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THE FARMER'S ADVOCATE

AND HOME MAGAZINE

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* AGRICULTURE, STOCK, DAIRY, POULTRY, HORTICULTURE, VETERINARY, HOME CIRCLE.*

PUBLISHED AT LONDON, ONTARIO, JULY 15, 1903. WINNIPEG, MANITOBA. No. 578

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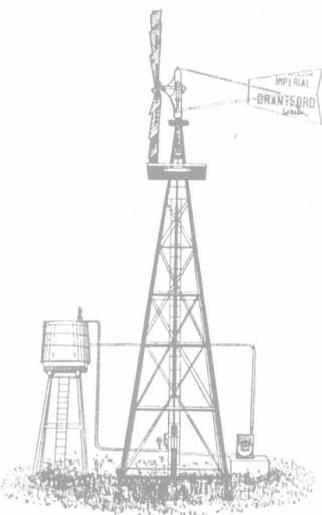
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F. W. Hodson,
Live Stock Commissioner.

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Commissioner's Branch.

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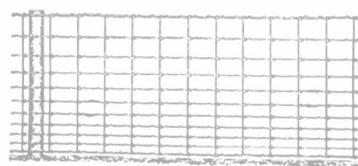
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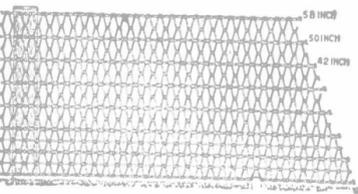


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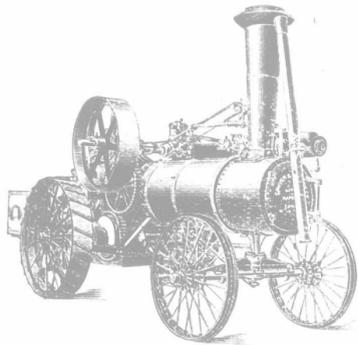
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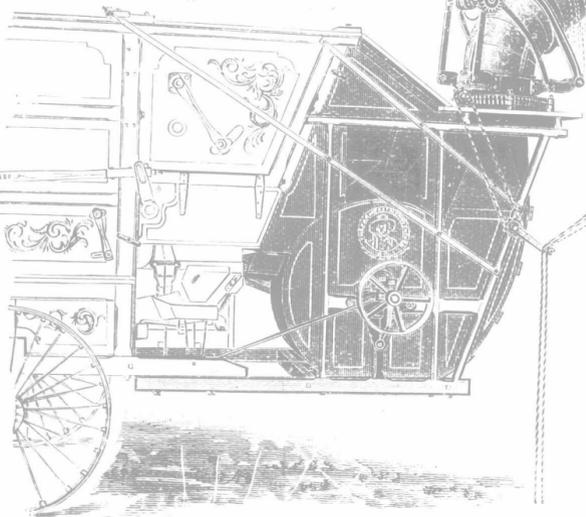


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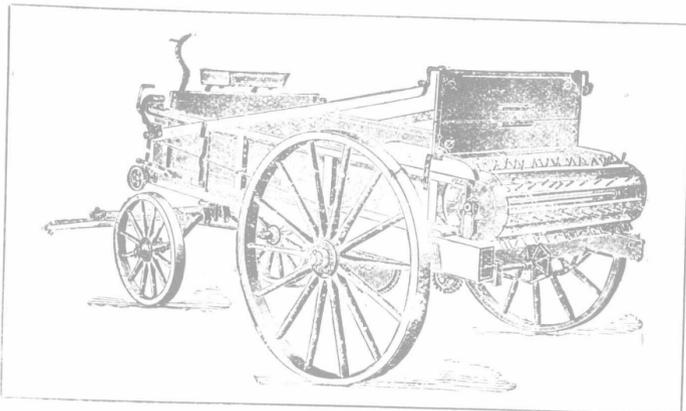
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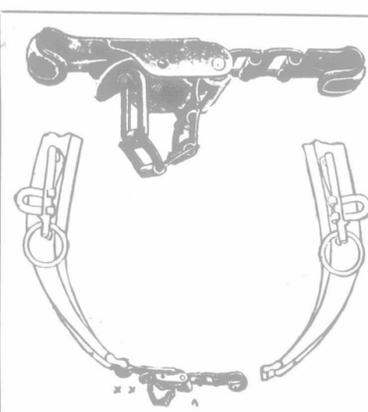
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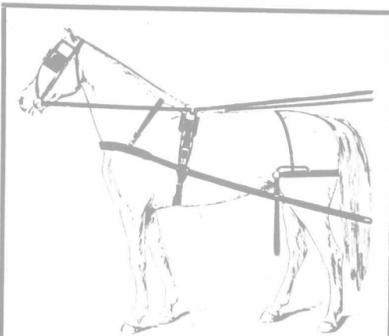
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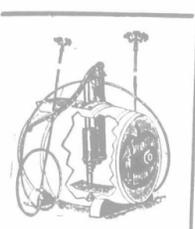
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JOHN WELD, MANAGER

1. THE FARMER'S ADVOCATE is published on the first and fifteenth of each month. It is impartial and independent of all cliques or parties, handsomely illustrated with original engravings, and furnishes the most profitable, practical and reliable information for farmers, dairymen, gardeners, and stockmen, of any publication in Canada.
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11. ALL COMMUNICATIONS in reference to any matter connected with this paper should be addressed as below, and not to any individual connected with the paper.

Address—THE FARMER'S ADVOCATE, OF
THE WILLIAM WELD COMPANY (LIMITED),
LONDON, CANADA

The Hour of Destiny Passed.

The Saturday Evening Post, of Philadelphia, is out with a strong editorial appeal to the United States authorities to hold out a friendly hand to Canada. The Post says their relations with Canada overshadow the Philippine question and every other issue of foreign or colonial policy that confronts the Republic.

The popular Chamberlain proposition and Canada's unprecedented progress have frightened our Yankee neighbors out of their Rip Van Winkle sleep regarding the great Dominion. But like many another deathbed repentance, Uncle Sam's has come too late. Canada has put her hand to the plow, and will not turn back.

Death of Mr. Thomas C. Douglas.

We regret to have to chronicle the sudden death, on July 8th, of Mr. T. C. Douglas, of Galt, Ontario, well known to many of our readers as a prominent and successful breeder and exhibitor of Southdown sheep. Mr. Douglas had worked in the hay field during the day and was in his usual good health. Going to the house about nine o'clock in the evening, he lay down in a hammock on the veranda to cool off, where he was found about midnight, dead, his death evidently being caused by apoplexy. Mr. Douglas was sixty years old, though his appearance would indicate a much younger age. He was a man of fine physique, having the appearance of perfect health, as the result of temperate habits and a well-ordered life. He was a public-spirited and progressive farmer; had sat in township and county councils for many years; was President of the South Waterloo Farmers' Institute, a forceful and acceptable speaker on agricultural topics on the Provincial Institute staff; an enthusiastic Sunday-school worker, and a man of sterling christian character. His wife, two daughters and three sons survive him.

G. L. Lamb, Prescott County, Ont.: "I was very much pleased to get the missing numbers of my 'Farmer's Advocate' replaced a short time ago. I feel that I have considerable information about my business at hand now, and when I have them bound it will be convenient too."

STOCK.

Our Scottish Letter.

THE ROYAL SHOW OF 1903.

In spite of the heading, this is being written in the new show-yard of the Royal Agricultural Society of England, at Park Royal, near old London. This new venture of the great national society has been rendered necessary by a wide variety of reasons. For more than sixty years the society has held what is called a country meeting—that is, a show at a given center throughout England. For the purposes of this migration the country was divided into districts. The plan followed for many years was this: The council announced that the show of a given year would be held in a given district. Each of these usually contained several great centers of population. For long there was keen rivalry between such centers for the honor of entertaining the Royal Agricultural Society. On a date towards the close of the year, the Council of the Society met in London, and the competing municipalities were heard through their representatives. The center was chosen which offered the greatest inducements in respect of suitable site, contributions to local funds, and prospective admission of visitors. By and by the selection committee found its work increasingly difficult on account of the rapid growth of the yard, and the consequent impossibility of securing sites within a reasonable distance of the railway stations. In 1900 the honor of entertaining the Royal Agricultural Society for 1902 actually went a-begging; no municipality seemed to care to have it, and had not Carlisle come to its rescue it is difficult to say what might have happened. The society lost immense sums by some of its shows, a result partly due to excessively bad weather in one or two instances, and generally excessive expenditure in all. At Kilburn, not very far from the present site at Park Royal, in 1879, on account of continuous bad weather, the loss amounted to £22,000; and at Maidstone, Kent, a few years ago, the loss was over £6,000. On the other hand, at Cardiff in 1901 a big profit was made, but this, on account of bad weather, was again lost at Carlisle a year ago. Taking its shows all over for forty or fifty years, the Royal made a loss rather than a profit, but its heaviest losses were invariably made when the camp was pitched near to London. This fact has caused many members to view with grave apprehension the new departure in purchasing a permanent site near to London. So far I fear their misgivings are to be justified. This is the third day of the show. Although up to the close of the preceding week there had been a succession of deluges in and around London, the weather dried up two days before the show opened, and there has been a succession of days of sunshine and warmth. The show has enjoyed the patronage of royalty in quite an unusual degree. H.R.H. the Prince of Wales is President. He was in the yard for quite a long time on Tuesday (the opening day); he returned again yesterday, and spent nearly the whole day in the yard, and returns again on Saturday, when it is hoped the London proletariat will turn out en masse. Yesterday afternoon, in addition, we had in the afternoon their Majesties the King and Queen, with H.R.H. the Princess Victoria, and quite a small army of royalties; yet the board announces to-day that the total attendance of paying persons was only inside of 13,000. To-day (Thursday) things promise no better. The fact is that London does not care a rap for an agricultural show.

The display of stock is fairly good. Better shows have certainly been seen on former occasions at the migratory country meetings of the Royal. The horses come first in the catalogue, but they are by no means first in merit as a section of the show. A few good hunters lead their class, and the Hackneys, although few in number, are of excellent merit. The champion stallion and mare are both got by the famous Garton Duke of Connaught 3009. The mare is Mr. Livesey's Queen of the South, a phenomenal animal in respect of shape and action. She can and does walk and trot wonderfully well; few goers like her have been seen in our time. Messrs. Black, Whitewall, Malton, have taken the stallion championship with St. John, which recently won at Edinburgh. He is quite a bold performer. The Harness classes contain some splendid horses. The lovely animal, Forest King, owned by Mr. C. Wertheimer, was a clear winner in his class, but, curiously, did not get the championship. He is a magnificent stepper, and those who like that kind of action have probably never seen a better. Riding and Polo ponies were the best section among the horses, and Shetland ponies made a great display. Clydesdales were but moderately represented. Both championships went to gets of Baron's Pride, viz., Messrs. A. & W. Montgomery's Baron's Style and Mr. Thomas Smith's practically unbeaten three-year-old filly Royal Ruby. Shires are, as might have been expected, more numerous. They were quite a good lot, and were par-

ticularly well judged by Mr. T. B. Freshney, Somercotes, South Line. Suffolks made a more than ordinarily good display. There was a show of draft horses in harness this forenoon; they numbered more than a score, and included a large selection of big Shire geldings, such as one sees at work on the London streets. Very few of them had good feet, but they had nearly all magnificent tops and ribs. The winner, a big roan of the old Fen type of Shire, is a great horse, with fairly good feet and a really good walker. He travels well, and deserved to win easily. The second was a brown horse with good ribs but very bad feet and pasterns. The third, a bay horse, bred in Wales, was a first-class specimen of the cart horse. He does not walk as well as the first, and is short enough in his pasterns, but we liked him very much as a good, serviceable cart horse, with wearing-like limbs and plenty of weight. Clydesdale men must do more to keep the lorry in view. The horses shown at London this week, with the exception of the Messrs. Montgomery's first-prize two-year-old colt, a right good type of cart horse, are too narrow and single. They can beat the Shires hollow for feet and limbs, but all that can well be without forgetting altogether that a Clydesdale is a cart horse. In this connection I may call attention to two good shipments of Clydesdales made to Canada last week by Mr. Wm. Colquhoun, Mitchell, Ont., and Mr. Robert Ness, Howick, Quebec, two faithful exponents of the Clydesdale cult. The horses shipped by Mr. Colquhoun are thick, wide, short-legged specimens of the real cart horse stamp. They are certain to attract attention and sell well in Canada. Mr. Ness continues true to his love of a tasty, thick, short-legged, round-ribbed horse, with some quality of feet and limbs. He has done well with that class in the past, and what he has shipped this week will not disappoint his patrons.

The cattle department was by far the best in the show. The Shorthorns and Herefords made a grand exhibition, and were well worth going a long distance to see. The Shorthorn bulls were championed by Mr. John Handley's dark roan, Pearl King 79531, a three-year-old from Greenhead, Milnthorpe, which won champion honors at Dublin. He won as a two-year-old last year. He is a lengthy, straight bull, with a beautiful top line. Perhaps he may be a little lacking in depth. The second prize winner in the same class, Mr. Wm. Bell's Baron Abbotsford 76087, is also from the north of England. He is a four-year-old, and stood in the same position last year. He is of the Scots type, his dam being the famous Duthie cow, Lady Clara III. Mr. Deane Willis was third in the class, with the short, deep white bull, C. I. V. 80707. Lord Polwarth showed a real old Booth type in the immense animal Royal Cardigan. He was placed fifth, and there was a certain advantage in this, as it called attention to a class of animal in which there can be little profit. Between the little white bull C.I.V. and this monster there is a great gulf, and they were happily divided in the prize-list by a very nice red bull, Stoneytown Archer, from Mr. R. P. Cooper, Shenstone Court, Lichfield. The two-year-olds were not quite as strong a class. The first-prize yearling bull was Mr. J. Deane Willis' lovely youngster, Bapton Scepter, one of the best in the country, and a noted winner this year. He was also the reserve champion. The Shorthorn cows were an exceptionally meritorious lot. The championship of the females went to His Majesty the King for his great two-year-old heifer Sylph, a red and white, by the celebrated 800-gs. champion bull, Royal Duke 75509. This is a heifer of extraordinary scale, and very deep in front. She led a strong class. Mr. Deane Willis had reserve championship with his first-prize cow in milk, Kilblean White Heather, bred by Mr. J. B. Manson. She has been a regular winner and breeder, and is a genuine good cow. Some excellent females were shown in all the classes by Mr. Jeremiah Colman, Gatten Park, Norwich. They were bred by Mr. Atkinson, Overthwaite, Milnthorpe, so that the north of England was making an unusually good appearance at this show. These Overthwaite cattle were got by Cairn 72151. A singularly handsome yearling heifer was shown by Mr. Joseph Harris, Calthwaite, Carlisle—the owner of one of the few remaining Bates herds in England. This winner is Duchess 136th, and her sire was Prince Pensive 77500, her dam being by the famous Duke of Cumberland 4th 70302. When a good Bates sort is seen it is a good one.

The Lincoln Reds are a type of Shorthorn cattle which have been bred for a long series of years in Lincolnshire. They have at length won recognition from the Royal, and are entitled to it. They are a thrifty good sort, combining the production of beef and milk in quite a unique degree. Messrs. R. & R. Chatterton, Stenigot, Lincoln, were first with a grand big bull named Red 2611.

The Herefords, as usual, attracted a vast amount of attention. Their quality was undeniable, and perhaps they were a better lot than

the Shorthorns—that is, taking them all over. His Majesty the King had the male championship with the two-year-old bull, Fire King 22135, the reserve being Mr. Peter Coats' Holmer 22290, from Clifford Henford. The female champion was Mr. Thompson's two-year-old heifer, Bonnie Mary. Devons and South Devons were not as strongly represented as they have sometimes been in past years, when the show was in the south of England. The former are well known; the latter are a taller and bigger race of cattle, a little high on the leg, but carrying much wealth of flesh.

Aberdeen-Angus cattle are rapidly conquering English territory, and this year they made a very strong exhibit at this show. The numbers shown were quite unexpected so far from home, but the black polled breed is very popular in the south. The championship of the breed went to Mr. T. H. Bambridge, Eshott, Felton, for the celebrated bull Maramere 18160, bred by Mr. McLaren, Auchnaguie, Aberfeldy, and got by the famous Delamere. The reserve was the first-prize two-year-old bull, Mr. W. B. Greenfield's, from Haynes Park, Bedford. This bull is named Quinton of Haynes 19773, and except for a little plainness in the head and weakness in the hocks, he is perhaps the best bull of his age seen for a long time. The best female of the breed was Mr. R. W. Hudson's Effulgent of Danesfield 28617, a four-year-old cow, and a very good one. The reserve was Lord Strathmore's first-prize yearling heifer, Vintage of Glamis, a bonnie one. She was followed in her class by another heifer from Glamis, named Etotic of Glamis, which may yet beat her.

