foot, unless we were fond of being trampled to death, as the sight of a man on foot arouses their curiosity; they will circle round you, and in a short time most of the herd want to participate in the examination; the near ones keep crowding the front ones until the circle becomes so small that in their frantic efforts to prevent coming in contact with you they end by trampling you under foot.

One great drawback was their lack of transportation facilities, but that has been overcome by the building of a railway from Edmonton to Fort McLeod. The principal market (besides home consumption) as yet is British Columbia. Owing to the cheapness of raising and fattening the Alberta rancher can compete and even undersell the B. C. farmer. With the general introduction of good eastern sires, good facilities for transportation and good markets, stock ranching in Alberta can be made a profitable industry.

The Hon. S. C. Wood's Estimate of Manitoba, British Columbia, and the Western Territories.

The Hon. S. C. Wood, late Treasurer and Commissioner of the Province of Ontario, has recently visited Manitoba, British Columbia, and the Western Territories of Canada. Mr. Wood is now and has been for years the General Manager of the Freehold Loan and Savings Company. His inspection was, therefore, in the interest of his Company, a very careful and critical one. He was accompanied by Mr. John Russell, B. A., and Mr. Cooper, the western agents for the company. Mr. Wood is a very shrewd, careful financier, and an accurate observer experienced in agricultural matters. Mr. Russell and Mr. Cooper have had a long experience in Manitoba, and a careful previous training in Ontario. The conclusions come to by these gentlemen are, therefore, worthy of attention. In speaking of their trip, Mr. Wood said:—"I found Victoria, the capital of

BRITISH COLUMBIA,

to be a handsome and prosperous city. Vancouver, to my mind, has the greatest prospects of any city or town on the coast. It is situated on the main land, and the development of the mines, timber, agricultural and other interests, will all tend to build up Vancouver. The Great Northern railway is likely to have large interests in the city, and it is now not unlikely that the city will be the northern terminus of the Northern Pacific railway, all adding to the wealth of the place. These railways are moving that way."

"Mr. Van Horne's predictions regarding Vancouver will be verified!"

"Vancouver's residences, business places and public buildings would be creditable to any city. The population is 16,000. The value of buildings erected in 1891 was \$1,239,975, one-third of the value of the whole buildings in the city. That speaks well for on year."

"I don't think farming land is the largest element in the prosperity of British Columbia. The supply of land is too limited. If I take a liberal view of what is estimated by parties who profess to know, there are only a few hundred thousand acres at most. What farming land there is is good, equal to anything in the world. So far as the mineral interests is concerned there is a larger development going on just now than for some time past."

CALGARY, EDMONTON, PRINCE ALBERT AND OTHER WESTERN DISTRICTS.

We went forty miles out from Calgary before reaching a good farming country. It extended to Edmonton and on to the Athabasca district, a country which will find an outlet by the extension of the M. & N. W. R. through the Yellowhead Pass to the Pacific.

At Edmonton the business is concentrated on Central street; the dwellings have an air of comfort and neatness. The district is suited for farming to the north, west and north-east, and along the Sturgeon river. The whole territory is the very best for farmers, and an excellent opportunity is offered for every kind of farming on any scale. The soil is first class, rich sandy to clay loam, verging principally towards the latter. Coal is delivered at \$2.50 per ton. Going north fifteen or twenty miles Metaskwin is reached. Wheat here has been slightly touched by frost. There has been a large influx of settlers from Washington, Idaho, Nebraska, Dakota and other states. These farmers are well satisfied. The C. P. R. has disposed of 52,000

acres during the season to these same people. Farm land prices range from \$3 to \$5 per acre. On the way to Prince Albert from Regina we saw the Mennonite settlement at Rossthurn. Some forty families of these people are doing well. They have good water and land. Prince Albert merchants are doing an active business. North-west, north and north-east of Qu'Appelle and Indian Head, extending across the Qu'Appelle river and into the Pheasant Plains, the crops were equal to anything seen in the west. The farmers are contented; the future is bright.

MANITOBA.

"Speaking candidly, the present is the most valuable of any crop ever harvested in Manitoba. A large quantity of grain has been threshed from the shock without rain, and stacking has been done in the same careful way as in Ontario. South of Brandon, on the farm of Mr. James Smith, we saw 55 stacks of wheat and oats, all well put up. Regarding the yield, according to government returns 875,000 acres under wheat. The estimate was originally 22 bushels per acre, but we placed it at 15 bushels, which would place the yield at 13,125,000 bushels; taking out the quantity necessary for seed and home consumption, that would leave 10,000,000 bushels of first-class wheat for shipment. Some 330,000 acres were sown in oats, the yield averaging 40 bushels per acre, a total of 13,320,000 bushels; 97,000 acres were sown in barley, the average per acre was thirty bushels, a total of 2,910,000 bushels. As the average in peas and flax was small, we did not make an estimate of the yield. We are grateful to be able to say that more threshing has been done this season than any previous year. This is largely owing to the despatch in threshing operations. There are 1,160 steam threshers in the province, and one of these machines threshed 3,000 bushels in a single day. Farmers are giving their attention to stock raising and dairy farming. In the annual report to the directors of the company I will say the prospects of Manitoba are quite as good as in any province of the Dominion, and investments are as safe here as anywhere in Canada. I am very favorably impressed with Winnipeg's progress during the past year."

An Encouraging Letter.

"Brookdale Farm,"

Douglas, Man., Oct. 15th, 1892.

Editor Farmer's Advocate, Winnipeg, Man.

DEAR SIR,—Enclosed find subscription to October, 1893. Mrs. M. and myself are highly pleased with the *ADVOCATE*. Mrs. M. looks for its arrival each month as eagerly as if it was an old and much valued friend. Am very much pleased to know that we shall receive it bi-monthly.

Now a few notes may not be amiss. This year I had in 300 acres of wheat, and about 100 acres between oats and barley. I had threshed about 1,000 bushels wheat out of the stook, and had an average of 25 bushels to the acre of No. 1 wheat, for which I realized 58 cents per bushel for some, and took 56 cents for the rest. A pretty sight on the farm this summer was to see five binders following one another round the field. Every person who saw my crop growing admitted it to be one of the finest in a radius of over 45 miles. I have 38 pigs, to which I feed my frozen grain of last year, which I could have sold for only 25 cents per bushel, but expect to make very much more out of it by pork. I have a lovely farm of 600 acres, with nice brook shaded with trees on each side—water all year; have 80 acres fenced for pasture on each side of brook. At present I have only 18 head of cattle and 12 head of horses, but intend having (in time) a model mixed farm. Thanking you kindly for waiting on my subscription so long, and wishing the *ADVOCATE* much success,

Yours very truly,

WM. MITCHELL.

Growing Spring Wheat.

BY JAMES GRAHAM.

I again ask your valuable space to reply briefly to a communication of Mr. Ketchen in the October issue of the *FARMER'S ADVOCATE*, regarding the expense of the growing of spring wheat. In a former article Mr. Ketchen calculated the expense at 78 cents a bushel, and now returns to the question by including an additional expense of 22 cents a bushel for manure, which he says he overlooked in his former calculation, bringing up the cost now to over one dollar a bushel; this must be very serious and discouraging information, if true, to farmers. The fallacy of this manure theory is self-evident, and can be seen at a glance; it confutes itself. The 84 acres which I took as a basis in my article would cost at this rate the extravagant sum of \$462 for manuring alone. Manuring land is only utilizing straw which has a certain value within itself quite sufficient to recoup the labor of returning it to the soil whence it came, and therefore no labor attending the saving of it has any claim on the charges of the production of wheat. Mr. Ketchen persists in taking exception to every item of mine, making up the expenditure to the farmer in growing spring wheat, and does not appear to recognize the scientific application of machinery and the cheapening of labor thereby. With a little levity, a little logic and free use of figures he concludes that I am altogether away down; he also says that if I find my way down to Huron he will introduce me to a dozen farmers who paid 50 cents an acre for reaping (and the farmer to furnish twine), and to one who paid \$1 an acre for reaping fall wheat. Well, what has that got to do with the question in Ontario? I have no doubt there are many sparrows in Huron. The little farmers there, without machines of their own, who, by the dozen, have to hire their wheat cut as best they can in a hurried time, should not be quoted in this discussion by Mr. Ketchen as paying the reasonable expenses incurred in the growing of spring wheat in Ontario. He also says that raising wheat at 18 cents a bushel (my estimate) and selling it at 75 cents a bushel would yield a clear profit of 400%; here again occurs a gross misuse of figures, but we will let that pass. Then pathetically he asks, "Why is it that so many of our farmers' sons are leaving comfortable homes and braving the cyclone and blizzard, and enduring hardships too numerous to mention, in order to make homes for themselves in the great Northwest, instead of staying at home and raising wheat at 18 cents a bushel?" I beg to trespass by saving the use of the above language by Mr. Ketchen does him very little credit, for it certainly was illogical as well as out of place, for no country on the face of God's earth, for the short time it has been attached to Canada, ever credited such a name for itself in such a short period as the Northwest has done in the production of the very finest quality of wheat, and in such quantities as is likely at the present time to affect the grain markets of the world. In reply to the query asked for in reference to our farmers' sons, there can be only one answer, that is, to get clear of the square 10 acres or small holding, and to grow spring wheat and spring wheat only with a 25 cent tariff against them by way of freight, in addition to what we in Ontario are subject to. In discussing the real expense in raising spring wheat, my main object is chiefly to dispel a false idea inculcated by some that it is almost hopeless to expect a profitable return following the costly labor required for its production. Our methods and machinery are progressive, which enables us to keep abreast of the times in farming as in everything else, making it cheap, speedy and profitable. My estimate of the work is not by any means too low or unreasonably too heavy for the time given. In conclusion, allow me to say, Mr. Editor, I feel satisfied that the thrifty farmers of Ontario will endorse my estimate as being as nearly accurate as possible, and that experience will justify them, as it does me, in arriving at that conclusion.

Weeds.

BY J. HOYES PANTON, M. A., F. R. G. S.
Cirsium arvense (Canadian Thistle.)

Few plants have received more notice than this, both from the practical farmer and the theoretical botanist. No weed has been so fully discussed as to the ways and means to get rid of it, and yet it lifts its head year after year as a living testimony of its vitality, vigor and reproductive power. It has a perennial creeping rootstock with many joints, every one of which is capable of sending out roots. All thistle flowers do not bear seed; some have stamens only, others pistils—the latter only can produce seed. This explains how some persons have failed to see thistles grow from what they thought seed. There is no doubt the thistle will grow from seed as well as other plants. This plant is well adapted for spreading rapidly, bearing many seeds easily blown about by the wind, and its roots bear latent buds at each joint. Few subjects are more discussed at farmers' institutes than the destruction of thistles. There seems to be a common opinion among thorough-going, systematic farmers that this weed offers no barrier to its extermination but what may be readily overcome by *thorough tillage*. From among many methods which the writer has heard fully discussed, he has selected the following as likely most practicable:—

1. Summerfallowing.—In this case plow shallow in the fall, and in the spring continue the cultivation so thoroughly as not to permit the thistles to see light, for under its influence they prepare food material which is stored in the rootstock, and thus the plant is fortified against future adverse conditions, and the roots will put forth growth for a time. Now, if the plant is never allowed to add to the rootstock force, in time all the reserve material of the root will be exhausted. If the summerfallow is neglected to be plowed at a time when vigorous young thistles are hourly storing away reserve material, one can readily see how difficult it will be to overcome the trouble. Keep thistles from the sunlight by hoe, cultivator or plow, and their continuance will not last long.

2. Plow in the fall, cultivate in the spring from time to time until about June, and then sow buckwheat. Plow this under about the time that it is flowering—if necessary, a chain may be used to assist in covering the buckwheat; then harrow and roll. Cultivate regularly on the surface until time of sowing.

3. Seed down a spring crop with clover (10-15 pounds per acre). Cut early the next year. Manure the clover stubble and plow deep; then cultivate weekly, and sow at the proper time fall wheat. Some, instead of manure, let the second crop of clover grow four to six inches and plow under.

4. Plant corn and keep the thistles *well hoed*; never allow any of them to get above the soil, at least but a short time. Repeated cutting will soon weaken them, and finally destroy them. If this is followed by another *well hoed* crop, but few, if any, thistles will remain. The old roots will be dead, and what, if any, remains will be seedlings, which will always be appearing as long as careless farmers permit thistles to seed.

5. Soiling.—This is a method which has been followed with much success at the College farm. Rye is sown in autumn, and cut when in early blossom. This is followed by rape sown in drills, upon which sheep are fed as soon as sufficiently grown.

Cirsium lanceolatum (Bull Thistle.)

This large species of thistle is frequently seen on new land, but is never viewed as a serious weed. It is a biennial, and is soon got rid of by cutting or spudding a little below the surface. If cut below the crown before flowering it is soon killed. It is readily known from its large purple heads with strong prickles, and darker green foliage in contrast with the common Canadian thistle. Unless in new land, they are generally found growing isolated along the roadside, or in the fence corners of the fields.

Aster cordifolius.

This beautiful aster, covered with flowers, does little harm in the fields; it seldom leaves the fence corners and roadsides. The stem is much

branched, bearing innumerable small, pale blue flowers. The lower leaves are heart-shaped. This perennial plant is somewhat shrubby in appearance, and flowers in the autumn.



Bidens frondosa (Bur-marigold, Spanish Needles) Fig. 25.

A coarse weed in low grounds, 2-5 feet high, branched with pinnate leaves 3-5, coarsely toothed leaflets. Seed flat, hairy, with upturned bristles and two-awned. It flowers in summer, and the seeds, like burs, are sometimes troublesome from sticking to the fleece of sheep by their barbed awns.

Inula helenium (Elecampane.)

A perennial very common along the roadside in some parts. It looks something like a small sunflower, with stem 3-5 feet high; large, somewhat oval leaves, woolly beneath. The root is very mucilaginous, and is used in medicine. It seldom invades cultivated fields, but may sometimes be seen in pasture land.



Xanthium canadense (Cockle-bur). Fig. 26.

A coarse, rough-looking plant, bearing some resemblance in its coarse appearance to the bur-

dock. The leaves somewhat triangular, heart-shaped, toothed on long stalks. The bur is somewhat oval and about one inch long, covered with stiff hooked prickles. It often grows along river banks. Being an annual, if kept from seeding by cutting it can soon be subdued.

Farming for Profit—Past, Present and Future—The Successful Methods of Each.

In the past, when farms were new, success was measured by the energy of the operator. Fertility was abundantly stored in the soil, therefore attention to adding to the supply of plant food was thought unnecessary, and he who produced and sold the most grain added fastest to his wealth. Stock and stock products were only in moderate demand, and the export trade in these as yet had not opened out. The forest still furnished a remunerative means of employing labor in winter, and no excuse was found for idle days on the farm at any season of the year.

During the present decade, and those immediately preceding that in which we live, the successful Canadian farmer has to face a very different state of things. "The stock-in-trade"—the producing capability of the soil of the farm—has to be considered. He still clings to money making by grain-growing, and the little produce fed on the farm is consumed with a view to increasing the capabilities for this purpose. Stock is fed, and with the best farmers money is made from this source. Farm labor is among the greatest drawbacks in connection with farm operations, chiefly on account of little demand for men during the winter season, while those employing men do not study to provide the means of using labor in the most economical manner. Altogether the cost of production too nearly approaches the cash receipts to leave a sufficient margin for profit, the cheaper producing countries having interfered with and lowered prices of grain.

With this change in circumstances old methods must be changed or the future will not have a promising outlook, as it is argued that there are but slender hopes for grain rising in price. It must, therefore, be from some other source that large cash receipts must be looked for, while cheaper modes of production must be introduced, so that Canadian farmers may compete favorably with those of other countries.

The average ten-year yield of the province of Ontario for fall wheat was a trifle over 19 bushels per acre, while spring wheat is but 15 bushels, barley 25 bushels, oats 34 bushels per acres. The yield in any of these grains at the average market value would leave no margin for profit after the cost of labor is accounted for, to say nothing of the interest on stock and implements, the wear and tear on these, as well as other items not here mentioned against each crop, the cost of growing which, under the cheapest possible methods, would be at least equal to the figures given below:—

Crop, Dr.	Fall Wheat.	Barley.	Oats.
Rent or interest, at 6 per cent., on land at \$60 per acre.....	\$ 3 60	\$3 60	\$3 60
Plowing once after preceding crop.....	2 50	2 00	2 00
Cultivating, harrowing, rolling.....	1 50	1 50	1 50
Sowing.....	30	30	30
Seed.....	2 50	1 50	80
Yearly expenditure in keeping up fences in ten-acre fields.....	1 00	1 00	1 00
Cutt'ng, twine and shocking.....	1 25	1 25	1 25
Hauling.....	60	60	60
Threshing.....	1 00	1 00	1 00
Cleaning, bagging, marketing.....	1 00	1 00	1 00
	\$15 25	\$13 75	\$12 85

Thus, taking the average yield as above, 19 bushels fall wheat at 85c. per bushel, also the average price, would give \$16.11; 25 bushels barley, \$13.75, and 34 bushels oats, \$9.20

Comparing the above figures, it will be seen that the position of the average grain-growing Ontario farmer is not better than the wage earner, with this disadvantage, that a large portion of the year is non-producing, and nothing is earned, as from force of circumstances he is obliged to be idle. And, again, in selling his grain he is surely selling from his farm its producing power, or his stock-in-trade; yet this is the practice of perhaps three-fourths of our farmers. Is it surprising that they are dissatisfied, while he who feeds a few cattle, breeds a few horses, and raises a few sheep by what is commonly called the mixed method, is decidedly better off? He at least is contriving to keep up his land, yet his progress is of necessity slow. There is no rest time with him. It is by steady work and constant thrift many of our farmers have attained a competency.

The successful system for the future must be more intensive, by which means a greater production of feed per acre may be produced, a far greater number of cattle fed—the farm producing the bulky feed, while the more concentrated food, in the form of cheaper grain and mill stuffs, may be purchased, which will add largely to the fertilizing elements and allow the more expensive wheat and seed grains to be sold, and yet ever improve the farm in value. The successful course must take all matters into consideration, the chief points of which are: A system by which the greatest quantity can be produced on the land; the crops so arranged that the land is always being prepared for the next crop, so that there is no hurry, and yet there is work provided for the whole year, and such crops grown that are certain of giving good returns.

The following system includes a five-year course, and is calculated to produce the best paying crops, as well as those that are certain to give good results throughout the whole course:—

First Year—Soiling Crop—Rye, clover, oats, peas, corn.

Second Year—A Grain Crop, for sale—Fall wheat, spring wheat or barley.

Third Year—Hay—Red and alsike clover, Timothy.

Fourth Year—Silage Crop—Corn.

Fifth Year—Grain Crop, for sale or feed—Oats.

The object sought is to have the work evenly distributed throughout the whole year, the cattle to be bought up in the fall and fed throughout the winter, while provision is made for keeping them later if desired, as the price of export cattle early in May, and even on into June, is not always satisfactory; and again this same system would be applicable to a dairy farm.

In a fall wheat growing section it is designed to have a crop that will allow a perfect preparation for this crop without having recourse to a bare fallow, and without losing a year's production on any part of the land.

The manure is applied to both the corn and green crops; in both cases a light dressing is applied and hauled out in the winter.

Rye is the first of the series of crops for soiling, and should be ready from the 15th to the 20th of May, and will hold good until the 5th of June. The rye may be seeded with clover, but the land on which the crop was grown should be ploughed by the beginning of July. Clover is then ready, which is followed by the peas and oats, and later on the corn, which can be used for the silo if not used for soiling, care being taken to have it early enough to take off before wheat seeding. But it is to the corn field proper that the silage is looked to for the bulk of the winter supply of feed, and is ready to put in

the silo immediately after fall wheat seeding. It is unnecessary to go further into detail, except to summarize the whole output of the year, which is intended to cover 125 acres of tillage land:—

Cr.	
By 100 head export cattle, at \$65 per head.....	\$6,500 00
" 1,000 bushels wheat, at 85c. per bushel.....	850 00
" 1,200 bushels oats, at 30c. per bushel.....	360 00
	\$7,710 00
Dr.	
To 100 head export cattle for feeding, at \$35 per head.....	\$3,500 00
" Feed required to be purchased or allowed from above.....	1,370 00
" Wages and board of three men at \$500 per year.....	900 00
" Seed.....	100 00
" Repairing items, twine, etc.....	100 00
" Rent and taxes.....	550 00
" Interest on capital, such as farm stock.....	250 00
	\$6,770 00
	\$940 00

Nothing is allowed for horse feed, as it is calculated there is sufficient grown outside that otherwise accounted for. Neither is anything allowed for fences, as none are in use, thus saving one of the most expensive items on the farm. There is nothing excessive about the figures. And where seed growing is added, instead of the mere commercial prices estimated for grain a much better balance would be forthcoming. We contend that, at the present basis of the price of land and the value of money, there are few lines of business that will equal farming, when pursued with the same tact and thoroughness as that practised in the mercantile or manufacturing trade.

Pork Productions—Views of a Leading Manitoba Firm of Packers.

To the Editor of the FARMER'S ADVOCATE:

DEAR SIR,—We are glad to say that hogs are rather more plentiful this season than in former years. We are certainly very much pleased to see that our farmers are now commencing to pay attention to this industry, as, in our opinion, it is one of the most important in this province, considering that there is such an abundant quantity of cheap feed that usually cannot be sold, and if it were converted into money in this way it would certainly be a great benefit to farmers and the province. It seems strange that farmers have not gone into it before this time. However, from all information we can gather, we think the change has come now, and we hope it may continue, as it is really too bad to see the large amount of money that goes out of this country for hog products each year, and which, instead, should go into the pockets of the farmer. They should also not forget that well-bred stock is always the most profitable; and we strongly advise marketing just as soon as fit for market, as the demand for hogs dressed, weighing from 150 to 250 pounds, is increasing, and very heavy weights decreasing, and in so doing they get quick returns. We have no doubt but Winnipeg will always afford a good market for hogs all the year round, and farmers that give this matter some attention, and market their hogs quickly, will be well paid for their trouble.

J. Y. GRIFFIN & Co.,
Winnipeg, Man.

This last season, from what had been a sheep pasture for six years, Mr. Arch. Wood, of Foxton, reports a yield of 46 bushels per acre, good quality, White Fife wheat; barley stubble on same farm yielding only 25 bushels wheat, and wheat stubble (second crop) 18 bushels. Mr. Wood utilizes all the manure made on his place, and finds that, judiciously applied, it causes the wheat to ripen about a week earlier, besides giving a larger yield.

Seed Wheat.

BY D. F. WILSON, BRANDON.

At the beginning of the harvests of 1891 and 1892, owing to the pressure of work and the dread of early frost wheat was cut very green—so green that it might well be called an experiment; and it was thought by many in 1891 that farmers in numbers of instances were spoiling their sample of wheat, but they were, in most cases, agreeably disappointed. The question is, Is this early cut wheat suitable for seed?

It is now generally acknowledged that wheat cut on the green side makes a better sample of grain than that which is allowed to get dead ripe. Not only does it appear a better sample to the ordinary observer, but the miller also prefers it, as it makes a whiter flour. But while it makes a whiter flour authorities in the matter say that it is not as nutritious flour as that made from wheat that has stood till it was thoroughly ripe. The early cut wheat contains more starch and less gluten than the ripe grain. Its supply of nitrogen having been cut off before it was matured, it makes up the deficiency by drawing on the air for an extra amount of carbon, which in the form of starch makes a very pretty flour. A wheat plant contains all its nitrogen when in blossom, but if cut before it is ripe some of this will be left in the root, and also some in the straw, for by cutting while green the water can no longer ascend in the stem, and there is, therefore, nothing to convey the nitrogen on to the head and form the perfect grain. All farmers know that the green cut straw is much better feed than that which has been allowed to get thoroughly ripe, which is a practical proof that it contains more nitrogen. I have seen wheat cut so green that it seemed almost impossible that the grain could ever be anything but shrunken; and had it been put up in long stooks, so as to quickly dry out, there is no doubt that it would have been so; but in this case it was put up closely in large, round stooks, and well capped, the result being a very good sample of wheat. By stooking in this way the sun and wind were prevented from doing their work too fast, the wheat remaining green for a considerable time, in which state it is able to absorb carbonic acid gas, which, being converted into starch, made up the deficiency in the grain which should have been derived from other sources. Such wheat as this is not perfect grain—it is immature, though the eye cannot detect it; it is in reality deficient in vitality, probably quite as much so as wheat that is somewhat frozen.

The germinating qualities of frozen wheat have been proved by tests in many instances to be equal to No. 1 Hard. These tests have, however, been generally under favorable conditions, and where the young plants would be able to get enough nourishment out of a very much shrunken seed to reach the surface, when it may be said to be independent; but were the crop grown from frozen seed, frozen and that sown again, and this repeated a few times, I think we should find that the yield of wheat per acre, even when not frozen, would be much below that where good seed had been sown year after year. This being the case, it is a great mistake to sow wheat that has been cut green, for we may expect the same results in the course of a few years as if sowing frozen wheat had been persisted in, and not only would there be a falling off in the yield, but also a deterioration in the quality of the grain. In the early days of settlement, when it was almost impossible to get seed potatoes, I grew an excellent crop from the smallest seed I ever saw planted, but I would not expect to do so if I picked out small potatoes for seed every year for a few years.

There are many good farmers who make a practice of sowing the best wheat they have, and this will often be that which has been cut greenest, and is, therefore, anything but the best for seed, and would be much better sold, for the buyers will pay the highest figure for it. No. 1 Extra is not necessarily the best seed.

The wheat crop of Manitoba being of so much importance, everything that tends to its improvement should be taken advantage of, and to do so farmers should make a practice of growing their seed. In doing so a piece of land should

be put in first-rate condition and be ready for the seed first thing in the spring, the crop allowed to thoroughly ripen before being cut, the grain threshed and stored by itself, and during the winter run through the fanning mill several times, blowing out all the smallest wheat. By following this plan there will be a tendency to improve the wheat product of the country—it is simply improvement by selection. "Like begets like" is true of plants as well as animals. All breeds of live stock have been improved by selection, a notable instance being the South-down sheep, in whose case no outside blood was introduced, and which is to-day the nearest approach in form to the perfect mutton sheep of any breed we have, but in the hands of a careless owner, who neglects his animals and is satisfied with the poorest of his ram lambs as a sire, a few generations show a decided deterioration even in this prepotent and hardy animal.

We may expect the same result with wheat, if we persist in sowing seed deficient in vitality. It is all right to grow this pretty wheat for the miller, who wants it and is satisfied with a superabundance of starch, but the farmer wants gluten enough in his seed to make the properly balanced ration for his young wheat plants.

More Special Work Needed.

The cause of so many of the drawbacks pertaining to farm management is that so many of our farmers spread their energies over too great a diversity of crops—they have too many irons in the fire, and consequently some are burned. If the farm is all paid for and the owner in easy circumstances a moderate living can be made in this way; but if, as is often the case, a young man is just beginning life and has the farm to pay for, improvements to make, new buildings to put up, he will find it an almost impossible task, and if he intends to succeed he must get out of the old ruts of growing a little of everything.

Times are changing. It was necessary at one time for the farmer to raise about all that he wanted for his own use, but the cost of exchange has been reduced so much of late years that no farmer thinks of doing that now, and as the need of this style of farming is passing away the advantages of special farming are made more apparent.

This is an age of specialties, and a man must get into some special line of farming to be successful. It matters little what it is, so long as it suits his nature and condition, whether it be gardening, fruit, grain, stock, or dairy, for all are equally successful if the right man is managing them, and then instead of putting the work upon a dozen or more crops he can concentrate it upon a few. These general principles will apply to any line of special farming.

Special farming does not help a man, it only gives him a chance to help himself. Every farmer must select the crops which are the most suitable for his own soil, climate and location. This is where the good judgment of the man is shown, and it is just here that many men make a mistake. Plenty of farmers will say, "Oh! this is too small and insignificant a business for us," while they are now perhaps keeping a dairy, growing a large number of crops, and working a lot of land; but enquire a little closer and you will find that these same men are growing from 15 to 20 bushels of wheat per acre, 100 of potatoes, or are making \$20 to \$25 for each cow they keep. Now, all these yields can be doubled if the man did his part, and while the above crops show little or no gain the doubled yield would make all the difference in the profits at the end of the year, and this at a very slight in-

crease in the expenditure. Farmers should learn that it is folly to undertake more work than they can do well. Plenty of men are working double the amount of land that their means warrant. They think that they would not have enough to do if they had less land. They might not if they worked it in the same way as they do the large farm; but with a less number of acres to work it will give more time for better work and more thorough cultivation of the land. For example, there would be time to cultivate a crop two or three times where now it only gets one, and time to put the work on the land at just the right season, and more time to keep all the crops entirely clean. You will find that there is no lack of work, even on a small farm, if a man has a mind to do it.

When you have your machinery and teams you can make more money in the regular way than by fussing over small matters, even if you have to buy many of the things which are usually grown on the farm, and the best result will be found by sticking to one line and giving it all your time and attention. It would not do to advise everyone to go into special farming, but if you will look around your own neighborhood and see that the most successful farmers are the specialists in some line, it will pay you to consider this fact, and you will see the wisdom of dropping off some things that pay you least or perhaps not pay at all, and to do more of that which makes you the most money, and the first thing you know you will find yourself a specialist in some branch of farming.

Of course people will talk against special farming and say that you should not have all your eggs in one basket, so that if one crop fails you will have something to fall back upon. Experience has proved this to be a mistaken idea. In the majority of cases the cause of failure has been that there have been too many crops, and for that reason they have all suffered and been failures, while a specialist would have given them better care and doubtless have brought them through a bad season, although it will not do to go to the extreme and make the specialty too narrow. It is best to have some variety in the case of failure. Though in most cases the man himself is more to blame, circumstances over which we have no control will sometimes interfere, and we will have partial or total failure, but these cases are very rare as compared with the failures which we could have prevented. Many of these failures are due, wholly due, to our undertaking more than we can do thoroughly, and this important fact should be impressed upon the mind of every farmer.

How often, in talking with farmers, we hear them say, "Well, I would take you down to see my root crop, but it is so weedy I am ashamed of it!" This is often owing to the fact that two crops are grown which require attention at the same time, and neither one is thoroughly attended to, while the same amount of work put into either would have given a greater gain with a less outlay. One sees such examples on the farms of our best farmers. In this style of business there is too much worry and not enough money.

It is of no use to grow half a dozen crops that do not pay, just because it is the fashion. Make up your mind what pays the best, and go ahead. Don't pay any attention to those who laugh and sneer at you now. They will be glad enough to follow your example when they see how successful you are.

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The Management of the Grass Crop.

BY JOHN TAYLOR, JR.

The grass crop does not receive the attention that is due to it by the majority of farmers, while upon its judicious management largely depends our success as grain growers. We cannot crop continually without impoverishing our land. We have not got the virgin soil to work on, and the keen competition necessitates, more than ever, growing big crops. Our soil has been cropped for half a century, and will not stand the strain without something being done to keep it up; one of the best and cheapest ways to secure this end is by the scientific management of our grass crop. There is a number of points to be observed, the first of which is the kind of plant to grow. Nothing, in my opinion, is equal to clover.

In seeding most farmers make a great mistake, because they do not sow thick enough. I know farmers who do not sow more than four pounds per acre. They say it is plenty; they would not say it was enough if they had not to pay for it. The rule with them seems to be, "A bird in the hand is worth two in the bush." They would sooner pocket the extra dollar than throw it on the land in the shape of clover seed, which would pay them many times over. I think eight pounds per acre is the least that ought to be sown. If you spend \$1 per acre in clover seed, it is the cheapest way of manuring your land. Clover at \$6 per bushel would be 10 lbs. for \$1—10 lbs. per acre is not at all too thick. There are plenty of farmers who haul manure from the towns, and pay \$1 a load and put 6 or 7 loads on an acre. I would consider it dear enough if I got it for nothing, and do not consider six loads of fire-fanged town manure worth more than one pound of clover seed, if it has been put to right use.