Galloways have not often been as numerous as they are on the present occasion. Mr. H. C. Stephens, Cholderton, Salisbury, was first with Jasper 8162, a good strong bull. Mr. John Cunningham, Tarbreoch, Dalbeattie, had first and second for bull stirks; first and com. for cows; and second and fourth for heifers. The Duke of Buccleuch, Sir Robert Jardine, Bart., of Castlemilk, Lockerbie, and Mr. William Barbour, Troquhain, New Galloway, were also prizewinners. The bull owned by the last named, Mackenzie of Kilquhanity, was placed third in the old class, and is one of the best shown. He is now a three-year-old.

Ayrshires are far from home and not at all numerous. Those forward are, however, quite satisfactory. Mr. Andrew Mitchell, Barcheskie, Kirkcudbright, shows most, and is successful with a very good cow in milk, bred by Mr. Robert Woodburn, Holehouse, Galston. Mr. James Howie, Hillhouse, Kilmarnock, shows a lot of good stock. His winning bull, Not Likely of Hillhouse 4469, has never been beaten. Lt.-Colonel Ferguson Buchanan, of Auchterlorie, is the other exhibitor of Ayrshires. He has taken a first prize. "SCOTLAND YET." 25th June, 1903.

Hog Cholera Outbreak.

Farmers who purchase store hogs for feeding purposes run considerable risk at times in case of the animals coming from a neighborhood or district where hog cholera exists. Great care should be exercised in making such purchases. An instance of this kind is reported as follows, by Dr. J. H. Tennent, of the Dominion Veterinary Service, which is taking prompt and vigorous measures to check any further spread of the trouble. Owners should promptly report to the authorities any suspicious cases, and co-operate in the measures taken for stamping out the ailment:

"A car from Harrow, Essex Co., arrived at Ripley, Bruce Co., about May 9th, 1903, containing a little over 300 hogs—175 from Harrow, and remainder from Belle River. Dispute as to class; unloaded and left in G.T.R. cattle-yards for few days, until seller or agent arrived; 58 fat ones were picked out and sold to Thos. Harris; he took them to his own barns, and let them among his hogs. After one week he shipped these 58 to Toronto to a packing house; he also placed a number in G.T.R. yards for a few days, and those that were in contact with the 58, then moved all to Huron feeding pens. The balance of car from Harrow were moved to Pine River pens. On June 9th, Inspector was sent, and found 63 of Pine River hogs dead; slaughtered and held post-mortem, found hog cholera; killed the lot, and found 125 diseased and 20 contact. Five breeding sows sold to farmers from this car, and in every case these animals had either died or showed post-mortem hog cholera. In two instances the pigs in contact were diseased. On June 25th, 1903, Inspector sent to Huron pens, found 185 hogs. Post-mortem revealed 129 diseased and 56 contact."

Mr. George Johnson, Dominion Statistician, writing the "Farmer's Advocate" under date of July 10th, 1903, says: "I never pick up your journal without finding something useful in it." So say they all.

Royal Counties Show.

At this year's show held at Southampton, England, there was a grand entry of high-class sheep.

THE HAMPSHIRE DOWN breed was ahead of all the others in number and in average of merit. Mr. J. Flower, in a class of twenty-one yearling rams, all of which were noticed in the award list, led with ease, with a most typical ram of the highest quality winning the first prize here, as he did at the Oxford County and the B. & W. of England shows; he was also made winner of



RESIDENCE OF J. J. STORY, WAWANESA, MAN.

the King's prize for best entry of its breed, and as the r. n. for this honor also went to Mr. Flower for his matchless pen of yearling ewes, first in their class, the success of this breeder was notable indeed. Mr. T. F. Buxton's masculine ram, let last season as a lamb to Mr. J. Flower for 100 guineas, came in for second honors; Mr. Carey Coles' neat, compact sheep securing the third award. Mr. T. F. Buxton was first and second for two-shear rams, with sheep of fine merit. Mr. H. L. Cripps led in the ram lamb class with a fine lamb; Mr. R. L. Ovey, Sir J. B. Maple (who should have been second), Mr. T. F. Buxton and Mr. J. Flower following in the order named. The last named breeder, however, was more than recompensed in the following class—that for pens of three ram lambs—winning with one of the grandest pens we have seen for many a day, for which during the opening day of the show he was asked if he would take \$500 each for them; a very useful pen won second for Mr. Carey Coles; and third honors were given to Lord Carnarvon, for a well-grown pen. In the ewe lambs, Lord Carnarvon won with a notably fine pen, one of the best we have seen for some time, a pen which will be keenly competed for at the dispersal sale already advertised in our columns. Mr. J. Flower was a very close-up second, and Mr. T. F. Buxton secured third honors.

SOUTH DOWNS were hardly up to their usual high merit, but the winners were, as a whole, quite equal to those of former years, Mr. C.

Adeane's winning yearling ram being of very high merit indeed, a ram which will be hard to beat at future shows. Mr. E. Ellis secured a notable success in the two-shear ram class, and won first and the championship of the breed with one of the best of this age that has been seen out for a very long while. Next him came one from Sir T. V. S. Gooch, whose position was more than its merit entitled it to, when compared with Mr. Adeane's ram that came in for third honors. The Pagham Harbor Co.'s flock, which won first and championship prize for the best pen of yearling ewes, had in them one of the very best pens of their breed we have seen for a long while. Second honors went to Mr. E. Ellis, for a most typical pen; and the Earl of Cadogan was r. n. The Pagham Harbor Co. took first prize both for single ram lambs and also for pens of three. Each of these entries was of very special merit, outstanding before all their competitors in respect to type, character and quality of fleece. Mr. C. Adeane was second in each class, with lambs of very notable quality, whilst the third place was filled with two evenly-matched and very typical pens from Mr. E. Ellis' flock. The ewe lamb class was a very capital one indeed, Mr. C. Adeane winning with a beautifully matched trio; next coming a fine and well brought-out pen from Mr. E. Ellis' flock, leaving the third place for a pen from the Pagham Harbor Co.'s flock, which for quality of fleece, typical character of wool and mutton, were quite as good as any.

In the small lot of Shropshires shown, Sir P. A. Muntz, M.P., led both for rams and ewes, Mr. R. P. Cooper taking second honors in each class, the whole of the exhibits being of very fine quality.

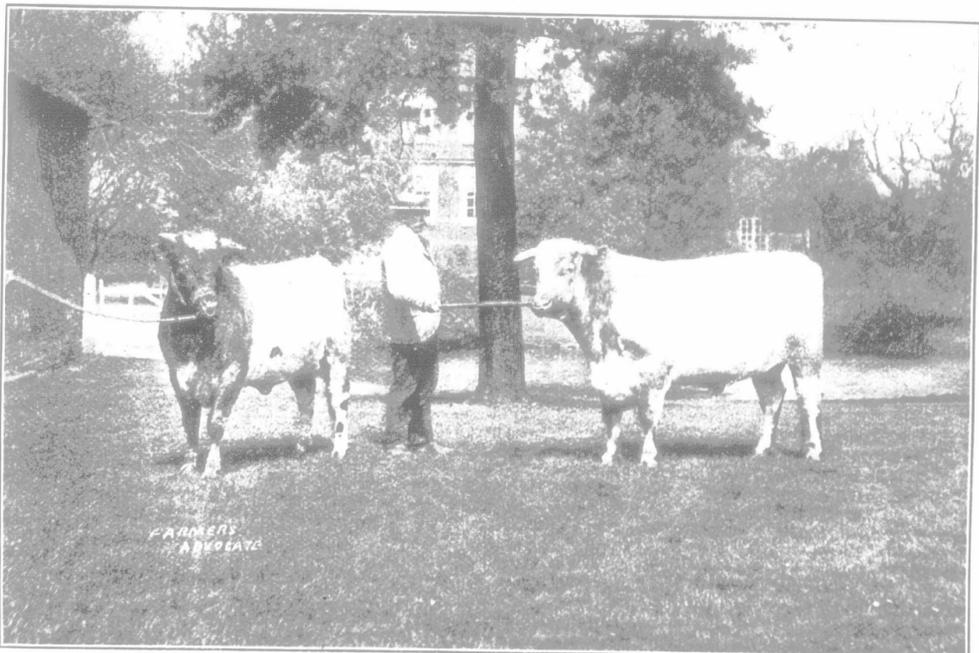
Mr. J. T. Hobbs led in the Oxford Down classes for yearling rams and ram lambs, Mr. A. Brassey for ewes, whilst a new exhibitor, Mr. J. Horlick, was represented with some very typical sheep indeed.

Mr. W. R. Flower won first and second in each of the Dorset Horn classes, with very meritorious sheep.

Remedy for Sow Eating Young.

I appreciate the "Farmer's Advocate" very much. One of the strong features of the "Advocate" is your replies to questions from farmers asking advice about sick animals. I have from time to time been able to get quite a number to subscribe for your valuable paper. I always use that as an inducement, and I have hardly ever failed. Farmers should use these columns more than they do, as almost every farmer has a favorite recipe that he has tried, and it might be a help to some brother farmer. Now, here is one of mine. A subscriber some time ago asked for a remedy for a sow eating her young pigs. The remedy I have always used, and have never known it to fail, is, as soon as the sow is noticed eating the pigs, to give a pound or two of very salty, fat pork. SAMUEL MILLER. "Fairview Farm," Maple Hill, Ont.

Waller Osborne, of Brant Co., writes that he likes the "Farmer's Advocate" because it stands up for everything Canadian all the time.



FAIRY PRINCE AND DUKE OF SEDBERGH.

English prizewinning Shorthorn bulls. Fairy Prince, dark roan; born Nov., 1901; first and champion over 300 Bulls at Carlisle show and sale, 1903. Duke of Sedburgh, light roan; born Nov., 1900; winner of eight first prizes, including first at Birmingham show and sale, 1903.

OWNED BY MR. T. PARTON, WESTON HALL, CREWE, CHESHIRE.

Oxygen Treatment for Milk Fever.

"Not so long ago milk fever in cows was dreaded as a most deadly disease. It is not, and scarcely will be, looked on with anything but dismay, but the invention of iodide of potassium udder injections robbed it of at least some of its terrors. The number of recoveries under this treatment was much more satisfactory. But the previous progress has stimulated experiment. Equal success has been attained by the injection of other antiseptic solutions, such as chinolol, or corrosive sublimate (one in a thousand). From the Canadian 'Farmer's Advocate,' just to hand, I note details of a number of trials of the oxygen treatment invented by M. Knusel, of Lucerne, which have been carried out by two veterinarians in London, Ontario. The oxygen is procured in cylinders compressed much above atmospheric pressure. At first the trials were made with measured quantities of oxygen (about two quarts into each quarter of the udder), but in other cases the udder was simply filled till distended, and the teats tied with tape to prevent the escape of the gas for a time. In the six cases detailed the results were uniformly successful, and the recovery exceptionally rapid. The modus operandi seems of the simplest, and quite within the range of ordinary farmers' abilities. The gas being kept at considerable pressure in the metal cylinders, all that is necessary is to connect a stout tube from the cylinder to the teat syringe, and the tap turned on till the quarter of the udder is distended. The teat and the syringe should be washed in antiseptic solution before operating. If the prospect is as bright as these experimenters promise, it will be much to our benefit. The oxygen can be kept on hand so easily, it is sure to become popular if even ordinarily satisfactory. The verdict by these veterinarians in Canada is that this treatment is as much in advance of the iodide of potassium treatment as that surpassed the old methods of dealing with the disease."—The Scottish Farmer.

[The "Farmer's Advocate," since calling the attention of stockmen and others to the oxygen treatment for milk fever, as successfully tried in Europe, has naturally followed with much interest experience with it in Canada, as we did in previous years the results of the Schmidt method. Messrs. Tennent & Barnes, the veterinarians referred to by our Scottish contemporary, advise us that up to this date they have treated with oxygen 21 cases, with the most gratifying result of 20 complete recoveries. The incidental advantages of this treatment are the rapidity (in from 1 to 3 hours, as compared with from 8 to 12 hours in the Schmidt treatment) with which the cows recovered; no subsequent udder or other ill effects, and no falling off of the milk flow. The case of non-recovery was a very fat, heavy-milking grade Jersey, that had been driven eight miles in very hot weather the day before calving; calved that night and went down the following morning. The veterinarians were not called till 6 p.m. on that day, and found her in the bush where she had been down some seven hours; one of the worst cases they had ever seen. She responded promptly to the treatment, but did not get on her feet; drank water and next morning picked a little grass, but gradually relapsed. A second injection of oxygen revived and held her till midnight, when she relapsed again, and a third and fourth injection resulted similarly, and she finally died at 3 p.m. Friday. It should be noted that this cow had come through an attack of milk fever the previous year.

Through the instrumentality of Drs. Tennent & Barnes, half a dozen other veterinarians have procured oxygen treatment outfits, and so far as heard from their experience in treating the disease has been uniformly successful.]

Human and Bovine Tuberculosis.

Berlin, July 9.—The Berlin Medical Society assembled yesterday evening to hear Professor Kossel, of the Imperial Health Office, report the results of the prolonged experiments of the tuberculosis commission in infecting calves with human tuberculosis. Prof. Koch's observations, prior to the celebrated London address, caused the health office to appoint the commission to make systematic experiments. The commission's investigations cover three forms of introducing tubercle bacilli in calves: first, subcutaneous injection; second, in food; and, third, by inhalation. The preliminary report covers only the first form, but the experiments with the other forms continue. The experimentation covered 32 separate cultures, twenty-three from adults and sixteen from children. The results were that nineteen calves subcutaneously treated did not show the slightest effect; nine showed after four months the slightest changes of condition, and seven showed more marked symptoms, but the propagation of tuberculosis in the body did not occur. On the other hand, four inoculations from tuberculous children infected calves with a disease which resembled a weak type of animal consumption, and two of this number died from

tuberculosis. The commission summarizes as follows: "The series of experiments strengthens Prof. Koch's view that bovine consumption, as the cause of human consumption, does not play the role generally attributed to it, but definite judgment requires further experimentation."

Fly Preventives.

For the past two years the Hatch Experiment Station has been conducting a series of tests with a number of so-called fly removers. When not too thick they were applied with a sprayer; otherwise, a four-inch varnish brush was dipped in the liquid and lightly drawn over the animals. Cows were treated in the morning before being turned out in the yard, and again at night before milking. They were observed at frequent intervals during the day, in order to note the effect of each particular brand.

The brands used and the results are as follows:

1. Sure Thing.—Applied as spray. Keeps off flies for a short time, but not lasting in its effects.
2. Cattle Comfort.—Applied as spray. Not very satisfactory.
3. Stop Fly.—Applied as spray. Favorable effect disappeared in one-half hour.
4. Norwood Sanitary Fluid.—Applied as spray. This material is unquestionably crude creolin; it is very valuable as a disinfectant, but not satisfactory as a fly remover.
5. Flylene.—Very effective, keeping the flies off for a long time.
6. Shoo Fly.—Applied with brush. It was fairly effective in keeping off small flies, but not the large house-fly.
7. Eli Fly Chaser.—Applied with brush. Same as No. 6.
8. Eureka.—Fairly satisfactory. Weather cool, and trial, consequently, not as thorough as others.
9. Rippley's Fly Remover.—Keeps small flies off for a short time. One year's trial.
10. Cyphers.—Keeps flies off for a short time. Only one year's trial.

TESTS WITH OTHER SUBSTANCES.

11. Light Coal Tar Oil.—This is the lighter of the two oils derived from tar. It was obtained through the courtesy of the Pocahontas Collieries Company, Pocahontas, Va. It appears as a dark, thin oil, with a strong creosote odor. It was applied as a spray, and gave quite satisfactory results.

12. Recommended by J. M. W. Kitchen, M.D.—One pound resin, one-half pound caustic potash, two pounds whale-oil soap (chipped), two quarts water. Boil these until all united into a smooth liquid, then add one pound pine tar and one pint kerosene. Thin down if necessary with water and kerosene. This mixture was quite thick and heavy. It was applied lightly with a brush, but was not effective.

13. Recommended.—One-half teacup bisulphide carbon, in which dissolve one tablespoonful pine tar, stirring thoroughly until tar is dissolved, and then add one quart kerosene or crude petroleum, and apply as a spray. This mixture was quite effective for a few hours, until the carbon bisulphide had evaporated. It must be kept in glass-stoppered bottles.

RESULTS WITH HORSES.

The agricultural division of the station gave a number of these articles a test with work horses, applying the same with a sprayer.

1. Sure Thing.—Keeps flies off well for about five hours; the large green fly does not mind it. Gums horse some.
2. Cattle Comfort.—Lasts about three-fourths of a day. Gums horses.
3. Stop Fly.—Ineffective.
4. Norwood Sanitary Fluid.—Ineffective.
5. Flylene.—Keeps flies off well, and gums horses but little. Very satisfactory.
6. Eli Fly Chaser.—Quite satisfactory, and equal to No. 5. Does not gum badly.
7. Eureka.—Same as No. 6.
8. Cyphers.—Protects for short time only, and gums badly.

GENERAL CONCLUSIONS.

(a) Quite satisfactory: 1, Flylene; 2, Eureka; 3, Eli Fly Chaser; 4, Shoo Fly; 5, Light Coal Tar Oil.

(b) Less satisfactory: 1, Sure Thing; 2, Cattle Comfort; 3, Rippley's Fly Remover; 4, Cyphers Anti-fly Pest; 5, Recommended Mixture No. 13.

(c) Unsatisfactory: 1, Norwood Sanitary Fluid; 2, Stop Fly; 3, Recommended Mixture No. 12.

The only objection to those marked "quite satisfactory" is their cost. Even at the present cost of the commercial articles, it is believed their use is warranted, because cows remain much quieter, and horses work better and require less attention from the driver. The report suggests, also, the use of light coal tar oil as a promising substance.

The Ontario Agricultural College Stock Department uses a mixture of fish oil and crude carbolic acid, in the proportion of two to one.

The Royal Show.

CATTLE, SHEEP AND PIGS.

(By our Special Correspondent.)

Eighteen breeds of cattle secured classification this year at the Royal Show, and they made an entry of 907. It will therefore be seen in the limited amount of space allotted to me, that but the barest recognition of the different breeds could be given. In fact, some of the minor breeds have had almost entirely to be omitted.

SHORTHORNS, the most cosmopolitan breed we have, took precedence in the catalogue, and amongst its 131 entries were found a very grand lot of animals. Pearl King, from Mr. John Handley; Baron Abbotsford, from Mr. William Bell; and C.I.V., from Mr. J. Deane Willis, secured the awards in the old bull class, after a keen competition between the two first named. Pearl King ultimately winning champion honors. The reserve for this came to Mr. Willis for Bampton Sceptre, a yearling bull of considerable merit. Amongst the female section the leading winners included His Majesty the King, who took champion honors for Sylph, a two-year-old daughter of Royal Duke, the champion bull at last year's Royal, Mr. Willis, with White Heather, being reserve number.

HEREFORDS secured an entry of 70, and a grand lot they were. Their fine form and beautiful flesh, with attractive appearance, gained for them a considerable company of admirers. His Majesty the King took leading honors in the bull section with the very fine two-year-old Fire King, who won the male championship. The female championship went to Mr. T. R. Thomson for Bonnie Mary, a very fine and typical two-year-old heifer; the Earl of Coventry being second and third; whilst in the yearling heifer class Mr. Richard Green was first and His Majesty the King second and third.

THE ABERDEEN-ANGUS, so well known in Canada, were here represented with 47 entries, and the champion prize for bulls went to the English breeder, Mr. T. H. Bainbridge. Another English breeder, Mr. R. W. Hudson, took similar honors for females. The Earl of Strathmore, the Earl of Rosebery and Mr. L. H. Macpherson, were also amongst the competitors.

GALLOWAYS, with a typical and not large entry, were well represented. Mr. John Cunningham, Sir Robert Jardine, the Duke of Buccleuch and Mr. H. C. Stevens were winners.

THE AYRSHIRE BREED, so far from its home, had an entry of 17, which though small was excellent. Messrs. James Howie, Lt.-Col. Buchan and A. Mitchell being the leading winners.

THE JERSEYS, with an entry of 186 head, made a marvellous show, and from what we can gather by study of the pedigrees of the winners, we find that they represent practically the whole of the leading strains of successful blood at the present time.

THE GUERNSEYS, with an entry of 89, formed one of those typical representations of the breed which renders the Royal Show of England so very valuable and instructive to the foreign and colonial buyer, for he there has an opportunity of comparing the best of each of the different breeds, and he also sees, if the entry is a small one, the leading specimens of the several breeds.

SHEEP.

There has not been so inclusive a schedule issued by the Royal Society since its Windsor meeting in 1889, as that which was issued in connection with this show, so far as regards the sheep section. The number of breeds represented being 21, with an entry of 571. The first breed in the catalogue was that of

OXFORD DOWNS, and here we may mention that Mr. J. T. Hobbs won first prize in each class, besides several honors with very representative and good sheep. R. W. Hudson was also successful winner in the class for yearling ewes, his well-known flock sending out some which were very much admired. Mr. W. J. P. Reading, W. Arkell and A. Brassey were also leading winners.

THE SHROPSHIRE were not so numerous represented as is usually the case; in fact, it is some years since the breed was so short of entries, there being but 62 present. It is, however, with satisfaction that we may note that the smaller entry secured a better average of merit and quality, and all through the class they were most typical of their breed. Mr. R. P. Cooper, who won for the best five yearling rams, the ram lambs and the yearling ewes, had present a very nice and good lot of sheep; Sir P. A. Muntz, who was second for old rams, third for the yearling rams, second for five rams, and second for yearling ewes, had very hard luck in not being more forward. Mr. A. Tanner won for the older rams, and Mr. M. Williams for the yearling rams.

THE SOUTHDOWN entry was one of the largest made for some years, and it was also the largest in the whole section of sheep. The winning sheep were of very good quality, particularly

those which won for the Pagham Harbor Company in the ram lamb and ewe lamb classes; whilst their second-prize old ram, which is going to America, will be found one that should lead wherever he goes. His Grace the Duke of Richmond took champion honors with a two-shear ram. Mr. C. Adeane, who won first for yearling rams, was also very successful in several of the other classes, which he deserved. The Earl Cadogan won champion honors for yearling ewes, with a very nice pen of high quality.

THE HAMPSHIRE DOWN breed, which all through this season has been particularly well represented at our shows, was equally so at this. Mr. T. Buxton led in the old ram class, closely pressed by Mr. H. C. Stevens. Mr. James Flower, who holds so high a reputation, was again confirmed in his pre-eminent place by securing first for yearling rams, first and champion for ram lambs, first and second for yearling ewes, and second for ewe lambs—a record of success thoroughly deserved. The Earl of Carnarvon, whose flock is now going to be dispersed, won first for ewe lambs with an unbeaten pen, and second for ram lambs with another pen of very high merit. Lord Rothschild, Mr. C. A. Scott Murray and Mr. Carey Coles were also very successful, and we may add that the last named breeder, whose flock is well known in Canada, hardly secured so good a position as anticipated.

THE SUFFOLK breed made one of the best entries we have seen at the Royal for some time, and though Mr. H. C. Smith won nearly all the leading prizes, it was satisfactory to find that the number and description of other awards was more general than has hitherto been the case, for amongst those who won were Messrs. S. R. Shirwell, D. Abbot, S. T. Fraylen and Lt.-Col. Baird.

THE LINCOLN breed made a very typical entry, small in number, but all good quality. Mr. Tom Caswell won champion prize with a two-shear ram, and Mr. Henry Dudding came in reserve number with his first-prize and champion yearling ram at Nottingham. The hard luck of Messrs. Wright in not securing premier honors with their noted two-shear ram Nocton Coronation, was probably one of the most serious mistakes in the awards. Mr. Henry Dudding secured first and third in the two lamb classes with some exceedingly fine sheep; Messrs. Dean & Sons, who won in the class for yearling ewes in full fleece, and also in the yearling ram class second and third, had a very fine lot of sheep present; and Messrs. Wright by securing the leading honors in the yearling ewe class had certainly some compensation for their great disappointment in not winning in the old ram class.

COTSWOLDS, which are so much admired in your country, made a very good entry. Mr. W. T. Garne has for many years previously secured all the leading honors, but we are pleased to note that Mr. W. Houlton and Mr. R. Swanwick were nearer to him than they have been in previous years.

Messrs. C. F. Jordan and G. Harrison won the leading honors in the Leicester class.

Mr. D. Hume and John Twentyman were principal winners in the Border Leicester class.

The executors of Mr. T. Willis and Lord Henry Bentinck occupied a similar position in respect of the Wensleydale class.

Mr. W. R. Flower, Mr. E. A. Heane and T. C. Cole were the leading winners in the Dorset Horn class, which we are pleased to mention were very much larger and better than in former years.

THE KENT OR ROMNEY MARSH sheep made the fourth largest entry of any number in the section, and the winning sheep from Messrs. C. File, F. Neame, A. Amos, George Farmer and W. Milne were of a very nice type of character, and as I have many times before suggested, it is very evident from the expression of opinion heard by men who know your country that there is room for this breed there, and the sooner they go the better it will be for those who take them.

THE DEVON LONG-WOOL, the Dartmoor and Exmoor, three breeds from Devon and Cornwall, made small but good entries. The Cheviot, the Black-face Mountain, the Lonks, and the Herds, also secured a good representative entry, and were very much admired by those who visited them. The small-boned, good-fleshed Welsh mountain sheep secured one of the largest entries for this breed we have seen for some time, and the last breed in the sheep section, the Ryelands, which for many years past has lingered as it was in obscurity, came out with so many fine specimens that one wonders why these breeders have not made more noise and brought their breed to the front, for though a breed unknown to Canadians, as it is to many at home, it is one of those which for quality of its flesh and description of wool has few that excel it.

PIGS.

THE LARGE WHITE, or Yorkshire section, found its leading winners for good pigs from the notable herd owned by Sir G. W. Greenall. In the other sections in this class the Earl of Ellesmere and Mr. D. R. Daybell were principal winners.

BERKSHIRES, which made a very large en-

try, and which are at the present time in great demand, both for home and export, were represented by some particularly fine and well-grown pigs. Mr. R. W. Hudson took first prize and champion for the well-known boar Manor Hercules, and H.R.H. Prince Christian was reserve for that honor with Stratton Polly 4th. Mr. James Lawrence, Sir A. Anderson and Messrs. H. T. de Trafford and J. A. Fricker were also winners.

TAMWORTHS, the breed so well-known and appreciated amongst Canadian pigmen had a very nice, level and good entry. Messrs. Ibbotson, D. W. Phillips and H. C. Stevens were the leading winners. The large black pigs, hardly known yet amongst you, made a very strong entry of high quality and good merit. Mr. C. F. Mariner, Mr. J. Goddard and Mr. H. E. White took the leading honors.

A Calf-feeding Experiment.

It is questionable if anybody doubts the superiority of new milk as the premier food for calves. A good article has, however, a limit to its value, and where separated milk is plentiful, and new milk scarce, the former, with all its faults, may be the cheaper of the two. All who understand calf rearing and feeding, and know the difference between ordinary skim milk and separated milk, realize the impossibility of equal results from the two classes of milk when used in the same manner. To do so is to expect the impossible. Provided both are of the same degree of freshness, separated milk is quite a good food; but old-fashioned skim milk is better. From the food point of view, separated milk and skim milk only differ in one respect, viz., that the former contains from 1-10 to 1-4 of 1 per cent. of butter-fat, while the latter usually contains

at an age which permits its using other foods to a greater or less extent, so that the deficiency of the skim milk is not noticed to the same extent as is the case when separated milk is used. Owing to the ready market at the creameries for new milk, there is also now a greater tendency than formerly to restrict the quantity and shorten the period during which new milk is given. This tendency is found to apply to every district where milk can be easily sold. For an immediate prospect of a return in cash for the milk sold to the creameries or elsewhere, compared with the more distant one when the calf is sold as a yearling or heifer, the food of the calf is often restricted in a degree greater than experience warrants as profitable. This further intensifies the stunting process in the growth of the calf, and it is not to be wondered at that dealers and feeders have become alarmed and have put all the blame on separated milk. There is, however, no occasion for alarm, but considerable necessity for further inquiry, in order to find out how far and with what advantage supplemental foods can be added to separated milk when fed to calves.

In converting new milk into separated milk, it has already been shown that nothing is added to it, and pure fat alone is drawn from it. The great question, therefore, for the calf feeder is, can this valuable butter-fat be replaced by any cheaper fat and yet give satisfactory results. It is very unlikely that any fat will ever give better results in calf feeding than the original fat of milk. A good article may, however, at times be bought too dear, and at the present price of butter the use of the fat of milk for feeding calves seems a very costly food. There are also good grounds for believing that much better financial results might in many cases be obtained if the butter-fat were sold for human consumption, and some cheaper, and yet easily-digested, fat purchased for the use of the calves. The experience of the last three or four years has proved

without doubt that good results can be obtained by adding about two ounces of cod-liver oil to the daily supply of separated milk. The addition of this quantity of oil brings the separated milk up to about the same percentage of fat as good skim milk. Those who have been most successful with this food recommend the use of new milk for about a month, after which the new milk may gradually be withdrawn, and a fully greater quantity of separated milk substituted, to the daily supply of which two ounces of cod-liver oil has been added. A few rearers have successfully used fully more than this quantity of oil without producing any purgative effects, but while some calves can easily digest more, others cannot, and this seems a safe limit. Instead of increasing the quan-



PEARL KING (79531).

Shorthorn bull, calved July, 1900. Winner of first and champion prize at the Royal Show, England, 1903.

PROPERTY OF JOHN HANDLEY, MILNTHORPE.

at least 1 per cent., and often more. Ordinary skim milk is, therefore, from four to ten times richer in fat than separated milk, or, in other words, skim milk contains from $\frac{1}{2}$ lb. to 1 lb. of butter-fat more than separated milk in every 100 lbs. Presuming new milk to contain $3\frac{1}{2}$ per cent. of fat, skim milk to have 1 to $1\frac{1}{4}$ per cent., and separated milk $\frac{1}{2}$ per cent., this will be equal to 56 ozs. in the first, 16 to 20 ozs. in the second, and 4 ozs. in the third, of pure fat per 100 lbs. of milk. For our purpose, 100 lbs. of milk may be looked on as ten gallons, so that one-tenth of the above figures represents the amount of fat in ounces in each gallon of milk. If a calf gets $1\frac{1}{2}$ gallons of milk per day, it would receive about 3 ozs. of fat in ordinary skim milk, and only a little over $\frac{1}{2}$ oz. in separated milk. This addition, daily, of from 2 to $2\frac{1}{2}$ ozs. of such a nutritive and easily-digested food as pure butter-fat is a valuable gain to the food, and is sufficient to account for a very great increase in the live weight of any animal to which it is given. Anyone can, therefore, easily see that separated milk is unsuited for feeding alone to calves. It, however, contains much the same casein, albumen and milk sugar as whole milk or old-fashioned skim milk, which are of equally great importance from the food point of view as the fat, so that the fat is really the only point in which the two kinds of milk differ. The whole question of the profitable use of separated milk as a food for calves depends on whether or not the abstracted fat can be replaced by some other substance.

When new milk is given to calves the first four or six weeks of their existence, there is no great difficulty in supplying the calf with supplemental food to make good the deficiency of the skim milk. The calf is then

encourage the calves to eat a little of the best procurable linseed cake, or to add to the milk a little jelly made from ground linseed and boiling water. During their second month calves will eat about half a pound of linseed cake per day, or somewhat less of linseed meal, in addition to their supply of separated milk and cod liver oil. As the calf gets older the linseed cake may be gradually increased, or it may have other substances added to it, such as well-boiled oatmeal. A small quantity of fresh well-made hay or young grass should be given early to each calf, as they begin to chew hay earlier than many people suppose. Some rearers have had good results from the addition of other substances besides cod-liver oil, linseed cake and oatmeal to separated milk, and it is not improbable that the best food or mixture of foods may not yet be discovered.

The first occasion on which public attention was drawn to the value of cod-liver oil for calf feeding was when, in 1896, Mr. Campbell, Farm Manager to Sir Robert Jardine, Bart., of Castlemilk, Dumfriesshire, fed sixteen calves, in four lots of four each, on various foods. One lot was given new milk for three months, and separated milk for one month later. A second lot were given the same quantity of separated milk, to which two ounces of cod-liver oil was added. In addition to these foods, both lots had one-half pound of linseed cake for each calf, daily, for the second month, one pound during the third month, and one and one-half pounds during the fourth month. Both lots were weaned at the end of the fourth month, when there was little difference between either in appearance, after which they were fed and housed alike. In January,

1897—that is, when about nine months old—those which had been fed on fresh milk weighed 15½ cwt., live weight of four, while those fed on separated milk and cod-liver oil weighed 16½ cwt., live weight of four. A year later both lots were sold in Lockerbie auction mart, the following being the gross weight and prices realized for each lot:

Those fed on whole milk weighed 35 cwt. gross, and realized \$275 for the lot.

Those fed on separated milk and oil weighed 36 cwt. gross, and realized \$297.50 for the lot.

The milk supplied to those fed on new milk was valued at \$60, or \$15 per calf; while the separated milk and cod-liver oil given to the other lot was valued at \$30, or \$7.50 per calf. These are facts which speak for themselves, and which any rearer may repeat and verify at little or no expense to himself.