FALL MANAGEMENT.

After the crops have been harvested is when great damage is frequently done to the young clover. The crop is no sooner off than a herd of cattle or sheep is turned in the field. By all means, keep them out; they tramp the ground when it is soft with the fall rains and eat the plants close, which leaves it in the worst possible condition for standing a severe winter. Keep your stock off and turn on the mower. I find the mower can be used to a decided advantage on the stubble. Cut down the stubble, which will form an excellent mulch; any weeds that may be growing will be prevented from going to seed. Clip the tops off the clover and cause it to stool out, and your clover is in excellent condition for standing the winter. Treatment in the

SPRING

depends on what you are going to do with the field. If it is for corn, you may let the clover grow as long as you can; thus there will be a crop of clover turned under that will tell in the corn crop. For potatoes I find there is no better way than to bury the seed in a good clover sod. If it is for wheat, cut a crop of clover hay off as soon as possible after the middle of June, then let it grow about three weeks and plow it down; wheat and clover can be grown alternately in this way without impoverishing the land,—in fact, it will continually improve. Plow the sod once and let it stay; this may be set down as a rule. Never plow more than once; it is not only waste labor, but an injury to the land, and not as good for the wheat. Some farmers have the idea that it is best to plow just before sowing; this is most erroneous. The ground should be as solid as possible below—nothing more than a nice seed bed worked up on the top. If the ground has been worked up deep it is too porous—too much space for air and water; it will heave and settle with the frost, the wheat will send down long roots which will be broken by the frost. The roots should be spread as near

the surface as possible, so that heaving by the frost will not affect it. Clover is the farmer's best friend, and it will put more money in his pockets than anything else I know of, if it is handled properly. The greed of the farmer prevents him deriving the full benefit. One reason is they do not sow thick enough. Another is they pasture the life out of it in the fall. Another is they try to get a catch on land that has been cropped till it is too poor to grow anything; then they think four pounds per acre will give a good catch. But the chief reason is they try to let it stand more than one year, which is a most foolish plan. Never, under any circumstances, let a field stand in grass more than one year, unless it be permanent pasture. For grain-growing fields there is nothing like quick rotation—the quicker the better. I have heard farmers say that that field ought to grow something now it has had a rest—it has been standing in grass three years, when really it has been the worst treated field on the farm. The good you get out of the first year's crop is undone the next if you let it stand. Red clover will not stand in the ground in paying quantities more than one year.

Fifty Years Ago.

BY T. B. WHITE, CLARKSBURG, ONT.

"It is no wonder that a business conducted with so little foresight or reference to the law of supply and demand often proves a failure. Were farms managed with an ordinary measure of business foresight, instead of the happy-go-lucky fashion which sees no farther than the next harvest time, and the owners' men capable of grasping the economic situation and realizing the importance of the changes in agricultural conditions taking place around them, they might easily have averted the loss and added to the productiveness and value of their land by husbanding their timber resources. The problem of what to do with the abandoned farms, of which so much has been heard lately, is in a fair way of settlement. These farms have been abandoned, and many more are on the way to abandonment, simply because they could not profitably compete in growing ordinary farm produce with the newer and more fertile regions opened up in the west. If partly planted with trees they would again become profitable, the fertility of the richer and more fertile portions would be improved, and the plantations, growing in value year by year, would eventually become a permanent source of profit.

The above quotations are a continuation from my last, and show in my opinion a very little knowledge of how the world is moving, and I hope to show in this article that the cap of the "happy-go-lucky fashion style" will fit in other places quite as well as where the writer of these quotations has seen fit to place it. With respect to the growing of crops on poor, worn-out lands, and to the abandoned farms, while there is great room for improvement, the above conditions are nothing like so general as such statements would imply, and the remedy will be found along the line of suggestions given under "More Thorough Work," by Mr. Hobson, in November issue, rather than in the planting of trees, which is too slow a process the way the world is moving. More can be accomplished every two or three years by manuring, sowing grasses and breaking up, than in fifty years by planting trees, besides having something to sell and to keep all the time. The advice to plant trees was more suited to Evelyn's time, and if the oaks which he planted did render the successes of Nelson possible, things are changed now. England would now with her

oaken ships be where she would have been without them in Nelson's time—nowhere, like the Merrimac with the little Monitor. I remember the time when we ate our bread and milk with wooden spoons and made hay with wooden forks, but give them to youngsters now and they would put them in the fire and burn them. Still we have the statement on page 57, Forestry Report, 1886, that "It cannot be that in Ontario among our patriotic young men we have not many an Evelyn to give good assistance in the task." In the task, I suppose, of reclaiming these abandoned farms, but where are they? The judges of our prize farms do not seem to find them. In their closing remarks for 1886 they say "Kelvin Grove" is richer than it was years ago, so of "Huntingford," and so of "Balsam Lodge," and others in competition.

The increasing stores of fertility have to be drawn from the soil itself, a provision in nature for which we can never be sufficiently thankful. Other agricultural writers say that they know many instances where land which was considered sterile and worn-out, but by drainage and thorough culture has brought forth good crops. Anyone reading "Forestry Condition of Ontario Counties for 1891," unless they know to the contrary, must be impressed with the idea that the farmers are fearfully neglecting their best interests. But for the same year we have something more encouraging in Bulletin 37, Ontario Bureau of Industries, where on fall wheat we read the spring reports from the western portion of the province, where our largest fields of fall wheat are to be found, were exceedingly hopeful, and present advices show that these bright expectations have been fully realized. In Western Ontario the yield in most cases has been really magnificent, ranging from 15 to 55 bushels per acre, and the average yield for the province estimated 24.4 bushels to the acre. In Forestry Report for 1887, page 36, we read: "The condition of superiority in English soil is largely maintained by the action of the Government in maintaining forests, etc. My answer to this, that what changed England to a very great extent from a duck shooting and rabbit snaring country to a good agricultural one was the draining of the low lands, and the discovery made by one Murry, an English chemist, that superphosphates were of great service in growing turnips. In our grandfathers' time the Lincolnshire Wolds were looked upon as a hopeless barren waste, and it is said about our great grandfathers' time they built a lighthouse, called Dunstan's Pillar, to guide the lonely traveller through the desert; but superphosphates having been applied to the land, the phosphates made turnips, turnips made sheep, and sheep made the land fit to grow barley, clover and other crops, until in my time these hills were occupied by the richest and most intelligent farmers I have met. It was on one of these hills that I earned my first pocket-money in helping to thin out turnips, and though they are exposed to bleak storms and winds across eight or ten miles of marsh, off the German Ocean, I heard nothing about planting trees for shelter, though if some could be provided when folding sheep in winter, it would have added much to the comfort. But this statement about the fertility of the English soil being kept up by the effects of forests is all sentiment, and too much sentiment used in making up a compound to remedy our drawbacks is apt to spoil the prescription.

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Clover and Ashes.

BY W. A. HALE.

After many years' trial of clover for its own sake, and of experimenting with hardwood ashes for their own sake, I gradually found, what I suppose many already know, that the two in conjunction made one of the happiest combinations known, and one that went far towards solving the problem, not only of keeping up but also of restoring lost fertility. That clover, peas and other leguminous plants have the power of adding nitrogen to the soil is a fact long since recognized, but just how the act was accomplished has been a matter for lengthy scientific discussions, and many there be who probably to-day deny the fact that the leaves have the power of extracting nitrogen directly from the atmosphere. Applications of nitrogen, in the form of nitrate of soda for instance, seem to be entirely wasted upon the clover plant, and as this is the most expensive ingredient in the general make-up of all plant food, the fact that clover is able not only to extract from the atmosphere what it requires for its own use, but to leave a large portion in the soil as well for the use of other plants which may follow it, is too important a point to be lightly passed over. Now, where many people have failed in the use of clover as a means of supplying fertility to the land is where they have depended too much on the clover itself, and have not given it even an ordinary amount of nourishment to start with. Clover will not succeed on entirely worn-out land, and any attempt to bring such into a renewed state of fertility by the use of clover is likely to prove a failure. Where the land is in fair condition clover will usually improve it, and in a very marked degree; but where the soil is exhausted by over-cropping, fertilizers of some sort must first be applied, after which the clover will do its share of carrying on the improvement. Direct applications of nitrogen to clover seem to be wasted, and so also in a certain degree are manures and fertilizers rich in nitrogen. Phosphoric acid and potash seem to be the two principal applied ingredients of fertility in which clover delights, and these are so well proportioned to its use in hardwood ashes that applications of these seem to be far more beneficial and lasting to clover than the best barnyard manure. Ashes often show better results the year after they are applied than they do the first. I have seldom seen any benefit to the grain crop when ashes were used, even in large quantities, but to the clover crop which followed the beneficial results have been very marked. Were hardwood ashes more used in England than they are I believe we should hear less of clover sickness than we do at present. There the rotation of turnips with bone dust and rape cake before barley and clover seed is about the worst preparation for the clover that could be devised, turnips being particularly exhaustive of potash, and bone dust and rape cake containing practically none; and to the persistent use of this rotation in many counties is doubtless due the recurrence of clover sickness, necessitating the leaving of this crop out of the rotation for ten or twelve years. While we in Canada are not as yet troubled with actual clover sickness, we are at all times liable to a premature failure of the clover plant. It is said "to run out in a year or two," to be "only a biennial," etc. As usually treated no doubt it is, but that we have at home a specific remedy for all this is equally true. Hardwood ashes, intelligently used, can be made to work wonders, not only in bringing this plant to a great state of perfection, but of maintaining it in a flourishing condition, if desired, for a number of years. Some years ago this fact was brought to my notice by the following experiment:—On a three-acre field, sown to oats and seeded with

timothy and clover, ashes were spread at the rate of seventy bushels to the acre, one-eighth of an acre at one corner of the field receiving none. The oat crop showed no difference where the ashes were and where they were not, showing pretty conclusively that the potash and phosphoric acid were not reduced to the "available" state in time for the grain to benefit by them, but the grass, and particularly the clover, the following year made a remarkable growth except where the ashes had been withheld. After two years' cutting of hay, in which the clover held its own better than usual, I applied in August a dressing of ashes to the piece that so far had received none. The next year the appearance of the field had entirely changed. On the main part the hay crop was principally timothy, while on the small piece the clover was far ahead, and the year after the clover crop was so strong on this piece that it had to be cut, cured and treated as clover while the rest of the field was practically pure timothy. Subsequent experiments with ashes and clover have all gone to show the wonderful effects that can be produced by the use of ashes; and where land is really run down this method of restoring its lost fertility by the use of ashes, in feeding clover on potash and phosphoric acid and letting it gather its own nitrogen from the atmosphere, is often far more economically done than by the use of barnyard manure, while it gives us the manure to use on other crops. Again, ashes, containing no seed weeds, make the best preparation for clean seeding, and one quick method of renewing a worn-out meadow or pasture is to plough as soon after haying as possible; mellow down the furrows by thorough harrowing (a disc or an acme harrow doing this part well and without tearing up the sod), then spread ashes at the rate of sixty to eighty bushels to the acre before the last harrowing, and sow clover seed at the rate of fifteen pounds to the acre, covering with a roller. In this latitude clover sown as late as August 25th will succeed well, and give a heavy crop the following year, somewhat later than the ordinary run; that sown as late as September 15th is liable to be winter-killed. In this way we insure a clean clover catch without grain, and lose no time by the operation. In the last issue of the Country Gentleman there are, I am sorry to see, no less than five advertisements of Canada ashes for sale by firms offering to supply them in car-load lots to parties in the United States. There they are evidently appreciated, while we, who already have them, are allowing our neighbors south of us to take from our very doors what ought to be, in conjunction with clover, the means of bringing thousands of our unproductive acres into a high state of fertility.

C. P. R. Extension.

The year 1892 has been no exception to the recognized policy of the C. P. R., in extending its lines throughout the Canadian Northwest as rapidly as the development of the country or the growth of business would seem to warrant. Truthfully in most instances it may be said that the railway is the pioneer of the country's development. The extensions built this year have been as follows:—On the Souris branch, from a short distance west of Oxbow to Estevan (the new coal town at the point where the Souris Line taps the Soo Line), a distance of 38½ miles; from Deloraine to Napinka, a distance of 18 miles; from Nesbitt (on what is sometimes called the Glenboro line) to Souris, a distance of 18 6-10 miles; the Pipestone extension from Menteith Junction (Souris Line) to Reston, a distance of 13½ miles; and from Mosquito Creek, now called Nanton Station, on the Macleod Branch, to Macleod, a distance of 48 miles. The railway from Paqua (the first station east of Moosejaw) to the International boundary, a distance of 170 miles, was energetically pushed, and a large extent of it graded, ready for track laying in the spring. This road will connect with the Minneapolis, St. Paul and Sault Ste. Marie Railway, commonly called the "Soo" Line, at the boundary, thus forming a very direct route from the Pacific coast, south of Lake Superior, to the Canadian Sault, where it strikes again the main line of the C. P. R.

Entomology.

Injurious Insects—No. 9.

BY JAMES FLETCHER, DOMINION ENTOMOLOGIST,
OTTAWA, ONT.



THE PEA-WEEVIL (*Bruchus pisi*, L.)

This old and well-known enemy of the farmer in western Canada is still far more abundant than it ought to be, and would be, if pea-growers were more careful to treat their seed before sowing. The pea-weevil (Fig. 1. a, natural size; b, enlarged so as to show the markings) is a small, brownish gray, very active beetle, one-fifth of an inch long, with two conspicuous black spots on the end of the upper surface of its body. This beetle emerges from seed pease late in the autumn or in the springtime, leaving a small round hole, through which it may be seen that the greater part of the inside has been eaten away. There is only one beetle in each pea. The life-history of the pea-weevil has been carefully worked out and is now well-known. The eggs, which are white, elongated objects three times as long as wide, are laid on the outside of the young growing pods, to which they are fastened by a sticky fluid. As soon as the young grub hatches, it eats its way through the pod into the nearest pea. The hole in the pod soon fills up, but that in the pea can always be seen as a minute black spot on the skin. The larva, which is a yellow, legless grub, attains full growth and turns to the perfect beetle in autumn inside the pea. Most frequently the germ of the seed is injured, for the young grub requires some resisting object when it eats its way into the young pea and this it finds in the wall of the pod where it comes nearest to the forming pea; and this is where the latter is joined to the pod, and where also the young germ is situated. There are, however, a sufficient number of the attacked seeds of which the germ is uninjured, therefore, some farmers have occasionally used them for seed. These will produce, it is true, a weak plant if sown, but the plants are never strong enough to give a crop which will warrant weevilly peas being used for seed. Many of the beetles leave the pease in autumn, and seek a suitable place for passing the winter, in barns or out-houses and under rubbish, but by far the larger number in most seasons remain inside the pease until the following spring.

Mr. T. G. Raynor, of Rose Hall, Prince Edward County, writes with regard to this point as follows:—"During a warm winter or early in spring the weevils eat their way out of the seed, and from 50 to 75 per cent. of the peas would be emptied in this way. Where they are very numerous they cause the peas to heat."

Mr. J. H. Allan, of Picton, who has had large experience in dealing in pease, says: "A considerable proportion of the beetles emerge from the pease in autumn, if the crop is left out until the bug is fully developed. In threshing them in this state the caps are removed, and the bugs get out and conceal themselves in some dry place until the spring, when the heat revives them, and they will fly from field to field

until they find the young crop of peas. They feed on the young leaves and flowers until the pods take form. The eggs are laid when the pease are quite small, about the size of a mustard seed. As soon as the beetles have laid their eggs they die. I advise early cutting and threshing, so that the seed can be treated while the insect is in the larval stage."

REMEDIES.

The best remedies for application at this time of the year are the following:—

1. *Holding over Seed.*—Undoubtedly the safest plan for the eradication of this injurious pest is to avoid sowing any seed less than two years old. The insects mature and must die the first year, but I have found from extensive experiments that two-year-old seed gave a crop in every way as good as seed of the previous year.

As there are no wild plants known upon which the pea-weevil feeds, if all pea growers would systematically adopt this practice, the pea-weevil, at any rate one of the worst enemies of the Canadian farmer, could be kept within reasonable bounds.

2. *Warm Storage.*—A good plan for farmers who save their own seed is to store the seed in strong bags of paper or close canvas, which the beetles cannot get through, and keep them stored in a warm room. In this way most of the insects are developed early and perish inside the bags, as they do not feed on the dry pease. This is not a perfect remedy, because a few of the beetles will always be delayed in their development, but by far the largest number will die.

It is claimed that excessive cold kills this insect inside the infested grain, and its known distribution in Canada would seem to favour this contention. Weevilly peas, therefore, which have been stored in a warm room might be exposed out of doors upon one or two occasions during the winter when intense cold occurs. The insects would be more susceptible to injury from the cold after having been kept in a warm temperature.

Bi-sulphide of Carbon.—A remedy which is not practical for application by farmers, but yet which demands notice here, because it is the best remedy for destroying weevils on a large scale, is the bi-sulphide of carbon treatment. This must be used with great care, as the material mentioned is very inflammable and dangerous, and therefore requires special apparatus.

It may be mentioned that the statement which is frequently made that infested pease will float if thrown into water is inaccurate, as any one can prove for himself by trying.

Trimming Evergreen Hedges.

The question is often asked regarding the time most suitable for clipping or trimming a cedar hedge, so as to make it to grow thick and spread out in the foliage.

In all pruning operations two of the main principles to be borne in mind are (1) that pruning during the period of vigorous growth has the effect of checking development; and (2) that pruning while the plant is dormant tends to encourage growth the following year. With these points in mind, in the case of a young hedge where rapid growth is desired, the present time is favorable for this purpose. In the case of an old and well established hedge, two clippings at least are necessary each season, and these may take place near the beginning and towards the close of the growing season.

We want at once an active agent in every township to secure us a large list of new subscribers.

Garden and Orchard.

Horticultural Notes.

BY J. CRAIG, OTTAWA.

BLACK WALNUT.

Among enquiries that frequently reach us is the best methods for treating and sowing the seeds of black walnut and other nut bearing trees. A point of vital importance is that the seed should not become dried before planting. Drying is nearly always fatal to the germination of walnuts or butternuts. When collected in small quantities the nuts may be mixed with damp sand and stored in a cellar till late autumn, when they should be sown in rows or beds, covering with three to four inches of earth. Treated in this way they will germinate freely the following spring, under the action of the winter's frost. It is wiser in this climate, as far as possible to plant the nuts where the trees are to stand, as transplanting has a somewhat injurious effect on all nut trees. If they have to be removed take them up in the fall, cutting deeply with a long digging spade, so as to leave as much root as possible, as few trees make a greater root extension in a single season than the black walnut. The bed from which these are taken should not be disturbed for a year, as it will be found that a number of the nuts which failed to germinate the first season will grow the second. The black walnut could be cultivated with profit over a large portion of Eastern Canada and it is a matter of regret that it is not more generally planted.

INJURIES FROM MICE.

As the subject is of considerable importance, I append instructions which were sent out last year in answer to a number of queries. As varying conditions often call for different treatment, the following preventives and remedies are suggested:—

Preventives.—1. Remove all rubbish that may lie about the orchard affording hiding places for mice.

2. In the autumn, before the ground freezes, bank each tree with earth to the height of 12 to 15 inches. This was done the past season to the 1,700 trees in the orchard of the Central Experimental Farm, at a cost of .53 cents per tree, or a little over one-half of one cent.

3. Tanned paper, which has been allowed to dry for a few days after being cut into squares of the required size, is also very serviceable. It may be fastened round the stem of the tree with twine, or may be held in place by a single carpet tack pressed through the overlapping edges into the bark.

Remedial.—1. In all cases with a sharp knife pare the wound smoothly. If the wound is 18 inches or more from the ground, cover completely with a thin coating of grafting wax, and wrap with a cloth to prevent wax melting and to assist in excluding the air.

2. When the wound is near the base of the tree, cover with grafting wax or green cow dung, held in place by rough sacking; or the tree may be banked with earth to a point above the wound, which is preferable.

The main idea is to prevent evaporation, by excluding the air and keeping the tissues in a normally moist condition. Under such circumstances, when taken in time, trees will frequently recover, though completely girdled.

MANITOBA EXPERIENCE WITH FRUIT TREES.

Nelson Bedford, Stodderville, Man., writes as follows:—"On several occasions you have kindly sent packages of trees of various kinds to me, for which I wish to express my thanks, and also to give the truest account possible of what their progress has been.

Two years ago last spring I received one apple tree (Duchess of Oldenburg) and several currant slips. The Duchess did well till winter, and then froze down, but grew again next year, and froze again in the winter. This year I grafted a transcendent crab-apple tree on to the root, and it is doing well.

"The currants, every one, died. I feel sure it was because they were too far advanced when they arrived. Our place is very favorably situated for a garden, and our currants are usually a

heavy crop. I have two transcendent crab-apples bearing this year, and a number of younger ones all doing well. De Sota plums also do well here and bear every year. I have quite a few grafted on wild plum trees, and find them very much improved in size—and, I think, in every respect. I tried one Ostheim cherry tree, but it died first winter. One year ago last spring a package of 100 trees came, and a large percentage grew. I may mention the ones I like best—four evergreens (white spruce), one lilac, six elms, besides cottonwood, willows and poplars."

This is inserted for the reason that such experience is of exceeding value to co-laborers in Manitoba. Your application for cherry buds arrived too late to be included in the distribution made this season, as the budding period closes about September first. Budding itself is a simple process of changing the variety of a fruit or other tree by inserting under the bark of the one a bud of the other.

There are many kinds of budding, the simplest and most generally practiced being stock or shield budding. This operation is performed before growth has ceased, or, as nurserymen say, while the "bark slips"—in the case of cherry trees, early in August. The stocks to be budded are planted in rows the year previous. Scions are taken from vigorous, healthy trees; these furnish the buds, which are sliced from the young shoot, using a sharp knife. A T-shaped incision is made in the stock, through the bark, near the ground. The cleft is opened sufficiently to admit the wedge-shaped end of the bud, which is gently pressed downwards till firmly inserted, when it is firmly bound in place by basswood bark wrappings, wool yarn or raffia (a fibrous grass from the South). If the bud unites, the stock is cut back the following spring. The whole strength of the root is thus directed to the development of the new bud, which grows so rapidly under these conditions that in the South saleable trees are formed by the growth of a single season. In the North, where the growing season is shorter, good trees are grown by this method in two and three years.

Poultry.

Egg Production on a Large Scale.

Poultry keeping, like that of every other department in live stock breeding, requires experience in order to give the satisfactory results that will make it a financial success, which is the interesting accompaniment of every undertaking, whether entered upon with a view to earning a livelihood or merely as a pastime. Among the requirements for poultry keeping is a suitable soil. Although moderate success may be obtained where due care is exercised, yet it is always more or less uphill work where damp, heavy clay or cold land is the seat of operations; while, on the contrary, if the soil is dry and warm better fowls can be raised, and with greater ease to the operator, as there will be more freedom from disease, especially among the young chicks.

When it is intended to enter largely into the business well laid out buildings must be provided, to which conveniently arranged yards are attached, so that a frequent plowing or otherwise breaking up the ground that quickly becomes foul through the presence of large numbers of birds. This will repay many times for the work it entails. It will also be found necessary to so arrange yards that at the growing season they may be shut away, so that suitable, quick-growing crops may be sown in order to provide the shade that is among the essentials for success in poultry raising. It is commonly understood that this business cannot be so profitably carried on a large scale. Parties often begin with a small number of hens with a suitable run, and the venture is successful above all their expectations, and are beguiled into trying their hand on a much larger

scale, basing their estimate from the same standpoint of profit. In this they forget the amount of feed that all the best foraging varieties are enabled to procure for themselves, which is not only a vast saving in the feed bill, but largely conduces to that still greater essential, health. The conduct of a poultry farm on a large scale is much easier when egg production is the object in view, for in the other case of raising chickens for the market more territory would have to be provided in order to obtain the same amount of profit, and it is very doubtful if chicken raising in large numbers can be made to pay, except where a high price can be obtained from a well established trade. This is very different from the ordinary barn-yard fowl, that eats what would otherwise be wasted, and picks much of its living from the adjoining stubble and grass fields.

The most suitable plan of a building for keeping hens for egg production is long and narrow, with windows facing the south. There should be a passage, four feet wide, extending the entire length of the building, and on the north side. The divisions between the compartments may be built with wire netting, which will add to the airiness of the building, and will also largely contribute to the appearance. All partitions should be boarded up two feet from the floor, in order to keep the inmates quiet and less likely to develop pugnacious proclivities, to which all breeds are more or less disposed. Sixteen feet wide is about right when a breeding stock of fancy varieties is to be kept, but if eggs for market is the aim it may be four feet wider, which would allow the compartments to be sixteen feet deep, and if fifty are to be kept in a yard, 12½ wide. In this way a building 100 feet long would accommodate four hundred hens.

Just as before stated that it requires experience to succeed in an undertaking that is commenced with a view of earning a livelihood, it will be found equally necessary to locate where land is moderately cheap and yet convenient to railroad shipping advantages. It will also be difficult to purchase a choice selection of laying hens, as these must be young in order to give anything like good results in egg production. It is also stated that in order to obtain a thoroughly satisfactory stock they must be bred, which would add to the difficulty at the outset, but this plan would doubtless pay better, as by this plan they could be sold off just after they had passed the second winter, when the highest prices could be realized, as at this age hens are yet eatable and they have passed their most profitable laying age. In breeds it is better to keep strictly to the varieties that are known to be non-setters, among which Leghorns, white and brown, are capital layers, and are among the hardest of the laying sorts. Others are also highly recommended, such as Black Spanish, Minorcas, Andalusians; the latter would likely cost more for foundation stock, but fowls quickly multiply when due care and attention is exercised.

Sufficient land is required for producing all the vegetable or bulky food required in the daily ration for the year round, for without green food both the health as well as the expected egg production will quickly wane, and cultivating the crops for this purpose should nick well with the time required in giving attention to the flock, while the ground they run over must be changed by cultivation in order to keep the fowls healthy. In fact, poultry require a change; and feeding grain, either whole or ground, and mixed into mashes, without the more bulky green food, such as grass in summer, and roots, cabbage, etc., in winter, would suffer; and, in this way particularly, they are like other large inmates of the farmyard, which would fall away if nothing but concentrated food is supplied them.

In our next issue we will give a plan of a building that is suitable to a large or small number of fowls, together with the best plan for the accompanying yards.

Poultry on the Farm.

BY MRS. IDA E. TILSON, WEST SALEM, WIS.

The New York Agricultural Experiment Station has tried a series of experiments which seemingly prove that hens lay better if allowed salt, but should the salt be in excess are then more liable to diarrhoea. Probably salt, sulphur, spices and likewise puddings can all be placed on the list of articles which are valuable but need wise handling. "Let your moderation be known in all things," even when feeding hens. One half teaspoon of salt for each quart of meal I have found a safe rule. As cannot be too often repeated, this salt, well pulverized, is mixed thoroughly through the dry meal before the latter is scalded. Four quarts of vegetables, my usual amount for a meal, have a level teaspoon salt put in the water where they are to cook. I give fowls much less sulphur than formerly, and never have a case of leg weakness among them now. But burning feathers and stale eggs show considerable sulphur is somehow found and appropriated by biddy. A tablespoon to a gallon of soft food, given poultry about twice in the spring, when beginning their active campaign, and the same at moulting time, will be all right with weather really dry, warm and sunny. Sulphur, while an enemy to every disease germ, opens pores and is unsuitable for damp weather. Mustard is my favorite condiment, though pepper and ginger have a place. We are told fowls in their native Asiatic jungles search for and can find many aromatic seeds and buds. Spices, however, are not food but stimulus. Fowls really have no "patent insides" of India rubber or sheet iron, but are "quite like folks," and need just enough spice to warm and quicken, but not to burn and destroy. Once, or at most twice a week in winter, is the extent of my use. Table scraps give a very welcome flavor to puddings, which, the more bewildering their mixture, the more like a Spanish "olla podrida" they are, find proportionally a greater relish. I have seen oil meal recommended in the proportion of one-third to two-thirds other meals, but so rich and laxative is it, I could never use that amount with my hens. A tablespoon or so to a quart of meal makes a good daily digester, very soothing for bowels. Animal fats, ham or mutton drippings will do the same. A poultry writer lately condemned bran for puddings, because so laxative and irritating, and said he now used shorts instead, but this latter, in turn, is sticky and clogging. My opinion is both are good, but neither should constitute more than one third of any pudding. Most medicines prescribed for hens are designed to be mingled with their drinking water, where soon revealed by taste. Powders mixed in puddings are far less readily detected. When, however, water must be medicated, do not fill dishes very full, but take small measure of both water and medicine, so little or none shall be left at night unused and wasted. As a general rule, do not doctor the well because some are ill. Literally, "let well enough alone." If sick birds cannot respond quickly to simple remedies they are a source of danger for your flock, and perhaps for yourselves, hence, like any other nuisance, should be removed. When appetites flag or hens grow dainty, cut-down rations two or three days, and build their frame and fame on variety of food, as fowls like almost everything, but nothing long at a time. Charcoal, while somewhat clogging, is an excellent disinfectant and corrector of sour bowels. Its virtues are greatest when new. It may be powdered and added to puddings, or freshly broken in bits given clear a little at a time. My hens additionally eat quantities of wood and coal ashes that are used as fresh as consistent with safety from fire. I not only carefully examine these ashes, but always give them mornings, so I can have all day in which to discover danger. Charred corn, though very efficient, is not, therefore, as some write, the only relished form of charcoal. Scientists now seem agreed that bone meal and oyster shells are of little value as far as furnishing egg-shell material is concerned, which latter comes from the soluble salts of lime found in food, especially in grass and vegetables, but a

form of grit, so beloved by biddies, as are bones and shells, gives them that contented mind which is said to be "a continual feast."

M. Provost du Handray, of France, believing fowls have a real language which he wishes to learn, has kept a phonograph among his poultry. He would feed some, letting others fast and complain of hunger, and by various agitations has thus caused them to utter a great variety of sounds. I fear their language when understood will too often tell in "mournful numbers" of experiments suffered, of caprices endured, and appreciation withheld.

Fresh Gravel for Fowls.

A "Farmer's Wife," writing in the Farming World, describes her experience of the effects on poultry of the absence of sharp grit in their runs. She says: "One constantly hears the complaint that after a certain time of having poultry on the same ground they begin to cease to thrive. And, in fact, the more perfect the arrangements for the poultry the more aggravating they are in this way. They have thrived splendidly for some years, and then comes a season when they begin to droop. The young hens are seen moping about, apparently with very full crops, but when caught, though the crop is full and hard, the body is light and thin; by-and-by one is found lying dead, and then another. If this goes on long enough, there is not a doubt poultry won't pay, and yet it seems strange that, with a perfectly unlimited run, this should happen (I am speaking of my own case). Now I know the reason, and I give my experience for the benefit of other farmers' wives.

"Two or three years of poultry on the same ground had pretty well cleared off all the sharp, small stones. My poultry had plenty of gravel walks within reach, but a high road, well metalled, where constant cart wheels were always breaking up fresh stones for them, was not easily got at by them.

"I sent the body of one of my dead pullets to a person who advertised, in a poultry paper, that for a certain fee he held post mortems on dead fowls, and I consider I never made a better investment. By return of post my answer came. The pullet was in perfect health, but owing to the absence of sharp grit in the crop, there was a stoppage of the channel of the gizzard and consequent wasting and death. In fact, my bird had died of acute indigestion. There were stones in the crop, but they were blunt, rounded little things, and the contents of the crop returned to me was a matted mass of half digested grass, most unpleasant to behold. I went to look at the gravel walks near the fowl houses. Sure enough, not a sharp stone could I find; every one had been picked up in the last three or four years. I at once sent for a sack of 'sharp grit,' and had dishes of it put down in all the yards, and most greedily do the fowls eat it.