Where separated milk is brought from a creamery once daily every precaution ought to be observed to keep the milk sweet and free from taints of any kind. To carry this out satisfactorily the separated milk should be first heated, then rapidly cooled, before being returned to the farmers. The process of heating, or pasteurizing, as it is called, may be carried out in a special apparatus made for the purpose, or by one of the many simple and inexpensive arrangements capable of attaining this end which will occur to most people. It is usually possible to do so at no cost for fuel by utilizing the exhaust steam of the engine driving the separator, etc. When milk is heated to about 150° F. it acquires a boiled flavor, which is very disagreeable to many people, and the digestibility of the albumenoids is believed to be also considerably lowered. The lactic acid germ, or active souring agent in milk, is, however, found to be very greatly weakened, if not even killed, by exposure to a temperature of 140° F. for from ten minutes to twenty minutes. Experiments at Wisconsin, in 1898, proved that 98 per cent., if not more, of the bacteria which produce lactic acid were killed by subjecting milk to 140° F. for twenty minutes. Other test at the same station also showed that milk heated for fifteen minutes at 140° F. was as fresh, on the average of a large number of tests, at forty-four hours as another portion of the same milk unheated, but kept under identical conditions, was at twenty-one hours. Where, therefore, the milk is to be used for calf-rearing, pasteurization should always be performed, and in order to get the full advantage of the process, it should be followed by rapid cooling down to 50° F. or under. In the most of cases, separated milk will always be brought back to the farm in the same vessels that carried the new milk away, and unless great care is taken at every point such vessels run considerable risk of contaminating the new milk. The process of pasteurizing, and then cooling, not only reduces this risk to a minimum, but it enables the milk of a day old to be fed to the calves, with little or no risk of souring and consequent liability of indigestion. To do so necessitates considerable care, both at the creamery and farm, otherwise good results will seldom be obtained. In the rearing of calves, even on the best of food, cleanliness must be observed everywhere, not only in the dishes from which the calves are fed, but particularly in the calf house, which must be clean, dry and well ventilated. Unless the latter be attended to, good results will rarely be obtained from any class of food.—[Irish Bulletin.]

Milk Fever Recovery.

To the Editor "Farmer's Advocate":

Sir,—I have been very much interested and greatly benefited by the articles in your valuable paper about the oxygen treatment for milk fever. I have a high-grade Holstein cow, a very heavy milker and very fleshy. About six hours after calving the first symptoms of milk fever were noticed. Our local practitioner, who has had much experience with milk fever, did all he could for her, but she gradually got worse, until about twenty-four hours after calving she was lying flat on her side, unconscious of our presence. An ordinary air pump was then procured, and a tube attached to it, disinfected and oiled. We carefully inserted it into the teats and pumped the udder full of air, tying tape around the teats to prevent the air escaping. In a few minutes respiration became easier, and in four hours and fifteen minutes after treatment the cow got up, without help, ate some grass and walked about twenty rods and got a drink. No milk was taken from her for twenty-four hours, and then just a little at a time for twenty-four hours more, when she was milked clean. The cow seems to be as healthy as ever; no ill effects can be noticed since the treatment.

Frontenac Co., Ont. WILLIAM WEBB.

[Note.—Attention has already been called in the "Farmer's Advocate" to the fact that ordinary air contains twenty per cent. of oxygen, and while the success of a trial is deserving of note, we would suggest the advisability of caution in favor of, beyond the oxygen treatment in the future, a careful practitioner, taking the appropriate prophylactic precautions.—Editor.]

A movement is on foot to start a horse-shoers' college at some point in Michigan.

HORSES.

Diseases of the Digestive Organs in Horses.

While it is not wise for the ordinary horse-owner to attempt treatment of disease in horses when professional attention can be promptly procured, it is well that all who own or drive horses should have an intelligent idea of the causes and symptoms of the ordinary diseases to which horses are liable. Some are so situated that a veterinarian is practically out of reach, and in such cases he is compelled to depend upon his own or his neighbor's skill. Again, even though a veterinarian may be in practice within easy reach, he may be from home when wanted, and his services not procurable for a few hours or longer. In such cases it is well for the owner to be able to diagnose the case, and give remedies that will have a tendency to alleviate the symptoms until skilled assistance arrives. In all cases, especially in digestive troubles, where simple remedies do not effect a cure in from one to two hours, it is much better to send for a veterinarian promptly, as the fact that the symptoms of disease are continuing, despite treatment given, indicates that the disease is serious and requires skillful and prompt treatment. Give your veterinarian a chance. Do not wait or treat yourself until the disease has reached that stage that renders successful treatment improbable or impossible, and then send for him. This is frequently done, and the practitioner called hard names because he failed to cure an animal that was practically dead when he was called. If a veterinarian be not within reach, the owner, of course, has to do the best he can, and it is particularly on account of those thus situated that I have considered it advisable to consider in these columns the causes, symptoms and treatment of some of the ordinary digestive diseases of horses. With rare exceptions, diseases of the digestive organs are the results of errors in feeding and watering. When horses are intelligently fed on food of good quality, and allowed to drink frequently (the water being of good quality), it is seldom any acute digestive trouble is seen. The stomach of the horse is less liable to disease than the intestines, from the fact that the former is small compared with the volume of the latter. The food is arrested for only a short time in the stomach, soon passing on to the intestines, where the chief part of the process of digestion takes place.

CHRONIC INDIGESTION. or indigestion without engorgement, occurs in the horse as the result of food of poor quality, diseases or irregularities of the teeth, the process of dentition, irregular feeding, voracious feeding, debility of the stomach or intestines, etc.

SYMPTOMS.—The horse is unthrifty, his hair is dry and staring, and he is usually more or less hidebound. The appetite is capricious, and he often has a tendency to eat filth; there is usually a sourness of the mouth and increased thirst, along with irregularity of the bowels and general unthriftiness. Colicky pains are sometimes noticed for a short time an hour or two after feeding, while in others giddiness, megrim, and even partial paralysis may occur.

TREATMENT.—The first principle in the treatment of any disease, especially if of a chronic nature, is to ascertain the cause and remove it, if possible. In the majority of cases of chronic indigestion in the horse, we will find the cause exists in the mouth. In a young horse, especially in his third and fourth year, when the temporary molars are being shed and replaced by permanent ones, we frequently find that the permanent teeth have partially displaced the temporary ones, the fangs of which have to a great extent become absorbed, but the crowns, which have been forced above or below the level of their fellows, have not shod, and, as a consequence, the colt cannot masticate properly. In older horses, and also frequently in young ones, the permanent molars are irregular, sharp corners projecting inwards from the inner margin of the lower row, and outwards from the outer margin of the upper row. These projections irritate and lacerate the tongue and cheeks, and thereby prevent proper mastication. Any person who has not paid attention to the mouths of horses in this respect, has no idea how often such conditions exist, or how necessary it is to have the teeth attended to. All horses over five years old, and often younger animals, should have their teeth dressed every year; hence, if a horse is suffering from the disease under discussion, his mouth should be carefully examined, and if not in good condition the fault should be corrected. If the mouth be all right we must look for the cause elsewhere, and if possible remove it. If diarrhea be not present, causing moderate purgative, say six to eight grains of calomel, according to the size of the animal, should be given. If the horse is suffering with indigestion, he should be given bran only twelve hours before administering the purgative. The purgative may be given either in the form of a bolus, or mixed with treacle

or soft soap, shaping it like a cylinder and wrapping in tissue paper, or by mixing with about half a pint cold water and given as a drench. Feed nothing but bran, and give water often and a little at a time (in cold weather it is wise to add sufficient warm water to remove the chill), until purgation commences, which is usually in about 24 hours; then feed lightly until purgation ceases. Follow up with one dram each, bicarbonate of soda, sulphate of iron, gentian and nux vomica, twice daily, given either in damp food or as a drench, mixed with a pint of cold water. If this treatment fail, give two drams muriatic acid twice daily, in half pint cold water, as a drench.

(To be continued.)

Sweat Pads.

The use of sweat pads under some circumstances may be justified, especially when horses have started work in the spring in good form and are reduced in flesh during the summer. One of the principal objections to the sweat-pad is that it tends to become soggy, and, consequently, increases the friction between the surface of the pad and the shoulder. It sometimes happens that by the use of the pad one can fit a collar that could otherwise not be worn. In this instance the price of a collar may be saved. By the use of the pad the draft is often thrown on the outer edge of the shoulders, while it should be as close in as possible. When an animal gets a sore spot on some part of the shoulder, it is sometimes possible to cut a hole in the pad and thus relieve the pressure on this place until it becomes healed. The main thing is to have a collar fit the shoulder well. Where this is the case there is seldom any danger of irritation, providing the hames are properly fitted to the collar and pulled up tightly each time they are put on. It never pays to work away with a collar that does not fit, because an animal that constantly experiences pain through ill-fitting harness cannot do the same amount of work, nor do it as willingly, as would be the case if all parts of the harness are adjusted to its form.—[Iowa Homestead.]

FARM.

A Scotch Roup.

An old-time reader and friend of the "Farmer's Advocate" has submitted for our inspection a copy of an auction sale bill of farm stock, implements, etc., issued in Scotland in 1832, with permission to publish such parts of it as may be deemed expedient in order to present and explain the names by which in the vernacular of the district certain classes of farm animals and domestic utensils are known. The bill sets forth that on the farm of Blindhill Bush certain animals and utensils belonging to David Graham will be sold by "Roup" on April 18th, 1833. A judge was appointed to act as referee in case of disputes, and to enquire into the financial standing and ability to pay of the buyer, if he claimed the time limit allowed for payment of sums over £2. Among the rules and conditions of the sale is the following: "In case of the buyer failing to find 'caution' (security), it shall be at the option of the exposor, either to re-expose such article or to declare the same to belong to the preceding offerer, who is bound to accept thereof at the highest price offered by himself, and to find 'caution' therefor mentioned, and failing his doing so, he shall be liable to the exposor in 30 shillings of damages, to be received in an ordinary action."

In the list of animals and articles to be disposed of, we find the following: 2 quey stirks (yearling heifers), 2 two-year-old stots (steers), 1 rigged cow (having a white line back, and red or black sides), 1 feathered cow (cow with white spot on tail-head), 109 ewe hoggs (yearling ewes), 35 gimmers (ewe lambs), 15 tip lambs (ram lambs), 1 chest of drawers (bureau), 1 grape dungfork, 1 slaughter spade (an implement for skinning off an inch or two of sod from grass land, to be dried and burned preparatory to plowing for crops), 2 thrav crooks (a hook and crank used for twisting straw ropes), 1 dreg (three-pronged scraper for unloading manure), 1 iron pinch (crowbar), 1 spoon creel (hanging spoon-holder), 1 set cart shelbands (rack for hauling hay or sheaves), 1 meal teason (box to hang on wall in kitchen), 1 milk stoup (stave milk pail, with side handle), 1 hanna (milking pail, with one stave higher than the rest for a handle), 1 set swifts (for winding yarn to be made into skeins), 1 check reel (for winding yarn into knots), 1 wand (willow) basket.

A striking feature of the conducting of the sale is the clerk's book, giving names of purchasers and the price of articles, a copy of which has also been preserved, the prices being given of course in £ s. d., in two sets of columns, one of which is filled with the price bid, and the other with the amount paid in cash, or by a promissory bill, the whole being neatly written and methodically kept.

Our Western Letter.

CROP PROSPECTS.

The month of June was slightly on the dry side, yet the fine growing showers of early July came in time, so that present indications point to a third large harvest, which will commence perhaps some ten days earlier than the harvest of 1902. The straw will be shorter than last year, which most will consider a blessing, for on fallow land, especially, a year ago considerable inconvenience was experienced with lodged grain. The largest yields usually are obtained from a crop of medium length, so that many predict that this year's grain average will exceed that of last.

TRADE BRISK

At present building in town and country is being pushed as never before, and many desirous of making improvements find it impossible to do so, owing to the scarcity of both material and laborers. The present progress is an advertising medium of the highest type, and holds many a man who has been induced through other means to spy out the land.

IMMIGRATION.

The rush continues, and many prospectors are hunting land for customers who are ready to purchase whenever a suitable tract of salable land can be found. Names could be mentioned of many who have recently purchased largely and who are now breaking and building, and at the same time hungry for more land for relatives or others anxious to test the goodness of the Canadian West. At present an Assiniboia farmer is on the lookout for a block of 50,000 acres, for which he has already got customers, chiefly Hollanders from the United States. This block if found will not be held for speculation, as is often the case, but will at once be divided into good-sized holdings, and become a part of the tilled West in a very short period.

IMPROVEMENTS.

The C.N.R. are laying some 650 miles of new track in Manitoba, which will be very helpful in handling the present and future crops. The chief engineer states that the extensions will certainly be finished in time for the present crop, and that great effort will be put forth to complete the branches. Grand View extension, 300 miles; Prince Albert ext., 60 miles; from Neepawa to Rosburn, 65 miles; Neepawa to Macleary, 55 miles; Neepawa to Carberry, 30 miles; southwest of Portage la Prairie, 40 miles; to Oak Point, 55 miles; east of Emerson, 20 miles; and from Greenway to Wakopa, 40 miles.

The C.P.R. is also busy putting in sidings, reducing grades and easing off curves, so as to enable heavier train loads to reach the ports. Considerable rail-laying is also being done. The line from Arcola to Regina, 115 miles; the Neudorf extension across Pheasant Plains to Jumping Creep, and the extension of the Manitoba and Northwest line beyond Yorkton, perhaps form the principal improvements which the C.P.R. intend making in that line this season.

EDUCATION.

Many of the older schools are becoming overcrowded, and in the Territories alone, since last October, 160 new schools have been started.

Teachers' salaries are going up, and signs of a scarcity of teachers is being felt in many parts; most vacancies, however, are being filled, Ontario teachers usually coming to the rescue.

BANKING.

Another prosperous sign of the times is the increased banking business. Extra banks are required to meet the demands, and it is not uncommon to find to-day four to five banks in a town where six months ago only two could be found. Many new settlers are depositing money for safe keeping until they decide where to locate; then, of course, the present boom has brought many moneyed individuals here, and the last two bumper crops have helped the steady, hard-working farmer to make some of the "needful," which for a time is left in the care of the bank.

EXPERIMENTING.

A number of experiments are being tried by agricultural societies to find out whether Idaho Red Winter wheat will prove successful in our climate. Most of these will be conducted in Alberta. Fodder corn, dwarf Essex rape, Turkistan alfalfa clover, other clovers, grasses and peas are also on the list for testing. Geo. Harcourt, B.S.A., Superintendent of Institutes and Fairs for the Northwest Territories, is in charge. Many of the mixed farmers of the Territories will watch with interest the results of these experiments.

GRAIN GROWERS.

Since the return of the "grain-growers" delegates from Ottawa, the farmers are more hopeful that past grievances relating to transportation matters will be righted, and this, along with the present bright prospect of another heavy

yield, is gratifying both to dwellers in towns and country. Prospects of good prices are also fair, and this pleasing combination of expected blessings has also made itself felt in a practical way by inducing old-timers and newcomers to vie with each other in breaking the virgin soil for next year.

SUGAR BEETS.

The beet sugar industry at Raymond, Alta., is being rapidly pushed ahead. A large acreage of beets have been sown, and some little time ago the thinning process was much in evidence.

The attendance at the schools was very low during that time, and, in fact, all available help was introduced to the "beet fields."

Irrigation promises to ensure the success of this industry, for all things except the regularity of sufficient moisture appears to have been provided to that neighborhood by nature.

Winnipeg, Man., July 10th.

OBSERVER.

Dragging Roads.

Down in Missouri, where gravel is scarce and where clay roads are destined to remain clay roads for a long time, considerable attention has been given of late to the improving of these roads by drainage and smoothing. The clay roads are first graded, as has been done in most parts of Ontario within very recent years, but in some sections instead of leaving them alone or covering them with gravel, they are dragged or scraped frequently with a heavy timber. The most approved method is to split a log in halves and attach a drawing chain to each end of each piece, in such a fashion that it will ride on edge, and so

Ginseng Growing.

To the Editor "Farmer's Advocate":

Sir,—In answering the inquiry of F. E. W., we would say, "What a wonderful medium of reaching the people the 'Farmer's Advocate' is?" In 1894 we there saw where ginseng roots and seeds could be bought. We immediately purchased enough to make a start, and paid for instructions how to cultivate and take care of it. We have been doing so since then successfully. A botanist who examined our beds three years ago said: "It is evident you know how to grow it to perfection." It is one of the best industries a farmer can invest in in this country at present.

Though our experience is only eight years, it is worth a great deal to us. We did not know the value of it, and did not take proper care of it the first two or three years. It looked a very small beginning, and some said it was not worth bothering with, and that it would pay better to grow a bed of carrots. But that day and that idea has long gone past. Our soil is sandy loam, but we think one could make almost any ground suitable that is high or dry enough. It is necessary to make it good, as it cannot be cultivated every year, and like other crops, the better the ground the better the crop.

It will not do to "sow" the seed. It should be dropped into a rut, more than an inch deep, made across the bed in straight rows, and about three inches apart, for convenience of keeping clean, etc., but one inch apart in the row is all that is necessary. It should be put in in October, and should be well covered with leaves for the winter, and shaded in the summer. We find

the most convenient and economical shading is lath, nailed half an inch apart. Ginseng won't stand the sun. At two years old the plants should be transplanted, and set four to six inches apart each way. The work is then over, except keeping the ground clean, mulching (if the ground requires it), and keeping shaded for five years, when the roots ought to be large enough to be taken up and prepared for market. The seed will be ripe in August, and can be taken off by any one able to pick berries. This seed should be taken care of for the next fourteen months, as it will not germinate the first year.

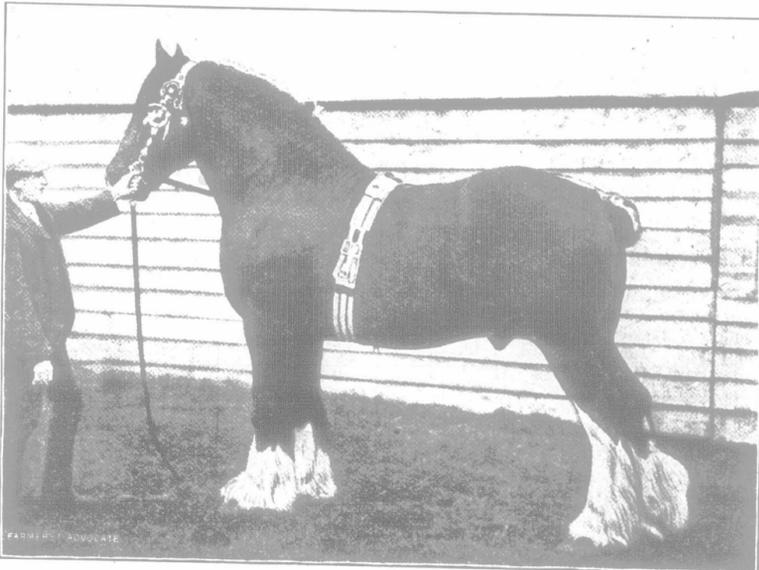
Now to answer the question, "What would be considered a fair return per acre?" seems to us something like

answering the question, "How much wheat would the Northwest Territories grow?" Ginseng growers do not reckon by the acre. All with whom we have corresponded speak about it by the bed. It takes so much seed, or so many roots "for a bed," or we made so much "out of a bed," which, if not otherwise described, means 16x3 feet. We know of no particular reason, except in shading with lath, which is four feet long, it is necessary to count by fours, but after we got started we saw we could manage the beds as well six feet wide. Therefore, contrary to our instructions, we laid out our beds 68x6 feet. If a bed that size planted with two-year-old roots—provided that all grew and were properly cared for—it should, for the next five years, at the present value of seed, return an average of \$3,000 worth of seed each year. Many of the two-year-old plants will bear seed; we have taken as many as six good berries off some plants before they were transplanted.

Victoria Co., Ont.

ARTHUR J. MARTIN.

[Note.—We recently inspected a bed of ginseng under cultivation for some years past in Middlesex County, Ont., and which appeared to be making very fair progress, though owing to the tedious nature of its cultivation we do not expect to see it become very general. The price of seed is uncertain. It has been quoted up to \$5 per ounce, and also at \$21 per pound. We were informed of one estimate of \$5,000 per acre for a matured bed, but that covered a five-year period, and included both seed and roots. The latter are used by chemists for medicinal purposes. The bed we saw was on a low, black loamy river bottom.—Ed.]



HENDRE ROYAL ALBERT 19686.

Shire stallion. Winner of first and champion prizes at the Royal Agricultural Society's Show, London, England, 1903.

THE PROPERTY OF LORD LLANGATTOCK.

Silo Building.

Silo building may now be said to be past the experimental stage, and it only remains for the person who wishes to provide a large supply of succulent food for winter use to decide upon the kind of silo he will build, having in mind the cost and duration of silos made of different materials. Silos naturally fall into two classes, temporary and permanent. The temporary silo is usually built of wood. A few years ago, before cement was generally introduced, very elaborate wooden silos were built, but of late the wooden stave and the cement silos have superceded all others with rare exceptions. The round stave silo has several features to commend it. It is easily built where lumber can be had; it is comparatively cheap, and it serves to tide a sceptical person over the experimental stage of ensilage feeding. On the other hand, they are purely temporary, the juices of the corn causing rot in the wood, and unless carefully built and well anchored, they require considerable care to keep them intact during summer. For these reasons the permanent concrete article is fast coming into general use.

In building a silo it should be borne in mind that the object of the silo is to preserve the contents from the air, and to this end the foundations should be solid and the walls as close as possible. In wooden silos the closeness of the walls is secured by the moisture of the silage swelling the timber, thus closing all cracks. In this connection it is well to finish the inside of a cement silo with a smooth coat of cement, either plaster or whitewash, to exclude the air and to obviate friction as the ensilage settles.

Round silos, whether of wood or cement, are now almost exclusively built. They have the advantage of containing the largest possible amount of contents for the walls employed, and as the pressure is evenly distributed over each part of the wall, they are not subjected to excessive strain at any one point, as in the square-shaped article. An effort should be made in building a silo to have it as high as practicable, to ensure a greater pressure on and closer packing of the ensilage, as this also tends to exclude the air and ensures a better quality of feed. At the same time, it should not be so high as to look like a walking stick. A good proportion is twelve feet in diameter and twenty-four feet high.

Ensilage has now come to be a necessity on many of the high-priced farms, where a large number of cattle must be fed in order to make a dividend from the farm, and their more general use is only a matter of time, when thicker population and higher land values will compel their employment. As those times are assuredly coming, it is better to be in advance of them than to be one who too slowly follows the changing conditions.

When Fertilizers are Valuable.

From several quarters have come expressions of satisfaction from the use of commercial fertilizers during the present growing season. Almost all kinds of crops responded noticeably to the judicious use of the different brands. The reason is obvious, but the effect may be misleading. During the previous summer the soil over most parts of America was so saturated with rain that considerable of the available plant food was leached to lower levels, or carried completely away, thus leaving the soil in a very poor condition to start germination without some addition of fertility. This need the high-grade fertilizers supply excellently, as a large proportion of the plant food contained in them is readily available.

Under different conditions of climate and soil so much direct benefit may not be noticeable, and it is well to consider this matter before purchasing largely and indiscriminately next year. To expect equally good results from the use of fertilizers another year when more of the natural fertility is available, is to over-estimate the value of fertilizers, and if as good results are not obtained there is a danger that the dealer will be blamed for the poorer results—an injustice to both him and the manufacturer. Fertilizers are good, and have a place, but one must not expect too much of them, nor use them too lavishly, else the profits of the farm will be found to be decidedly small, and the usefulness of the commercial article completely discredited.

No Joke.

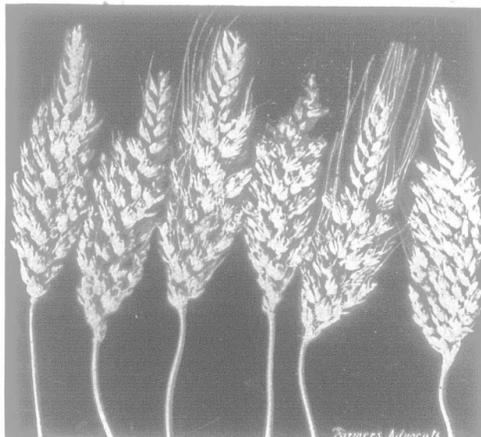
Some of our American papers are inclined to poke fun at Secretary Chamberlain for advocating in the English Parliament discriminations in favor of the colonies, as compared with foreign countries, in matters pertaining to trade. It may yet turn out that such a disposition to levity is rather premature. As we see the matter, such a course of action is far from improbable or impracticable, and if it become a realization, it will mean something to these United States. In many lines of agricultural consumption Great Britain is at present by far our most valuable customer. [The Minnesota Farmer.]

Signs of Rain.

BY DR. JENNER.

Edward Jenner, who introduced vaccination, was born at Gloucestershire, Eng., May 17th, 1749, died January 26th, 1823. He was apprenticed to a surgeon, studied under the celebrated Hunter, and when 24 began to practice medicine. His life was written by Dr. J. Baron. Jenner found time to worship occasionally at the shrine of the muse. While he was not noted as a poet, yet some of his metrical compositions were quite clever. It is said that on receiving an invitation from a friend to make a country excursion, he sent his excuse in the form of the following poem:

The hollow winds begin to blow,
And clouds look black, the glass is low,
And spiders from their cobwebs creep,
Last night the sun went pale to bed,
The moon in halos hid her head,
The boding shepherd heaves a sigh,
For see! a rainbow spans the sky.
The walls are damp, the ditches smell,
Closed is the pink-eyed pimpernel,
Hark, how the chairs and tables crack;
Old Betty's joints are on the rack,
Loud quack the ducks, the peacock's cry,
The distant hills are looking high,
How restless are the snorting swine—
The busy flies disturb the kine,
Low o'er the grass the swallow wings;
The cricket, too, how loud it sings,
Puss on the hearth, with velvet paws,
Sits smoothing o'er her whiskered jaws,
Thro' the clear stream the fishes rise,
And nimbly catch the incautious flies,
The sheep are seen with early light,
Cropping the meads with eager bite,
Tho' June, the air is cold and chill;
The mellow blackbird's voice is still,
The glow-worms, numerous and bright,
Illumed the dewy dell last night,
At dusk the squalid toad was seen
Hopping, crawling o'er the green,
The frog has lost his yellow vest,
And in a dingy suit is dress'd,
The leech, disturbed, is newly risen
Quite to the summit of his prison,
The whirling wind the dust obeys,
And in a rapid eddy plays,
My dog, so altered in his taste,
Quits mutton bones on grass to feast;
And see yon rooks, how odd their flight,
They imitate the gliding kite,
Or seem precipitate to fall,
As if they felt the piercing ball,
"Twill surely rain—I see with sorrow
Our jaunt must be put off to-morrow."



A NEW VARIETY OF WHEAT.

Alberta Wheat Heads.

The accompanying illustration of wheat heads shows a new variety of wheat with which Mr. Thomas Gatrix, whose farm is situated three miles east of Strathcona, is at present experimenting. Mr. Gatrix noticed in a field of wheat of the Egyptian variety, a stalk bearing seven heads. He was curious enough to wish to investigate what he supposed to be a freak. He pulled the head when ripe and planted each kernel carefully the following spring. The experiment was successful, in that every stalk grown from these seeds had heads similar to the parent one, and the stage at which the experiment now stands is that Mr. Gatrix has sown last spring over a half pail of seed. He reports a yield of from 100 to 180 well-developed grains to each head, and he has christened it the "Seven-headed Sinner."

Knife O. K.

The premium knife to hand all O. K. Agronomists pleased with it. Many thanks. D. H. MINNICK, Simcoe Co., Ont.

Protect Young Grass Plants.

A practice that is all too common is to turn stock upon a field seeded with grass and clover immediately after it has been cleared of grain, and to leave them upon such field indefinitely. In most cases when the grain is off there is considerable left for stock to pick up, and this will be done in a few days. At other times the young grass may have made considerable growth and furnish good pasture, but in both cases the ill effects of the continuous feeding of stock upon a stand of young tender clover and grass works more injury to the succeeding crop than the feed secured will compensate for. After the stock, preferably hogs or sheep, have gathered up the few scattering heads, the field had best be cleared and the young crop given a good chance to become established before the winter's weather sets in. It is expecting too much from the land to yield a crop of grain, to produce pasture in the fall, and to start the best crop of clover the following spring. The feed furnished by such fields may be badly needed in the late summer, but a much more profitable use can be made of the land if it is given a chance to establish the grass crop, and the feed that the stock requires be supplied from a plot of rape, corn, roots, or second crop of clover grown for the purpose. Better grow one crop at a time and get the maximum yield of it than to produce a poor crop of pasture, followed by a small crop of hay.

Prof. Wm. Brown's Death.

Australian papers received contain announcements of the death on May 12th last of Prof. Wm. Brown, at his residence in Ascalvale. On going to Australia in 1886, Prof. Brown was appointed to the chair of agriculture in the Dookie Agricultural College, and remained there until his appointment to the college at Longerenony. He was born on April 14th, 1833, at Turrieff, Aberdeenshire, Scotland. He received a thorough scientific and practical education, particularly in relation to agriculture and forestry. For some years he was factor to Col. Farquharson, of Invercauld, Braemar, but Canada presenting better prospects for his family of three sons and three daughters, he emigrated in 1871, and bought a farm near Orillia, and in addition to farming acted as Provincial Land Surveyor. He was appointed to the charge of the Ontario Agricultural College and Experimental Farm in 1875. Prof. Brown was author of various important publications in regard to live-stock, and was a lecturer of repute. His brother is Government Conservator of Forests for South Australia.

DAIRY.

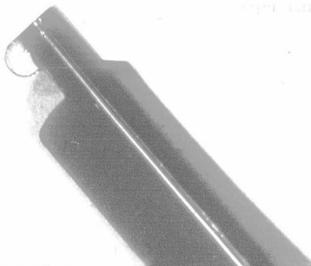
Soiling Crops and Shade.

The man who successfully brings his cows through this and the two following months deserves in all justice to be called a good dairyman. The elements and insects both seem to set themselves the task of drying up the cows, and in spite of green crops and fly protection the flow of milk is sure to fall off considerably. Neither of these adjuncts to dairying should be neglected at this time, however much other work may be pressing. In very few districts is it possible for cows to maintain a good flow when the pastures begin to dry up, however long the grass may be, and when the cow is kept busy fighting flies she is only using up nervous energy that might otherwise be utilized in the production of milk.

During the hot weather several things will suggest themselves to one. Such, for instance, as the relative value of different crops for soiling, the possibility of the rape crop for dairy cattle feed, etc.; and also the importance of shade for stock. On many farms even yet there are no trees, except a few in the orchard, but the value of shade trees does not appeal so strongly to one at tree-planting time as in the heat of summer. It might be well to make a good big mental note of this, and act upon it next spring.

Dairying at the Industrial.

Dairying will be made a strong feature at the Dominion Industrial Exhibition this year. The prizes are liberal, and the classes in the butter-making competition broad, giving scope to ambitions of amateur dairymen. All butter or cheese scoring 91 points and not receiving a cash prize will be awarded a medal. The cheese will be judged according to the following score: Flavor, 10; closeness, 15; even color, 15; texture, 20; finish, 10; total, 100. For butter 45 points will be given for flavor, 25 for grain, 15 for color, 10 for salting, and 5 for finish and package. The dairy cups, valued at \$50 each, for the best factory cheese and creamery butter, should generate close competition. Entries in the dairy department close August 8th.



The Benefits of Covered Milking Pails.

The Storrs Experiment Station has been recently conducting a series of experiments, the object of which is to find out some way by which the dirt in milk, as well as the bacteria, can be reduced to the minimum.

There were two sets of tests made. In one case, milk drawn into an open pail was compared with milk drawn into a pail with a cover devised for excluding dirt during milking. This pail is an ordinary milk pail with a closely-fitting cover, which has an opening near one side, into which is soldered a funnel four inches in diameter, having a wire gauze of fine mesh soldered across the bottom. This funnel extends slightly above and below the cover, and slopes somewhat toward the side of the pail. Another loose funnel fits inside the first one. When the pail is to be used, a few layers of clean cheese cloth are placed across the opening of the lower funnel, and the loose funnel, about three inches in depth, is pushed to hold the cheese cloth in position. This can be constructed by any tinner. The whole apparatus is simple in structure, and can be easily cleaned.

In the other case, milk drawn into an open pail was compared with the same milk strained immediately after milking. It was found that the amount of dirt from the covered pail was only 37 per cent. of that in the open pail, while the amount of dirt in the strained milk was 53.4 per cent. of that in the milk not strained. In other words, the cover excluded 63 per cent., while the strainer removed less than 47 per cent. So much for the dirt.

By the use of the covered pail, an average of 29 per cent. of the total number of bacteria and 41 per cent. of the acid-producing bacteria were excluded from the fresh milk. By straining the milk as soon as drawn into the ordinary open pail an average of but 11 per cent. of the total number of bacteria and 17 per cent. of the acid-producing species were removed. In short, by the use of the covered pail, milk can be kept much cleaner than it possibly can be with any amount of straining, even if the straining is done immediately after milking and under the cleanest possible conditions.

The milk was then kept 50 hours at a constant temperature of 70 degrees F., and it was found that the covered pail contained a smaller number of bacteria than did the milk from the open pail. In every test the number of acid-producing bacteria was smaller in the sample from the covered pail.