"As far as I remember, I had lost about three pullets in a fortnight, and a good many more were looking sickly. From the moment the sharp grit was given they began to mend, and since its constant use I have not lost a bird. I bought one hundred weight of the grit, wishing to lose no time in putting my stock's digestion in order, but in the future I have decided that all the broken china and earthenware be collected, and I intend the farm boy to improve the shining moments, when outside work is impossible, by breaking this up into swallowable size by my fowls. Every housewife must know what a quantity of crockery gets broken, and I confess it is a sort of consolation, gazing at one's best milk pan cracked across, to think what a splendid amount of sharp grit will come out of it."

Veterinary.**Tuberculosis as a Contagious Disease in Farm Animals.**

BY DR. MOLE, V. S., TORONTO.

In considering a disease of this description, that has baffled the investigations of the most expert, it cannot be expected that symptoms and cause can be very definitely described, and it is expedient that we should only point out the symptoms, relate a case or two, and give a general idea of the changes that take place in the lungs, with the recommendation at all cost to be rid of the animal as quickly as possible, for a more insidious disease cannot exist in a herd. One serious outbreak, in the eastern provinces of Ontario, in a fine herd of Jersey cattle ought to be a warning to every farmer not to delay in securing the best skilled veterinarian to investigate the first cause, to isolate and slaughter all suspicious cases, for it is only by this means that the disease can be held in check. It is no exaggeration to say that veterinary science has made more progress than any other within the last eighty years, and more than ever it did in the previous eighty, and every branch of veterinary knowledge has shared in this advance. Pathological research had discovered new diseases, had revolutionized the views regarding many others, and was now pointing out the way to methods of prevention that were scarcely dreamed of two decades ago. Take the disease we are now considering. Twenty years ago tuberculosis used to be considered as some mysterious quality of the tissues, that did not admit of any rational explanation; and that it was contagious and infectious was admitted by veterinary surgeons, though it was believed to be generated by various means of exposure to inclement weather, close breeding or improper feeding—a very common expression, "It was something in the air." It has been proved at the present day, beyond the possibility of doubt, that tuberculosis was caused by the introduction into the system of a minute vegetable parasite, germ or organism, and the disease has now been classed as a specific germ disease or contagious malady. It was further known that tuberculosis of the animal was identical with consumption in the human species, and might be and has been transmitted from one to the other. Magnificent results have been achieved in the case of some diseases, notably the Pasteurian method of protecting animals against anthrax, another contagious malady affecting the bovine tribe, by means of the alternated culture of the anthrax bacillus. We appear to be on the very threshold of still greater discoveries with regard to several other diseases, more especially the one we are considering, and the means of combating them, which have hitherto defied every therapeutic effort up to the present.

Tuberculosis is an infective disease as much as any germ disease can be; that is to say, given an animal pre-disposed to contract the complaint and the conditions favorable for its dissemination, it will surely appear. But it is no proof that others in the same barn or stable are not attacked that it is not so, or that they are healthy and vigorous; it is because their systems generally are in such a condition as to be able to successfully combat with the disease, even though they inhale the spores of the bacillus tuberculosis

from the affected animal. This points to the same disease, in the human subject, of phthisis. It is a well-known, undisputed fact that mother and children, with perhaps one exception, will succumb to this malady, and the husband, who has been living in close cohabitation, be immune. How can this be explained unless on the theory of non-susceptibility. It is hereditary. It has been proved that bacilli or spores can pass in the blood from parent to offspring. It cannot be directly produced by weakening the system. It is a disease due only to the specific organism; and if that organism be not present in the animal economy, no amount of weakening by over-feeding or milking, or in-and-in breeding (certainly a predisposing cause), can produce this disease. The bacillus can only be obtained from an existing case, thus proving it to be an infectious disease transmissible from animal to animal by any means other than contact. It is of two kinds, local and general; local, affecting particular glands and organs; systemic or general, attacking the lungs, and through them the most remote parts of the body. It principally affects the lungs and bowels of cattle, and about 20 to 25 per cent. of the cattle of this country are affected by this disease.

The use of milk from tuberculous animals has directly been proved to be a source of infection to the human subject, and it has come under our immediate notice of pigs being inoculated and die from this source, and the more tuberculosis spreads the greater is the danger from milk infection. The following cases are authentic and remarkable for the direct evidence in the human subject, and are taken from a French work on the subject:—

Mon. Auguste Ollivier presented a report on the transmission of tuberculosis by cows' milk. Two months previous to the report, dated Feb. 24th, 1891, he was called to a girl, aged twenty, at Chartres, who was suffering from acute tubercular meningitis (inflammation of the meninges of the brain.) Her parents were both robust, and she herself had had no previous illness, and lived under excellent hygienic conditions. On December 14th, 1890, she first complained of headache, which gradually became worse; on the 25th she was restless during sleep; on the morning of the 26th coma supervened. There was paralysis of the limbs, with squinting in both eyes upwards and to the right; the coma gradually deepened till death, which occurred at nine o'clock the same evening. The girl had been educated at a convent in Chartres, where within a few years tuberculosis had attacked twelve pupils, five of whom had died. It appeared that on November 26th, 1889, the veterinary inspector appointed to the abattoir had condemned the flesh of a cow between nine and ten years old, which had been slaughtered that morning in the Chartres abattoir. The animal seemed to be in good condition, but there were tubercles in the lungs, the peritoneum and the paunch, while the udder was completely filled with them. This cow had belonged to the convent where the patient had been educated, and its milk had for nine years been consumed by the pupils and others in the house. Between October, 1887, and the date of the slaughter of the cow one of the pupils died of tuberculous peritonitis, one of general tuberculosis in the mesenteric glands, and three of pulmonary phthisis; another pupil developed

tuberculosis disease of the elbow, and six others showed evident symptoms of tubercle of the lungs, but on being removed from the school and kept for considerable period in the country recovered. In none of these cases was there any family history of tubercle. The patient that Mon. Ollivier reports had left school for years before the onset of her fatal illness, but he nevertheless disposed to trace the infection to the milk of the diseased cow, which she had drunk during her stay in the convent. The moral of the whole story of the death of these young ladies: "It is prudent to use milk only after it has been boiled." As there is no doubt that milk from tuberculous cows contains the tuberculi bacilli, and even the muscular structure when fed to guinea pigs has produced the disease, it behoves the government, and more especially the health authorities of our towns and cities, to thoroughly examine and periodically inspect our dairies and cow-sheds, to supervise and examine the milk, not only for adulteration, but for the disease in particular. A remarkable case came under our immediate notice of detection by means of the milk test.

Mr. —, farmer, of Waterdown, near Hamilton, supplied milk to the city. In the course of the inspector's monthly round, a quantity of milk was taken which showed a very low percentage of butter-fat (2½ per cent.). Our opinion was asked if we could detect any latent disease, or whether disease would cause so low a percentage. We replied that disease would be manifested first in the milk, which would be somewhat increased in quantity and decreased in quality, accordingly an inspection was ordered by the health authorities. In company with Inspector Nixon, to whom all credit is due for locating this supply, we visited the farm, and were shown a fine herd of thirteen milch cows, and expressed an opinion that none of the cows present were suffering from disease. On counting the cows one was absent, and on searching found her secreted in a dense piece of underbrush; we had her removed to the barn, and examined her as follows: A rather fine-looking cow, about 700 lbs., horns and muzzle fairly healthy, though rather dry; enlargement of the sub-maxillary glands adherent to the under jaw about the size of a hen's egg; the hairs of neck could be freely pulled; back slightly arched, and peculiar appearance of nodules on the spine of the bone of the tail; a slight enlargement of the glands of the flank; hard condition of udder, more especially the hind quarters. Temperature taken at rectum, 104° Fahrenheit; cudging and appetite good. She was a deep milker, and gave 10 to 12 quarts night and morning, rather pale in color; tested by Lactascope, gave 2½ per cent. butter-fat. This cow was ordered to be destroyed by the health authorities, on pain of forfeiture of milk license to the city. To the farmer's credit, it must be said, he readily consented. A post mortem examination of carcass revealed a large deposit of tuberculous matter in the lungs, and they were fixed to the sides of chest by bands of fibrine; a small quantity of straw-colored fluid (serum) was found in the cavity, a few nodules in the mesentary, and three large patches of consolidation in the udder or mammary glands. This proves, if anything can, that by rigid supervision and periodical examination by qualified inspectors the disease could be detected, and should be made; for this farmer, a fairly good judge of cattle, confessed that he had not seen

the lumps under the cow's jaw, although milking her twice a day. Another form of this disease, known in the North of England parlance as "crooked," as near as can be expressed in writing, is often considered by farmers to be of a rheumatic origin, but it is really a tubercular arthritis of the joints, made manifest by enlargement of all the joints; when lameness supervenes, they then become veritable "piners."

We will relate one case as seen in pigs, out of many that have received attention. A few days after calving a cow was noticed to have contracted a slight cold, which passed away; at the end of six weeks after calving one quarter of the udder became affected with garget; the cough, loss of appetite, etc., continued, and after three months the cow had become a typical "piner," and she was ordered to be destroyed without delay. The farmer was loathe to act on the suggestion (as he happened to have a litter of pigs about five weeks old, rather backward on account of the mother's lack of milk, although perfectly healthy accordingly), until the young pigs were fit to sell in about three weeks. They were fed from a trough three times daily on the milk of the tuberculous cow. They were all sold with the exception of one, which was kept on the farm for breeding purposes. When about three months old, a debilitating diarrhoea set in, and in spite of attention, suitable food, and good housing, her cough became more or less chronic; she was put to the boar, with the object of promoting a thriving tendency; she conceived and farrowed a week before her time, the litter consisting of four dead pigs and one living, which shortly afterwards succumbed. She had a husky cough, and when hustled about the sty for a little while the respiratory distress was very marked. When she was slaughtered, the intestines, lymphatics and mesentary were principally affected, both lungs were extensively diseased, being, in the words of the butcher, "one mass of grapes." If anything further were needed to confirm the conviction that these pigs contracted the disease by imbibing the milk of the tuberculous cow, the same sow, mother of this one, had a previous litter all healthy; she was perfectly healthy, well grown and lusty; she reared third and fourth litters by the same boar, which were uniformly free from unthriftiness, or taint of disease; when she was fattened and slaughtered all the organs were found to be quite normal. To that we may say a larger proportion of cases than in the ox have their starting point in connection with the stomach and alimentary canal of the pig. In the horse tuberculosis almost invariably has its starting point in connection with the intestines and mesenteric glands, indicating that in that species the agents of infection are generally introduced with the animal's food and water. The number of cases of tuberculosis hitherto observed in the dog and cat is scarcely large enough to enable one to judge of its frequency, one case only coming under our notice in the dog. It is not at all uncommon in fowls; the lesions of tuberculosis are in the majority of cases confined to the abdominal organs, intestines, liver, spleen, etc. To sum up the whole, tuberculosis, according to our present knowledge, is an incurable disease, but it is an eminently preventable one, and its present alarming prevalence is the natural result of almost universal neglect of measures of prevention that are indicated in the cases of every infectious disease. It is the province of veterinary surgeons and the agricultural papers to diffuse among stock owners a knowledge of the true nature of the disease, and to point out what are the rational means of prevention. True it is, that there is an Act in existence, but it is not enforced, and there is no machinery for its obedience, and it is only the good sense of the farmer and stock keeper (and to their credit, it must be said,) that we do not see more fatal evidence of it than we do. The whole system of cattle inspection requires organization, the districts should be marked out and a special system of sanitary police inspection instituted by the government, for there are laws enacted especially against cattle disease, but so far as we can enquire never enforced.

Dairy.

Black Pepsin in Churning.

Some time ago we received what purported to be a report of the South Australian Dairymen's Association. The letter that accompanied it was dated at Melbourne, and was signed by J. O. Ross, Secretary, but as it had been mailed in a cover bearing the impression of Pittsburg, P. A., and had a United States postal stamp affixed, our suspicions were at once aroused. The report contained an account of a supposed test with black pepsin conducted by that association, and it was highly recommended by what were doubtless fraudulent signatures. We had filed the communication for exposure in our columns, but we withhold our own comments to make room for a full report of a thorough test conducted by Prof. Dean, at the Experimental Dairy, Guelph.

To the Editor of the FARMER'S ADVOCATE:

DEAR SIR,—Most of your readers have doubtless read the article going the rounds of the press, which states that 150 per cent. more butter may be made by adding a substance called black pepsin to the cream. I sent to the Concord Chemical Company, New York, for a sample of the wonderful stuff, and received in a few days a small sample of a reddish looking powder, accompanied by a printed letter and two circulars. The letter stated that "the directions or receipt is copyrighted by Cloud Harlin, of Toronto, Canada, and cost \$30 per hundred, and retail at \$2.50 each." I wrote Cloud Harlin & Co. (?) November 5th, requesting further particulars and more of the pepsin, saying we wished to give the matter the fullest investigation. At this time of writing, November 19th, I have had no word from them, neither has my letter been returned. One of these circulars is headed in the following manner:—

A FORTUNE FOR FARMERS,

AND A GREAT CHANCE FOR AGENTS TO MAKE MONEY CANNOT \$32 A DAY BE EASILY MADE? Here are a few of the sentences:

"What could be more desirable for the farmer than to know how to double the yield of butter without additional expense or labor? Will not every person that makes butter pay \$2.50 for directions and the right to use them, as soon as they see that the yield of butter can be more than doubled by the use of black pepsin as directed? If as much butter can be made from five cows by using black pepsin as from ten cows without its use, can any person who keeps cows afford to be without it?" etc., etc.

"The trouble with most of people is they won't try, and consequently they can't expect to succeed. Don't be afraid to try. Don't hesitate. Don't wait. Go to work, and when you have accumulated a fortune you will point with pride to the time you acted for yourself."

All we ask you to do is, get some directions and try our business one day. We have never yet had a person try our business who did not succeed better than they expected. Remember the price of directions is \$30 per hundred, or fifteen directions for \$5, or \$2.50 for a single direction. Black pepsin is worth \$2.50 per box, and a box will make 500 pounds of butter. A dozen boxes are worth \$24.

Address CLOUD HARLIN & Co.,
Toronto, Canada.

The above is a sample of the tenor of the whole circular. The following are the DIRECTIONS FOR MAKING BUTTER WITH BLACK PEPSIN.

Let the cream or milk stand until sour and thick, as you would for ordinary churning. Then heat the cream to 95 or 96 degrees, then let it cool to about 60 degrees, and then churn till the butter breaks. When you see the appearance of butter, stop churning. Now take two pounds of butter for each gallon you are churning, and heat it to about 100 degrees; add to this melted butter, one teaspoonful of dissolved black pepsin to each two pounds of melted butter. (The directions on each box of black pepsin tell

how to dissolve it.) Three gallons of cream would require six pounds of butter melted, and three teaspoonfuls of dissolved black pepsin; after you have added the black pepsin to the melted butter, while still warm pour it into the churn, and churn for eight or ten minutes, until the butter is like thick cream. Then draw off the buttermilk and pour in on the warm butter enough strong brine to cool and harden the butter; make the brine of salt and cold water—the colder the better. Churn the butter in this brine a few minutes, till it breaks in lumps as butter usually does, then take up, work and salt to taste. After deducting the weight of the melted butter you should have more than twice the butter you would in the usual way of churning, and it requires much less time to churn. The melted butter causes the black pepsin to assimilate (?) with the cream, and unites in the form of butter all the cheese, sugar and butter that milk contains. You can use strong butter, or butter that is off in color for melting, as the heating and the churning in fresh buttermilk will make the strong butter fresh, sweet and uniform in color. The more milk the cream contains the more butter you can make, so do not skim the cream close, but leave in plenty milk—the more the better. Remember this: "Leave in plenty milk, the more the better."

"Copyrighted in the United States of America, according to act of Congress, in 1892, by Cloud Harlin, of Toronto, Canada."

November 7th we took 8.5 pounds of cream, testing 15.4 per cent. of fat, or 1.31 pounds of fat, which would make about 1½ pounds of butter. The cream was treated according to directions. When finished we had 3½ pounds butter, or no increase after deducting the two pounds of melted butter. The buttermilk contained .9 of one per cent. of fat. November 12th we divided equally 18 pounds of cream, which tested 17.4 per cent. fat. One half we churned in the usual way, and the other half was treated with melted butter and black pepsin. Result:—From pepsin cream we had 1½ pounds of butter, after deducting two pounds of melted butter; buttermilk contained 1.6 per cent. fat. The other lot gave 2½ pounds of finished butter; buttermilk, .4 of one per cent. We thus got no increase whatever in these two experiments, while the extra labor amounts to considerable. I may say that in the second experiment we added six pounds of skim-milk to the cream, thinking that possibly this might help, as they say the more skim-milk the better. The quality of the butter from the pepsin lot is inferior.

As there have been several inquiries in reference to black pepsin from druggists and others, I would advise persons to spend their money in something more profitable than in buying a compound that will only delude. As a matter of fact, no compound can increase the yield of butter 150 per cent. It is possible that a substance may incorporate more of the solids of milk than is obtained by making butter, but such a compound would not be butter, but something that more nearly resembles cheese.

The following is given as the average composition of milk: Water, 87; fat, 3.6; albumen, 0.7; casein, 3.3; sugar, 4.7; and ash, 0.7 per cent. There is thus about 13 per cent. of solid matter in milk. In buttermaking we want but one of the solid constituents, and as little as possible of the others. It has an average composition of fat, 84; water, 11; salt, 3; and curd, 2 per cent. In cheese-making we make use of more of the solids. A cheddar cheese consists of water, 31; fat, 31; curd, 31; sugar, etc., 3; ash, 4 per cent. Now, we may discover a new method of manufacturing cow's milk, but the produce will not be either butter or cheese, but possibly curdo-butyrim. If such a compound can be made wholesome for food, and made from cow's milk, all dairymen will welcome it as a new feature of this already great industry—dairying.

[Just as our forms were closing, the following additional information was forwarded by Prof. Dean: "My letter to Cloud Harlin & Co., Toronto, has just been returned from P. O. Dept., stamped as follows: 'Suspected to be of a fraudulent character within the meaning of the Post Office Act.'"]

H. H. DEAN,
Ont. Agri. College.

Work Outlined by the Western Ontario Dairymen's Association.

The Ontario Dairymen's Association was organized in 1867, and the fruit of the then small beginning can be seen in the present world-wide reputation of Canadian cheese. In 1876 the work of this Association had assumed such large proportions that it was found advisable to divide the work, and the Eastern Association was formed. After this the Western division carried on the work with increased vigor. By thus organizing a step in advance was taken and much good work was done, still the Association did not reach the most important part of the dairy community, the patron; for, no matter how expert the cheese-maker is, it is impossible for him to make a first-class article unless he has the milk supplied in the proper form. The Association has long seen the importance of conveying to the patrons such practical information as will aid them in the proper care in the handling of milk for cheese factories. In order to do so, they have appointed a Secretary, with a thoroughly practical knowledge of dairying, who will devote his whole time to their work. The Secretary was instructed to visit the various Dairy Boards of Trade and as many annual meetings of cheese factories as possible, and also to arrange for a series of meetings of farmers and patrons of factories. The subjects which are recommended to patrons for discussion at these gatherings are:—The production and care of milk; the proper disposal of the whey; the growing of corn and the preparation of ensilage; the winter dairy movement; the improvement of factory buildings; and the work of the Association, and its importance to the farmer. It is to be hoped that the Secretary will meet with the hearty co-operation of the patrons in this new step; and, if we may judge by the resolutions adapted at the Boards of Trade meetings at the different towns which have been already visited, where they unanimously approve of this work, we shall hear good accounts of progress in the future. Representatives of factories who have not yet placed themselves in communication with the new Secretary are urgently requested to do so as soon as possible, so that no delay may occur in the arrangements for meetings. His address is J. W. Wheaton, box 346, London, Ont. The twenty-fifth annual convention of the Association will be held in London during the second week of January next.

Creameries vs. Private Dairies.

To the Editor of the FARMER'S ADVOCATE:—

No doubt the establishment of creameries is the surest and quickest means of securing lasting improvements in butter-making. A number of creameries have already been established in Manitoba and the Northwest, but, unfortunately, very few have so far met with success. Many have failed through the want of the main factor required for their existence, that is, milk or cream. A number of cheese factories have met with the same fate. It is easy to trace the cause of such failures. In some cases the factories are over-burdened with municipal taxes and insurance rates, the population is too scattered—milk transportation is, therefore, too burdensome and too costly, the herds are too small, and a goodly portion of our farming community is adverse to the milking of cows. Under the present circumstances we are looking to the establishment of well regulated and properly equipped private dairies, and also of minor creameries, as the only possible means of securing improvements in dairy work. The centrifugal cream separator, driven either by hand or horse-power, will no doubt play a great part in the accomplishment of our purpose. A number of these separators are now being successfully operated in Manitoba and the Territories. Although some kinds of these separators are very easily driven by hand-power, the saving of labor being so desirable on most of our farms, manufacturers and dealers are aiming at the use of horse, ox and even bull power to drive the separators, by placing before the public small creaming outfits, consisting of cream separators friction gears and horse gears or powers, and others of such appliance required in dairy farm-

ing. We are glad to state that we have so far succeeded in securing for the trade such outfits at comparatively low prices—that is, one hundred and eighty dollars (\$180) for a separator, friction gear and horse gear or power. If the above-named figures are still beyond the means of the average dairy farmer, nothing could prevent two or three farmers from clubbing together and sharing the expense, as well as the advantages, of such improved machinery. Any farmer keeping a goodly number of cows could well afford to secure even a still larger outfit, buy the milk from his neighbors, and thus start the foundation of a minor creamery. Hence, nothing can prevent our dairy farmers from securing, through well equipped and properly managed private dairies, nearly the advantage and profits of a creamery. Wherever small separators are used the creamery operations begin with the milking of cows, and by the time the cows are milked your dairy work is nearly done. In this way the largest quantity of best quality of cream is obtained, and the sweet, warm skim milk is ready for your calves and swine. You have no cans nor pans to wash, no milk to set, no great quantity of water to pump, and a good supply of fine butter is obtained, which when shipped weekly to market brings lots of money in your pocket.

S. M. BARRE.

Winter Dairying at London.

Recently a number of farmers from London township, interested in winter butter making, met at the Geary cheese factory, near London.

The Dominion government are endeavoring to show how cheese factories may be fitted up with comparatively little expense for winter butter making, and for this purpose have placed the necessary machinery in this factory. As there was already an engine in the building, very little change was necessary, save a little paper and sheeting to make the room comfortable. The same vats were used, the only change being that they were raised to such a height from the floor that the milk would run readily into the separator. The separator used is a No. 1 power Alexandra, with a capacity of 300 gallons per hour. Between the milk vat and the separator is placed a heater; the milk in passing through this is warmed by steam. A jetometer, a small steam pump, is used to force the skimmed milk from the separator up into the vat, ready to be re-distributed to the patrons according to their share of the whole milk.

The machinery necessary to change this cheese factory to a creamery was supplied by Mr. J. S. Pearce, of London, and consists of

1 300-gallon Alexandra Separator	\$400
1 Frunk Churn	55
1 Watson Power Butter Worker	25
1 Heating or Tempering Vat	20
1 20-bottle Babcock Tester	55
	\$555

These, with shafting, belts, butter ladies, salt dippers, etc., will be all that is necessary, so that \$600 will cover all expenses in changing from a cheese factory to a creamery. With present arrangements the milk of a thousand cows can be worked up, and the factory will doubtless become so popular, as soon as its advantages are realized, that sufficient milk will be supplied to run it to its utmost capacity. Samples of each patron's milk are taken and tested by the Babcock tester, and the pay is based upon the number of pounds of butter fat which is supplied by each patron.

After the machinery and building had been thoroughly inspected, those present adjourned to where the speaking was to take place.

Prof. Robertson was the first speaker. He spoke of the importance of winter dairying and the great success they are having with their butter factories. In 1890 there were but

two; now there are eighteen, an increase of nine fold. He had prevented twelve from starting, because he thought that they were not ready. He thinks that within two years there will be two hundred in operation. For the butter produced they make an advance payment per lb. of 15c., and the balance at the end of the season. Continuing, the Professor said that there was no reason why 20c. should not be realized clear of all expenses, while by using the centrifugal separator more butter could be obtained than by the ordinary way of setting in deep cans, besides having the skim milk to raise more calves on, or it could be profitably used in fattening pigs in connection with the coarse grains. They had carried on at Ottawa a very successful experiment in feeding frozen wheat to hogs. For each bushel of wheat fed they got an increase of 15 lbs., which would be equal to 73c. for the wheat. They also had an increase of 1 lb. for every 4½ lbs. of coarse grain fed.

Some people say that this feed will make the flesh too soft, but he had asked the opinion of a noted pork packer and extensive shipper, who said that it was of good quality and much superior to pea-fed pork. The English bacon eater likes the softer barley and oat-fed hogs better than the harder pea-fed pork.

While winter dairying will be of great service to the farmer, yet it will be of no particular advantage to the man who is too shiftless to help himself. By its help the enterprising farmer will not only be able to keep more cows, but he also can keep them better.

At the Experimental Farm they had kept 28 cows for 12 months with the produce off 40 acres, and this by ordinary farm work. The farmer should feed cheap feed, and as a cheap feed he recommends the ensilage which they were experimenting with at Ottawa, and which will give much larger yields than corn alone. Mix 16 lbs. of corn with 16 lbs. of English horse beans per acre, and sow in rows. The beans will take nearly all their plant food from the atmosphere, and do not rob the soil. The corn will grow as well mixed with the beans as if it was sown alone. Then mix the corn and beans with the heads from half an acre of sunflowers and put in the silo. At Ottawa they have grown as high as 7½ tons of sunflower heads per acre. He says that it gives good results in feeding, and that the oily nature of the sunflower has the effect of toning up the digestive organs.

Good cows are as necessary for success in dairying as is cheap feed. They need not necessarily be pure-bred, but must be capable of producing a good yield of butter or cheese. To be successful the farmer must attend to all the small details, for the little things often make the difference between success and failure. Look after your cows' comfort, feed regularly, give them plenty of salt, be sure to keep the milk clean and free from all bad odors.

The Professor closed by saying that he was on his way to England to make better arrangements for the sale of dairy products from Canada.

Mr. J. S. Pearce, of London, spoke of the importance of winter dairying, and as it was a success across the border, he saw no reason why it should not be successful in Canada, for in many respects we are better situated and have advantages over the farmers in the neighboring republic. He then gave an exhaustive series of statistics on the increase of the dairying industry, but we can only quote a few of them. In 1891 there were 838 cheese factories in Ontario, and last year they exported cheese to the value of \$9,580,000, as compared with \$620,000 in 1888. This splendid increase is a most gratifying showing, and he knew no reason, if we made good butter, why the value of it should not increase in the same ratio as the value of the cheese has. The average price received by creameries last year for their butter was 20½ cents.

England imported, in 1891, 238,120,000 lbs. of butter; of this we exported 3,768,000 lbs., or not much more than one per cent. This is not as it should be, and could be remedied if the patrons and leaders of dairy interests would keep it before the public, and see that the quality of butter was brought up to the same standard, and its name kept up, as that of our cheese has been.

Family Circle.

ESTHER GODWIN'S GEESE.

BY BESSIE CHANDLER.

Esther Godwin stood at her side door counting her geese. They had just been fed and were on their way to the goose pond, waddling along with that peculiar air of bumptiousness and importance which always makes their name seem so appropriate.

"There's seventeen of 'em," said Miss Esther; "seventeen at eight pounds a piece and a shilling a pound, that's—let me see—eight shillings is a dollar, that's—why, that's seventeen dollars!"

She seemed surprised at the simplicity with which her problem worked itself out. "I don't suppose I'll really get more than fourteen or fifteen dollars for the lot," she went on, "but that'll get a splendid Thanksgiving dinner, and have some to spare. Fifteen dollars is a lot of money."

She was a plump little woman, with rosy cheeks and black hair, which was just beginning to turn gray. She would have been pretty but for the look of anxiety and apprehension which had become habitual. It gave one the impression that she had had many troubles, and was waiting nervously for the next, which she felt sure was on the way.

Her little farm, which stretched away toward the creek, behind the low, white farmhouse, had the tired, discouraged look which farms sometimes wear. The barns were shabby and wanted painting, the fences were poor, and any farmer could have told you, at a glance, that the whole place needed ditching and draining. Around the house itself everything was neat and clean. Marigolds, and China asters were blooming in the little garden and some late sweet peas having climbed far above their supporting brush were nodding triumphantly at every breeze. The milk pans that were stanning themselves on a little bench were dazzling bright, and there were no chips or litter of any kind around the kitchen door.

As far as one pair of hands could do it, the work had been well done, but it is hard for a woman to run a farm alone, especially if it is encumbered with a mortgage to start with. Besides the farm Miss Esther had an invalid mother to take care of when Richard Godwin died and left her at the head of his somewhat involved affairs.

She had nursed her mother patiently and tenderly until she died, and since then she had done the best she could with her poor little farm, but the mortgage had hung over it like a heavy thunder cloud, and life had been more of a struggle than a frolic to Esther Godwin.

However, this was to be her last year in the old home. She was going to sell everything, pay all the old debts, and then with a snug little balance in her favor she hoped to go to live with her brother in the city.

She was too sensible a woman to mourn deeply over the impending change in her affairs. She regretted it, but she accepted it cheerfully. She said to herself in a practical sort of way—

"I can't keep the farm, and it's no use pretending I can. I ain't a-going to stay in one room and shut up the rest of the house, and half starve, living on a cake or two of mackerel and a little dab of quince jelly! That's the way old Miss Pierson does. She may call it being independent if she chooses, but I say it's just indecent, and she with a son that's ready to take her and do for her, out in Colorady! Of course, if things was different—"

and here Miss Esther's eyes were apt to grow a little sad as they wandered over her pasture lot to the rail fence that separated her little farm from Simon Bushnell's well-tilled acres.

The apple-trees in his orchard hung over her rail fence, and many an apple in the autumn dropped over on her side.

But Miss Esther never picked them up now. There was a time when they might all have been her apples, but that was long ago. Miss Esther never spoke of her old-time lover,—in fact she had never spoken but once of her unhappy love affair. That was when her mother died and her brother James had exercised his right, as head of the family, to question her.

"Whatever was the trouble 'tween you and Simon Bushnell, Esther?" he asked.

Miss Esther bit her lip and turned very white. "There wasn't no trouble, James," she answered, "—you see—you see—he's a sort of quick-tempered man and terrible sot in his ways. We'd been engaged about two months when his mother died and he came a-prancin' over one evening and wanted I should marry him right away. He said he was awful lonely and getting terrible tired of Mis' Sanders' cooking. I found out afterward she hadn't given him nothing but batter cakes for dinner that day and Simon never could abide batter cakes. I think myself they set like lead in your stomach. Well, I told him it wasn't no time to be marryin' with my mother flat on her back, and his mother just laid in her grave. The truth was I wasn't ready. I hadn't made but two flannel petticoats, and hemmed some towels, and I wasn't going to marry no man without a decent setting out."

She stopped a little and sighed. "What did he say, Esther?" asked her brother. "He said he gessed that was as good a time as any, but I wouldn't hear to it. Then he flared up and said, 'Well it's now or never,' and then I flared up too, and said, 'Well, Simon, it may be never for all o' me.' Then he walked off, holding his head high and toppin', and I kept thinking he'd turn 'round and come back, but he didn't, and James, he's never so much as spoke to me since nor even looked this way."

"Well," said her brother, thoughtfully, "he must have been awful mad."

"He was, James, he was, but that ain't no reason why he should drive by every day, a-looking straight ahead as if he was afraid my lilac bushes and apple trees would sort of poison him if he happened to get sight of 'em. I don't want to marry him, goodness knows—I've had trouble enough as 'tis—but I do like to live friendly-like with all my neighbors."

"Pra'ps he'll come 'round yet," suggested James. "O, no he won't," said Miss Esther with earnestness. "I know Simon Bushnell through and through. If there should be an earthquake, or some such thing, and I should be shot up into the air, and land in his front yard, then maybe he'd speak,—'cos he'd be so astonished he'd forget he was mad. But nothin' 't'at happened just ordinary like, would make him budge an inch. I believe he'd drive right by a-looking between his horse's ears, if it was my own funeral, and I was being carried out the door."