The results of the test show clearly that the covered pail is much better for the production of pure milk than straining. It is quite evident that it is much better to keep the dirt out of the milk in the first place than to strain it out after milking.

Harrietsville Cheese and Butter Factory.

The annual statement for 1902 of the Harrietsville, Ont., cheese and butter factory, affords a good example of the business done in one season by a large and progressive Canadian dairy establishment. There were received 5,317,253 lbs. of milk; cheese made, 497,629 lbs.; money received, \$51,468.95; interest, \$25.95; balance from 1901, \$29.32. Total \$51,524.22. Average price for season, \$10.34; average lbs. milk to make one pound cheese 10.68. Butter was made in winter and from Saturday night's milk to the extent of 599,463 lbs.; butter, 26,722; money, \$5,521.58; balance in bank, \$17.14; interest, \$16.18. Total money \$5,554.90, making a grand total for both cheese and butter of \$57,079.12, distributed among the farmers of one locality for one product alone.

More Liberal Use of Lime.

Even the Danes are improving upon their proverbial cleanly methods in dairying, and the improvement is along the line of a more liberal use of lime for cleaning the walls, ceiling and floors of their buildings, and in water for washing the utensils. A few years ago steam was used to a great extent in the cleaning of churns, floors, etc., but now it is becoming much less common. All wooden utensils are rinsed and scrubbed first with cold or lukewarm water to remove the milk, and then they are covered with a coat of thick mush of slacked lime. After ten or twenty minutes, or later, the churns or other utensils are scrubbed with lime and cold water, after which they are rinsed twice in warm water, and at last with water hot enough to make the wood dry quickly.

Lime is also used for cleaning the floors, and has very much reduced the use of steam and soda. In stables and factories, whitewash is slowly taking the place of paint, which is often ruined by dampness. It is sometimes objected that lime will peel off, but the Danes do not consider that a serious drawback, as it is much easier to brush off a wall with a stiff brush and apply a fresh coat of whitewash than to clean it and apply a coat of paint, besides the cost of the limewash is considerably less.

GARDEN AND ORCHARD.

The Pear Blight.

This disease is the worst with which the pear grower has to contend. Scientific investigation has proved that it is due to the presence of a specific germ, so that it is what may be called a bacterial disease. The germs are so minute as to require the aid of a powerful microscope to see them. They are carried by the wind, and in this way the disease, if not kept in check, disseminates rapidly. It is claimed that they are unable to penetrate the bark of a healthy tree; and they gain access to the tissues through the blossoms, and this fact has led to the charge that is made against the honeybee, that it is an active agent in propagating the disease, by carrying the germs from the blossoms of diseased trees. This charge, however, is scarcely worthy of serious consideration. The germs also gain access through the tips of the terminal twigs, which during growth are soft and succulent; and there is no doubt they often gain entrance through cracks in the bark.

Cutting out and burning the diseased limbs is the only really effective remedy, and a close watch should be kept for any signs of the development of the disease. When cutting out, they should be cut well back to the sound wood. The fact has been noticed that slow-growing pear trees are less liable to injury by blight than those of rapid growth, and many growers have taken a hint from this and have ceased to cultivate the pear orchard, and many of them report comparative freedom from blight where this plan has been adopted. The writer is of the opinion that a

Spraying Young Fruit Trees.

Many people think it unnecessary to spray young fruit trees before they begin to bear. This is a mistake, and when spraying is being done the young trees should be sprayed at the same time and with the same mixture as the older bearing trees.

The fungus scab affects the leaf as well as the fruit, and the object should be to prevent it from ever getting a foothold, and if young trees are kept free from it there will be little, or, at least, much less difficulty in dealing with it when the trees come into bearing. The foliage will be kept healthy, and that is of the most vital importance to the health, vigor and usefulness of the tree.

Cover Crops.

It is a good plan to sow some kind of cover crop in the orchard during July. It is a practice that is becoming more popular every year, and its value is being appreciated by the most progressive and successful fruit growers. It serves a double purpose; it furnishes a protection to the roots of the trees, and this is very important. There is not now the same protection by the snow as in former years; often very low temperatures prevail during some of the winter months, more particularly in December and March, when the ground is bare, and the roots of fruit trees, especially tender sorts, are sure to suffer injury where they are not protected by some kind of a cover crop. Then the plowing in of the cover crop the following spring adds a

great deal of humus and plant food to the soil. There is a difference of opinion among fruit-growers as to what is the best crop to use for this purpose; crimson clover, mammoth and red clover, cow peas, rye, rape and the hairy vetch, have all been recommended by various growers. It is important that the crop should be a leguminous one, or what the Americans call a nitrogen trap, and also one that will grow to a sufficient bulk to form a good thick mat, and that will remain green throughout the winter.

There is nothing better for this purpose than the common red clover. It will probably give more general satisfaction as a cover crop than any other. If the orchard is in a good state of tilth, it will germinate quickly, unless the

weather be extremely dry, and will make a rapid growth and continue to grow till quite late in the fall. It will make rapid growth in spring, and if not plowed under too early will add a large amount of humus to the soil. Had the peach growers of Southern Ontario used cover crops they would not have suffered the loss of so many trees in the trying winter of '99.

Orchard Cultivation.

There is a danger that on account of the wet weather, orchards will not receive their usual cultivation, which is urgently needed to destroy weeds, aerate the soil, and conserve soil moisture for future use. If the ground is not stirred it bakes, cracks open and evaporation goes on rapidly. By stirring the soil through frequent cultivation, thus keeping a loose mulch on the surface, capillarity is broken up and moisture retained. As soon as it is possible, therefore, to get on the ground without poaching it after a rain, the cultivator should be started in the orchard and kept going as steadily as time and weather will permit.

Prospects for Apples.

The Ontario Department of Agriculture has received word from Europe that the apple crop is likely to be very poor there this season. In this connection a letter was received from a large French cider manufacturing firm, asking if it would be possible to secure from Ontario a large quantity of apples at reasonable prices. If so, they could do with six to eight thousand tons.



TWO CALGARY WINNERS.

- 1. Prince Lyndoch [2381], first prize in mature Clyde class, Calgary Spring Show.
- 2. Pride of Eastf. 14 [2325], first at Toronto Spring Show, and second at Calgary.

BOTH OWNED BY JNO. CLARK, CROWFOOT, ALTA.

thorough spraying with the Bordeaux mixture is a valuable help in the way of prevention; but every crack and crevice of the bark and the whole surface of leaves and twigs should be covered. Stimulating with nitrogenous manures should be avoided. The pear will do with one-third less nitrogen than the apple, but requires twice as much potash, lime and phosphoric acid. The use, therefore, of hardwood ashes and lime as fertilizers for the pear, and less nitrogenous manure, is plainly indicated as a rational treatment and an aid toward the prevention of the blight.

Spraying in Oxford County.

Mr. W. A. Mackinnon, Chief of the Fruit Inspection Division of the Department of Agriculture, Ottawa, was in Oxford County recently, where he was supervising the application of a system of spraying for orchards. The department has arranged to conduct these spraying operations at cost, and twenty farmers in that county have taken advantage of the opportunity. The sprays are applied by gasoline engines, and the leaves and branches are thoroughly covered with a solution of Paris green mixed with sulphate of copper. The orchards in which the system is being operated are in excellent shape, and promise to give heavy yields. Other farms where the sprays are not being used are suffering from various insect troubles, and in some instances trees are entirely bare. The object of the Department is to demonstrate the possibilities of power-spraying, and it is meeting with the greatest success in its efforts.

Trapping the Codling Moth.

One of the most effective ways of destroying the codling moth is by the bandaging of the trees. The bandages may be made of burlap, wrappings from the dry goods stores, old sacks, or any such cheap material. It should be cut in strips, about ten or twelve inches wide, and long enough to go at least twice around the tree, and tied with a piece of binding twine. The time to apply these bandages is right now. They should not be left any later, but should be on the trees before any of the larvæ are full-grown, as they often leave the apple before it drops, and go in search of a suitable place to pupate, and the bandages furnish them with just the place they are looking for. They crawl in between the bandage and the bark, and spin their silken cocoons in which they change to a pupa. As it is well known that there are two broods in a season, and that the second brood is far more destructive than the first, it is very important to destroy as many of the first brood as possible, and prevent them from perpetuating their species.

The writer has known cases where the larvæ have travelled 30 and 40 feet in search of a suitable hiding place, and found it in one of these bandages. It is not a costly process, as the material costs little or nothing, and it does not take long to apply them. It can be done best by two persons, having the strips already cut—one to wrap the bandage around the tree, and the other to carry the twine and tie them.

These bandages should be examined about once in ten days, as the moths mature in about two weeks after making their cocoon. They may be destroyed by plunging the bandage in hot water, or what is easier and more convenient, is for the operator to carry a small mallet with which he can crush them quickly, and a smart man or boy will go over a large number of trees in a very short time.

Marketing Fruit.

One of the problems with which the fruit-grower has to deal, is the marketing of his products to the best advantage. The best solution of the question is to produce a high-class article, and it will always sell in any market. It is seldom that the market is drugged with first-class products.

But there are other questions that enter into the subject of marketing, such as railway freight and express rates, the question of shipping on consignment, or dealing direct with the retailer. The extremely high charges by the railways for what is usually called the short-haul, has been the burden of complaint by fruit-growers for many a year. The charges are in many places simply prohibitive. Perishable stuff must be shipped by the more expensive express system, which is even worse, if possible, in the matter of charges. In places like the Niagara Peninsula, where fruit-growing is made a speciality, and the growers by combined and persistent effort have succeeded in obtaining some concessions, a better system prevails; but there is much room for improvement even there, and for the grower where no combined action has been attempted, the cost of getting his fruit to market leaves little or no margin of profit. Then there is the question of commission. There is something to be said in favor of the commission men; they handle a very large bulk of the fruit in the large towns and cities, and often a lot of poor stuff is consigned to them when the market is glutted, and they are criticised if they fail to get good prices for it. On the other hand, the grower has no control. The commission-man, if he chose to be dishonest, has every chance to do so; the system is unsatisfactory, and the sooner it is abolished the better. Let the commission-men become dealers, and buy direct. The grower will find it more satisfactory to sell direct to the dealer, and if he can secure the patronage of a good live man who has a large retail trade, and always make it a point to furnish him with a prime article, the results are sure to be satisfactory and profitable to both.

(To be continued.)

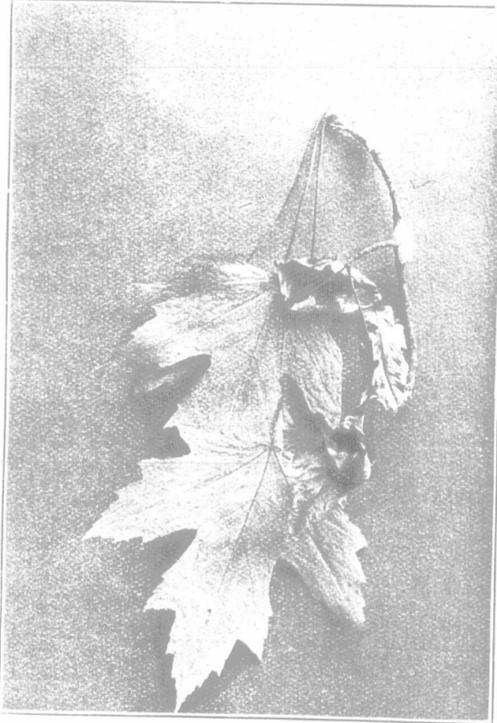
Why Some Sprayers Fail.

There is one way in which persons not altogether familiar with the process of spraying are very apt to become discouraged and dissatisfied with the results that they may obtain, and that is they are too likely to think that one remedy ought to be a cure-all for anything and everything, rather than a preventive for one thing, and because such does not prove to be the case in one or two trials they are led to wrong conclusions, and set the job aside as a failure. Spraying is merely one of the sanitary measures that necessarily go with successful fruit raising; it is a preventive, not a curative. Bordeaux mixture is not an efficient remedy against the attacks of insects, neither will Paris green successfully prevent apple scab or bitter rot of apples, but a combination of the two remedies, if rightly handled, will prove an efficient barrier against a

variety of troubles. Spraying is an expensive and tedious process, and it is not worth doing at all unless it is done well and done at the right time. This does not mean that it is necessary to spray eight or ten times during the season in order to get results. Three thorough applications made at the proper time ought to insure a good percentage of the crop in ordinary seasons. Considered from the standpoint of time and expense, three applications will be about as much as will be ordinarily given, unless it be when there is an epidemic of some kind, or some species of insect is unusually troublesome, when it would be necessary to make later applications.—[Bulletin 5, Missouri Fruit Station.]

The Maple Scale.

From all over Ontario we are receiving reports of the presence of the maple Lecanium (*Pulvinaria innumerabilis*). For some reason this scale is more numerous than ever before in this section. In many places they are found upon grapevines and Virginia creeper. About the end of June the eggs found in the cottony mass hatched, and the larvæ at once attached themselves to the under side of twigs and leaves. The males when full-grown develop wings, and mate with the females, after which they die. In the fall before the leaves fall the females that are attached to them migrate to the twigs and fasten to them by inserting their proboscis. The eggs are laid in the following spring. Treatment consists in spraying with kerosene emulsion about



THE SCALE ON A MAPLE TWIG.

every ten days, until the numbers are reduced, or with kerosene emulsion diluted with strong soapsuds, when the eggs are in the cottony masses. In towns where a force of water can be obtained from a hose, the egg masses can be destroyed by drenching the tree, thus washing off the cottony masses.

APIARY.

Unripe Honey Spoils Trade.

To illustrate the evil results of marketing unripe honey, a writer in "Gleanings in Bee-culture" cites the following:

"Certain beekeepers in the main buckwheat sections of New York, in recent years got immense returns from their bees by taking off the combs before the honey had been sealed, or very soon thereafter. Some of them were called 'Lightning Operators.' Their honey was sold on the reputation that buckwheat honey had made for itself, that of being a good article for baking purposes, but after two or three years of disappointment with buckwheat honey (that they occasionally got hold of) the manufacturers have determined that they would use no more buckwheat honey, for of late it had been very unobtainable in many instances. The result is, that for the past two or three years these largest of consumers will not have anything to do with honey that has any symptoms of buckwheat about it; and as its use for other purposes is very

limited, we have great difficulty in disposing of it, and when we do it is at a low price.

"I am firmly of the opinion that, had it not been for the greed of these beekeepers, buckwheat honey to-day would be in as great demand as it was ten and twenty years ago; for at that time it was considered one of the best kinds of honey for baking purposes."

POULTRY.

As Others Do It.

One only needs to attend a poultry show to be convinced that the men at the front of the poultry business are not farmers, but poultry specialists. They are men and women who are devoted to this one branch of stock-raising alone, and their methods are necessarily the most profitable in the realm of poultrydom. It is the methods of these men one must adopt as far as practicable in the successful management of the farm birds.

Recently we visited a plant from which come each year some phenomenal winners of prizes as fancy birds, and where every bird must keep up to a high standard of utility, for poultry-keeping is a business of small profits, and the wider the margin between cost of support and profitable returns the larger becomes these profits.

At this time of the year in the professional poulterer's yard the scratching space is covered with his lawn clippings. The runs are divided so that sunflowers, corn and other tall crops can be grown to provide shade from the hot sun, and, incidentally, food for winter.

One at once sees the benefits of these intensive methods, and it only remains for each to decide to what extent he shall adopt them. Certain it is that the poultry business is good, and the systems in vogue on many farms might easily be improved, so why not make a move for improvement all down the line.

Hatching and Rearing.

Incubators and brooders are now made so simple of construction, easy of operation and certain in results that they are becoming very popular with poultrymen. The most suitable time for most farmers to hatch out their chickens is in April or early in May, for the reason that unless provided with incubator room and brooding house, so as to be independent of outside temperatures, it would be inconvenient if not impossible to raise chickens in paying numbers at an early season. Pullets hatched prior to late April, or May, although they may commence to lay in late summer or early fall, are apt to moult and remain non-productive when eggs are at their highest value. On the other hand, the May pullet, which probably begins to lay in November, and continues to do so without ceasing during the season of high prices, is obviously the most suitable bird for the farmer.—[Prof. S. G. Gilbert, Central Experimental Farm.]

Getting a Good Rate.

A writer in Farm Poultry says: "I have been a breeder of Plymouth Rock fowls for the last fifteen years, and can truthfully say that I have never seen the time that I cared to change them for any breed. I have made a clear profit of from \$2 to \$2.87 per head for several years, and I think it just as easy to make a good laying strain of hens pay you \$2 or more per head per year as it is to make a dollar pay six per cent. interest. Either one requires a little headwork, but it can be done. So long as it is clean, I don't think there is as much in the kind of feed one uses as there is in giving the right quantity at the right times. That is what counts.

Profits from Eggs.