"You haven't ever spoken to him, Esther?"

Miss Esther's lip curled. "Speak to him! Well, I should say not, and never will till the crack o' doom. I told him it might be 'never for all o' me,' and so it may. Not but what 't'would have been convenient, with the farms joining the way they do and all, but it will never happen now, never."

"Well," said her brother kindly, "I've got a home for you, Esther, whenever you're a mind to come. If you want to stay here a while longer in the old place why you can, but don't never get to feeling that you are homeless or friendless, 'cos you ain't."

Miss Esther was silent, but she looked at him gratefully.

That was four years ago, and she had struggled on alone, but the time had come now when she must accept her brother's offer. She did rebel against her fate, but she had one aspiration, one keen desire, which it seemed to her that she must gratify. She wanted once, just once, before the property passed out of her hands forever, to have a family party at the old home—to end her solitary life, as it were, in a blaze of glory.

She decided to have it a Thanksgiving party, and she invited her brother and his wife, and their four children, her Uncle Josiah and his wife and her father's cousin who taught school in the neighboring village.

"There'll be ten of us," she said over and over, "and it's lucky there's just ten left of them blue chiny plates."

Her unconscious geese were to provide the feast, not in propria persona, but fatted and sold and converted into turkey, cranberry sauce, mince pie, and all other kinds of good Thanksgiving fare.

Miss Esther took a great deal of pride in this her last appearance as a land holder and a hostess.

"I want to let 'em see," she said, "that I ain't coming to them 'cos I'm driv to it, and clean at the end of my rope. I want 'em all to come here once, and see the planner and the Brussels carpet in the parlor and the new tidies and all, and I'll give 'em such a dinner as they can't get, no—not in New York, for all its style."

So for weeks the thought of her Thanksgiving dinner was uppermost in Miss Esther's mind. She planned for it by day and dreamed of it by night. Every inch of the little farm-house was thoroughly cleaned. She mended whatever a woman's hands could mend, and painted the worn woodwork with careful touch. She had a crock of June butter packed down in the cellar, and an extra fine ham hanging in the coolest corner. Meantime the seventeen geese, which represented the biggest part of the Thanksgiving dinner, grew daily fatter and fatter.

It was about the first week in November when Miss Esther determined one bright sunny morning to go down into her cellar and look over her preserve closet. It was a light, cheerful cellar, kept in spotless order. Miss Esther lifted down all the jars and tumblers, while she wiped off the shelves. Then she wiped off each jar, and as she put it back in its place she commented upon its contents and state of preservation.

"Them strawberries are as lovely as the day they was put up," she said admiringly; "and I never did see such color to raspberry jam, and I declare if here ain't a jar of them o'd brandy cherries. I didn't know there was any of 'em left, it's—why it's three years ago since that old ox-heart tree bore so unexpected. My! They're all mouldy on top! I wonder what's the matter."

She unscrewed the top and smelt of the contents critically. "Land sakes," she ejaculated, "if they ain't worked! Well I never knew my brandy cherries act like that before, no matter how long they was kept! Well I should think as much! If here ain't a great whole in the cover. Now how did that come? I don't believe there's any use scalding 'em over, they're too far gone for that. I'll just have to throw 'em away."

So she put the jar upon the cellar stairs to be carried up when she went, and resumed her work. "I'll have some peaches for tea Thanksgiving night," she said, "with whipped cream and sponge cake. They won't want anything very hearty after all that dinner."

It was quite late before she finished, and leaving everything in immaculate order went upstairs to cook her solitary dinner.

She used to lie down for a little while each day after dinner, and then take her work and sit in the west window of her little sitting-room where the afternoon sun was coming in.

To-day she was finishing a pillow sham, which was designed as a last crushing piece of elegance for her Thanksgiving guests. But she had hardly threaded her needle when glancing out across the

yard she saw a sight that startled her. There were her geese—her seventeen Thanksgiving geese acting in the strangest manner. Some of them were dead, others were dying, and a few were staggering around helplessly, as if it were only a question of seconds when their end should come too.

She threw a shawl over her head and hurried out to them full of anxiety and alarm.

Some of them rose to their feet at her approach and took a few tottering steps, only to fall again in white, unconscious heaps. Others stretched out their necks and squawked dismally, and they all looked at her with keen reproach.

Miss Esther almost cried. "Oh!" she gasped, "what ails you, you poor feeble-minded creatures? What's come to you—have you been poisoned, or what?"

But the geese made no answer, though one old gander squawked incoherently as he tried to walk away in his usual stately manner. The effort was too much for him; he sank down helpless and expiring.

"Miss Esther could hardly suppress a scream. Her Thanksgiving dinner seemed to be vanishing before her eyes.

"What shall I do?" she cried, "oh, what shall I do! They've all been poisoned. Oh, what shall I do?"

A bright thought shot across the dark despair that filled her mind. Her geese were dying; it was too late to help them now. But the feathers—she might yet save the feathers and so prevent them from being a total loss. But if they were to be live geese feathers, and that was the only kind Miss Esther considered of any value, they must be secured at once.

She did not hesitate. She seized two of the dying geese and bore them into her little kitchen.

Hastily spreading down a clean sheet upon her spotless floor she began to pluck them hurriedly.

The first geese gave no sign of life, but the second squawked resentfully all through the operation.

The tears stood in Miss Esther's eyes. "Oh, it seems dreadful," she said, "to pluck them in their dying moments! not even to let them die in peace! Poor things, poor things! But it's got to be done—it's got to be done."

She worked away with nervous, despairing energy, until the entire seventeen denuded corpses were stretched upon the kitchen-door. The sheet was piled with a great snowy mound of fluffy feathers. She gathered it up, by the four corners, and took it up into the wood-house chamber, where she spread the feathers to dry.

Then she came down and looked at the seventeen prostrate geese, wondering what disposition she had better make of them.

Suddenly one of them rose to its feet, gazed at her mournfully, and then staggered with weak, unsteady legs towards the closed door.

Miss Esther watched the supposed corpse with horror. Its breast was quite bare, and it presented the singular appearance that a man would make whose toilet was complete, but for the absence of his shirt.

Miss Esther rushed to the door and opened it, and gazed after the goose, as it slipped weakly forth.

"Land's sake," she said hoarsely, "ain't you dead!"

The goose didn't answer. It walked on, as if it were shaking the dust of her incalculable house forever from its feet.

Miss Esther turned around, weary and perplexed, only to find that two more of the stricken creatures had arisen, and were feebly moving about.

"Oh, dear! oh, dear!" she cried, "what 's the matter with you? It's worse having you come to life, than it was having you die. What shall I do with you all?"

But these geese, too, walked out in dignified silence. One of them stopped at the door, and putting his head on one side, looked at Miss Esther in a peculiarly sily manner, at the same time uttering a most unseemly squawk.

"Oh, my," she cried, "the creature winked at me! I never saw such goings on in all my born days!"

All the flock but two finally recovered their power of motion, and went out into the yard. These two stretched their necks now and then in a comfortable, rustling sort of way, and then settled back into repose. They seemed to say—settled back into repose. They seemed to say—do not wake me, let me dream again, and so Miss Esther left them and followed the other fifteen out, anxious to see what new antics they were performing. They eagerly began to eat, and were performing. They eagerly began to eat, and were performing. They eagerly began to eat, and were performing.

Miss Esther, drawing a little closer understood it all.

"It's those brandy cherries!" she exclaimed, "whoever would have thought you'd go to gobbling them up! Well, well, so that's what's been the matter with you! Well, I am ashamed of you, I truly am!"

She looked at them severely, but the geese seemed to show no repentance for their recent spree, and continued to eat eagerly all that were left of the cherries.

"Shoo," said Miss Esther, waving her hands. "Shoo—shoo. You shan't have another single one, you wicked, guzzlin' creatures!"

She carefully picked up all the remaining cherries.

"Now what am I going to do with you, with your breasts all raw and bleeding? A pretty looking set you are!"

The geese looked mournful. They had never faced a November night with such exposed chests before.

"Well," said Miss Esther, resignedly, "I suppose

you'll have to come into the woodshed and sleep to-night. It's a most monstrous performance, the whole thing."

"Monstrous" was a word she rarely used, and only to express some unprecedented and really dreadful affair.

She had an uncomfortable feeling of responsibility for their condition. She had plucked them herself, in what she believed were their death agonies. She could not let them suffer now, for her act of cruelty. She thought about them all night, and in the morning a brilliant idea came to her.

"What they need is chest protectors," she said to herself, "and I don't see why I shouldn't make 'em some. There's all that battin' left from the quilts, and that ball of green string, I got for the morning glories to run on. I'll just make 'em some comfortable little pads, and tie 'em on."

And so she did—she cut and fitted seventeen chest protectors and tied them on to her denuded geese. Then she opened her kitchen door, and her little flock stalked forth. She was quite excited with the success of her experiment, and stood in the doorway watching them, a bright spot of color glowing on either cheek.

At just that moment Simon Bushnell drove by, but Miss Esther did not see him. If she had she would have noticed how the expression of his face changed from indifference to surprise and then amazement and consternation. He had driven by for many years, his eyes apparently fixed upon the headstall. He had passed her coldly by in her little pleasures, and greater sorrows. But now the unexpected had happened. The sight of seventeen geese in cotton batting chest protectors, tied on with green strings, broke down the reserve of years.

He stopped his horse and looked and looked again.

"Esther," he cried, "Why, Esther, what is the matter?"

She saw him there. "It's nothing, Simon," she answered, "you needn't stop."

Then she went into the house without giving him another glance, but she left the door open behind her.

He hesitated a moment, then he drove up to the old hitching post, which so many horses had chewed that it seemed to be all frayed out. He tied his horse, and passing by the strange looking geese he followed Miss Esther into her little kitchen.

She stood in the middle of the room, as if she was waiting for him. Her heart was fluttering wildly, but her face was firm and fixed.

"Why, Esther," he said again, "what is the matter? What have you got on those geese?"

"Chest protectors," she answered, "I tied 'em on with green strings. I'm stammered after her. Then he looked at her keenly. Was she going insane?"

"I plucked them yesterday," she exclaimed, "'cos I thought they was dying. They acted so queer and flapped over on their sides so. But they'd eaten some brandy cherries that I threw out, and they were just intoxicated. And I felt so bad when they came to life, with their chests all exposed, that I just made those little coats and tied them on."

Simon Bushnell looked at her, and then he glanced out of the window at the flock of erring geese. Then he began to laugh—great haw-haws of honest laughter, that convulsed his face and shook his frame.

Miss Esther watched him silently—then a lump came in her throat, and the tears rose in her eyes. "I guess you wouldn't have laughed," she said indignantly, "if those geese was all you had for your Thanksgiving party, and you thought they'd gone and died!"

He stopped laughing quickly. "Your Thanksgiving party?" he said inquiringly.

"Yes," she answered. She was still indignant, and the tears in her eyes were beginning to glisten upon her cheeks.

"They was all I had to buy my party fixin' with. I've asked John, and his wife and children, and Uncle Josiah and Aunt Ruth, and Ellen Martin, to dinner, and I calculated to get about fifteen dollars from these geese to buy things with. You see it's my last Thanksgiving here, I'm going to sell the farm, and then I'm going away."

Simon Bushnell was silent for a moment. "You're going away?" he finally repeated.

"Yes," she answered doggedly. "I am."

He drew a little nearer. "Esther," he said slowly, "have you felt real bad and lonely and miserable all these years?"

"Yes," she answered honestly. "I have."

"Well, so have I," he confessed, "I've been a pig-headed fool. But it isn't too late. 'Spouse you keep your farm. But I ain't too late. 'Spouse you let me have the folks to dinner, and let it be my Thanksgiving party. 'Spouse you marry me now, Esther?"

She was silent, crying softly.

"Esther," he said gravely, "don't take on so. It's now or never, Esther, for sure this time."

"Oh, Simon," she said, holding out her hands, "let it be now, let it be now!"

He put his arms around her, and kissed her awkwardly.

"I just bless these geese of yours, Esther," he said, "'cos I'd vowed I'd never speak to you again, no matter what happened, but they kinder surprised me into it, 'fore I thought."

"Poor things!" sobbed forth Miss Esther, "I'd kind of hate to kill 'em now!"

But she did, and they helped to furnish part of her Thanksgiving dinner as well as her wedding feast.

THE HOUSEWIFE.

Minnie May's Dep't.

MY DEAR NIECES:—

"Oh, the spring hath less of brightness
Every year,
And the snow a ghastlier whiteness
Every year;
Nor do Summer blossoms quicken,
Nor do Autumn's fruitage thicken
As it did—the seasons sicken
Every year."

We are emphatically a retrospective race. As time rolls rapidly ever onwards, we look back to the long years that are gone. Childhood's innocent, happy days, the best, bright days of school, the first dawn of manhood and womanhood, when life began to seem stern reality, and we took our stand among our fellows; all these hold dear. But perhaps if there is one thing that stands out in bold relief, it is the long, cheerful winter evenings that passed so pleasantly away.

I can remember it all so plainly, even now—the days duties over, we all gathered together to forget our petty troubles and trials in pleasant talk and merry games, and there is no place so suggestive of cosy comfort as the spacious farm sitting-room, with father, mother and children gathered round the cheerful wood fire. It is a rare thing in the city to find all gathered by the home fireside in the evening. Business, amusements, dissipation—something, I am sorry to say, to break up those home pleasures which farmers' families only know.

But it is of the approaching Christmas I wish to speak to my nieces. I hope each and every one of you will try in some way to make somebody else happy on that day. Remember all you can, and especially those who have no parents nor home, and whose lot in life seems less blessed than yours, for if we look around we can see many who have little to cheer them, and to whom a kind word, a "Merry Christmas," and a little useful present or a toy for their children would do much towards making them happy. Wherever possible I would recommend having a Christmas tree in the home. It always is an attraction, and when the process of disrobing the gorgeously attired tree commences, who has not heard the shouts of joy as Johnny receives the coveted knife and Fanny the longed-for book, and when the spring skates that Bobby prayed and hoped for all last winter actually go plump into his arms, such a howl of ecstasy is set up which fairly makes our own hearts bound with delight; and if we have succeeded in making even one happy on Christmas day, do we not feel much better ourselves?

I must now conclude in wishing all my nieces a very Merry Christmas and a Happy New Year, trusting that our pleasant intercourse shall be continued during 1893. The *Advocate* is to be much improved and enlarged, and to be issued hereafter every fortnight, giving us an opportunity of much closer communication.

MINNIE MAY.

P. S.—Minnie May offers a prize of \$2.00 for the best essay on "Punctuality," all essays to be in our office by the 20th December. Also a prize of \$2.00 for the best original New Year's story, not to exceed four columns in length of our ordinary type; must be in our office by the 1st January.

The cries of none of the animals approach more closely that of the human voice than those of seals when lamenting the loss or capture of their young. The cry of a wounded hare resembles that of a child in distress. Its piercing shriek can be heard on a still night at a distance of more than a mile.

Prize Knitted Mitts.

WON BY MISS NELLIE COWAN, MOSBORO', ONT.
DIRECTIONS FOR MAKING.

Cast on your needles fifty-five stitches and knit the first round plain.

2nd Round—p 1, k 1, p 1, k 6, p 1, k 1, p 1, k 7, throwing the thread over between each stitch, p 2, k 7, and, as before, throw your thread over between each stitch, p 2; repeat this until the end of the round.

3rd Round—p 1, k 1, p 1, k 6, p 1, k 1, p 1, n, k 9, n, p 2, n, k 9, n, p 2, n, k 9, n, p 2, n, k 9, n.

4th Round—p 1, k 1, p 1, k 6, p 1, k 1, p 1, n, k 7, n, p 2, n, k 7, n, p 2, n, k 7, n, p 2, n, k 7, n, p 2, n, k 7, n.

5th Round—p 1, k 1, p 1, k 6, p 1, k 1, p 1, n, k 5, n, p 2, n, k 5, n, p 2, n, k 5, n, p 2, n, k 5, n, p 2, n, k 5, n.

6th Round—p 1, k 1, p 1; remove three stitches to an extra needle, knit the next three, and replace the three lifted and knit them; p 1, k 1, p 1. Repeat from the second round until long enough for a cuff. Knit the front of the mitt plain, for the back the cable stripe with fern stripe on either side, and two purled stitches between the fern stripe and the plain front.

Simple Christmas Gifts.

BY EVELYN L.

Once more dear old Father Christmas is near at hand, and, at the thought of his coming, we bestir ourselves to be ready with the little gifts which we wish to send in loving greeting, as expressions of good will, to those united with us in the ties of love and friendship. A few suggestions as to new and pretty fancy work may be found useful.

Ring-work being still fashionable, many useful as well as attractive articles are made of the brass rings crocheted with knitting silk. Needle-books are novel and effective when made in this way: Take seven rings for one side of the cover and crochet them with silk. If a ring sufficiently large be used, a spider's web may be worked in the centre. Sew the rings together—one in the centre and the other six surrounding it—forming a circle; then cut two or three pieces of flannel the same shape, but a size smaller, and button-hole the edges with silk; join the covers and flannel together with two tiny bows of baby ribbon the same shade as the silk, and, on the opposite side of each cover, sew a piece of the ribbon, about five inches long, to tie together when the needlebook is not in use. Yellow, pale blue, pink or crimson are the favorite shades. Pen-wipers may be made in a somewhat similar manner, the rings being joined in triangular form and chamois skin being used instead of flannel.

How many times, when sewing, are we annoyed by the scissors slipping down to the floor or disappearing into unthought of corners. A good way to obviate this difficulty is to make a pretty ribbon and ring attachment and pin it to one's side. The materials required are:—Fifteen rings, one inch in diameter, two yards of ribbon, an inch and a-half wide, and a pair of scissors. Crochet the rings with knitting silk the same color as the ribbon, yellow being very effective but red more durable. Fasten one end of the ribbon around a ring, then run the other end through one of the handles of the scissors, leaving a loop about four inches long. Make a similar loop through the other handle, passing the ribbon through the same ring, slightly lapping one ring over the other, weave the ribbon in and out, leaving a plain piece at the top six inches long, and finish with a pretty bow, which is pinned to the side of the wearer, and the scissors hang ready for use.

Many are the devices and designs used for making photograph frames, but the prettiest one I have seen was made from the following directions:—Take three quarters of a yard of ribbon, four and three-quarter inches wide. (Five inch ribbon will answer, but the former is preferable.) Fringe it on each end to the depth of five and a quarter inches; then crochet twenty-six rings, join them together in this way

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o o      o o
o         o

o         o
o o      o o
o o o o o o
o o o o o o

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and sew them to the ribbon so that a cabinet photograph will fit the frame thus constructed. The lowest row of rings should come above the fringe. Join three rings in triangular form and draw the ribbon together some distance above the top of the photograph where the rings are secured, the top one being used to hang it up, and the other fringed end of the ribbon hanging gracefully at one side.

One of the most unique articles is that used for hat and stick pins in place of the old-fashioned cushion. Buy a pretty bieque doll's head with flowing hair; it must not be too large, say about seven inches around the shoulders. Take a piece of sheet wadding nine inches long and sixteen inches wide; fold it up so that will be about four inches wide, then put a thick coating of mucilage inside the doll's shoulders and crowd one end of the batting into the neck in order that the shoulders may fit neatly down upon it and let it dry. When this is ready, take a piece of satin about nine inches square; double it and make a case to cover the batting; gather it at the top, and secure it tightly around the doll's neck. Then, with soft lace about an inch and a-half wide, make a deep frill around the neck, putting a stitch here and there to keep it in place. The lower edge of the case may be finished with loops of baby ribbon an inch long, or crocheted rings, fringe, or in any pretty way which one's taste may suggest. A crocheted ring is securely sewn at the back of the neck and drawn through the hair, by which to hang it up, and, when finished and filled with pins, it will be found useful as well as ornamental.

Dainty hairpin-holders may be made of the small, round Japanese baskets so common in our city stores. Select one about twelve inches in circumference, and take out the bottom. Knit or crochet, in some delicate shade of wool, round, tufted pieces to fill the apertures and sew them in securely. Chenille balls of the same color sewn around the basket are a great improvement; about ten will be needed. Finish with a pretty bow and strings of ribbon.

To make a neck-tie case, a very suitable gift for a gentleman:—Take two pieces of pasteboard fifteen inches long and six inches wide, covering each with three sheets of wadding on one side and one sheet on the other; scatter a little sachet powder between the wadding and cover them with pale blue satin. Across the sides more thickly wadded put two rows of fancy elastic or pale pink ribbon; join the covered pasteboard together in book form with two bows of pink ribbon, and sew a piece of ribbon on each cover on the other side with which to tie them together. The neck-ties are slipped under the elastic and are easily kept in place. Any colors which combine well may be used. A pretty idea for one of the covers is to stretch a piece of ribbon across diagonally from one corner to the other, upon which may be painted or embroidered the name or initials of the one for whom the case is intended, or, if preferred, a spray of flowers or a conventional design.

Tatting is now so fashionable that many dainty and useful articles may readily be made by those who are handy with the shuttle, doilies being particularly popular.

Large wooden spoons are utilized for the purpose of making pin-cushions. The spoon is gilded or bronzed, as taste may dictate, and a small satin cushion glued into the bowl, while a ribbon bow and loops finish the handle.

*** Swiss Legends of Santa Claus.**

There are endless legends and stories about him; some are most quaint. He is supposed to have been an extraordinary child from his birth, and to have spoken the first day he was born. He grew up with a remarkable love for Holy things. His father and mother died when he was very young, and left him great riches which he bestowed in charity. Hearing that a nobleman in the city where he lived was very poor indeed, and had three daughters who were nearly starving, he one night tied up some gold in a handkerchief and took it to the house. The door was open, and looking in he could see the three poor girls asleep in one bed, at the foot of which their father was sitting weeping. St. Nicholas did not wish to be seen, and at the same time was puzzled how to leave the money without this happening. Suddenly, however, the moon came out from behind a cloud and showed him an open window, through which he could throw the handkerchief unseen. It fell at the father's feet, who was overjoyed at the sight of the gold. By its aid, so says the story, he was enabled soon afterwards to marry off his eldest daughter. St. Nicholas came a second time to the house and threw in more gold, with which the second daughter was portioned. When the Saint came the third time the father was on the watch and discovered him. St. Nicholas, however, desired him to tell no one what had occurred, and the father with many thanks and blessings promised to obey.

*Santa Claus is the patron Saint of the children of Switzerland and Germany, and it is customary at Christmas to hang the stockings at the foot of the bed for Santa to fill.

†ANOTHER LEGEND.

According to this story Santa Claus was Bishop of Myra, where a dreadful famine was raging, and a great many ships laden with wheat having entered the port, St. Nicholas went to the captains of the vessels demanding a hundred hogsheads of wheat from each. This they refused, saying that the wheat had been measured at Alexandria, and must be put untouched into the Emperor's granary. The Saint, however, persuaded them with the assurance that when they should discharge their cargo no loss would be felt. They believed him, and found, on arriving at Constantinople, that he had told them truly. It was during this same famine that the greatest miracle is said to have been performed. As he was travelling through his Diocese visiting the

people, he chanced to lodge with a man, who in consequence of the scarcity of provisions, was wicked enough to steal little children, whom he murdered, cut to pieces, and served up as meat to his guests. St. Nicholas, however, had no sooner cast his eyes on the dish than he discovered the arch fraud. There was a tub in the room containing the remains of three of these unfortunate children. He approached it and had no sooner made the sign of the cross over it than up they sprang whole and well.

† A picture represents St. Nicholas with his crozier and mitre, standing over a tub in which are the three restored boys, while a man, most likely the host, is shrinking out of an open door at the back.

Making an Impression.

BEHAVIOR OF THE GIRL WHO DISCOVERS THAT SHE IS BEAUTIFUL.

The girl is unlucky who finds out suddenly that she has something nice the matter with her. I know one, says a writer in the Philadelphia Press, who learned that she had lovely hair. She took to doing it up with the hair-pin, and she used to look like a mop on the third day of a house-cleaning. She took to jerking her head, too, so that her hair would come down, and then she did look lovely, especially if it happened at the theatre, at luncheon, or in the cars. She

would wiggle her head so that her words would come out scalloped, and her nose got all spread around. A girl with a neat foot is the worst nuisance I know. She always has it stuck out in the car. Her shoe-string is always coming undone. She is forever lifting her dress and making you nervous. It just about spoils a girl if she finds out that she has fine eyes and pretty teeth. Good-bye to quiet expression at once. Her eyes roll droop, snap, shut, open, dance, and sparkle all over the place, till you wonder why they don't get sprained. Meanwhile her teeth are working just as hard. She smiles twice a minute, and often her eyes are getting in some fine touches that don't go with a smile at all. The effect is awful. I got so tired looking at a girl the other day that I wondered why the man with her didn't marry her just for the sake of tying her eyes fast to her nose and knocking her teeth out. As for me, give me a girl who knows she is homely, or one who is so good-looking that she doesn't care.

Henry IV. and His Children.

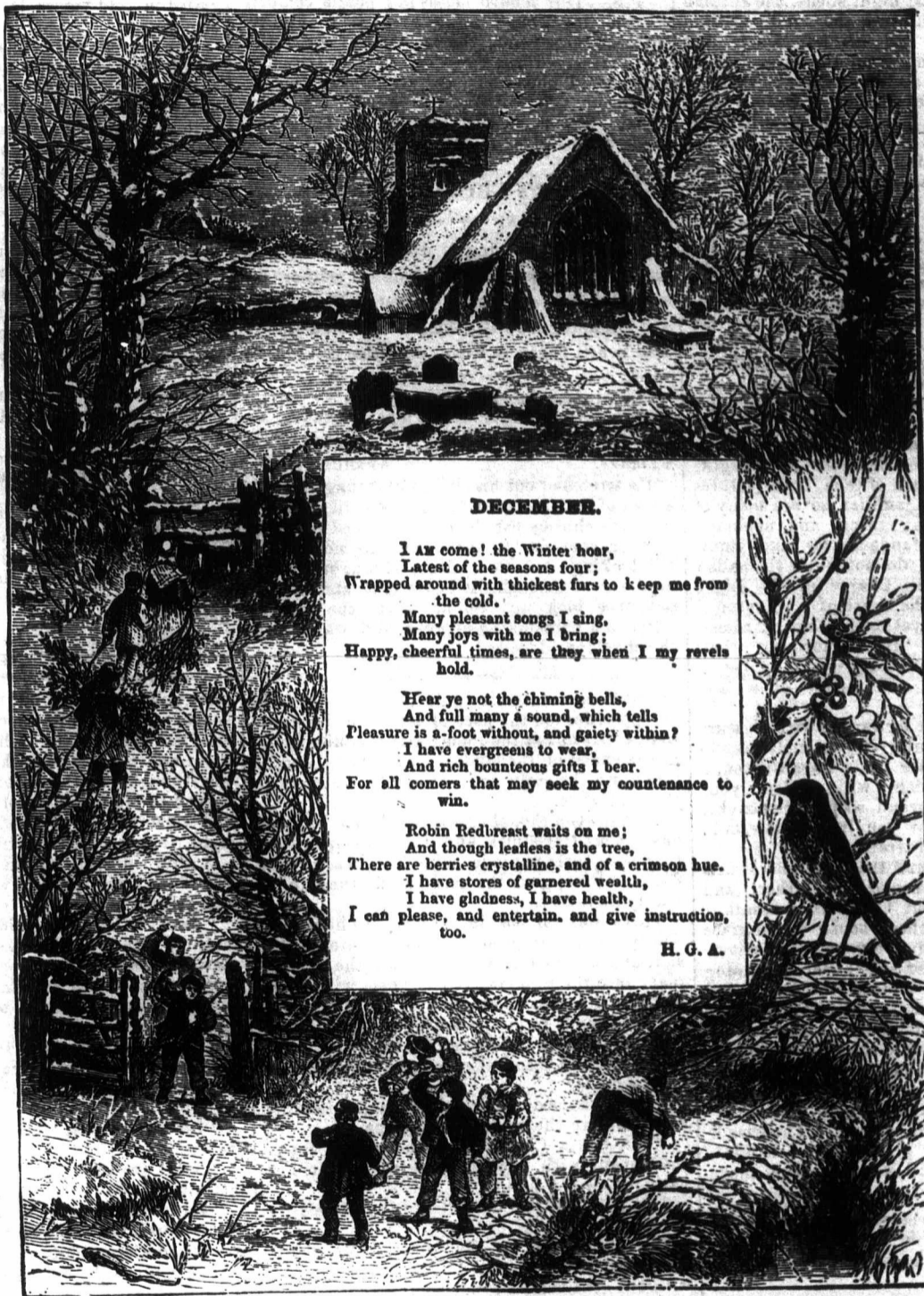
Henry IV. of France always insisted upon his children calling him papa, as he did not wish them to

address him by the titles of sire and majesty, according to the ceremonial adopted at foreign courts. He was in the habit of taking part in the childish amusements of his little ones. One day as he was going round a room on all fours with the Dauphin, his first-born, on his back, an ambassador unexpectedly entered his apartments. The King, without changing his posture, said to him:—

"Sir, have you children of your own?"

"Yes, sire," was the reply.

"Ah, well, in that case I will finish my ride round the room."—[L'illustrazione.



DECEMBER.

I AM come! the Winter hoar,
Latest of the seasons four;
Wrapped around with thickest furs to keep me from
the cold,
Many pleasant songs I sing,
Many joys with me I bring;
Happy, cheerful times, are they when I my revels
hold.

Hear ye not the chiming bells,
And full many a sound, which tells
Pleasure is a-foot without, and gaiety within?
I have evergreens to wear,
And rich bounteous gifts I bear.
For all comers that may seek my countenance to
win.

Robin Redbreast waits on me;
And though leafless is the tree,
There are berries crystalline, and of a crimson hue.
I have stores of garnered wealth,
I have gladness, I have health,
I can please, and entertain, and give instruction,
too.

H. G. A.

Not Up to the Standard.

"No, mis," said the school trustee of district No. 13, Cornstalk Township, shaking his head slowly, "I don't think you're quite the person we want for teacher in our school."

"May I ask in what particular I fail to meet your requirements?" enquired the young woman timidly.

"I've been listening to your talk," rejoined the official reluctantly, yet firmly, "and if I must tell you the truth, you don't seem to have no idea of grammar."—[Chicago Tribune.

Uncle Tom's Department.

MY DEAR NIECES AND NEPHEWS:—

Our sorrow for the loss of John G. Whittier, the Quaker poet, has not subsided when we are again called on to lose a friend whose lines each one of us have enjoyed, and whom we have claimed as partly our own. The Poet Laureate, Alfred Tennyson, lies to-day in the poet's corner of Westminster Abbey, quietly resting amid England's great ones. We can but wait for a glance at the last of this greatest poet of England's present time. "He lay," we are told "through the last night silent, the autumn moonlight all across his bed, the wind whistling in his manor oaks, and his left hand, that blameless hand, resting upon the open pages of 'Cymbeline.'" For sixty years, for it was then he wrote 'The Lady of Shallot,' 'Oenone' and 'The Palace of Art,' he has been writing for us, and in the fulness of his fame, in a ripe old age, he has passed quietly away. His coffin was covered with the flag of his country, whose true son he was and ever wrote for, and whose honor he ever upheld. Upon the flag lay a wreath of laurel leaves sent by the Queen. During the service the choir sang 'Crossing the Bar' and 'The Silent Voices,' a poem he dedicated to his wife only ten days before his death. Among the contributions of poetry sent in for my nieces and nephews, I shall expect to find these beautiful ones. The greatest living Englishmen laid him to rest—a fitting tribute to his greatness; but one which he himself would value far more, and in this we can include Whittier also, can be rendered by us all, the tribute to a pure, kindly, benevolent life, righteous in thought, word and deed. The face of each, from pictures of them, has long been familiar, so are many of their lines to you, my nieces and nephews. Who does not know 'Maude Muller' and 'Snow Bound?' Who of you do not know the ballad of the 'Revenge,' 'The Charge of the Light Brigade' and 'Ode on the Death of Wellington?' even if you have not yet read 'Enoch Arden,' 'Locksley Hall,' or 'In Memoriam,' than which, perhaps in the language is no better interpretation of the real sorrow of a true friend.