As a result of an experiment with three flocks, aggregating 1,250 hens, the Cornell University Station found the average cost of feeding a hen per year to be 99 cents. The average value of eggs at market rates exceeded the cost of food by \$1.31. The total yearly production per hen averaged 129.7 eggs, and the average cost per dozen of eggs was 9.2 cents.

We Wonder Why.

It often gives a man considerable concern if his wife complains of feeling tired after having made the fire, creamed the milk, fed the chickens and calves, milked the cows and prepared breakfast all before seven o'clock in the morning.

Wet weather should be an incentive to greater diligence in spraying, rather than an excuse for not spraying. Eternal vigilance is the price of safety in fruit growing, and it behooves everyone who desires a full crop of first-class fruit to spray early and often.



GENERAL VIEW OF THE DOMINION ILLUSTRATION POULTRY STATION, HOLMESVILLE, ONT.

Double Poultry House at Holmesville.

BY F. C. HARE, CHIEF OF DOMINION POULTRY DIVISION.

The Dominion Department of Agriculture built last fall at the Holmesville, Ont., Bowmanville, Ont., and Bondville, Que., Illustration Poultry Stations, modern houses for the housing of one hundred utility-type Barred Plymouth Rock pullets. Two of these houses are double houses, 80 feet long and 16 feet wide; one house is a single house, 100 feet long and 12 feet wide. The double houses are built at Holmesville and Bowmanville, Ont., and are described in this article.

The double houses are divided by cross partitions into separate pens, 8 feet running length and 16 feet wide. Each pen will house 20 hens producing market eggs, or a breeding pen of male and 10 or 12 females. There are separate exercising and roosting pens.

The exercising pens are 8 feet running length and 10 feet wide. They are made as bright as possible by means of 3 by 6 feet hot-bed windows in the roof. One window lights two pens. Even in dull winter weather the fowls were able to scratch in the floor litter for small grain. The windows are storm-proof when closed, and can be raised for ventilation. There is also a window in the front wall of each pen. The window is 3 feet 2 inches long by 2 feet 10 inches wide; it is hinged to the plate and opens inwards. This system of light and ventilation was most satisfactory.

The roosting pens are 8 feet running length and 6 feet wide. There is a door between the exercising pens and the roosting pens, and when this is closed the roosting quarters are tight and warm. During the coldest weather last winter the fowls were comfortable on the roost.

The walls of the houses consist of the studding, covered on the outside with (1) one thickness of rough inch lumber; (2) on the outside of the rough lumber two thicknesses of building paper, well lapped; (3) outside the building paper a layer of half-cut siding or clapboards. The half-cut siding was purchased at from \$12 to \$15 per 1,000 feet. The wall is draught-proof and warm; it can be built at a reasonable price. There is no covering inside the studding, except around the roosting pens, where a layer of building paper and matched siding is laid to increase the warmth.

The floor of the houses is made of earth. The level of the earth floor is six inches above the outside ground. The floor is dry, and is made as follows: Three inches of coal ashes or coarse gravel are placed on the earth, and over the ashes three inches of light, dry sand.

There are grass yards 75 feet long in front of the houses. For 25 feet from the houses the yards are the same width as the inside pens of the house (8 feet). Then for every two or three small yards there is a yard 50 feet long and 16 or 24 feet wide. The fowls of the two or three pens have access to the large yard at different times of the day, or on different days, and to facilitate distributing litter and sand and cleaning the houses, gates are placed in the fences near the house. The gates are sufficiently large (8 feet wide) for a horse and wagon to drive through. Smaller gates are also placed in the large yards where required. The fences are 5 feet, 6 inches high. Boards are used for two feet above the ground, and above the boards woven wire fencing 42 inches wide. The fence is durable and of moderate cost.

The double houses built at the Illustration Stations are universally admired by the farmers in the vicinity of the stations. Similar houses have been built by farmers near the stations, thus showing that the practical planning of the houses was recognized and valued. The separate exercising and roosting pens are valuable features for our Canadian winter; the fowls are in a cheerful pen during the day, and in a warm

pen at night. The house can be built any length and will give entire satisfaction.

Complete construction details of the double and single poultry houses are contained in a revised edition of the bulletin "Profitable Poultry Farming," which will be mailed free of charge on application to the Poultry Division, Department of Agriculture, Ottawa.

Fattening Chicks.

In reply to your favor, re feeding poultry, I don't know that I can say anything new. So far my experience has been in favor of the Barred Rock for fattening. There were ten or twelve breeds tried at the Station last year, and the Rocks made the best gains and presented the finest appearance when dressed. Our main feed for growing chicks is a mash composed of equal parts cornmeal, buckwheat (ground) and bran, mixed with buttermilk; the mash is not soft, but crumbly. This is almost our sole feed from the time they are a few days old until they are ready for the crates. At present we have a lot that have had nothing but this, three months old, weighing over four pounds apiece. Usually they are crated at three pounds or over; the corn is then taken from them and oats and buckwheat, 2 to 1, or oats 2, barley 1, buckwheat 1, mixed with buttermilk is given. The oatmeal is the main ration for crate feeding to whiten the flesh, and would do well as a complete ration if the chicks did not tire of it.

I think if farmers would raise a good feeding variety of chicks, which at the same time makes a good layer, such as the Rocks, Wyandottes, and perhaps the Orpingtons, much more could be realized from this brand of farming. The demand for the right bird cannot be supplied. Those who do not care to fatten and dress themselves, could get good prices for a thrifty three or four pound chick from those who do.

F. C. ELFORD, Manager.

Dominion Poultry Station, Huron Co., Ont.

The Poultry Yard in July.

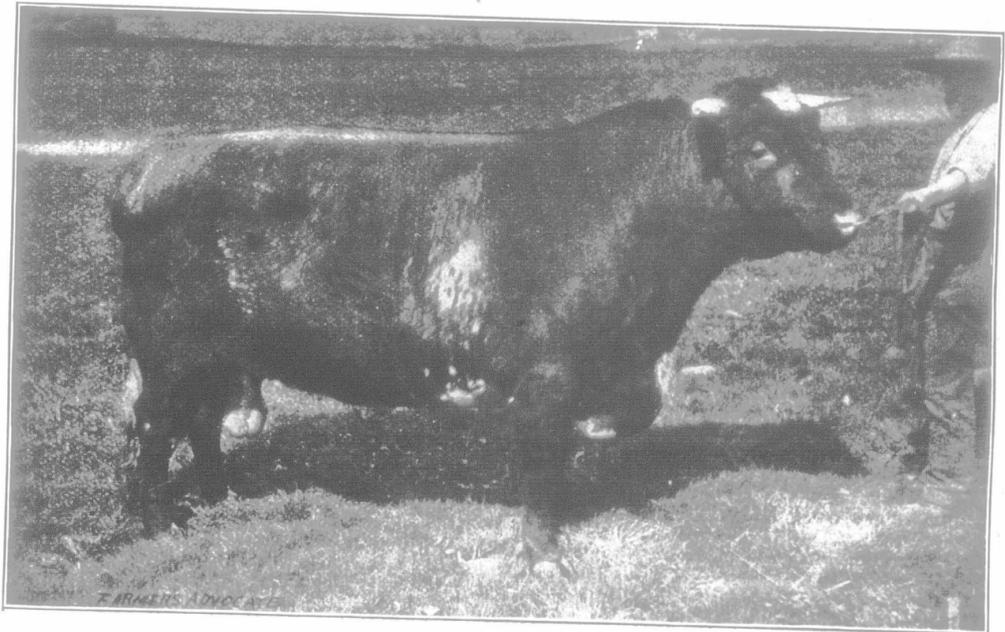
One of the pleasantest months to the poultryman is the present. This is the month he gets an idea of "where he is." If the earlier work of the year has been thoroughly done, the eggs from strong, vigorous and well-mated stock, he will be able to congratulate himself as he complacently views the well-grown, well-feathered specimens. But the work is not all done. The "dog days" are here, and an abundance of shade must be provided, not only for the birds, but for the drinking water as well.

The hot days are also the breeding time for lice—lice of all sorts and descriptions—and they must be fought persistently. Do not fancy because you have a pure-bred strain of birds, or incubator and brooder-raised chickens, they will not have lice, for they will. There are varieties of chicken lice, and each have to be tackled in their vulnerable parts.

The "red mite" infests the houses, and wherever there is a crack or a crevice you may be sure the red mite has a nice home there during the day. During the night he will sally forth and feed on the birds, destroying their vitality, lowering their egg-production, and wasting your good feed. A coat of lime-wash, in which is mixed some crude carbolic acid, either sprayed or laid on the walls, settles their hash for a long time, and brightens the birds' quarters. Another good way is to stop all ventilation and burn a few sulphur candles in the house. This is a somewhat dangerous mode, and precautions are necessary that the fowl house is not burned down, and the house must be well ventilated before the birds are allowed to enter, or they will be suffocated. The body lice can easily be seen; if the birds have been supplied with dust baths, they will cleanse themselves some, but a good dusting with insect powder does them good; or a simpler way can be used. If you regularly, every month, paint the dropping-board and roost pole with a composition of coal oil in which naphthalene flakes have been dissolved—about one pound of flakes to a gallon of oil—you will find the lice question to have no terrors for you. The same applies to the coops, colony houses, or whatever you raise your chicks in.

While the lice question is the bete noir of poultrydom, a little work regularly done always keeps them under. If your birds have free range they will supply themselves with both animal and vegetable foods; but if confined these must be supplied to them—the former in small and the latter in large quantities.

Do not forget the grit. This is as necessary to your birds as your teeth are to you. Many, many cases of so-called cholera and of indigestion can be traced to a lack of grit, and nearly every case of diarrhoea is the result of "no grit." The red and gray granite boulders occasionally found on the prairies make capital grit, and a stone-chisel and stone-hammer, properly applied, soon reduces the rock to suitable proportions. If the granite rock is not handy, limestone grit is better than none, and is made in the same way. This month, too, the fattening crates should be seen to. These are not much used in this country, but will come more and more into favor. A fattening crate may be anything up to a slightly darkened room. The object is to confine the



JOY OF MORNING.

Joy of Morning (5829) - 3270. Born December 12, 1898. Bred by W. S. Marr, Uppermill, Aberdeenshire. Sire Pride of Morning; dam Jessica, by Scottish Archer. Imported and owned by Hon. M. H. Cochrane, Hillhurst, Que.

TO BE SOLD AT THE DISPERSION SALE OF THE HILLHURST HERD, AT HAMILTON, ONT., AUGUST 11, 1903. See Ad. on page 661, and Gossip on page 668.

birds; prevent them exercising to any extent; thus causing all the food consumed to increase the weight and appearance of the bird.

Three weeks to a month is quite long enough in the fattening crates. If you are skeptical about the good of the fattening crate, give them a trial. Take, say, a dozen chickens, treat six as you usually do, and confine the other six. Have fresh, clean water before them all the time. Feed them three times daily all they will eat up clean in twenty minutes, with soft food, not too wet, composed of shorts, oat and barley chop, wheat chop, plenty of green food, and a little meat food twice a week, and see the difference in your two lots.

The ideal food for birds in a fattening crate is the hull and husk of the oat, ground to flour. In the Old Country fattening poultry is quite a business by itself, the birds being bought by the fatteners while in but fair condition, and the increased weight, coupled with the increased price per pound, amply pays them for their work.

Winnipeg. W. J. C.

QUESTIONS AND ANSWERS.

1st.—Questions asked by bona-fide subscribers to the "Farmer's Advocate" are answered in this department free.

2nd.—Our purpose is to give help in real difficulties; therefore, we reserve the right to discard enquiries not of general interest, or which appear to be asked out of mere curiosity.

3rd.—Questions should be clearly stated and plainly written, on one side of the paper only, and must be accompanied by the full name and address of the writer, as a guarantee of good faith, though the name is not necessarily for publication.

4th.—In veterinary questions, the symptoms especially must be fully and clearly stated, otherwise satisfactory replies cannot be given.

Veterinary.

[Answered by our Veterinary Editor.]

JOINT ILL.

Colt was sick with constipation when twelve hours old. It knocked about a good deal, and broke the skin around its eyes and the hock joints. I treated it, and it got all right, but a day or two after it swelled on fetlock joint. I bathed it and it burst. The joint is still large and discharging. Some days after one hock swelled, I opened it, and a good deal of matter escaped. The swelling is now worse, and hard and painful to the touch. It can use the limbs a little, and sucks fairly well. W. M. S., Ontario Co., Ont.

Ans.—Your colt has joint ill, caused by a germ gaining access to the blood through the navel opening. Treatment consists in opening the abscesses as they form, and injecting an antiseptic as a two per cent. solution of carbolic acid into the cavity three times daily. Also give the colt 8 grs. iodide of potash in a little of its mother's milk three times daily. It is not probable the colt will live, and if it should it will probably be a cripple, as the articular cartilages in the joints affected usually are destroyed. This disease has been discussed and preventive measures given at least twice this season in this journal. Prevention consists in dressing the navel opening as soon as possible after birth, and several times daily until healed, with corrosive sublimate, 10 grs.; water, 8 ozs.

KNUCKLING—SCRATCHES—BULL WITH SKIN DISEASE.

1. Five-year-old horse knuckles. He has had scratches since February. Would that cause knuckling? Is it blood trouble that causes scratches?

2. Bull has some sort of skin disease. I think it is scurvy. LEARNER, Lanark Co., Ont.

Ans.—1. It is quite probable the scratches cause the horse to knuckle. Scratches are usually caused by carelessness in keeping the pasterns clean, but a poor condition of the blood predisposes. Poultice with linseed meal applied warm and changed three times daily for two days and nights. If proud flesh be present, then dress once daily with butter of antimony applied with a feather for three days. Then apply three times daily a lotion composed of 1 oz. each of sulphate of zinc and acetate of lead and 3 drs. carbolic acid to a pint of water. Purge him with 8 drs. aloes and 2 drs. ginger, and follow up with 4 drs. hyposulphite of soda twice daily.

2. You give no symptoms in this case. I suppose it is a case of eczema. Wash thoroughly with strong, warm soft soap suds, and follow up twice daily with a dressing of a four per cent. solution of zenoleum or creolin.

ATROPHY OF THE UDDER.

Two of my cows show indications of loss of one quarter. There is no apparent disease, but a marked gradual decrease in the size of the quarters. T. M., Montreal, Que.

Ans.—In all probability the affected quarters suffered from a subacute inflammation which was unnoticed. Atrophy, such as you describe, is very hard to combat. Massage, long continued and often, gives the best results. There will probably be a congenital weakness and predisposition to such a condition in the female progeny of the cows. It is unwise to breed from cows with one or two bad udders.

COLT WOULD NOT SUCK.

Mare foaled at 10 mos. and 11 days; milk had escaped from the teats for three weeks before foaling. The colt was smart, and would go through the form of sucking, but would not take the teat, then lie down contented for a while, get up and operate as before, etc. It lived only 24 hours. W. G. S., Simcoe Co., Ont.

Ans.—Of course the colt died, as it got no nourishment. The attendant should have held the colt in position, placed the teat in its mouth and manipulated the gland so as to cause the milk to run into the mouth. This would, in all probability, have started the colt to help himself if repeated a few times. If not, the mare should have been milked and the milk given to the colt out of a narrow-necked bottle frequently, in small quantities, until it learned to help itself. It was very stupid on the part of the attendant to allow the colt to die from want of nourishment.

FATAL CASE OF INFLUENZA.

My horse's face swelled, and in three days he died. My veterinarian said it was influenza and blood-poisoning. He did not cough, but had difficulty in swallowing. Is the disease contagious, and is it necessary to disinfect the stable? If so, how long before it would be safe to put fresh horses into it? D. G. S., Elgin Co., Ont.

Ans.—Your veterinarian was doubtless correct. Influenza is liable to be complicated with many affections, and in this case blood-poisoning resulted and caused death. Influenza is infectious, the virus is of a volatile form and mixes with the air. It would be good practice to disinfect the stable, which would be fit for use as soon as the whitewash or other disinfectant used becomes dry.

BONE SPAVIN.

Last November my horse went lame, and a puffy swelling appeared in front of the hock. I blistered it four times, as I was told it was blood spavin and blistering would cure it. Now there is a hard lump in front and down low on the hock. He sometimes goes very lame without apparent cause, but soon gets over it. I am told it is a bone spavin. Can the lump be removed or the lameness cured, and is his usefulness likely to be permanently impaired? Antigonishe Co., N. S. W. M.

Ans.—There is no doubt this is bone spavin. The lump cannot be removed, but it is very probable the lameness can be cured by skillful firing, followed by blistering. The operation can be successfully performed only by an expert. In some cases the lameness cannot be cured, but usually it can, and the horse will suffer no further inconvenience as far as his usefulness is concerned. In rare cases repeated blistering will effect a cure, but it is usually better to fire at first.