There is much to look forward to with pleasure during the coming winter if you undertake to read what either of these poets have written, a winter's reading which will widen your knowledge, give you grand scope for thought, and which will open for you fresh interests in the "primrose path of literature."

Were Uncle Tom around the latter end of this month, and able to suggest to fathers and mothers something about Christmas presents, I rather think a copy of these books would grace the little library of each of my young relatives. You will think my letter sad, I fear, beginning with two who "have crossed the Bar," and ending up with this being the last letter of this year. Yes, the very last. Some, whose faces I saw in thought as I wrote the first letters, are missing, and some wee faces, who a year ago took no interest, are peeping in. The years come and the years go, and we grow from babyhood to be old men and women. The friends you have now in a few years will be changed, and each of you will fill a niche being made ready for you somewhere.

"The work of the world is done by few,
God asks that a part be done by you."

Each of us can say, as we bid dear old '92 adieu:—

"I see not a step before me,
As I tread on another year;
But the past is in God's keeping,
The future His mercy shall clear;
And what looks dark in the distance
May brighten as I draw near.

So I go on, not knowing;
I would not if I might;
I would rather walk in the dark with God
Than go alone in the light.
I would rather walk with Him by faith
Than walk alone by sight."

Or in Whittier's words:—

"I know not where His islets lift
Their funded palms in air,
I only know I cannot drift
Beyond His love and care."

Let us read the last night of this year, in addition to the "May Queen," Tennyson's "Death of the Old Year," and may your Christmas, my children, be a very happy one, and a glad entering on the new year of 1893.

UNCLE TOM.

P.S.—Our Poets' Corner still proves a source of interest, but I am sure there are still a great number of my nieces and nephews who have not sent in their favorite poems. Let me have as many as possible for next month. Make your selection from the writings of any poet you choose, and let me have them not later than the 20th December.

P.S.—This month closes our puzzle competition for 1892, but I cannot give names of all the prize-winners before the 1st January, or until I have received the answers to the December puzzles. I hope you have all enjoyed this department, and will continue to assist me during 1893. New rules, new prizes and new attractions will be given in our next issue.

Arthur's Christmas Letter.

ANNIE J. HOLLAND IN HOUSEHOLD MONTHLY.

Arthur seated himself upon the floor, in a corner of the room farthest from his mother; he wrinkled his eye-brows, puckered his mouth, and cramping his little fingers around a stubby lead pencil began to write; and this is what he wrote:—

Dear santy claws: Ples dont for Get to Fill my stockin. An Id like A Sled an a par of skaTes. An ples giv MOTHEr the vKry nicEst thinG you goT. We Live on French strett, First ChlmBly down 2 FLighTs.

He stretched out his little numb fingers, with a sigh of relief; for printing was hard work for Arthur's chubby fist. Then he glanced furtively over his shoulder, to make sure his mother was not looking—but no; stitch, stitch, stitch her needle went through the heavy coat, and she did not once look up. So he folded the precious letter in a painstaking manner, and sealed it in the envelope addressed:

MR. SANTY CLAWS,

and stuffing it into his little pocket—regardless of opposition on the part of letter or pocket—went softly out of the room; but his quiet movements ended on the landing just outside, and he tore down the stairs and through the streets to the post office.

Perhaps the thought that there were but two days before Christmas, and the consequent fear that the gentle reminder might not reach Santa Claus in time, gave the deer-like fleetness to his sturdy little feet.

There was no one in the office, so he walked boldly up and dropped the letter through the slot, and watched it sliding down the inclined plane into the receiving box. Then, with a fear of being detected he ran out of the office, and with his hands in his pockets, scampered home.

Arthur's letter lay among the others for a half hour or so, and then a clerk began assorting them for the mails.

"Here's a good one!" and he laughed heartily as he held up the crumpled envelope.

"Mr. Santa Claus!" and he laughed again, in company with two or three clerks who had gathered around him.

Just then the door opened and the postmaster came in.

The clerk held up the letter, "Mr. Santa Claus—address not given! Are you acquainted with the gentleman's residence?"

Mr. Morris took the envelope and laughed also, as he glanced at it, and was about to throw it down, when a sudden vision of four little maids, with an unquestioning faith in Santa Claus, rose before him.

"Perhaps I can find the gentleman," he said, with a twinkle in his kind blue eyes; and putting the envelope into his pocket he walked away.

It was Christmas Eve. There had been a heavy snow storm the day before, and it had cleared off very cold. The people were muffled in furs to their eyes—if they had the furs—and hurried along over the crisp snow, which sang

sharp little songs under their feet. The rude wind wrestled with them at the street corners, making the gentlemen catch wildly at their hats, and fluttering ribbons and veils in the faces of the ladies.

Jack Frost played coarse practical jokes upon everybody and everything within his reach, so that the market boys felt obliged to run with the turkeys and turnips, blowing the while upon their aching fingers, or rubbing their smarting ears.

The newsboys, with ear muffers, and caps pulled closely down, held their papers under their arms and their hands in their pockets, and thrashed one foot against the other, while they called in cold voices to the passer-by, "Paper, sir! paper!"

The heavens were studded with gleaming stars, which blinked merrily down upon the hurrying throng; and through uncurtained windows were glimpses of gay Christmas trees with happy children dancing around them, and smiling fathers and mothers looking on.

Holly wreaths hung in profusion, and festoons of evergreen and mistletoe adorned the walls; and over these happy scenes played the flickering light of the "yule" log's glow.

The church bells rang merrily, and the organ's deep note peeled forth upon the night winds; lights streamed from the windows and through the doors as they swung to and fro, while softly on the listening ear stole the sound of voices singing of "Peace on earth, good-will toward men."

But the peace and warmth and glow had not reached "French street, first chimney, two flights down."

There was a little fire—just enough to give it the name—but its name seemed an empty title.

The curtain was not drawn—what need of that? since the frost had worked so thick a screen that not even a loving star could peep in with a happy Christmas greeting. Mrs. Hill, with an old shawl over her shoulders, sat close to the table, with a dim kerosene lamp beside her.

She was blue with the cold, and her fingers so stiff that the needle went laboriously through the heavy seam. Her tired eyes filled with tears now and again, but she dashed them away—every minute was precious; for if the coat was not finished to-night, and taken back—there was a sorry outlook for to-morrow. And the thought of the empty larder and coal-hod nerved her to frantic efforts at faster working; and when the clock outside told the hour of eight, it sent a colder thrill through her frame.

Arthur, in spite of the cold, had pulled off one of his stockings, and was looking ruefully at a large hole in the toe.

"Look!" he said, holding it up before his mother, with a comical expression on his little mottled face.

"O Arthur, how you do wear your stockings out! I mended them all up last Saturday night."

"But it comed right through again!" and Arthur glanced from the yawning stocking toe to his mother's tired face, then back again to the stocking.

"Do you s'pose the presents will come through?"

"No, I am afraid they won't," she said, half-bitterly.

"But I don't want 'em to!" and he looked with a perplexed expression at his mother, who was afraid his presents wouldn't come through.

He examined the hole again, taking its dimensions by thrusting three fingers through it and stretching them apart.

Yes, there was no doubt a good-sized toy could squeeze through that hole.

"Can you mend it, mother?"

"O Arthur, don't ask me to do anything!" she answered fretfully, and Arthur moved away a little; for never in his life before had he heard his mother speak like that.

But the next instant she reached out her arm, and snatched him passionately to her heart.

"Arthur, dear, mother is sorry that she spoke like that to you," and she kissed the little cold face, while her tears—so near the surface—rained over her own face and his. "I am tired, but that is no reason for my speaking crossly to you;

and mother will mend the stocking before she goes to bed."

Arthur put his arms around her neck. "You'll have a happy Christmas," he said, looking up into her face with beaming eyes; and her tears started afresh as she looked at his hopeful face and thought of the gloomy prospect.

"I wish I could make a fire and warm you before you go to bed," she said, rubbing his blue cheeks with her cold fingers; "and give you something to eat."

"I ain't much hungry," he answered, with a brave smile.

"If I finish this coat in time I shall get something to eat, and I will wake you up and give you some," and kissing him, she turned back to her work and began that weary stitch, stitch.

Arthur hung up his stocking, and going back to his mother pulled the shawl away a little and kissed her on the neck—a form of caress which did not interfere with the needle—and with a bright face opened the bed-room door and shut himself in. How cold it was! for the door had been shut all day, that what heat there was might be kept in the kitchen. He would like to have opened it, for a ray of light from his mother's dim lamp, but it would make her colder; so he kicked off his shoes, not parting with very much else, for it was too cold to undress, and jumped into bed, and in a few minutes was fast asleep, dreaming, perhaps, of Christmas feasting and Santa Claus.

Arthur had not been dreaming long when a low knock startled Mrs. Hill.

What could it mean? And she trembled a little as she walked to the door and opened it.

A kind-faced man with merry blue eyes was standing there; he had very fat pockets, and a sled in one hand and a parcel in the other; and Mrs. Hill trembled more than ever, but from quite another emotion than fear.

Mr. Morris explained his errand; and as he stepped into the room there was a sound of other footsteps in the little entry, but he shut the door and unloaded his pockets and laid his parcels down.

"My children sent these things to Arthur," he said, laughing, as bags of candy, nuts, and raisins came out, in company with "jumping-jacks" and picture-books. "I hope Arthur won't be offended," and he drew a little doll from the depths of one pocket.

"My children are all girls, and the youngest one looked so disappointed when I suggested that a doll was not just the thing for a boy that I concluded to bring it along."

Mrs. Hill had hardly spoken; her eyes required a great deal of attention, and her lips had an over-mastering tendency to tremble; Mr. Morris, to relieve her, looked as little as possible in her direction.

But finally there was an end to apples and oranges, toys, strings of pop-corn and candy, and the rest of his errand must be accomplished; so clearing his throat, and looking hard at the ceiling, he said:—

"My wife thought the nicest thing for the mother would be a ton of coal and a barrel of flour."

Poor Mrs. Hill—poor Mr. Morris! for it was almost as trying for one as the other; he walked to the window and examined the frost work; it was so thick and fine that he glanced at the stove next, and then at the empty wood-box and scuttle. The table, with its dim light, row of spoons, and scissors, with the unfinished coat in the chair, told the story plainly.

Mrs. Hill looked up at last, and tried to thank him; and Mr. Morris said how happy they had all been in answering Arthur's letter; and he looked so happy as he said it, that no one could have doubted him. Then he opened the door and a man sat a large basket inside and went away directly.

"I shall see you again, Mrs. Hill; and I hope you and Arthur will both have a very merry Christmas. Good-night," and he had gone before Mrs. Hill could speak. He went directly to a coal dealer and ordered a bag of coal and a basket of wood sent at once; and did not leave the place until he had seen them on their way. Mrs. Hill was still sitting in the chair where

Mr. Morris had left her when the heavy step of the men with the coal and wood, and their loud knock at the door, roused her from her reverie.

The first thing she did after they had gone was to make a rousing fire. How it crackled and snapped! and she bent over the stove and rubbed her stiff fingers in the genial warmth. Then she took Arthur's stocking, with the yawning toe, and quickly mended the big hole and put the toys in. The candy-bags and strings of popcorn she hung around it; and piled the apples and oranges in a plate on the shelf above; and stood the shining new sled beneath, with the skates, mittens, and woolen scarf hanging over it.

What a fine show it made! and how she longed to catch Arthur out of bed to see it! but she wanted the room to get warmer first; and then there was the basket to be unpacked.

She folded away the coat—not finished, but that did not matter now—and smiled brightly as she picked up her spools and scissors, and thought of the day of rest before her.

There was everything in that basket—at least so thought Mrs. Hill. Two pies; a loaf of cake; another of bread; little heart-shaped cakes, sugared in pink and white; a plum pudding; butter; tea; coffee; sugar; cranberries; a bag of sweet potatoes; a squash; a turnip; two glasses of jelly; and a turkey. The little table was loaded; it had never groaned beneath such a weight before.

Mrs. Hill hung the holly wreath, which had lain on the top of the basket, in the window; then opened the bedroom door.

"Arthur," she said softly, bending over him; but Arthur did not move. She kissed him on the lips; he puckered up his mouth, opened it, and closed it again, with a deep breath, and was as fast asleep as ever.

"Arthur, do you want to hear about Santa Claus?" The sleepy eyes opened and he rubbed them with his little fists.

"W-h-a-t!"

"I thought you would like to hear about Santa Claus; your presents have come."

Arthur was wide awake—as what boy would not have been—and sprang out of bed.

"Didn't he come quick?" and he stood in the bedroom door, his eyes still blinking, looking from the chimney to the table, and from the table back to the chimney, and then up to his mother's face.

She drew him to the stove, and sitting down took him on her lap.

"I didn't 'spect so much!" he exclaimed, finding his tongue at last; "but ain't it jolly—jolly!" and clapping his hands together he threw his arms so tightly around his mother's neck that he nearly stopped her breath, and gave her a sounding kiss.

"The stockin's full—an' you mended the hole!" and he got down on the floor and peered up under it. "It's all sewed tight!" Then he pulled down the sled and skates, tried on the mittens, wound the scarf around his neck, scraped acquaintance with the candy, and took a bite out of a shining apple.

Words! words were weak for the expression of his satisfaction; so he danced up and down the room, and clapped his hands, and laughed and whistled, and finally turned a summersault, in the intensity of his joy.

Then he and his mother had their Christmas supper in the warm room, with the firelight shining through the cracks of the usually grim old stove. And they talked of this glad evening—for somehow the bitterness of its beginning had passed from the mother's mind, and the old carol which sings that "night is past," most fitly expressed the thought of her thankful heart.

"I can see a star!" Arthur cried, and sure enough, the frost had melted a little, and a star was peeping in; oh, more than one! two, three—yes, several shining down on the poor little home, as they had shone, long years before, on lonely Jadaea, and telling again the old yet ever new story, of the Christ-child's birth, and of love and peace on earth.

When ammonia is used to remove stains on colored fabrics, if the color is dulled, a little weak oxalic acid will restore it.

POETS' CORNER. First Prize for Selected Poetry.

ADA ARMAND, PAKNEHAM, ONT.

Lord Alfred Tennyson, the late Poet Laureate of England, born 1809, died on Oct. 6, 1892, having for many years successfully filled that position. The Bishop of Winchester, speaking of him, says: "In his completeness he seems to far surpass Wordsworth, and to almost match Shakespeare. He was strong as Byron, without Byron's cynical and arrogant disdain." Two of his own poems were sung at his funeral, viz.: "The Silent Voices" and "Crossing the Bar." The "Charge of the Light Brigade" was written in commemoration of the Battle of Balaklava (1854). Among his other works are:—"Idylls of the King," "May Queen," "Maude," "The Echoes" and "Funeral of Wellington."

The Light of Other Days.

TENNYSON.

Tears, idle tears, I know not what they mean! Tears from the depth of some divine despair Rise in the heart and gather to the eyes, In looking on the happy autumn fields, And thinking of the days that are no more.

Fresh as the first beam glittering on a sail That brings our friends up from the under world, Sad as the last which reddens over one That sinks, with all we love below the verge, So sad, so fresh, the days that are no more.

Ah! sad and strange as in dark summer dawns The earliest pipe of half-awaken'd birds To dying ears, when unto dying eyes The casement slowly grows a glimmering square, So sad, so strange, the days that are no more.

Dear as remember'd kisses after death, And sweet as those by hopeless fancy feigned On lips that are for others; deep as love, Deep as first love, and wild with all regret, O, Death in Life! the days that are no more.

Lullaby.

Sweet and low, sweet and low, Wind of the western sea, Low, low, breathe and blow, Wind of the western sea! Over the rolling waters go, Come from the dying moon and blow, Blow him again to me; While my little one, while my pretty one sleeps. Sleep and rest, sleep and rest, Father will come to thee soon, Rest, rest on mother's breast, Father will come to thee soon; Father will come to this babe in its nest, Silver sails out of the west, Under the silver moon; Sleep, my little one, sleep, my pretty one, sleep.

Life and Death.

ADELAIDE ANNE PROCTOR.

Adelaide A. Proctor was born in Bedford Square, London, on the 30th of October, 1826. Her love of poetry was displayed in her childhood, and before she was able to write she had a little album with her favorite verses copied in it, and this she carried around as other girls did dolls. The proceeds derived from her poems were spent in helping the needy, but her life was cut off at the early age of 39, in the year 1864. Among her poems are:—"The Sailor Boy," "The Story of the Faithful Soul," "A Legend of Provence," "The Last Chord" and "A Tomb in Ghent."

Life and Death.

"What is Life, father?" "A battle, my child, Where the strongest lance may fall, Where the warlike eyes may be beguiled, And the stoutest heart may quail, Where the foes are gathered on every hand, And rest not day or night, And the feeble little ones must stand In the thickest of the fight." "What is Death, father?" "The rest, my child, When the strife and toil are o'er; The angel of God, who, calm and mild, Says we need fight no more; Who, driving away the demon band, Bids the banner and spear from our falling hand, Takes the banner and spear from our falling hand, And proclaims an eternal peace." "Let me die, father! I tremble and fear To yield in that terrible strife!" "The crown must be won for Heaven, dear, In the battle field of life; My child, though thy foes are strong and tried, He loveth the weak and small; The angels of Heaven are on thy side, And God is over all!"

Is Might Right?

BY GOLDSMITH.

Ill fares the land, to hastening ills a prey,
Where wealth accumulates, and men decay;
Princes and lords may flourish, or may fade;
A breath can make them, as a breath has made;
But a bold peasantry, their country's pride,
When once destroyed can never be supplied.

A time there was, ere England's grief began,
When every rood of ground maintained its man;
For him light labor spread her wholesome store,
Just gave what life required, but no more;
His best companions, innocence and health,
And his best riches, ignorance of wealth.

But times are altered: trade's impeding train
Usurps the land, and dispossesses the swain;
Along the lawn, where scattered hamlets rose,
Unwieldy wealth and cumbrous pomp repose;
And every pang that folly pays to pride.

Those gentle hours that plenty bade to bloom,
Those calm desires that asked but little room,
Those healthful sports that graced the peaceful
scenes,
Lived in each look, and brightened all the green,
These, far departing, seek a kinder shore,
And rural mirth and manners are no more.

Second Prize.

MISS RHODA COSGRAVE, WHITEWOOD, N. W. T.

Thomas Moore, the well-known Irish poet, was the only son of Mr. John Moore, a citizen of Dublin, Ireland, where the poet was born on the 28th of May, 1780. His home was essentially a home of love. His tastes and friendships formed almost in boyhood have tinged his principles and feelings throughout life, and his love of independence, enlarged by modern philosophy, did not limit all his hopes to the deliverance of Ireland. He celebrates liberty as the right of all men, as the charm of all countries. When ages will have passed away one will stand out in the page of Ireland's history—the greatest poet of the nineteenth century, Thos. Moore.

The Meeting of the Waters.

There is not in this wide world a valley so sweet,
As the vale in whose bosom the bright waters meet;
Oh, the last rays of feeling and life must depart
Ere the bloom of that valley shall fade from my heart.

Yet it was not that nature had shed o'er the scene
Her purest of crystal and brightest of green;
'Twas not the soft magic of streamlet or hill;
Oh, no—it was something more exquisite still.

'Twas that friends, the beloved of my bosom, were near,
Who made every dear scene of enchantment more dear,
And who felt how the best charms of nature improve
When we see them reflected from looks that we love.

Sweet vale of Eosa! how calm could I rest
In thy bosom of shade with the friends I love best,
Where the storms that we feel in this cold world
should cease,
And our hearts, like thy waters, be mingled in peace.

Remember Thee.

Remember thee! Yes, while there's life in this heart,

I shall never forget thee, all low as thou art.
More dear in thy sorrow, thy gloom and thy showers,
Than the rest of the world in their sunniest hours.

Wert thou all that I wish thee—great, glorious and free,
First flower of the earth, and first gem of the sea—
I might hail thee with prouder and happier brow,
But, oh, could I love thee more deeply than now?

No! Thy chains as they rattle, thy blood as it runs,
But make thee more painfully dear to thy sons;
Whose hearts, like the young of the desert-bird's nest,
Drink love in each life-drop that flows from thy breast.

Third Prize.

FRANK POLLOCK, ST. MARY'S, ONT.

Night.

Percy Bysshe Shelley, the author of the following poem, was born in England in 1792, and was drowned from his yacht in the Mediterranean in 1822. His verse is characterized by an ethereal beauty and melody that has won for him the name of the "Poets' poet."

Swiftly walk over the western wave,
Spirit of Night!
Out of the misty eastern cave,
Where all the long and lone daylight,
Thou movest dreams of joy and fear,
That make thee terrible and dear,—
Swift be thy flight.

Wrap Thy form in a mantle gray,
Star inwrought!
Blind with thine hair the eyes of day,
Kiss her until she is wearied out,
Then wander o'er city and sea and land,
Touching all with thine opiate wand—
Come, long sought!

When I arose and saw the dawn,
I sighed for thee;
When light rode high, and the dew was gone,
And noon lay heavy on flower and tree,
And the weary Day had turned to his rest,
Lingering like an unloved guest,
I sighed for Thee!

Thy brother Death came and cried,
"Wouldst Thou me?"
Thy sweet child, Sleep, the filmy-eyed,
Murmured like a noon-tide bee:
"Shall I nestle near thy side,
Wouldst thou me?" and I replied
"No, not Thee!"

Death will come when thou art dead;
Soon, too soon,
Sleep will come when thou art fled,
Of neither would I ask the boon
I ask of thee, beloved Night,
Swift be thy approaching flight,
Come soon, soon!

Puzzles.

1-CHARADE.

If any day you go away
From home, you will agree
To go with speed you will only need
To take a 1, 2, 3.

When to a bill, or e'en your will,
Your name you would affix,
You can't deny that you'll rely
Upon a 4, 5, 6.

Now, if this "con" you work upon,
Its answer to define,
You'll get it pat, provided that
You only 7, 8, 9.

Three times three above you see;
Just place them in a line,
A simple part of mechanic's art
Is the answer, 1 to 9.

GEO. W. BLYTH.

2-CHARADE.

To Cousins all; "Xmas Greetings."

Just one year ago,
I did make a farewell bow;
But my love I could not sever,
So I'm back again forever.

'Twas in the May ADVOCATE,
That my "obit." from F. B. I read:
And the kind remarks from Miss Ada since
Have almost turned my head.

To FINAL off any danger ever ready,
I am PRIME again, dear mate;
"Never TOTAL, always forward,"
For my motto now I take.

May we then go on forever,
Ever cheering Uncle Tom;
Loving, helping one another,
Thus we'll have a grand "dom."

HY. REEVE.

3-CHARADE.

We were out hunting one day last month,
That is, my cousin and I;
When, tired of wandering through the woods,
We thought for FIRST ducks we'd try.

And so we borrowed a nice light boat,
Made to suit me—the rower,
And headed for the opposite isle,
About a mile from the shore.

On arriving at the other side
What should we behold
But a notice, standing stiff and straight,
In letters firm and bold.

And this is how the notice read:
"Any person or persons found
Trespassing on this property,
Or camping on this ground,
Shall be prosecuted according to law."
But we only laughed at it.

And said, "just let them catch us."
Oh, we were not afraid a bit.
We landed where we thought we had
Seen COMPLETE like a mink;

We went across, and were coming back,
But what stopped us, do you think?
Why the watchman himself,
No SECOND more or less,
And we were forced to give him
Our names and address,
And then we went. But when
Out of sight we got,
We had a good laugh at
Being so nicely caught.

CHARLIE S. EDWARDS.

4-DECAPITATION.

To Charlie Edwards and Lily Day:
There is a motto which tells us,
"Self-praise no honor is."
But one would scarcely think so
When reading the "ads." of "biz."

Well, perhaps there's some truth in it,
But what I meant to say
Is, that self-depreciation
Is not a thing to pay.
And you have done exceeding well—
Being novices at the game,
You really make us veterans
Feel a little touch of shame.
You efforts will LAST rewarded be
By our dear Uncle Tom;
Your names he'll place at the head of the list
Of winners for this year's "dom."
So hold your heads up boldly,
Your merits do not ignore;
But make others recognize them now,
If they PRIMAL did before.

ADA ARMAND.

5-ANAGRAM.

Why had I no puzzles in last month?
Did anyone ask, I wonder?
The TOTAL was (don't blame me, pray),
My naughty brother's blunder.
I gave him in time my letter to mail;
Then picture my dismay!
As he returned it unto me,
When he came home to-day.
But our column did not suffer,
As the puzzles there I see
Are as good, and many are better,
Than any sent by me.
And I must thank my cousins,
H. A. W. and Lily Day,
For all the many words of cheer
They've scattered o'er my way.
And I hope, now Harry's here again,
He'll not do as before,
Just stay a while, and leave us then,
His absence to deplore.
And now, as Christmas is SO NEAR,
My greetings here I'll send,
May its very choicest blessings
On all of you descend.

ADA ARMAND.

6-LOGOGRIPH.

In a noun, composed of five letters, may be found
eight verbs:—A color, a beverage, an animal, a
fruit, an adjective, three other nouns, and a pre-
position.

LILY DAY.

Answers to November Puzzles.

4-MUSIC	1-Pastime.
U L E M A	2-Ashamed.
S E D A N	3-Am-i-able.
I M A G E	5-Never, nerve.
C A N E S	

Names of those who have Sent Correct Answers to Nov. Puzzles:

George W. Blyth, Ada Armand, I. Irvine Devitt,
Addison and Oliver Snider, T. L. Simpson, George
Rogers, Alice Dawson, Frances G. Somerville,
Jessie Cumberland, Frank Milling, Charlie S.
Edwards, Lily Day, A. R. Borrowman.

Whom Not to Marry.

Never marry a man who has only his love for
you to recommend him.
It is very fascinating, but it does not make
the man.

The most perfect man who did not love you,
should never be your husband.
But, though marriage without love is terrible,
love only will not do.

If the man is dishonorable to other men, or
mean, or given to any vice, the time will come
when you will either loathe him or sink to his
level.

It is hard to remember amid kisses and praises
that there is anything else in the world to be
done or thought of but love-making; but the
days of life are many and the husband must be
a guide to be trusted—a companion, a friend, as
well as a lover.

Many a girl has married a man whom she
knows to be anything but good, "because he
loved her so."

And the flame has died out on the hearth-
stone of home before long, and beside it she has
seen sitting one that she could never hope would
lead her heavenward—one who, if she followed
him as a wife should, would guide her footsteps
to perdition.

Marriage is a solemn thing—a choice for life.
Be careful in the choosing.

Decorations for Christmas Tree.

Cut strips of colored paper into four-inch lengths, and one-inch widths. Gum the edges and join into rings. By another loop join these into chains, any length required, and loop from the tops to the tips of the branches. They may be made of white and pink, or blue and white, or all one color. Silver or gilt paper may be used. String long rows of pop-corn and use in the same way, or a lot of small flags of all devices can be made of colored paper. This paper can be procured at any newspaper office for a trifle. Red berries strung in long rows make a pretty effect looped between the branches. Even a small bit of silver cut into fine fringes and tied at intervals close to the branch, produces a sparkling effect. The small flags should be gummed to a small stick and inserted in the branch with pen-knife. These Christmas trees are a pleasing device from which to distribute the gifts to a Sunday school.

Queer Old Customs.

It will be news to many in this day that there was once a time, a long time, too, extending over several centuries, when there was a salaried official

IN CHURCH

to waken sleeping members of the congregation, and to expel sleeping dogs from the sacred edifice.

These individuals are alluded to in the records as

SLUGGARD-WAKERS AND DOG-WHIPPERS, and the fees paid them were very liberal, their annual salary being a mere pittance.

The custom, which was frequent in England, was also practiced in America more than two centuries ago. The Rev. Dr. Samuel Whiting, a minister of Lynn, Mass., was provided with a sluggard-waker, one Allan Brydges, who brushed the faces of those inclined to sleep with a fox's tail fastened to a long staff, "likewise a sharpe thorne, wherewith he may prick such as be most sounde."

Women, as well as men, also served in this capacity.

BETTY FINCH,

of Warrington, occupied this position at Holy Trinity Church in 1810, a comparatively recent period. She walked majestically up and down the aisle during the service, armed with a long stick like a fishing rod, with a "bob" on the end of it. With this she angled for sleepers. The term "bobbars" was used for this service, and Betty's son, one of a family of officials, used to recite for the amusement of the tavern goers:

"My father's a clerk. My sister's a singer. My mother's a 'bobber,' And I am a ringer."

The dog-whipper was to be found in every county in England, and is still at his work in the churches of some remote places. Indeed, there is a church in Wales where

"LAZY TONGS,"

with spikes in the ends, are still used to drag the unconsecrated animals from the sacred edifice.

The dog-whipper at Bray, in Berkshire, was provided with a "jerkin" to indicate his official position, at a cost of six shillings and four pence. The item paid to Richard Turner for whipping the "dogges" out of a church at Morton, in Derbyshire, in 1862, was one shilling.

It is believed that the well-known sexton of Peterborough, Old Scarlet, was one of the first dog-whippers in the country. His portrait on the wall of the cathedral depicts him with a whip in his belt. He died in 1591.

In some of the churches the dog-whipper was only allowed to drive out truant dogs, the dogs of the gentry being furnished with a pew, where they were admonished to keep order.

In Northrope Church, which was a dependency of Northrope Hall, there was a hall-pew for the Northrope canines, who were of bluer blood than the collies of the shepherds, and were more highly accommodated, as well as being safe from the taws of the dog-whipper.

A Few Suggestions for Entertaining.

BY EVELYN L.

Now that the busy season is over upon the farm, and the short winter days, with their long evenings, have come, there is more leisure to consider how these evenings shall be spent and hospitalities exchanged. Uncle Tom, in his letters to nephews and nieces, has from time to time alluded to pleasant ways of spending these evenings in the home circle, so I will not touch upon these, but will offer rather a few suggestions for entertaining. It is perhaps hardly necessary to say, in passing, how essential it is that we mingle with those about us, as this enlarges our thoughts and ideas, makes us bright and cheerful, and keeps us akin to the spirit of the times.

In country districts, where guests will drive several miles, it is well to serve refreshment upon their arrival, and for this reason teas are very popular. The old-fashioned plan of seating all the guests around the one long table, groaning under the triumphs of culinary skill, may have its advantages, but the newer way of using small tables will be found much pleasanter. Place your tables, three or four in the parlor, two or three in the sitting-room, etc., according to the number you entertain, four being the best number for each table. If you can obtain them delicate sprays of green, artistically arranged, have a pretty effect on the white linen covers. On each table have a cream pitcher and sugar bowl, a dish of olives or pickles, some salted almonds, and forks and spoons, according to what you intend serving. After the guests are seated a plate of thin bread and butter, or bread and butter sandwiches should also be placed on each table, and then serve the tea, beginning, we will say, with fried chicken, cream potatoes, cold sliced tongue or ham, celery, and tea or coffee, as may be preferred. After these plates have been removed, have cheese, salad and crackers, while for a third course ice cream is always acceptable; but where this cannot be obtained jelly or canned fruit must take its place, aided by the light and dainty cakes, the pride of every housekeeper's heart.

Great care should be exercised in the seating of guests, and the hostess must summon all her tact to her assistance in arranging the tables, in order that those who sit together may be congenial company. Designate each guest's place by a written or painted card bearing his or her name, and there will be no confusion in seating.

After tea it is well to have some settled form of entertainment. Progressive conversation has become very popular. If you have six tables make out a list of twelve topics, varied to suit the probable tastes of your guests. The following list is offered as a suggestion:

- 1. School days. 2. Friendship. 3. Blunders. 4. Cholera. 5. Cranks. 6. Travel. 7. True Patriotism. 8. Physical Culture. 9. The last book read. 10. What gift, as a woman, would you prefer before all others? 11. What city is the most beautiful that you have seen? 12. Whom do you consider the greatest living statesman?

On prettily decorated cards write two subjects, placing one on each table. Let it be understood that five or ten minutes, as may be thought best, will be allowed for the discussion of each subject, and have a small bell to ring at the expiration of the allotted time. After the first topic on each card has been discussed one lady and one gentleman from each table progress, the former to the table above, and the latter to the one below that which they formerly occupied, and the second topic is talked over. Then those who remained at first progress to another table, and in this way each guest has an opportunity of conversing with everyone present, and every topic is discussed in turn. At the close of the conversation a vote is taken as to the best conversationalists, and prizes presented to the lady and gentleman securing the greatest number of votes.

"Observation" is a pleasant finish for an evening's enjoyment, and is carried out as follows: Cover a large tray with bright tissue paper, and place upon it a collection of from one to two

hundred small articles of every shape and variety which may be collected from every department of the household. Place the tray on each table in turn, allowing one minute for observation. When all have looked at it distribute pencils and paper, and allow five minutes for writing down all that can be remembered. The one having the largest correct list is entitled to a prize.

"Salamander" will also be found interesting. Provide each guest with a pencil and sheet of paper with the word "Salamander," or any other which may suggest itself, written at the top. Then allow ten or fifteen minutes for writing the words which can be constructed from the letters forming the word on the paper, and the person having the greatest number is declared the winner.

Progressive verse making, if not considered too difficult, may be made very entertaining and amusing. Upon a small slip of paper, provided for the purpose, each person writes a noun, after which the slips are folded up and distributed, so that every one receives a noun written by some one else. In the same way questions are written and distributed, and then it is the pleasing task of each individual to compose a verse of poetry, bringing in the question and noun which has fallen to his share, no matter how incongruous they may be. A stated time being given for their composition the verses are read aloud, those having the best progress, as in the conversation, and those making the greatest number of progressions being the winners.

Pink teas and rainbow teas are very pretty and appropriate for the holiday season. For the former make the small table-covers of a suitable shade of pink silecia; if the white be preferred, a large pink bow is a pleasing addition. Tie the bread and butter in tiny rolls with pink baby ribbon, a bow of which on the cards for the guests' names has a very pretty effect. The color may be carried out in any way that fancy suggests—pink jelly, pink icing for cake, pink ice cream, etc., etc. At a rainbow tea lately given, soft draperies for the room were made of long strips of inexpensive material of different colors, sewn together to give the rainbow effect. Pretty ribbons decorated the tables, harmonizing and blending in their arrangement, while the cards had the rainbow colors daintily shaded in one corner.

An Artist's Bill.

An artist employed in an old church in Belgium, being refused payment in a lump and asked for details, sent in his bill as follows:—

Table with 2 columns: Description of work and Amount. Items include: Corrected and renewed the X. Commandments (3 12), Embellished Pontius Pilate, and put a ribbon on his bonnet (3 00), Put a new tail on the rooster of St. Peter, and mended his comb (3 20), Replenished and gilded the left wing of the Guardian Angel (4 18), Washed the servant of the High Priest, and put carmine on his cheeks (5 12), Renewed Heaven, adjusted two stars, and cleaned the floor (7 14), Renewed the flames of Purgatory, and restored souls (8 06), Revived the flames of Hell, put a new tail on the Devil, mended his left hoof, and did several jobs on the damned (7 17), Rebordered the robe of Herod, and adjusted his wig (4 00), Put new spatter dashes on the son of Tobias and dressing on his sock (2 00), Cleaned the ears of Balaam's ass, and shod him (3 40), Put earrings on the ears of Sarah (2 04), Put a new stone in David's sling, enlarged the head of Gollah and extended his legs (3 02), Mended the shirt of the Prodigal Son, and cleaned his ears (4 00). Total: 54 46.

Camphor gum burned on a stove or volatilized over a lamp is recommended as an excellent means of driving away flies or mosquitoes.

If any foreign substance is swallowed which is sharp, a needle for instance, do not give an emetic, but confine the diet to mashed potatoes for two days.

Tar or paint may be removed by first applying oil of some kind, or lard; then, after scraping off the loosened substance, apply a mixture of turpentine and benzine, and at the last use benzine alone.

Ill-Mannered Children.

It would be a blessing, indeed, if many a mother could see her children's behavior through her neighbor's eyes. It would no doubt remove some scales of maternal blindness, and result in the better governing of her offspring. There is no more disagreeable object in life (unless it is an ill-behaved man or woman, and such conduct in mature years is more generally the result of early training) than a thoroughly ill-mannered child. How often we see, on the street, at entertainments, while both visiting and receiving visitors, children who, by their obtrusive or objectionable ways and constant talk, render every one near them uncomfortable. That home discipline has in a measure degenerated in the last score of years, no one can doubt. The quiet, respectful child is almost a thing of the past. I do not mean that children are to be restricted from ever making noise. I like the hilarious racket attending childish sport when it is made in proper season. But that season is certainly not when the mother is entertaining company or when a child is a guest in another's home.

It seems strange that any mother who realizes her responsibility as a mother does not reason to herself in this wise relative to her child's character:—"When my little one was born it knew absolutely nothing. It had no realization of morals or manners. Only as it is taught the difference, bad ways and good ways, pleasant ways and disagreeable ways are alike to it. Consequently it rests upon me as its mother, its most constant companion, the one most deeply interested in its welfare, to be earnest and vigilant in teaching it such ways only as will produce pleasant and desirable traits of character."

I once visited at the home of a lady who was a most intelligent, cultured person. Among her several children was a five-years-old boy whom I think I shall never forget. There was scarcely an instant's cessation during the day from his noise and chatter. As for his actions they were simply indescribable. At one time he climbed on the piano and thumped the keys with his shoes. The following is a sample of his mother's attempt at conversation with her visitor:—"I am reading a book called Dream Life, and it is so beautiful. (Tommie, do let Mabel alone.) The language throughout the book is smooth and poetic. (Tommie, come out of that cabinet.) You have read the book, you say? Well, isn't it charming? (Tommie, stop drumming on that piano.)"

Is it not deplorable that any mother will give her ignorant, dependent little one such wretched training? Does such a mother never look into the future and see what will be the result of such discipline in early life? Does she not see trouble ahead for herself? Does she take pleasure in thinking that she is raising sons and daughters whose manners will be repulsive in good society? Viewing it in another light, has any mother the right to give the little irresponsible being whom she has brought into this world such a start in life? Is it not a sacred, binding duty upon her to teach her child good morals, good manners, and every other attribute conducive to the making of a good, pleasant character?

Its Meaning.

"What are you going to call your new paper?" asked the friend who had dropped in to see the aspiring young journalist.

"The Palladium," was the reply.

"That's a good name for a newspaper. By the way, what is the meaning of the word?"

"It means—hum—it means—why, you know what a palladium is, don't you?"

"No, I'm asking for information."

"Well, that's a good one on you! Lived in a civilized community all your life and pretend you don't know what a palladium is."

"I'm in earnest. What is it?"

"Why, a palladium is—Great Caesar! Look at that dog fight!"

"Saved!" howled the young journalist, pouncing on the dictionary the instant the door closed on his visitor's retreating form.—(Chicago Tribune.)

O Tell Me, Is It Love?

BY SAMUEL MINTUM PECK.

I'm feeling very strange of late;
All is not right, I fear,
My mind's approaching such a state
'Twere mild to call it queer.
It first began by writing verses,
And seeking rhymes for "dove;"
But now it's daily growing worse—
O tell me, is it love?

I spend a fortune on perfumes;
My candy bills immense,
I buy the rarest kind of blooms
Regardless of expense.
I pose before the glass and smile
In every sort of way;
I turn and bow in every style—
Now, is it love? O say!

To woman's charms so long quite proof,
Smiles, blushes, dimples, all,
From each bright snare I held aloof,
And viewed my comrades fall.
Who would have dreamed that ever I
Would keep a female glove
And blush and kiss it on the sly—
O tell me, is it love?

I do not eat enough to keep
A humming bird alive.
They say I babble in my sleep
Such honeyed thoughts I give.
I know I stammer when I speak;
My hands are in the way,
A certain doorstep makes me weak—
Now, is it love? O say!

I used to laugh at stars and moons
As only fit for "chaff."
Now I go humming old love tunes
And hardly ever laugh.
I seek by night a vine-wreathed house,
And watch a light above.
Then sneak away just like a mouse—
O tell me, is it love?

Within my brain queer fancies come,
And problems strange and new;
If one lives on a certain sum,
How much will serve for two?
And then anon I'm darkly sad,
And then I'm wildly gay,
O tell me, am I growing mad?
Or is it love? O say!

Saving Work.

Every woman needs a large table on which to wash dishes, milk pans, cans, pails, etc., and I thought I had done about the right thing when I furnished my wife one three feet wide and five feet long. But I found that it took a good deal of hard work to keep it clean, and one day my wife suggested a zinc cover. I bought for one dollar a sheet which completely covered it, and it is always smooth and bright with less than a fourth the work it required before covering. I believe the one thing which has saved the most work is my arrangement for setting milk. We are remote from a pond from which to cut ice, and so do not use it for cooling milk. For some years we used our cellar, which is cool and suitable, but the work of carrying milk up and down stairs is so heavy that I determined to arrange something better. We have a well of good, cold water six feet from the summer kitchen. I made a tank one foot wide and deep enough to hold a three-gallon can of milk, and placed it just inside the summer kitchen, and cut a hole through the siding so that we can pump directly into the tank. At the bottom a faucet projects outside, so that the water can be drawn into a small cemented basin, which discharges into a tile drain. A waste-pipe at the top discharges into this basin, and now, when the men come to the pump for water, instead of pumping a tubful for us to empty, the waste water runs through the tank and cools our milk. The tank is made of inch-and-a-half lumber, and painted three coats, inside and out. I am not sure but it would be nearly as cheap, and better, to make a box of inch lumber and line it with zinc, as it would be easy to keep it sweet.

Our cellar has a cement floor, and food keeps cooler and will keep sweet longer placed on the cellar floor than in a cupboard or safe, but it must be covered from flies, and when covered closely it often has a musty taste. We have prepared some boxes of light wood, with wire such as we use for fly screens to give ventilation. Two boxes are needed, as we sometimes must put warm vegetables in, and these should have a box by themselves. By opening a cellar at night, so as to thoroughly ventilate it, darkening it in daytime, and sprinkling the cement floor with cold water occasionally, a cellar may be kept delightfully cool.—(Waldo F. Brown in American Agriculturist.)

A Workshop on the Farm.

No farm is really complete without a well-appointed workshop. It is generally found that one will save almost enough every year to pay for the stock of tools used. There is always space in an upstairs granary or loft to arrange a workshop. Plenty of light is very necessary, especially immediately over the work-bench. A chimney and stove must be furnished. The stove should be placed in a wide, shallow box of sand to avoid danger from fire. The work-bench should be substantially built. Only the top need be planed, and a wood vise with broad jaws is to be secured to one end. Another desirable adjunct to the shop is a good grindstone, fitted with both treadle and crank, for tools always need sharpening, and it is only with sharp tools that a neat job can be done. A small scroll saw and lathe will be found very convenient, and now can be bought for a very few dollars. A shaving horse can be made by any one of ordinary ability, and it will be found almost indispensable, as will be a harness-bench, and it is really surprising how often these things will come into use, saving dollars in money and many trips to town. The set of tools needed in the workshop need not be a very large or expensive one at the start, as it can be added to from time to time. There should be an ordinary hand saw about seven point, a rip saw, a tenon saw and a compass saw, costing from twenty-five cents to one dollar each. Also a good hatchet or two, costing from fifty to seventy-five cents each; a claw and rivet hammer, costing from fifty to seventy-five cents each. From six to twelve chisels, assorted sizes, and a wooden mallet will cost a total of two or three dollars more; a good brace, with a set of assorted bits, will take from three to five dollars more, according to quality. A little implement containing an assortment of awls in the handle which has a screw top to it can be had for fifty to seventy-five cents. In planes there should be a smooth, a jack and a fore-plane, costing from one to three dollars each, though frequently many tools can be picked up, good and cheap, at a junk shop or pawnbroker's in the large cities. There should also be a few gonges, a plumb bob, a small and a large square, a compass, a bevel, a level, a good two-foot rule, a monkey wrench, a saw set, a few files for both wood and iron, a drawing knife, a spoke shave, etc., together with with a lot of harness needles, thread, knife and awls. No farmer, with a workshop thus supplied, need be at a loss to employ his leisure time during winter weather or rainy days at any season. A small assortment of lumber should be kept overhead out of the way in the shop so it can be dry, well seasoned and handy when needed.

From fifty to one hundred dollars spent in furnishing up a shop as suggested will be found to be the best paying investment on the farm, for there are but few farms on which it can not be made to pay at least one hundred per cent.

NEW ADVERTISEMENTS.

Sale of Brood Mares and Shropshire Sheep—Messrs. R. W. Folkes and T. D. Hodgins, London.
Cross-cut Saw—Shurly & Dietrich, Galt, Ont.
Central Business College—Shaw & Elliott, Toronto and Stratford, Ont.
The Manufacturers' Life Insurance Co., Toronto.
Fencing Rough Ground—Page Wire Fence Co., Walkerton, Ont.
Bronze Turkeys for Sale—Jas. A. Stewart, Jr. Menie, Ont.
Holstein-Friesians—A. C. Hallman & Co., New Dundee, Ont.
Guns, Rifles and Watches—Stanley Mills & Co., Hamilton, Ont.
Jerseys—J. D. Stewart, Russeldale, Ont.
Berkshire Hogs—S. Coxworth, Claremont, Ont.
Manitoba Washing Machine—McCrossan & Co., Winnipeg, Man.
Plymouth Rocks—C. W. Eckhardt, Ridgeville, Ont.
Shorthorns—W. B. Cockburn, Aberfoyle, Ont.
Galloways—D. McCrae, Guelph, Ont.
Annual Live Stock Sale—O. A. C., Guelph, Ont.
Ayrshires—R. Reid & Co., Hintonburg, Ont.
Fodder-Cutting Implements—B. Bell & Son, St. George, Ont.
Bob-Sleighs—Bain Bros. Mfr. Co., Brantford, Ont.
Incubator—Geo. H. Stahl, Quincy, Ill.
Shorthorns, Clydesdales, Etc.—David Birrell, Greenwood, Ont.
Sleighs—Bain Wagon Co., Woodstock, Ont.

SALE OF BROOD MARES

Mr. R. W. Ffolkes will sell at the LONDON WESTERN FAIR GROUND STABLES, on Wednesday, 21st December, 1892, about 65 head of Mares, from 15.2 to 16 hands high. These Mares were intended for export, but proved to be in foal. They are all bred to Imported Horses, Thoroughbred, Hackney and Coach Sires. Terms cash; parties requiring time can have 30 months by furnishing approved joint notes, with interest at 7 per cent.

R. W. Ffolkes.

T. D. HODGENS WILL ALSO SELL

at the same time and place about 40 HEAD OF REGISTERED SHROPSHIRE SHEEP, principally 3-year-old imported ewes, all of which have been bred and are supposed to be with lamb. This is his entire flock, as he is going out of sheep breeding, being overstocked with horses. The above ewes are all regular breeders and had lambs this year.

324-a-o T. D. HODGENS.

DAIRYING for PROFIT

OR THE POOR MAN'S COW.

By Mrs. E. M. Jones.

We recommend all interested in butter-making to obtain a copy of this valuable book. In order to stimulate its circulation we will give two copies to each old subscriber who will send us one new subscriber and one dollar. Price, 30c. each.

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ANNUAL SALE OF LIVE STOCK OF THE ONTARIO AGRICULTURAL COLLEGE FARM

The Hon. JOHN DRYDEN, Minister of Agriculture, has instructed J. D. HEFFERMAN to conduct the Fourteenth Annual Sale of Pure-bred Stock, the property of the Ontario Government, in the Victoria Rink, Guelph, on Thursday, 15th Dec. 1892, when the following Pure-bred Animals will be sold by Auction, viz.:—5 Shorthorns, 3 Herefords, 1 Galloway, 1 Sussex, 1 Red Poll, 1 Devon, 2 Holsteins, 4 Ayrshires, 20 Improved Yorkshire Pigs, 15 Tamworths and 3 Berkshires.

TERMS OF SALE.—\$20.00 and under, cash; over \$20.00, twelve months' credit on approved notes without interest, or discount for cash at the rate of six per cent. per annum.

The Provincial Fat Stock Show will also be held at Guelph, on the 14th and 15th December, and parties coming to the sale and show may secure reduced rates by getting a certificate from the railway station agent at the starting point and having the same endorsed by the secretary at Guelph.

Catalogues may be obtained by applying to THOS. SHAW, Prof. of Agriculture. Sale to commence at one p.m.

JAMES MILLS, PRESIDENT

Standard - Bred Stallions

AT OTTER PARK, NORWICH, ONT.

Premier Stallion, Lexington Boy 2.23, by Egbert 1138, sire of Egthorne 2.12 1/2; Temple Bar 2.17 3/4, and forty-three others in thirty list. Other standard-bred Stallions in stud. For particulars send for announcement.

315-y-OM CORNWELL & COOKE, Proprietors.

NINTH ANNUAL Ontario Provincial FAT STOCK SHOW

—TO BE HELD IN THE—

CITY OF GUELPH,

—ON—

December 14th & 15th, '92

—UNDER THE AUSPICES OF THE—

Agriculture and Arts Association of Ontario, the Guelph Fat Stock Club, and the Sheep and Swine Breeders' Association.

Cattle to be in the building by 10 a. m. of Dec. 14. Prize Lists can be obtained from the Secretary.

HENRY WADE,

323-b-om Toronto.

STOCK FOR SALE.

MANITOBA HORSEMEN, LOOK HERE

I can sell you an imported Clydesdale Stallion for less money than any other dealer. I handle none but sound, first-class stock, and sell at a small profit. I number among my customers such well-known horsemen as Enright Bros., Winnipeg, Man., and Dundas, Ont. Also a few choice Shetland Ponies.

A. K. TEGART, IMPORTER AND BREEDER, TOTTENHAM, ONT.

313-y-OM

La Compagnie du Haras National

30 St. James Street, MONTREAL, CANADA.

65 Prizes & Diplomas

in 1891 and 1892,

for our French Coach (Anglo-Norman), Percheron, and Clydesdale stallions and mares

FOR SALE AT REASONABLE PRICES

Give Us a Call.

Auzias-Turenne, General Manager.

315-y-om

SHIRE HORSES.—A grand young imp. stallion for sale at a low figure.

IMPROVED YORKSHIRES.—Young stock of all ages at farmers' prices.

WHITE HOLLAND and BRONZE TURKEYS.—Orders booked for young birds for fall delivery. Correspondence solicited. Prices on application.

318-v-om W.M. MULLEN, Hillsburg, Ont.

D. & O. SORBY, GUELPH, ONTARIO,

BREEDERS AND IMPORTERS OF FASHIONABLY BRED CLYDESDALES



is at the head of our stud.

314-y-OM

HILLHURST -- HACKNEYS

Oldest Stud in America and largest in the Dominion.

All stock full registered and bred from the most fashionable and purest blood, direct from breeders in the heart of the Yorkshire Hackney breeding district.

STALLIONS.

Fordham (287) 28, by Denmark (177); Maxwell (3143) 76, by Prince Alfred (1325), and Danesfort (3535) 77, by Danegelt (174). MARES by Matchless of Lonsborough (1517), Danegelt (174), Wildfire (1224), Fordham (287), etc. Young stock for sale. Twelve fine Yearling Shropshire Rams, registered, and Aberdeen-Angus Bulls fit for service. For catalogues address for sale at moderate prices. Hillhurst Station, P. Que.

M. H. COCHRANE, Hillhurst Station, P. Que.

322-y-om

MESSRS. JAS. GARDHOUSE & SONS.,

ROSEDALE FARM, HIGHFIELD P. O., ONT.

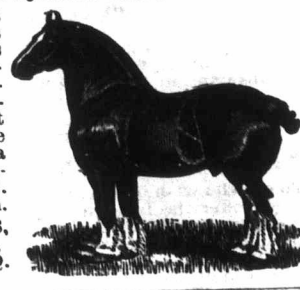
Have on hand and for sale at low figures, Draught Colts and Fillies, both from imported and Canadian bred mares, and mostly sired by their sweepstakes horse "King of the Castle." These are all good ones, and will make very heavy mares and horses. Also Shorthorns and Leicesters of the choicest strains of blood. Write for prices or come and see us. Station and Telegrams: MALTON on G. T. R. 313-y-OM

ROBERT NESS, WOODSIDE FARM,

—IMPORTER AND BREEDER OF—

Yorkshire Coachers, French Coachers, Clydesdales, Clydesdale Mares, Shetlands, and Ayrshire Cattle.

The stock has taken more prizes than all importers and breeders combined in the province. I am prepared to sell at prices to suit the times. Give me a call. Canada Atlantic Ry and G. T. R. on the farm. ROBERT NESS, Woodside Farm, Howick P. O., P. Q. 315-y-OM



H. I. ELLIOTT, BREEDER OF

Scotch Shorthorns and Shropshires.

RIVERVIEW FARM, 320-y-om Danville P. Q. WARMINSTER AT HEAD OF HERD

Shorthorns, Coach Horses & Berkshires.

Our herd is headed by Daisy Chief = 13674 =, he by the famous Indian Chief = 1108 =, and was highly successful in the various Western Ontario fairs of the past season. We have for sale 3 young bulls, 6 heifers, and a Cleveland Bay mare and gelding, at reasonable figures. Also registered Berkshires and a few extra choice Cleveland Bay mares, the get of Disraeli, Dalesman, etc. Write for prices, or come and see us. A. J. C. SHAW, Camden View Farm, Thamesville. 318-y-om

SHORTHORNS, BERKSHIRES,

Plymouth Rocks, Bronze Turkeys. Write me for prices on the above. I have one of the finest show cows in Ontario for sale. Waterloo-Booth strain. H. Chisholm, Montrose Farm, Paris, Ont. 321-y-OM

If you want a well-bred Shorthorn Bull for use on Grade Cows, or a Heifer to start a herd, with, at a price that your pocket can stand, write me. I can suit you. C. G. DAVIS, Woodlands Terrace Farm, Freeman P. O., Ont. 318-y-om

SHORTHORN CATTLE—A few good, useful,

young bulls for sale.

PLYMOUTH ROCK FOWLS—Pilgrim strain;

choice cockerels and pullets at moderate prices. Also registered Berkshires. W. T. WARD, 321-y-om Birchton Farm, Birchton P. O., P. Q.

VALENTINE FICHT,

Maple Leaf Farm, Oriel, Ontario,

offers for sale at reasonable figures and on liberal terms, 30 head of well-bred Shorthorn bulls and heifers, yearlings and two-year-olds, also a three-year-old shire stallion from imported sire and dam (2nd prize Toronto), and a grand lot of Cotswold sheep. STATION: Woodstock, on C. P. R. and G. T. R. 318-y-om

MAPLEWOOD STOCK FARM.

SCOTCH SHORTHORNS, IMP. YORKSHIRE AND BERKSHIRE PIGS. Herd of Yorkshires headed by Favorite (Imp.) and Royal Duke, both prize winners; also registered Berkshires of Snell's stock. Pairs supplied not akin, and satisfaction guaranteed. Correspondence invited. Address, 322-y-OM J. G. MAIR, Howick, P. Q.

SCOTCH-BRED : SHORTHORN : BULLS,

Scotch-Bred Heifers, Imported Shropshire Rams, Imported Ewes, Home-Bred Rams, Home-Bred Ewes, FOR SALE,

in any number. All of very best quality, and at the lowest prices. We want 500 recorded rams for ranches. Correspondence solicited.

John Miller & Sons,

Brougham, Ont.

Claremont Station, C. P. R., 22 miles east of Toronto, 306-y



OUR
SUBSCRIPTION PRIZES
FOR 1893

According to our usual custom at this time of the year, we have decided to give the remainder of this year and

ALL OF 1893

To all new prepaid subscribers for \$1.

Agents Instructed to Take Subscriptions on these Terms

During the past year the ADVOCATE has steadily and surely grown in public favor. Our Subscription List is larger than ever before, and is constantly increasing. We ask each of our old subscribers to send at least

ONE - NEW - NAME

To all who wish to get up clubs of new subscribers we offer the following terms:—For from 1 to 25 new names sent us at any one time, 25c. each. For from 25 to 100 new names sent us within any year, 35c. each. In no case will more than 10c. be allowed on renewals. Special terms to permanent agents. To those who desire to work for Stock Prizes we offer the following:—To the Canvasser sending in 100 new names at \$1 each, a young Bull or Heifer of any of the following breeds: Short-horn, Ayshire, Devon, Holstein, Jersey, Polled-Angus or Galloway. For 30 new names we will send a Ram or Ewe Lamb of any of the following breeds: Cotswold, Leicester, Lincoln, Shropshire, Southdown or Horned Dorset, or a young pair of any of the following breeds of swine for the same number of names: Berkshire, Yorkshire, Suffolk, Poland-Chinas, Chester White or Tamworth.

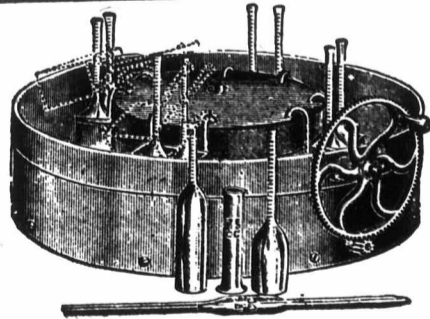
Older animals of any description on equally favorable terms. All stock sent out by us will be registered in their respective records, and be of good quality. We guarantee satisfaction in all respects. We want good, honest agents in every county in Canada, and will give permanent employment and good wages to suitable persons. Our regular agents are earning from \$600 to \$1,200 and expenses per annum.

IMPLEMENTATIONS

In implements we can give the best possible value. For 40 new prepaid subscribers we will ship a celebrated Campbell Fanning Mill and Bagger, or one of the Monarch Fanning Mills and Baggers. These are two of the best Mills made in America. The sieves and screws are numerous and complete, the bagging attachments perfect. They are by far the lightest running mills manufactured. For 30 new prepaid subscribers we will ship one of The Dale Pivoted Land Rollers, fully described in the September issue.

To those desiring Windmills, either steel or wooden wheels or derricks, we can offer special inducements. We have made arrangements with the best manufacturers, and can supply the Improved Halliday Windmill, manufactured by J. F. Walmsley, Woodstock, or the well-known mill made by The Wortman & Ward Manufacturing Co. of London, or a mill manufactured by the Toronto Pump Company. Terms and outfit furnished on application.

In sending subscribers for subscription prizes, send in your names and cash weekly. In all the larger prizes we will give from three to six months in which to send us the required amount of cash and names. When you commence to canvass, let us know for what prize you are working. As soon as any reliable canvasser sends us one-half the number of names required to win the prize for which he or she is working, we will ship the prize if desired, and allow the canvasser a suitable time in which to send us the number of names specified, but we must be furnished with suitable evidence that such parties are reliable.



ALEXANDRA HAND CREAM SEPARATOR.

For 210 new subscribers we will give a No. 8 Alexandra Cream Separator; price, \$110. A lady can work it. Capacity, 25 gallons per hour. Or a Babcock Milk Tester, four-bottle machine, price \$9, for 15 subscribers; eight-bottle machine, price \$12, for 21 subscribers; twelve-bottle machine, price \$14, for 25 subscribers. Bottles, measure, pipette and half gal. of acid will be shipped with each tester.

The Best Bargain Ever Offered in Sewing Machines.

A \$55.00

SEWING MACHINE!

will be given for sending us 60 new subscribers, or for 10 names and \$25 cash extra. In all premiums \$1.00 must accompany each new name.



The "Peerless" High-Arm

is the name of a Strictly High Grade Sewing Machine that we are now prepared to offer to all who want a First-Class Machine with all Modern Improvements at unheard-of Low Prices. The Design is Graceful, and the Finish all that could be desired. It is Light Running and Noiseless.

ALL of the DESIRABLE features contained in other well-known modern style machines are to be found in the PEERLESS, improved and simplified by the best mechanical talent, until it stands, as the name implies, the peer of any machine in the market.

All wearing parts are of the best quality of case-hardened steel, possessing great durability, and by the turning of a screw, all lost motion, caused by wear, can be taken up. Every machine passes a rigid inspection by competent men before leaving the factory.

Every Machine is furnished with an Improved Automatic Bobbin Winder, which is so simple that a child can operate it—winding the thread automatically on the bobbin as evenly and regularly as the thread on a spool. A self-setting Needle and self-threading Cylinder Shuttle are used on the Peerless High-Arm Sewing Machine. The self-threading Shuttle is so simple that with two motions of the hand, backward and forward, the shuttle is threaded. The woodwork is the best that can be procured, of either Antique Oak or Black Walnut. The PEERLESS is so simple that any one can easily operate it in a few minutes' time, as the Instruction Book, which is sent with each Machine, is profusely illustrated, and answers the purpose of a competent teacher. It shows how to do all kinds of fancy work with attachments.

Complete Set of Latest Improved Attachments
Each PEERLESS Machine is furnished with a complete set of Johnson's celebrated steel nickel-plated Attachments in a velvet-lined case. Following is the outfit:—1 Tucker, 1 Ruffer, with shirring plate, 1 Hemmer Set (4 widths) and Binder, 1 Braider (Foot and Slide), 1 Thread Cutter, 1 Hemmer and Feller (one piece), 10 Needles, 6 Bobbins, 1 Wrench, 1 Screw Driver, Oil Can (filled with oil), Cloth Gauge and Thumb Screw.

A registered Certificate of Warranty is furnished by the manufacturers agreeing therein to furnish any parts that may prove defective within five years, free of charge (except Needles, Bobbins and Shuttles), so great is their confidence in the excellence of the PEERLESS.

We cannot speak too highly of this machine, having used one ourselves; we are, therefore, in a position to recommend it to our subscribers.

We have made arrangements with a large jewelry house whereby we can offer extra good inducements in watches for getting up clubs of new subscribers. One dollar must accompany the name of each subscriber.



For twenty new names, or ten new names and \$5.00 cash extra, we will give a three-ounce Sterling Silver Stem-winder and Stemsetter.

A screw back and front, open face, dust-proof and water-tight, Waltham, Elgin or Columbus Movement. For thirty new subscribers and \$50, or five new subscribers and \$10 cash extra, a Gold Filled Watch, Solid Gold Joints and Thumb-piece, Hunting or Open Face, Stem-winder, Waltham, Elgin or Hampden Movement. Or a Ladies' Watch, similar to above, for twenty-seven new subscribers and \$27, or four new subscribers and \$10 cash extra. The above watches are all warranted for five years.

RINGS.

A Ladies' Solid Gold 10-Carat Ring with Diamond in centre for five new names and \$5, or two new names and \$1 in cash. Gents' Solid Gold 20-Carat Ring, handsomely engraved, for four new names and \$4, or one new name and \$1 in cash.

We have purchased a large quantity of

Silverware and Scissors

from a reliable wholesale house, which we propose giving as premiums to those sending us new subscribers. All articles we give as premiums may be relied upon as being as represented. We will never send out cheap, trashy stuff, such as is offered by many publishers.

The Forks and Spoons are manufactured by the Meteorite Mfg. Co., they are silverplated upon white metal, and guaranteed never to tarnish.

We will give One Dozen Medium Sized Teaspoons for 4 new subscribers, price \$1.50; or, half-dozen for 2 new subscribers, price 75c.

	Price.
1 Dozen Dessert-spoons, 7 new subscribers,	\$3.00
1/2 " " " " " " " " " " " "	1.50
1 " " " " " " " " " " " "	4.00
1/2 " " " " " " " " " " " "	2.00
1 " " " " " " " " " " " "	4.00
1/2 " " " " " " " " " " " "	2.00

The Scissors are the best quality manufactured and handsomely nickel-plated. We will give a pair of

	Price.
5 1/4-inch Ladies' Point, for 2 new names.....	\$0.70
5 1/4-inch Button-hole, " " " " " " " " " " " "	75
8-inch Bent Trimmers, " " " " " " " " " " " "	1 10
7 1/2-inch Straight, " " " " " " " " " " " "	1 00
8-inch Barber Shears, " " " " " " " " " " " "	80

THE AUTOMATIC KNIFE.

We are always on the lookout for something useful and novel for our subscribers, and now give the boys and girls an opportunity of getting an excellent knife for very little effort. The blades are all warranted hand-forged of the very finest Sheffield silver steel. The handle is beautifully chased and nickel-plated. Opening device is curious and unique. It is done by pushing a button at the end of the handle, and the blade springs up as shown in the cut. These knives sell for \$1 each. We will give one to any of our subscribers who send us \$2 and the names of two new subscribers.

In forwarding your order with names and remittances, state if you wish both blades smooth or one smooth and the other with nail-cleaner.

This cut only shows one blade, the other is large and smooth.



BOW PARK HERD

—OF—
PURE-BRED SHORTHORNS.

Have always on hand and for Sale young Bulls and Females, which we offer at reasonable prices.

ADDRESS—

JOHN HOPE, Manager,

308-v Bow Park, Brantford, Ont.

SHORTHORNS



I have for sale six females, ages from eight months to two years, color red and rich roan. Also three bull calves of extra merit. Also some young cows. All choice animals from choice imported stock at reasonable prices.

D. ALEXANDER
320 y-OM BRIGDEN, Ont.



SCOTCH SHORTHORNS.

Imported Prince Royal and cows bred by S. Campbell, Kinnellar, and James Bruce, of Burnside, together with their descendants by imp. bulls. Seventy head to choose from; also Cotswold sheep. Farm close to station. **J. & G. Taylor,** Rockwood, Ont. 317yom

CHOICE SHORTHORNS!

Our herd contains representatives of the best Scotch families. Village Blossoms, Queen of Beauties, Duchess of Glosters, etc. Prince Albert, by old Bampton Hero, and the Craickshank topped bull Blake, head the herd. **H. & W. SMITH,** Hay P.O., Ont. Exeter Station, 1/2 mile. 319-y-om

ABERDEENSHIRE :: SHORTHORNS.

The Imported Kinnellar Bull **Toft Hills**, and cows of similar breeding.

Young Stock from the above For Sale.

S. J. PIERSON & SON,

321-f-om Meadowvale, Ont.

— SHORTHORNS —

—AND—

Improved Large Yorkshires

at prices to suit the times.

SEVERAL choice spring litters to select from; also a few sows fit for service.

WM. COWAN, V. S.,

313-y-om

GALT.

SHORTHORNS!

The Briars Herd, the property of Dr. F. C. Sibal, Sutton, Ont., is one of the largest in Canada—over 80 head of registered breeding stock. Young bulls always for sale. Address

F. C. SIBBALD,

The Briars, Sutton West, Ont. 318-y-om

DEEP MILKING SHORTHORNS.

WM. GRAINGER, Londesboro', Ontario, offers for sale, a yearling bull and a three-year-old heifer in calf, of the best milking strain of Shorthorns in Canada; both registered and good colors; dams made 30 lbs. of butter in seven days on grass. **COME AND SEE THEM. THEY ARE GOOD ONES.**

319-y-om

JERSEYHURST FARM, MARKHAM, ONT.

ROBT. REESOR, importer and breeder of A. J. C. C. Jerseys of the choicest breeding, with the St. Helier bull Otolie 17219 at the head of the herd. Stock of all ages on hand and for sale. 320-y-OM

SHORTHORN BULL CALVES FOR SALE.

Three reds, sired by Bampton Chief—14380—, a worthy son of the noted Bampton Hero, and one roan, grandson of (imp.) Toft Hills, winner of 1st at Toronto this year. All grand calves and good pedigrees. Also a few choice Berks just fit to wean. Prices reasonable.

R. RIVERS & SON,

324-y-OM Springhill Farm, Walkerton.

SHORTHORNS, CLYDESDALES AND COTSWOLDS.



I have now on hand FOR SALE an extra good lot of TRULY BRED SHORTHORNS, CLYDESDALES, AND COTSWOLDS. Among my COWS, HEIFERS, and young BULLS are some fine show animals. The CLYDESDALES are of equal quality. MY PRICES are low and TERMS liberal. Visitors welcome. Correspondence solicited.

DAVID BIRRELL,

Telegraph and Post Office—GREENWOOD, ONT. 324-e-OM

SHORTHORNS.

I offer at right prices six promising Scotch-bred bull calves, from 8 to 12 months old, sired by pure Scotch bulls. Among the lot are calves that were winners at Guelph and other local and county shows. Colors red and roan. Also some grand Shropshire ewes in lamb and roans. (imp.) Braithorne (6). Come and see them. Corwin Station, C. P. R., two miles, and seven miles east of Guelph. Write or wire me when to meet you.

W. B. COCKBURN,

320-j-OM Greenhouse Farm, Aberfoyle, Ont.

SHORTHORNS & BERKSHIRES.

A choice lot of Fall Pigs on hand, also a few fine Spring Sows. Write for prices. No trouble to correspond.

John Racey,

321-y-om LENNOXVILLE, P.Q.

A few Shorthorn Cows, Heifers and Young Bulls for sale, of first class quality and breeding.

W. J. Biggins,

319-y-om Elmhurst Farm, CLINTON, ONT. One mile south of G. T. R. station.

IMPORTED SHORTHORN BULL "TOFT HILLS."

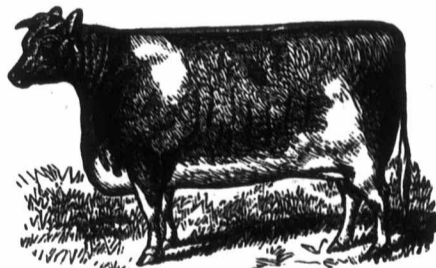
First prize Toronto Exhibition, 1892. Bred at Kinnellar. Reasons for selling, his heifers coming in to breed. Come and see, or address—

S. J. PIERSON & SON,

MEADOWVALE, ONT. 323-b-om One mile from station.

New Importation!

ARTHUR JOHNSTON, Greenwood, Ont.



Announces that on the first of December next (1892), he will have none from quaran line **SEVEN YOUNG BULLS AND SIX FEMALES,** All of which will be sold at moderate prices.

I have also seven exceedingly good young bulls of my own breeding for sale. Send for Catalogue. Greenwood P. O. and Telegraph Office, Claremont Station on the C. P. R., or Pickering Station on the G. T. R. Parties met at either station on shortest notice. Come and see my cattle. 323-y-OM

SCOTCH-BRED SHORTHORNS FOR SALE

6 Choice Young Bulls

And the Imported Craickshank Bull

ABERDEEN HERO,

Their sire. Also some nice

Young Heifers

From one year old up.

Prices to suit the times.

322-y-OM

SHORE BROS., White Oak.

JERSEYS.

Two grandsons of Canada's John Bull, aged 12 and 15 months, respectively. Price \$60 each, or the pair for \$110. F. O. B., G. T. R. Registered dams. Fine stock. **J. D. STEWART,** Russeldale, Ont. 324-a-om

JERSEYS.

I offer a few head of choice stock. One 5-year-old cow, due to calve Feb. 1st. One 2-year-old cow, fresh in milk. Also two heifer calves and one bull calf. All healthy, fine stock. Registered in the A. J. C. C. **J. FENNELL,** Berlin, Ont. 324-a-om

BELVEDERE JERSEYS SERVICE BULLS ARE

Canada's John Bull. Allie of St. Lambert, 2094 lbs. butter a week; 56 lbs. milk daily.

Hugo Chief of St. Ames, Pure St. Lambert.

Massena's Son—Massena, over 20 lbs. a week; 9,099 lbs. milk, estimated to have made 902 lbs. 2 oz. butter in 1 yr., 11 days.

Signal of Belvedere—(Sir Signal, Miss Satanelia (Signal cow), 20 lbs. 6 oz. butter a week, on 2nd calf.

Believed to be the three greatest living bulls. Silver cup at the Kellogg Combination Sale; Silver Tea Set (Farmer's Advocate) for milk test; over 20 medals, gold, silver and bronze; over 300 prizes in money, also numerous diplomas, commendations and special prizes.

Special Offering Now.

3 Sons of Canada's Sir George, (pure St. Lambert).

2 Sons of Massena's Son, from tested cows.

Registered and express paid to any reasonable distance.—**MRS. E. M. JONES,** Brockville, Ont. Canada. 313-y-OM

Ingleddale Farm, Winona, Ont.

JONATHAN CARPENTER offers for sale at very reasonable figures a number of very fashionable bred Jerseys, bulls and heifers, of all ages; also standard-bred colts and fillies from such sires as Gen. Stanton, sire of thirteen in the 30 list, and Almont Wilkes, trial in 2.16. "Good individuals with gilt-edged pedigrees." Come and see them. 319-y-om

GLEN ROUGE JERSEYS!

WM. ROLFE, Glen Rouge Farm, Markham, Ont., offers for sale Jerseys of all ages from his famous herd. The world-renowned St. Lambert blood a specialty. Also registered Clydesdale Horses. 321-y-OM

Maple Cliff Stock Farm

Three Ayrshire Bulls for sale, including the grand stock bull, Robbie Dick 1257, bred by the late Thomas Brown, and two young bulls fit for service; also Bronze Turkeys. Stock winning at both Montreal and Ottawa.

R. REID & CO.,

324-b-OM Hintonburg, near Ottawa.

DOMINION PRIZE HERD OF AYRSHIRES

This herd has taken all the first prizes wherever shown in Quebec and Ontario since 1887 to 1891. From imported stock. Young stock for sale at liberal prices.

JAMES DRUMMOND & SONS,

315-y-OM PETITE COTE, MONTREAL, P. Q.

PRIZE-WINNING AYRSHIRES FOR SALE.

I have at present one of the largest & best herds in Ontario, which has been very successful in the prize ring. They are deep milkers and of a large size. Bulls, cows and heifers for sale a 1 ways on hand.

JAS. McCORMICK & SON,

323-y-OM Rookton, Ont.

Ayrshire Cattle & Poland China Hogs,

MERINO SHEEP AND FANCY FOWL.

We have the largest herd of Poland Chinas in Ontario. At the last Industrial Fair we carried off 17 prizes out of 26, including both prizes for pens. We breed from none but the best, and our aim is to supply first-class stock at living prices. We mean business. Write, or come and see us.

W. M. & J. C. SMITH,

313-y-OM Fairfield Plains P. O., Ont

Prize-Winning Ayrshires for Sale



GURTA 4th
(1181)
Mine is one of the largest and most successful show herds in Canada. They are finely bred and of great individual merit. Bulls, heifers and cows always on hand for sale; also a few good Leicester sheep. Correspondence solicited. Visitors welcome. Address

THOMAS GUY,
314-y Sydenham Farm, Oakawa, Ont.

Messrs. A. McCallum & Son, Importers & Breeders of Registered **AYRSHIRE CATTLE.** **SPRUCED HILL FARM,** Danville, P. Q. Three yearling bulls for sale at reasonable figures. 330-y-om

GALLOWAYS.

12 HEAD OF IMPORTED GALLOWAYS

From the Best Herds in Scotland.

GOOD ANIMALS. GOOD PEDIGREES.

Several of them Prize Winners at recent shows.

SALE AT FAT STOCK SHOW, GUELPH, 15th December, 1892.

Special railway rates. Terms and pedigrees on application.

D. McCrae,
324-a-om GUELPH, ONT.

Herefords, Standard-Breds and Yorkshires. Headquarters for the famous Tushingham blood. Tushingham (1945) sold for \$5,000. Also standard-bred colts and fillies and pedigreed Yorkshires. 321-y-om **J. W. M. VERNON** Waterville, P. Q.

BAYSIDE STOCK FARM

The home of pure-bred Hereford Cattle. Heifers and bulls (get of Cecil, Commodore and others) for sale. 322-y-om **T. A. BONISTIEL,** Trenton, Ont.

The Sweepstakes Herd of Herefords.

My herd won both the 1st and 2nd herd prizes at Toronto, Montreal and Ottawa, 1891. In competition with the largest herds in Canada. An unequalled record. Over forty head of the choicest breeding. Write me for prices, and mention this paper, if you want a bull of the grandest beef breed on earth. **F. A. FLEMING,** The Park, Weston, Ont., or 51 Wellington street, Toronto. 319-f-om

Herefords, Leicesters, Imp. Yorkshires and Poland-Chinas.

Send in your orders now for Ram Lambs for fall delivery. Three really good Yorkshires Boars and one Sow, 7 months old, registered pedigrees, \$15 each if taken soon. **DAN REED,** The Spruces, Glanford P. O., Ont. 318-y-om

HEREFORD CATTLE & CHESTER WHITE HOGS.

The undersigned offers for sale three grand bulls and a few heifers of the above breed. Also pigs of both sexes. Prices dead right. **JOS. CAHENS,** CAMLACHIE, ONT., 14 miles from Sarnia. 313-y-OM

HOLSTEINS & YORKSHIRES.

None but the best are kept at **BROCKHOLME FARM,** - Ancaster, Ont. **R. S. STEVENSON,** Proprietor.

Write me for prices if you want first-class stock at moderate figures. Holsteins in the advanced registry; Yorkshires all recorded. 319-v-om

Holstein-Friesians
OF THE CHOICEST MILKING STRAINS
Extra individuals of both sexes for sale.
J. W. JOHNSON,
315-y-OM SYLVAN P. O.

INGLESIDE HEREFORDS.

Herd headed by the Medal Bull of Canada, Young Tushingham 2nd (2298). All stock registered and from prize-winners, combining the desirable blood of

HORACE, ANXIETY, THE GROVE 3rd, BEADWARDINE.

Choice young stock of the above strains for sale at reasonable prices.

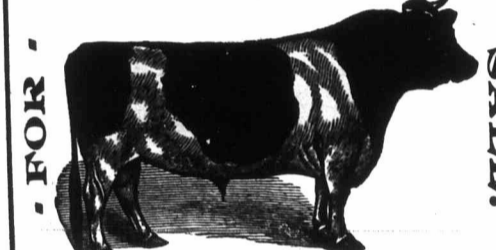
IMPORTED CLYDESDALES.

Prince of Wales and Darnley strains. Saddle horses and stylish drivers for sale.

Station, **H. D. SMITH,** Ingleside Farm, Compton, Que. 321-y-om

HOLSTEINS at WALNUT HILL FARM

Messrs. H. McCaugherty & Son, Streetsville, Ont., offer for sale, at low figures, choice young Bulls and Heifers of the best dairy strains. Write for prices, or, better still, come and see us. Visitors welcome. No trouble to show stock. Streetsville Station 1/4 mile. 318-y-om



A choice lot of thorough-bred Holsteins. We have on hand a large number of choice bull and heifer calves which we offer for sale at reasonable prices. They can be seen at Wyton, which is on the St. Mary's Branch of the Grand Trunk R. R. Before buying, give us a call. For further information apply to **W. B. SCATCHERD,** Secretary, Wyton, Ont. 312-y-OM

HOLSTEINS FOR SALE

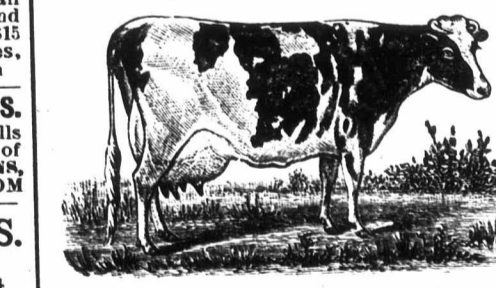
Lansdowne Farm, - Winona, Ont. To avoid inbreeding we offer for sale our two-year-old prize-winning bull "Siepkje's Milk's Mercedes Baron." A grand individual and a rare stock getter. Also a nice bull calf and a few extra good heifers; all registered and from tested dams. No culls. Write for prices, or meet us at Toronto Fair. **J. C. McNIVEN & SON,** 320-f-om

ONLY-HOLSTEINS-ONLY

We are making a specialty of breeding Holsteins of the following strains: -Aaggies, Harringtons and Mercedes. Our last importation comprised nineteen head from one of the leading herds in the United States. Our herd now numbers close to 30 head. Young bulls and heifers for sale. Prices right and terms reasonable. **E. M. S. & C. S. MOTT,** The Gore Farm, Box 95, Norwich, Ont. 318-y-om

THE GREAT MILK AND BUTTER HERD OF HOLSTEIN-FRIESIANS.

SMITH BROS., Credit Valley Stock Farm, CHURCHVILLE, PEEL COUNTY, ONT., (24 miles west of Toronto).



This is the place to get stock of best quality at reasonable prices. We have seventy five head, including prize-takers; best strains, cows and heifers, with large milk and butter records; young bulls of superior quality. Send for catalogue. 316-y-OM

HOLSTEIN-FRIESIANS.

I have several choice young Bulls of the Aaggie and Harrington strains, which I will sell cheap to quick purchasers. Also several choice Cows and Heifers, of Bonnie Queen and Aaggie breeding, will be sold at greatly reduced prices, if taken soon. Write for prices & breeding. **H. BOLLERT,** Cassel, Ont. 318-y-om

HOLSTEIN-FRIESIANS.

Owing to an important change in business between now and spring, our herd will be reduced one-half. Stock the choicest. Breeding the highest, and prices the lowest. All young stock bred from Silver Medal and First Prize-winning stock. See us at once.

New Dundee P.O., Waterloo Co., 318-y-OM Ontario.

A. C. HALLMAN & CO.



Wanted! Breeding Ewes

Good Grade Shropshires. Address— **DAVID JACKSON,** Raven's Glen, Man. 324-a-0

SHROPSHIRE & SWORTHORNS
For sale at reasonable prices. A choice lot of ram lambs & yearlings sired by my imp. Thomas ram from imp. and home-bred ewes; also five young bulls from 6 to 18 months old. **W. G. PETTIT,** Freeman P. O., Ont., Burlington Stn., G. T. R. 318-v-om

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Imported and Home-bred **EWES, LAMBS**

—AND— **SHEARLING EWES** of best quality and lowest prices.

ALSO **YOUNG YORKSHIRE PIGS.** Come and see me before buying elsewhere. **T. H. MEDCRAFT,** Sparta P. O., Ont., 321-r-OM Eight miles south-east of St. Thomas.

MAPLE SHADE SHROPSHIRE

SHROPSHIRE HAVE Continental Notoriety.

ORDERS WILL NOW BE TAKEN FOR **CHOICE -:- LAMBS**

Of both sexes. Over one hundred to select from. Address, **JOHN DRYDEN,** 314-y-OM BROOKLIN, ONT.

1881—SHROPSHIRE—1881.

My flock is one of the oldest in Canada, my first importation being made in 1881. My present stock of ewes were imported direct from the flocks of Bradburne Bros. and H. Parker. Write for prices. **JAS. COOPER,** KIPPER, ONT. 319-y-om

SHROPSHIRE, CLYDESDALES and Polled-Angus Cattle.

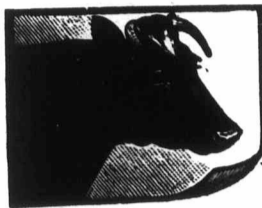
Two imp. stallions, one yearling bull and eighty choice Shropshire rams and ewes of all ages. Prices reasonable. Write quick. All registered. **JAS. McFARLANE & SON,** Clinton, Ont. G. T. R. Station 1/2 mile. 319-y-om

MAPLE GROVE FARM.

Cotswold and Leicester Sheep, also Improved Large Yorkshire Swine, are my specialties. **C. W. NEVILLE,** NEWBURG, ONT. 322-y-om

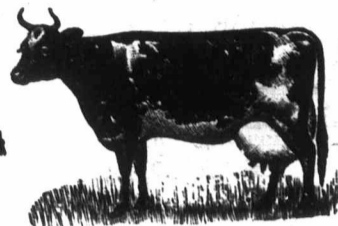
CHOICE REGISTERED SOUTHDOWNS.

Messrs. A. Telfer & Sons, Springfield Farm, Paris, Ont., have been breeding Southdowns for thirty years. A fresh importation just arrived. Stock for sale. 321-y-OM



W. G. EDWARDS & CO

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SCOTCH SHORTHORNS.

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

ALEX. NORRIE, Manager.

Pine Grove Stock Farm
ROCKLAND, ONT.

ELMHURST STOCK & DAIRY FARM

CLARENCE, ONT.

Shorthorns, Shropshires and Berkshires

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

HENRY SMITH, Manager.

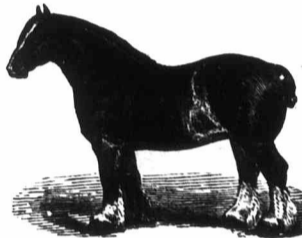
Laurentian Stock
AND
Dairy Farm.
North Nation
Mills, P. Q.

Ayrshires, Jerseys and Berkshires.

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

GEORGE CARSON, Manager. 316-y-OM

THORNCLIFFE STOCK FARM!



I have on hand the best young **CLYDESDALE** Horses & Mares on this continent Bred from the well-known sires Prince of Wales, Darnley, Macgregor, Energy, Lord Montrose, The Ruler, Caruban Stamp, Knight Errant & other celebrities.

My stock in the above lines were very successful at all the large shows last year.

SHROPSHIRE!

Orders cannot be booked for Shearling Rams, Ram Lambs and Ewes, sired by the celebrated prize-winning English ram, Bar None. Also Rams and Ewes of this year's importation.



SHORTHORNS

CHOICE YOUNG
HEIFERS AND BULLS
by the celebrated Cruickshank bulls

NORTHERN LIGHT

VICE-CONSUL.

Call and examine our stock before purchasing elsewhere. Terms reasonable.

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

322-y-om

J. N. GREENSHIELDS, "ISALEIGH GRANGE FARM." J. Y. ORMSBY, V.S., Manager.

IMPROVED YORKSHIRES.

Our last importation, just landed, includes 1st prize winners at the Royal and other leading shows in England, and we are now prepared to show against any herd in the world, bar none. Send in your orders for young pigs.

N.B.—Our prices will be found most reasonable, and we offer special inducements to buyers from a distance. Visitors most welcome and met by appointment. Address all communications to the Manager, **J. Y. ORMSBY**, Station, telegrams and letters, Danville, P.Q. 322-y-om

GUERNEYS.

The Sweepstakes Herd of the Dominion, with the gold medal bull, "Ontario's Pride," at its head.

We have no heifers for sale, but can spare one or two bull calves by this famous sire.

SHROPSHIRE.

We have just landed nearly 100 head of Shearling Rams and Ewes from the flocks of R. Thomas, R. Brown, T. Meares, G. Thomson and J. Thonger, including several noted winners. We offer for sale an extra choice lot of shearlings of both sexes and a few lambs.

Special inducements to buyers from a distance. Address all communications to the Manager, **J. Y. ORMSBY**, Station, telegrams and letters, Danville, P.Q. 322-y-om

GLENHYRST.
50 acres, bordering on the City of Brantford.

JAMES MAXWELL, SUPT.
Shropshire Sheep.

Shetland Ponies,
Apples—in quantity—Plums.

Registered Stock, all ages, for sale.
JOSEPH STRATFORD, PROP., [321-y-OM]

OAKWOOD FARM.
100 acres, bordering on the City of Brantford.

GEORGE WALTER, SUPT.
Have on the farm a modern wooden silo, Capacity 250 tons. Dorset-Horned Sheep. Jerseys, A.J.C.C. Holsteins (Royal Aargle family). Advance Register. Chester White Pigs.

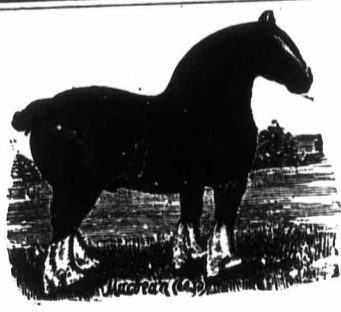
Three grand modernized stock farms under one management.
JOSEPH STRATFORD, PROP., [321-y-OM]

CEDARS FARM.
175 acres, eleven miles from City of Brantford.

ROBERT WALKER, SUPT.
Oxford-down Sheep.

Shorthorn Cattle,
Medium Yorkshire Pigs.

Medium Yorkshire Pigs.
Under one management.
BRANTFORD P. O., CANADA



CLYDESDALE AND HACKNEY

STALLIONS AND MARES

CONSTANTLY ON HAND, AND FOR SALE AT REASONABLE PRICES

Our last importations comprise a large number of one, two, three and four-year-old registered stallions and mares, the gets of such sires as Macgregor (1487), Darnley (222), and Prince of Wales (873). Also a few choice **SHETLAND PONIES**. Correspondence solicited, and visitors always welcome.

GRAHAM BROTHERS

Twenty-five miles east of Toronto, on the C. P. R. 314-y-OM CLAREMONT ONT.

LINCOLN SHEEP.

LAMBS AND SHEARLINGS of both sexes always for sale.

Our last importation was made direct from the flock of Hy, Dudding, Esq., of Great Grimsby, and comprises the pick of a flock numbering 1700 head.

If you want a ram, or a few ewes send along your orders.

J. T. GIBSON, Denfield, Ont.

W. WALKER, Iderton, Ont.

on London, Huron and Bruce Rty.

319-y-om

JOHN A. MCGILLIVRAY, Jerseydale Farm, Uxbridge, Ont., Midland Division G. T. R., importer and breeder of DORSET HORN SHEEP.

314-y-OM

Cotswold Sheep!

Wm. Thompson, Mt. Pleasant Farm, Uxbridge, Ont., Importer and Breeder, takes pleasure in intimating to the public that he is importing a large number of show sheep, which are expected to arrive early in August. Call and inspect personally. Visitors always welcome, and met at Uxbridge Station, Mid. Div. G. T. R. 315-y-om



THE GLEN STOCK FARM.

Clydesdales, Shropshires and Berkshires.—Choice young registered stock for sale. Telegraph office, Innerkip. Farm, 3/4 miles from Innerkip Station on C.P.R. and 6 miles from Woodstock G. T. R. **WHITESIDE BROS.,** Innerkip, Oxford Co., Ont. 316-y-om



IMPORTED SHROPSHIRE!

Having sold all my ram and ewe lambs, I now offer to intending purchasers their choice of SEVENTY 1 and 2-SHEAR EWES in lamb to my imported stock rams. The ewes, for quality and size combined, cannot be excelled.



W. S. HAWKSHAW, GLANWORTH P. O. 315-y-OM (7 miles south of London.)



Cotswold Sheep. The gold medal flock established in 1854. All bred straight from imported stock. Three imported Rams in use. Young stock for sale.

Berkshires. Herd established in 1865. Imported



and young stock for sale at all times. Spring Pigs now ready to ship. We ship to order, guarantee satisfaction. Come and see, or write.

Jersey Cows, Heifers and Calves: registered: pure-bred unregistered, and high grades, bred from rich butter stock. 315-y-om
J. C. SNELL, EDMONTON, ONT.

DORSET HORNED SHEEP.

T. W. HECTOR, IMPORTER AND BREEDER.

The oldest and largest flock of Dorset in Canada.

First Prize Toronto and Montreal Exhibitions, 1891, for flock. Sheep of all ages for sale, ewes and rams not skin.

T. W. HECTOR, The Cottage, Springfield-on-the-Credit P. O., Ont.

Stations, Springfield and Cooksville on the C. P. R. Port Credit on G. T. R. 314-y-OM



EUROPEAN ADVERTISEMENTS.

ALCESTER PARK SHROPSHIRE SHEEP.

It will pay Canadian buyers to visit the above flock, which is founded on the best strains in England. Rams and Ewes always for sale. ALSO IMPROVED YORKSHIRE PIGS.

H. PARKER,
The Park Farm, Alcester, Warwickshire, Eng.
316-y-om

SHROPSHIRE SHEEP

The Loughcrew flock has been very successful in England and Ireland wherever exhibited. It consists of 300 breeding ewes of the most fashionable appearance & blood. Ravens, Beach, Barra, Coxon and Mansell. The Annual Sale 31st of August.



EWES AND RAMS FOR SALE.

Apply to **J. DIXON,**
Loughcrew, Oldcastle,
Co. Meath, Ireland.
319-y-OM

SHROPSHIRE SHEEP.

John W. Edwards,
"The Hollies," West Felton, Shropshire, Eng.
Invites all American and Canadian buyers to visit his flock, which has sent more than one winner across the Atlantic. A choice lot always on hand to select from. Visitors always welcome. No trouble to show sheep. Address as above. 322-y-om

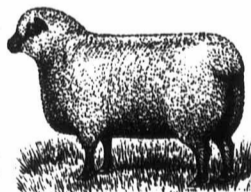
SHROPSHIRE SHEEP

We handle none but the best. We sell at living prices. We have one of the most successful flocks in the show yard in England. We import direct from our English to our American flocks. Write for prices. We can suit you.

JOHN THONGER,
Wolf's Head Farm, Nesseliff, Salop, Eng.
322-y-OM

BEAM : HOUSE : SHROPSHIRE SHEEP.

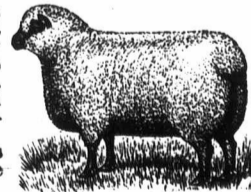
WM. THOMAS
offers for sale
RAMS AND EWES
from his famous flock, which has sent so many winners to the leading shows. Address—



WM. THOMAS,
Beam House Farm, Montford Bridge, Salop,
England. 7 miles from Shrewsbury.
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SHROPSHIRE SHEEP, -:- SHORTHORNS and Yorkshire.

My Shropshire flock is founded on the best blood in England. My Shorthorns are of the deepest milking strains. American and Canadian visitors always welcome. **Young Stock always for sale at reasonable figures.**



GEO. THOMPSON, Wroxall, Warwick, England. Station and Telegraph—Hatton. 316-y-om
Trains met by appointment.

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SHROPSHIRE SHEEP

DAVID BUTTAR,

Corston, Couper-Angus, N.B., Scotland

Has taken all the principal prizes in Scotland for several years. His sheep are of the purest blood, and carefully bred; every sheep eligible for registration. Pedigrees and prices on application. 318-y-OM

Astwood Hill Shropshires, the most famous flock in England. We led in the show ring at the Royal and the Bath and West of England in 1891.



T. & S. BRADBURN,
Astwood Hill, Redditch, Eng. 316-y-om

Shropshires, Shorthorns, Shire Horses and Yorkshires.

The Ruyton-11-Towns Flock always winning at R. A. S. E. and other shows. Last win:—The Champion Cup at the Royal Liverpool, Manchester & North Lancashire Show for the best ram, all ages and all breeds. Shorthorns:—Winning at R. A. S. E., etc., etc. Herd established over fifty years. Yorkshire Pigs of good pedigrees.

Easy distance from Liverpool. Meet trains at Baschurch, G.W.R., by appointment. Address **RICHARD BROWN,** Ruyton-Eleven-Towns, Shropshire, Eng. 322-y-om



DORSET HORN SHEEP!

CULVERWELL BROS., Durligh Farm, Bridgewater, Somerset, Eng. Breeders and Exporters of Improved Dorset Horn Sheep. Sheep and wool from this flock have won many first prizes at all the leading shows in England and Canada. Flock registered in English record for price, etc., in Canada and U. S. A. apply to—
JOHN TAZEWELL, Uxbridge, Ont., G.T.R. 315-y-OM

LINCOLN -:- SHEEP

I always have for inspection and sale a large flock of pure Lincoln Longwool Sheep, including many prize-winners, having taken eighty prizes the last two years at the Royal and other shows, for both rams and ewes, also the first for the best collection of Lincoln fleeces of wool at the Royal Windsor show last year, which proves the character of this flock, which is most famous for their great size and 120 years' good breeding. Also breeder of

WHITE -:- YORKSHIRE -:- PIGS

Address—
HENRY DUDDING,
Riby Grove, Gt. Grimsby, Lincolnshire, Eng.
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BLAIRTUMMOCK -:- CLYDESDALES

Prof. McCall invites inspection of his Stud of Clydesdales, by American and Canadian buyers. Among the many good ones bred at Blairtummock may be mentioned Col. Holloway's renowned Cedric, acknowledged the greatest breeding horse in America. Address—

PROF. MCCALL,
The Veterinary College,
GLASGOW, SCOTLAND.
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CLYDESDALES AND AYRSHIRES

Walter Park, Halton, Bishopton, Scotland, the breeder of the world-renowned "Lord Erskine," has always for sale a choice lot of Clydesdale Colts and Fillies; also pure-bred Ayrshires of the best milking strains. Visitors welcome. 317-y-om

HACKNEYS!

Duncan Jenkins, The Cross, Govan, Scotland, offers for sale Stallions and Fillies, the get of such sires as Danegelt, Anconus, Sir Gibbie, etc.; all registered, and of the very choicest quality. All American and Canadian buyers should visit this stud. 317-y-om

THE HOME OF SPRINGHILL DARNLEY.

Clydesdale dealers when in Scotland should not fail to visit Messrs. R. & J. Findlay's Stud, Breeders and owners amongst others, of the famous H. A. S. winner "Springhill" 5387. Address—Springhill, Bailleston, Glasgow. 317-y-om

THE HOME OF SIR EVERARD!

Wm. Taylor, Park Mains, Paisley, Scotland, calls the attention of American and Canadian buyers to the fact that his stud of Clydesdales and Hackneys is one of the best in Scotland. Inspection solicited. No trouble to show horses. 317-y-om

W. G. BUTCHER,

The Chestnuts, Needlingworth, Hunts, England offers for sale a grand selection of **HACKNEY AND SHIRE-BRED COLTS AND FILLIES** of the choicest breeding, and good individually. All registered. Visitors welcome. Station: St. Ives, Hunts. 317-y-om

CLYDESDALES AND AYRSHIRES.

Parties visiting Scotland to purchase the above should call on the undersigned, who always has a choice selection bred from the best strains of blood. **ROBT. WILSON,** Manswraes, Bridge o' Weir, Renfrewshire, Scotland. 317-y-om

2250 SHROPSHIRE SHEEP

Including most of the greatest winners, also Horses, Ponies, Cattle, Pigs and Sheep

Of other breeds, exported during 1891, by

E. GOODWIN PREECE,

Live Stock Exporter, - SHREWSBURY, ENG.

Who has personal knowledge of the best flocks, herds and studs, experience in shipping, and the privilege of selecting the choicest specimens of any breed, either for exhibition or breeding. American buyers supplied at lowest rates, and those visiting England conducted round the best stocks, so as to compare merits and prices before buying, and assisted in buying and shipping, FREE OF CHARGE. All necessary documents furnished. Highest references. Information free. All importers should communicate. 318-y-om

TO STOCKMEN AND BREEDERS.

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

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

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

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

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

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

ROBERT WIGHTMAN, DRUGGIST, OWEN SOUND, ONT.
Sole Agent for the Dominion. 315-y-OM

BERKSHIRES AND SOUTHDOWNS.

Choice lot of young boars and sows (registered) for sale at reasonable prices.

E. E. MARTIN,
322-d-om Paris Station, Canning P. O.

FOR SALE

A choice lot of young Berkshire pigs, from two to three months old, from imp. and prize-winning stock; also a few choice boars fit for service. I have also some Yorkshire pigs fit for show purposes, boars and sows from six weeks to six months old. Prices reasonable. Address **H. J. DAVIS,** Breeder of Berkshires, Yorkshires and Shorthorns, box 290, Woodstock. 318-y-OM

FOR SALE COTSWOLDS

AND BERKSHIRES. We have for sale forty head of yearling Cotswold Rams; thirty head of yearling Cotswold Ewes, and a number of young Berkshire Sows, in farrow to imported boars. We are now getting young pigs, which will be ready to ship in April and May. Write us for prices.

J. G. SNELL & BRO., EDMONTON, - - ONTARIO. Brampton and Edmonton Stations. 321-y-OM

S. COXWORTH, CLAREMONT, ONT., Breeder and Importer of Berkshire Hogs.

Young stock of different ages constantly on hand. Pairs supplied not akin. Stock won at leading shows in 1892-18 first, 11 second, 7 third, including Toronto, Montreal and Ottawa. Prices moderate. Satisfaction guaranteed. Station and Telegraph Office - CLAREMONT, C. P. R. 316-y-OM

Large White Improved Yorkshires - The undersigned has for sale a number of pigs of the above breed, ranging in age from four weeks old up to eight months. A few young sows in pig to first-class boars. The above stock are bred from imported stock selected from the noted herds of Sanders Spencer, F. Walker Jones and George Charnock, England. Prices reasonable for quality of stock. Apply to W. H. GEORGE & SON, Box 160, Woodstock, Ont. 318-y-OM

FIRST SWEEPSTAKES HERD

IMPROVED YORKSHIRES IN CANADA,

selected from the well-known herds of the Earl of Ellesmere, Prescott Union, and C. E. Duckering, England, by James Main, who is considered one of the best judges of pigs in America; also one imported sow and several other Canadian-bred sows and boars of the well-known herds of Sanders Spencer and F. Walker-Jones, England.

Registered Sows and Boars mated not akin.

JOSEPH FEATHERSTONE,

P. O. and Telegraph. PINE GROVE FARM, 321-1-om STREETSVILLE.

THE MARKHAM HERD, Locust Hill, Ont. (Farm one mile from Locust Hill St., C. P. R.) Registered Improved Large Yorkshire, Berkshire and Suffolk Pigs. Stock selected from the best herds in Canada. Am booking orders for Spring Pigs. - LEVI PIKE, Locust Hill, Ont. 320-y-OM

Improved Large (White) Yorkshire Pigs and Scotch Shorthorns.

Sweepstakes herd of Yorkshires wherever shown in 1891. The largest herd in Canada. Breeding stock selected from the most noted English breeders. All stock registered. Shipped to order and guaranteed to be as described. J. E. BRETHOUR, Burford, Brant Co., Ont. 314-y-OM

FARMERS, READ THIS!

We will pay extra for fat pigs bred from Tamworth and Improved Yorkshire boars, as they are worth more money to us. We have imported a large stock of these pigs, and have on hand a choice selection of imported and home-bred boars and sows. Write us for prices, which are as low as they can be made, this being a business entirely of a secondary consideration with us, our first object being to supply the trade with an A1 article in the bacon, and we are satisfied that these are the breeds that pay both the feeder and the packer. Send in your orders quick and get a good in-pig sow, or a boar to use on grade sows.

JAS. L. GRANT & CO., Ingersoll, Ont. 320-y-om

ADVERTISE IN THE ADVOCATE

IMPROVED PEDIGREED LARGE YORKSHIRES!

A few very choice young boars, between 3 and 4 months old, at \$10 each. - J. M. S. Harbour, KING P. O., Ont. 318-y-om

J. M. HURLEY & SON, Offer for sale pedigreed Improved Large Yorkshire Pigs of both sexes. Herd founded in 1887. Our aim is to make our pigs advertise us. Kingston Road Stock Farm, 321-y-om Belleville, - Ont.

R. H. HARDING, Mapleview Farm, THORNDAL, ONT. Importer and breeder of Ohio Improved Chester White Swine and Dorset Horned Sheep. Breeding stock recorded; young stock for sale at moderate prices. Write or particulars. 322-y-om

E. D. GEORGE PUTNAM - - ONT., Importer and Breeder of Ohio Improved Chester White Swine

The largest and oldest established registered herd in Canada. I make this breed a specialty, and furnish a good pig at a fair price. Write for prices. 317-y

Registered Poland-Chinas - Canadian Black Bess Herd. - Stock strictly of the Corwin, King, Butler and Black Bess blood. Choice stock of all ages for sale at reasonable prices. Imported Nominie at head of heard, assisted by Imported Boars Condit, Luck and Moorish King. Farm two miles south of G. T. R., C. P. R. and E. & H. R. stations. Correspondence and inspection of herd solicited. Reduced rates on shipment by express. - J. J. PAYNE, Chatham, Ont. 314-y-OM

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Clydesdale Farm, Amber P.O., Ontario. Young Boars and Sows bred from registered stock, imported from the best herds in England. This famous breed of bacon pigs is recommended by the largest bacon curers in the world. Try them, it will pay you. I have several pair unrelated. Some A1 Clydesdale Stallions kept for service. Imported and home-bred Colts and Fillies. 317-y-om

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NOTICES.

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

Mr. David McCrae will offer for sale twelve head of Galloway cattle during the Fat Stock Show at Guelph. We understand that among those offered are a number that were successful at the late shows. This should afford an excellent opportunity to intended purchasers, as both events may be taken advantage of, and for which special railway rates are arranged for.

THERE'S MANY A SLIP. Now that winter has come, many horses and cattle will be injured by slipping. A strain causes a lameness, which if properly attended to from the start will soon be cured, but if left, a hard substance often forms over a joint, and a serious blemish results. Dick's Liniment should be applied as soon as any lameness is shown, while if Spavin, Curb or Ringbone has already formed it, it can be cured with Dick's Blisters. Get Dick's, it costs only 50cts.

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P. B. Gordon, Chief Inspector of Stock, writing from Queensland, states that there are on one sheep run there at present 1,007,434 sheep, and that there are several other owners who possess flocks of from 400,000 to 600,000.

NEW FACTS ABOUT THE DAKOTAS is the title of the latest illustrated pamphlet issued by the Chicago, Milwaukee & St. Paul Railway regarding those growing States, whose wonderful crops the past season have attracted the attention of the whole country. It is full of facts of special interest for all not satisfied with their present location. Send to A. J. Taylor, Canadian Passenger Agent, No. 4 Palmer House Block, Toronto, Ont., for a copy free of expense.

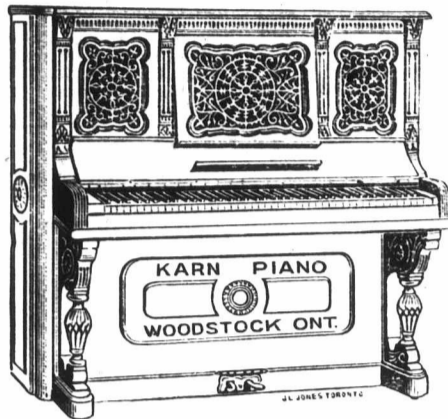
D. E. Smith, of Churchville, Ontario, is getting out, in pamphlet form, a small book of sixty or seventy pages, or more, which will contain information on:—How to build a Silo; Ensilage as a Cheap and Useful Food; Butter-making; Cheapest and Best Rations for Dairy Cows; a History of Holstein-Friesian Cattle; Butter Records; Beef Records; Butter Test Prizes; Scale of Points of a Dairy Cow; Cuts of twelve or more representative Dairy Animals, including the Queen of dairy cows, Pauline Paul. It will be ready about Christmas.

O. A. C. STUDENTS' REGISTER.

When the Experimental Union entrusted the Personal Editor of the O. A. C. Review with the work of compiling a register of all O. A. C. students, they felt sure that love for their *Alma Mater* would ensure him their hearty co-operation, and that they would do all in their power to aid him in this important work. But they were much surprised to find that a large number of former students of the college had neglected to answer the questions and return the cards, which were mailed last June, but if they are filled up and returned at once, they will be in time, as the Register must be completed and a report prepared for the Experimental Union, which meets at the College on the 22nd and 23rd of December. As every effort has been made to make this a full and correct record of the names, addresses and occupations of all who have attended the O. A. C. since its establishment in 1875, it is hoped that every student will feel that it is a duty that he owe, not only to himself, but also to all his fellow-students, to see that his name is not omitted from the list. If by any oversight some have not received the reply postal cards, it would be esteemed a favor if he would write to G. Fred. Marsh, Thornbury, Ont., giving his name, post office, year of attendance, and his present occupation.

The Ontario Agricultural and Experimental Union will meet at the Ontario Agricultural College, Guelph, December 22nd and 23rd. The Executive have met and decided to ask such as T. L. Terry, Hudson, Ohio, U. S., and have instructed the Corresponding Secretary, R. F. Holtermann, Brantford, Ont., to endeavor to make terms with him. Thos. Ballantyne, M. P. P., and many other able men are expected to take part in the programme, while Mr. J. L. McKenzie, Analyst of the Bureau of Health, Toronto, who is known as an authority on tuberculosis, anthrax and hog cholera, has already signified his willingness to be present. The reduced railroad rates, which can be secured by all at this time; also the new Convocation Hall, built at the College, is sure to give a large and interesting meeting. The *FARMER'S ADVOCATE* has arranged to secure a report of the meeting. Any further information can be secured from the Corresponding Secretary.

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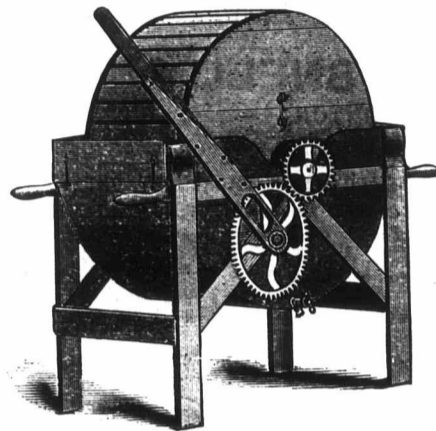
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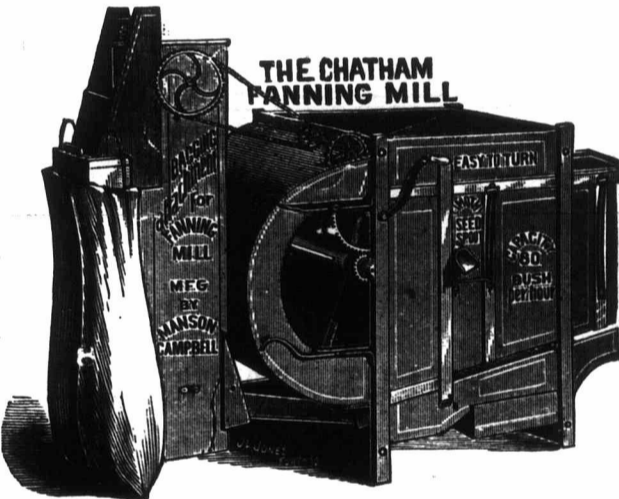
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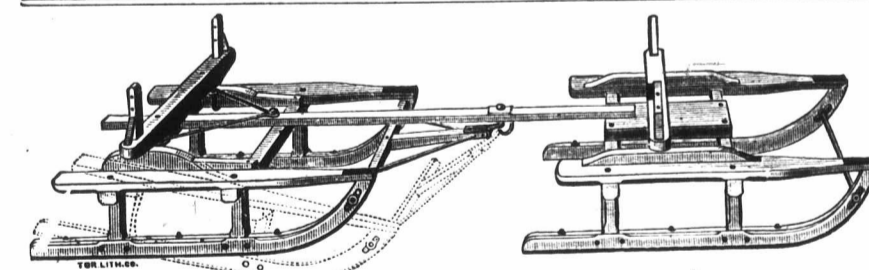
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Reasons Why our Sleigh is the Best in the Market:
BECAUSE with our Patent Attachment to Hind-Bob, it is the easiest running Sleigh made. Because it will go in and out of pitch-holes without any strain on itself, even when heavily loaded. Because it does with the old coupling. Because with our improved coupling it can be backed up the same as a wagon. Because with our swivel in coupling it can be used on the roughest roads without any twist to the reach. Because with our swivel in coupling it will allow either bob to turn up on its side when loading or unloading logs without any danger of breaking the reach. Because with our improved coupling it can be turned around in its own length. Because it is always in line and will track under all circumstances. Because it cuts off less than any other sleigh made. Because it is well made of the very best wood and iron. Because it has a good length of runner and faced with a two-inch steel shoe. Because all sleigh-makers who have seen our coupling, say that it is just what was wanted to make the bob-sleigh perfect, and wonder why such a simple and necessary improvement was not thought of before.

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317-y-0 JOHN SMITH, BRAMPTON.

STOCK GOSSIP.

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

S. Cuxworth, Clarendon, writes that he has done a good trade in Berkshires and Cotswolds. He exhibited Berkshires at Toronto, Montreal, Ottawa and Markham, and was successful in winning 18 firsts, 11 seconds and 7 third prizes. At Montreal he exhibited 11 head and won 6 firsts, 2 seconds and 1 third prize, including the herd prize for best boar and two sows, any age. Sales have been good, and orders still continue to come in. The herd was never in better condition than at present. Sales are as follows:—D. N. McLennah, Summerstown, Ont., one boar and one sow; W. H. Martin, Warden, Que., one boar; C. W. Kerr, Oil City, Ont., one sow; C. T. Garbutt, Clarendon, Ont., one imp. boar; John Cope, St. Williams, Ont., one sow; H. Robinson, Lyn, Ont., one sow; Joseph Robinson, Lyn, Ont., one sow; Oscar Forrester, Malloytown, Ont., one sow; Jas. Thornton, Cashtown, Ont., one sow, in farrow; John Malyon, Saintfield, Ont., one boar; Thos. Brown, Springville Ont., one boar and one sow; Joseph Slack, Clarendon, Ont., one sow, in farrow; Nathan Tarr, Mongolia, Ont., one sow, in farrow; David Leitch, Grant's Corners, Ont., boar; Samuel Sales, Stewart, Ont., one boar; Dugald Campbell, St. Thomas, Ont., one boar and one sow; C. P. Roe, Pickering, Ont., one boar and one sow; D. A. Graham, Parkhill, Ont., one sow; W. A. Kennedy, Apple Hill, Ont., one boar; L. N. Jackson, Minnedosa, Man., one boar and one sow; Daniel Harvey, Renton, Ont., one boar; Jas. Hortop, Balsam, Ont., one boar; W. J. Shephardson, Walter's Falls, Ont., one sow, in farrow; Wm. Patterson, Churchill, Ont., one sow; W. W. Weed, Potsdam, N. Y., two sows; C. J. Gilroy, Glenbuel, Ont., one sow, in farrow, and one boar; R. Ward, Balsam, Ont., one boar; H. Ratcliffe, Ringwood, Ont., one boar and sow; Major Bros., Whitevale, Ont., one boar; Alex. Christie, Mountair, Ont., one boar; Jonas Proctor, Glencoln, Ont., one ram lamb; Wm. Thompson, Uxbridge, Ont., six ram lambs; J. C. Snell, Edmonton, six shearing rams and four ram lambs; Mr. Lee, Ill., U. S., one ram lamb; J. G. Snell and Bros., Edmonton, two ram lambs; Wm. Ward, Balsam, Ont., four ewes.

John Laidlaw, Wilton Grove, Ont., reports his flock of Lelcoesters to have been established about fifty years ago by his father, recently deceased, and it has always been kept up to a high standard by the use of the best rams obtainable, and now numbers sixteen registered sheep, besides a number of others which, though practically pure-bred, he does not intend to apply for entry. The first importation was made in 1880, by bringing out an exceedingly good ram, bred by Mr. T. Ferguson, Cooper, Angus, Scotland, and also a pair of ewes from the same flock. These ewes have done remarkably well, and have already produced a pair of shearing ewes and four ewe lambs. One ewe dropped six lambs within two years. Recently he purchased two shear ewes, four shearing ewes and two ewe lambs from Messrs. Geo. Harding & Sons, Waukecha, Wisconsin. These sheep were purchased to go the rounds of the shows in the West, and won on every occasion, except in one or two instances, where they came in contact with the imported flock of Lincoln, owned by Mr. Wm. Oliver, Avonbank, Ont. Among the State fairs at which they were shown were Illinois, Indiana, Wisconsin, Kansas, Missouri, and a number of others. These sheep were from the well-known flock of Mr. John Kelly, of Shakespeare, Ont., and were fitted purposely for Mr. Harding. The four shearing ewes above mentioned were sired by the ram imported by Mr. Kelly in 1880, from the well-known Mertoun flock of Lord Palworth, St. Boswell, Scotland.

A note from Mr. Sanders Spencer, of Holywell Manor, near St. Ives, Hants, England, gives some very satisfactory information concerning his really wonderful herd of Improved Large Yorkshire pigs, which has now representatives in thirty different foreign countries, in many of which pigs exported by Mr. Spencer, or others bred from them, have again this year won prizes. He has recently shipped the first pigs of the breed sent direct to Finland, to Orange Free State, and to Durban—the two last in South Africa. Besides those pigs lately imported into Canada for Mr. Greensfield's herd, and selected by Dr. Ormsby, a boar and two yelts were at the same time sent to Mr. J. G. Mair; the boar, Holywell Sol, is reported to be a very superior pig, and likely to make a mark for himself at the fairs next fall. The Holywell Manor herd is now so large, containing, as it does, nearly 500 head, that it is quite possible to sell from it what some buyers might consider a few of the best animals, and yet the best, because not fattened for show, be left behind. There must be something intrinsically good in a herd which has a prize winning record of over a quarter of a century.

W. G. Pettit, of Freeman, Ont., reports that his flock of Shropshires has done very well this season, and that his advertisement in the ADVOCATE has brought him a good many customers from all over Canada and the United States. He reports the purchase from John Miller & Sons of the 2nd prize ram lamb at Toronto. This lamb was bred by T. & S. Bradburne, of Astwood Hill, England, and won first prize at one of the lead'g shows before leaving England. Mr. Pettit also reports that his Shorthorns are doing well, coming into winter quarters in good condition. The young bull Grand Fashion, purchased from Arthur Johnston, Greenwood, is growing into a grand bull, and if put into show form would certainly add another to Mr. Johnston's long list of winners. Mr. Pettit thinks by using the very best sires he will be able to keep his Shropshires and Shorthorns well to the front.

STOCK GOSSIP.

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

We have to thank Mr. Geo. J. Dow, North Epping, N. H., U. S. A., who is already well-known to our readers, for a copy of his new work on capons and caponizing, which gives a full description of the process, and plain and simple directions that may be followed by any one.

J. P. Phin, Hespeler, reports that he has sold one of his imported stock rams, Sir James R. M. 15997, through Mr. J. H. McRerts, of Lucan, to Mortimer Levering, Secretary of the American Live Stock Association. Mr. Levering writes that he is very much pleased with the ram. He is a splendid specimen of the breed, and a very impressive sire.

Just as our last forms were going to press, we received the following list of the names of officers for the ensuing year elected by the American Aberdeen-Angus Breeders' Association:—President, W. A. McHenry, of Iowa; Vice-Pres., H. N. Elliott of Missouri; Sec.-Treas., Thos. McFarlane, Illinois. Directors elected for three years—W. lace Estill, Mo.; M. J. Evans, Iowa; M. A. Judy, Indiana.

In 1884 the first certificate of membership in the American Shropshire Sheep Association was issued to Mortimer Levering, of LaFayette, Ind., who was the organizer of the Society. During the past week membership certificate 1,000 was made out to Mr. Levering's little son, Richard Mortimer Levering. The Shropshire Association now numbers over 1,000 active members. Its growth has been largely due to Mr. Levering's zeal and management.

A horse breeder writes enquiring the breeding of the stallion Whalebone, which was a chestnut horse that won 1st in the carriage class at the Western Fair, London, in 1877. It is supposed he was sired by the horse known as Broken-tailed Whalebone, that made several seasons in Waterloo and Middlesex Counties somewhere about twenty-five years since. Any of our readers who can give the information will confer a favor by writing us.

R. Rivers & Son, of Springhill Farm, Walkerton, insert a new advertisement this month in which they offer bull calves and Berkshire pigs. They also report the sale of their prize-winning calf Eclipse to Alex. McDonald, Greenock. Their stock bull Barmpton Chief = 14380 = is proving himself a good stock-getter, his calves being prize-winners both at Paisley and Walkerton exhibitions, he taking 1st at the former and 2nd at the latter show; their four-year-old cow Kirklivington Duchess 6th, by Laird of Kinelar, winning the red ticket at both places. She is the dam of a roan bull calf offered for sale.

W. E. Wright, of Glanworth, writes us that he has many inquiries for stock, and his flock is doing well and has gone into winter quarters in good condition. He reports the following sales:—Four ewe lambs to W. S. Hawkshaw, Glanworth; one shearing ram to John Conworth Paris; three shearing rams to J. Dunkin, Brucefield; two ewe lambs to J. McFarlane, Clinton; six shearing ewes and one ram lamb to H. Bennett, Glanworth; one ram lamb and four breeding ewes to W. A. Hill, St. Thomas; one shearing ram to Asa Marr, Aylmer; two ewe lambs to Thos. Neff, Corinth; one ram lamb to L. B. Huntley, Marlow, N. H.; two shearing ewes and four ewe lambs to Jas. Charlton, Ilderton; one ram lamb to A. & H. Parsons, Komoka; one ram lamb to Charles Alexander, Sanatic Co., Michigan; two shearing ewes to Charles Myers, Dresden; one ram lamb to Wm. Donaldson, Woodstock; one shearing ram to Frank H. Wright, Glanworth.

The Haras National report the following prizes at the Quebec Provincial Exhibition: 1st, 2nd and 3rd prizes in the Percheron aged class: Boston (18863) 8; July (18168) 2; Bonne Chance (32176) 5. 2nd prize in the Roadster class: Holopheme. The Percheron class was as large as the Clydesdale class this year, and brilliantly represented by specimens from the following stables: Trappist Fathers, Oka.; Deaf and Dumb Institute, Mile End; Hon. Louis Beaubien, Montreal; Haras National, Montreal; Frank H. Black, Amherst, N.S.; O. Milet, St. Marc; A. Burel, Veil Diel; F. Marcotte, St. Antoine; T. Archambault, St. Marc. The French Coach horses were in such large numbers that a special class will be made for them next year. They took 1st and 2nd prizes in Carriage and Roadster class. The Haras National has received of late some splendid Percheron and Clydesdale stallions.

A. C. Hallman & Co., of Spring Brook Farm, New Dundee, write as follows: "We just received a very flattering letter and also a fine photo, of Holsteins from D. McNaught, V. S. and M. P. P., Rapid City, Man. Mr. McNaught bought some young stock from us four years ago, and has with them developed a herd that has swept the Province. He states that with strong competition at the Provincial, Winnipeg, he beat the Avshires, Alderneys and Jerseys for the best milk herd, winning \$125 in money and a solid silver cup, valued at \$50. He also beat the Shorthorns in straight competition, and his prize money amounts to \$350. We are greatly pleased with results at the exhibitions, again sustaining our past record in winning a large share of highest honors. Our herd numbers nearly 60 head, and for individual merit and choice breeding cannot be surpassed. We were never in better shape to turn out just such herds as Mr. McNaught's, and even surpass them. We purpose making important changes in our business between now and spring, and will offer special inducements until herd is reduced to half its size."


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A valuable stock farm of 560 acres, six miles from Winnipeg. This property has a river frontage, and adjoins "Marchmont," the large stock farm of Mr. W. S. Lister, in the Parish of St. Paul's. For particulars apply to

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YOU HAVE STOCK TO FEED

THEN DO IT ECONOMICALLY

BUY A WATEROUS Standard Chopper.

It Elevates the Grain; Chops it as Fine and Fast as Desired, and BAGS THE CHOP.

OVER 1,000 IN USE.

USES BEST OLD STOCK - FRENCH: BUHR: STONES. Best Grinding Medium Known.

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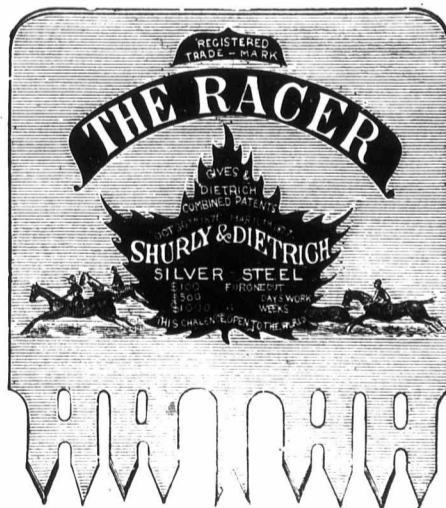
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ARE YOU USING
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IF NOT, WHY NOT?

Write for Catalogue and Prices.

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The Razor Steel, Secret Temper CROSS-CUT SAW.

We take pleasure in offering to the public a Saw manufactured of the finest quality of steel, and a temper which toughens and refines the steel, gives a keener cutting edge and holds it longer than by any process known. A Saw to cut fast "must hold a keen cutting edge".

This secret process of temper is known and used only by ourselves.

These Saws are elliptic ground thin back, requiring less set than any Saws now made, perfect taper from tooth to back.

Now, we ask you, when you go to buy a Saw, to ask for the Razor Steel, Secret Temper Saw, and if you are told that some other Saw is as good, ask your merchant to let you take them both home, and try them, and keep the one you like best.

Silver steel is no longer a guarantee of quality, as some of the poorest steel made is now branded silver steel. We have the sole right for the "Razor Steel" brand.

It does not pay to buy a Saw for one dollar less, and lose 25 cents per day in labor. Your saw must hold a keen edge to do a large day's work.

Thousands of these Saws are shipped to the United States and sold at a higher price than the best American Saws.

—Manufactured only by— 324-d-o

**SHURLY & DIETRICH,
GALT, ONTARIO.**

MANITOBA THE GREAT GRAIN AND CATTLE PROVINCE HAS WITHIN ITS BORDERS HOMES FOR ALL!

Manitoba is making rapid progress, as shown by the fact that in four years the area under crop has more than doubled.

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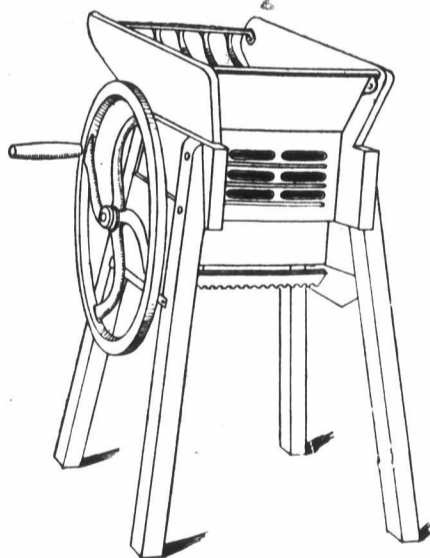
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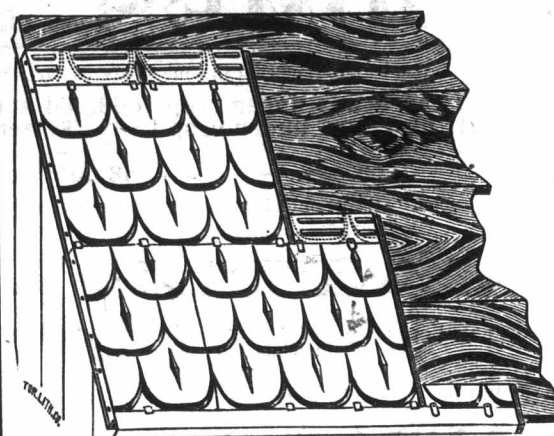
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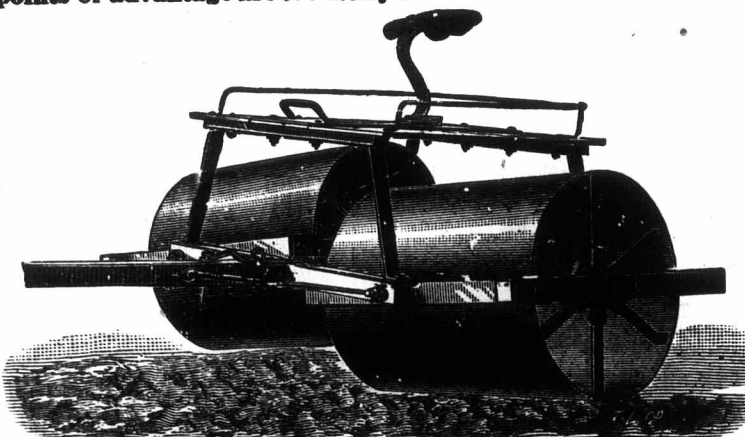
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