COW WITH A COUGH.

We thought our cow took a cold last winter. Her breathing is very hard now, especially after exertion, and she coughs. W. J., Brant Co., Ont.

Ans.—There is little doubt your cow is tubercular, and nothing can be done. In cases where this disease causes such well-marked physical symptoms, it is better to destroy the animal, as there is more or less danger in using the milk. You might have your veterinarian test her with tuberculin, and if she passes safely through the test, treat her by applying mustard to the chest and giving 1 dr. iodide of potash, night and morning, but the symptoms given indicate tuberculosis.

UNTHRIFTY MARE.

I think my mare is weak across the kidneys. She sometimes wobbles with hind quarters. She is a very free driver. I cannot get her to take on flesh; her skin and hair are fine, and she looks healthy. After she comes in warm she does not dry across the back for two or three hours. Picton Co., N. S. W. J. W.

Ans.—I do not think there is anything wrong with your mare's back, more than probably a slight congenital weakness. The wobbling referred to is a peculiarity of action shown at a certain gait, or when the load she is drawing is out of proportion to the gait. Horses often acquire this peculiarity of gait by being driven beyond their speed, especially with two or more in the rig. The reason she does not become fat, is probably also due to a congenital peculiarity. If not, look to her teeth; get your veterinarian to examine her mouth, and if necessary, dress her teeth. She requires no medicines internally. Of course, the proper treatment for horses that are brought to the barn warm is to rub them until dry. Applying the following mixture three or four times daily over the loins with a sponge will check excessive perspiration of the parts, viz., 1 dr. nitric acid to a pint of water.

COUGH AND HEAVES.

1. What shall I do for a horse that coughs up matter at times?

2. Give cure for heaves. F. S., York Co., Ont.

Ans.—1. If this horse has not developed heaves, the following treatment will check the cough. Give him every night and morning a ball composed of 2 drs. solid extract of belladonna, 1 dr. camphor, 1½ drs. powdered opium, and 15 grs. digitalis. If his bowels become constipated give 1 pint raw linseed oil.

2. There is no cure for heaves. The symptoms can be relieved by feeding carefully on food of first-class quality in small quantities and often. Dampen all food eaten with lime water, and do not exercise soon after a meal. Feed larger quantities of grain and less bulky food, so as to not overload the stomach.

CATARRH AND APOPLEXY IN COW.

Cow began to cough last December. My neighbor said she had hollow horn; he split her tail, put pepper and salt in it, and tied it up. She appeared all right from that time until two weeks ago. She coughs and discharges from the nostrils. Last Sunday she took a fit, fell over, lay on her back quite stiff, frothed at the mouth, etc., for about ten minutes, got up and looked well, but wild. She is failing in flesh and milk. What are the symptoms of hollow horn? Rainy River District. H. R.

Ans.—There is no such disease as hollow horn. The conditions that lead quacks to diagnose hollow horn are unthriftiness and debility; all cow's horns are more or less hollow. Your cow evidently has chronic catarrh, and she suffered on Sunday from an attack of cerebral apoplexy. The cough indicates tuberculosis. It would be well to have her tested with tuberculin. If not, give her a slight purgative, of say, one pound Epsom salts and one ounce ginger. Follow up with one dram doses each of ginger, gentian, nuxvomica, sulphate of iron and bicarbonate of soda, twice daily. If she should show any symptoms of another fit, draw about one gallon of blood from the jugular vein.

UNTHRIFTY PIGS.

Pigs, three months old, fed on chopped wheat, oats and barley, with a little grass or weeds once daily, thrived well until two weeks ago, when I noticed them failing. They get very thin and gaunt, and eat little, cough, and one had diarrhoea. Essex Co. C. A. L.

Ans.—Your pigs have chronic indigestion, due to want of exercise, too high food and want of green food. If they are constipated give each about 2 ozs. Epsom salts. Turn out on grass (clover, if possible), feed on milk, bran and shorts. Give no grain for a few weeks, and then feed lightly and gradually increase the dose.

CRIPPLED PIGS.

Pigs just weaned have lost the power of their hind legs. Would feeding on corn-meal cause it? York Co., Ont. G. H.

Ans.—High feeding and want of exercise caused the trouble. Corn-meal is too strong food for young pigs. Purge each pig with an ounce of raw linseed oil. Feed on bran, shorts and milk, and turn out on clover pasture.

LAME COLT.

Strong colt, three weeks old, went lame three days ago. There is a soft lump on the front of the stifle of right leg. Nipissing District, Ont. S. McD.

Ans.—It is probable your colt has partial dislocation of the patella. Keep it quiet in a box and rub the stifle well once daily until well. Blistered with cantharides, 2 drs.; alcohol, 4 ozs.

WARTS ON COW'S TEATS.

Warts grow on my cow's teats. Two or three grow together to a length of ½ inch, then drop off and the teat becomes very sore. Ontario Co., Ont. J. S.

Ans.—Clip the warts off with a shears or knife, and dress the raw surface twice daily with a weak solution of silver for two or three days to destroy the unhealthy growth, then dress the sore places with oxide of zinc ointment, three times daily until healed. There is no way of preventing the warts appearing, and they must be treated as they appear.

PIGS WITH ECZEMA.

My breeding sows have some skin disease. They are covered with a dirty, rough coating, and are continually rubbing themselves. The young pigs are similarly affected. Ontario Co., Ont. J. S. G.

Ans.—The pigs have eczema. Wash thoroughly with strong, warm soft-soap suds. Then rub with a weak solution of silver for two or three days to destroy the unhealthy growth, then dress the sore places with oxide of zinc ointment, three times daily until healed. Disinfect the pens in which they have been kept by thoroughly washing with a five per cent. solution of carbolic acid, and a few days whitewashing.

INFECTIOUS ABORTION.

I have had several cases of abortion in my dairy herd in the past year. I have about 20 cows due to calve this fall. What can I do to prevent abortion?
Dundas Co., Ont.
W. H. C.

Ans.—Where several cases of abortion occur in a herd without apparent cause, we are justified in assuming that the herd has the infectious form, which is very serious. The disease is due to a germ, which gains entrance to the genital organs of the female through the vulva. The virus is readily introduced, and is communicable from female to female by contact, from female to male, or vice versa, by copulation, from aborted fetuses or genital discharges, from clothing, pails, stools, etc., that may have come in contact with a diseased animal, or from an attendant. In fact, any communication between an infected animal and a healthy pregnant one may result in contamination. If we acknowledge these facts we see that perfect isolation is necessary. The noninfected cows should be removed to healthy quarters, and no communication whatever be allowed by attendants or otherwise with the diseased. All aborted fetuses and genital discharges should be burned. The afterbirth, if not expelled, should be removed by hand and burned. It is well to get a barrelful of a good antiseptic, as a solution of bichloride of mercury, 40 grs. to the gallon of water. The antiseptic is used in such large quantities it is better to prepare a large quantity at once than small quantities each time. This solution should always be heated to 100 degrees before using. The womb of an aborted cow should be flushed out with about a gallon of the solution, introduced with an injection pump once daily, until all discharge ceases. The vulva and thighs should also be washed with the solution daily. All excrement from diseased animals should be burned or mixed with quicklime. If a vaginal discharge continues after the neck of the womb has contracted so that the nozzle of the pump cannot be introduced, an ounce or two of the solution should be injected into the vagina until the discharge ceases, after which the animal should be removed from the diseased herd, but not allowed with the healthy for some weeks. An aborted cow should not be bred for at the least six months, better if allowed to run nine, after abortion. The attendant who looks after the diseased animals should not come near the healthy, but if sufficient help to allow of this be not procurable, he must change his clothing and wash his hands and arms in the solution before going from the diseased to the healthy herd. It is good practice to wash off the vulvas of the healthy cows that have been exposed, with the solution, and inject about an ounce into the vaginas once daily, in order to destroy germs that may be present. Any bull that has been bred to a diseased animal should not be bred again for at least six months, and in the meantime his sheath should be flushed out twice weekly with the solution. A bull that is being bred to a cow that evidently is not diseased, but has been exposed to the infection, should have his sheath flushed after copulation. When the herd is apparently healthy, the stables must be thoroughly disinfected by a thorough cleaning and washing with a five per cent. solution of carbolic acid, followed by the application of a coat of hot lime wash, containing about three per cent. carbolic acid. All clothing, pails, forks, brooms, etc., that were used in the affected stable must be either burned or disinfected before healthy stock is reintroduced into the premises. This manner of treatment is, of course, slow and expensive, but half measures in cases of this kind are of little value.

SCRATCHES IN STALLION—GREEN FODDER.

1. Clydesdale stallion had scratches early in spring from walking in wet; the scratches have healed up, but have left scars on which form small dry scabs. Please tell me how to prevent scabs forming?

2. Is a mixture of oats, barley and wheat, cut green, good for a stallion, or is it likely to prove injurious?
"CLYDE."

Ans.—1. If the scratches are entirely cured, there is nothing better to remove the dry scabs and promote a healthy growth of hair than fresh lard or sweet oil. Wash well with castile soap and warm water, and apply either of the above.

2. Barley, oats and wheat, when cut green for fodder, give very good results, but while not equal to peas and oats, it is not known to have any injurious effects. Barley is not advisable in mixtures for green fodder on account of the awns which, if allowed to approach maturity, are apt to be troublesome, otherwise no objection can be taken.

ENLARGEMENT FROM CALK.

Mare calked herself in front of fetlock. The calks have healed, but there is a hard lump left.
Grey Co., Ont.
J. S.

Ans.—Enlargements of this kind are very hard to remove. Repeated blistering will eventually reduce the lump, but will not entirely remove it. The daily application of compound iodine ointment will also give more or less results.

"HUSK"—ABORTION—WORMS.

1. I would like to know, through the columns of the "Farmer's Advocate," what is the matter with our calves? They seem to be short of breath. They pant continuously, and they also cough, mostly while drinking. Those affected pine and get thinner, and finally die. Any cure or information on the subject will be gratefully received.

2. If any cure has been found successful in the



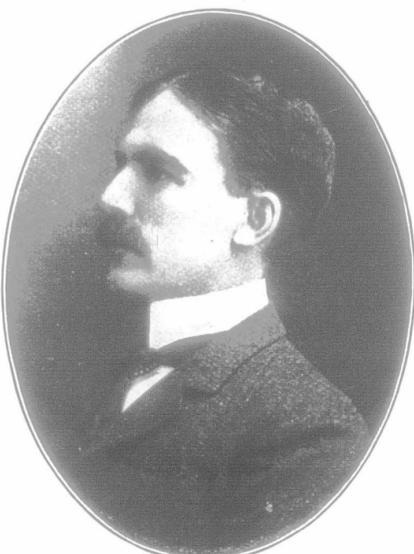
CAPTAIN F. J. CLARK.

Manager Western Manitoba's Big Fair, Brandon.

case of cows slipping calves, please let me know?
3. Please let me know if there is any successful cure for worms in horses?
Red Deer, Alta.

"SUBSCRIBER."

Ans.—1. Your calves are probably suffering from "hoose," sometimes called "husk," a disease which is chiefly confined to calves of from one to twelve months old. It is caused by the presence on the windpipe and bronchial tubes of a large number of very small thread-like worms (Filaria bronchiales), about half an inch in length. These parasites are lodged in and protected by a thick, viscid mucus, which, with their tenacity of life, renders their dislodgment and elimination a matter of some difficulty. The treatment consists, in administering, twice daily, in a little warm gruel: turpentine, from two teaspoonfuls to a tablespoonful; molasses, one tablespoonful. Another mode of treatment which has been successfully employed, is the inhalation of chlorine



R. M. MATHESON.

President Western Manitoba's Big Fair, Brandon.

gas; but as this gas is poisonous, its administration should be under the personal superintendence of a competent veterinary surgeon. An excess of this gas, although fatal to the worms, would be equally so to the calves. The fumes of burning tar may be inhaled with beneficial effect, and with the advantage of not being poisonous.

2. Abortion is of two kinds: Sporadic and epizootic or enzootic. The causes of sporadic abortion are very many, and consist of acci-

dents, errors in diet, improper sanitation, disease, acute or chronic, of the generative, urinary, digestive, or respiratory systems. Epizootic or enzootic abortion is infectious, and is caused by a micro-organism inhabiting the genito-urinary mucous membrane, and is transmitted from one cow to another; hence, every cow in the stable or herd is sometimes the subject of this breeder's and dairyman's scourge. In contagious abortion a thorough system of cleansing and disinfecting are the only measures with which it can be successfully combated. When a cow aborts she should be immediately removed and isolated from the rest of herd. The fetus, litter and all discharges should be removed and burned. The stall, or place where the cow stood, should be well cleansed and carefully disinfected by swabbing thoroughly with water containing one pint of crude carbolic acid to the pailful. The cow's hind parts, including the tail, should be well washed with warm soft water and carbolic soap, and afterwards apply the following lotion: Perchloride of mercury, one dram; water, one quart. Inject the vagina with about two ounces of the lotion. Apply the lotion every alternate day for one week. If a cow shows any signs of abortion she should at once be separated from the others. Prevention is the best remedy for abortion.

3. After preparing the animal for a purgative in the usual way, give to an adult horse: Barbadoes aloes, seven drams; calomel, one dram; ground ginger, two drams; syrup or soap, sufficient to form a ball. Feed exclusively on mash diet until physic has ceased to operate. Follow up by giving, morning and evening, in food, for one week: Sulphate of iron, nux vomica, gentian pulv., and nitrate of potass., of each, one dram.

CORNS.

What can be done to cure corns on a horse's foot?
Lambton Co., Ont.
E. W.

Ans.—Remove the shoes, pare well out, cutting a groove on each side of the corn to relieve the pressure. If possible give a few weeks' run in a low, damp pasture, always looking well to the paring of the feet.

Miscellaneous.

APPLE-TREE LOUSE.

Enclosed find a twig from our apple tree. The leaves and fruit are literally covered with a little green insect with black eyes and black lines on its sides. They are on the under side of the leaves, and are going to destroy the trees if not attended to at once. What would you prescribe as a remedy?
Ontario Co., Ont.
F. J. W.

Ans.—This is the apple-tree aphid (Aphis mali). The eggs are laid in the fall and the young hatch about the time the buds begin to burst in the spring. These at once insert their beaks into the young leaves or swelling buds, and begin to feed on the juices. All the lice hatched at this season are females, and reach maturity in ten or twelve days, when they commence to give birth to living young, producing about two per day for two or three weeks. The young locate about their mothers, and are just as prolific. As the season advances some acquire wings and migrate to form other colonies. When cold weather approaches males are produced, the sexes mate, and eggs are deposited for the continuance of the species another season. The leaves of trees infested by these insects become distorted and twisted backward, forming a protection from the rains. The scab on fruit often owes its origin to punctures made by these lice. The best remedy is to give the tree a good cleaning in winter by scraping off the rough bark and washing with caustic washes, as the whale oil soap solution. Spraying about the time the buds are opening with strong soap suds or weak lye is good. At this season nothing is better than to spray with the kerosene emulsion made by mixing two gallons of kerosene and one gallon of sour milk. The ingredients should be warmed to blood heat and thoroughly mixed by being churned through a spray pump. The application may have to be repeated several times, as it is hard to get at all the lice when the leaves are thick, as at this season. It would be well to prune as much as possible and burn the branches. A spring frost is the common check to these pests, and their natural enemy is the ladybird beetles.

SAWDUST IN RIVER.

Has a sawmill owner a right to dump sawdust into the river?
Coaticook, Que.
SUBSCRIBER.

Ans.—Generally speaking, no. That is to say, in the ordinary case he could hardly do so without damage to others, and such damage as would be actionable. But as to just how others would or might be affected in the particular case, and the extent, correspondingly, of the risk the mill owner would run, it is impossible to say without being familiar with the locality and circumstances. We would, accordingly, advise that a local lawyer be personally consulted.

COWS EATING BONES, ETC.

What is the cause of cows chewing bones and bits of leather? J. A. M.
York Co., Ont.

Ans.—An unusual number of people are asking us this question this season. The answer we give in each case is that it is due to an abnormal appetite, or the want of salt. Just what causes the abnormal appetite is hard to say. It may be cultivated, or it may be due to a lack in the feed of some of the mineral matter essential to animal nutrition. The nourishment derived from pastures growing on different classes of soils varies considerably, and it is only reasonable that upon certain lands the stock may not receive a sufficient amount of certain food constituents, hence an unnatural craving. The composition of the unnatural food eaten does not always indicate the element of nutrition lacking in the pastures, but is eaten in some cases apparently as a matter of taste. If the pasture is good and the cows are thriving, we can suggest no other remedy than the keeping of salt before them, and the removal from their reach of all filthy material for which they seem to crave.

COWS CHEWING BONES.

1. Why do cows that are on pasture and have access to salt chew bones?
2. Give cure for cough following distemper.
3. Will this cough result in heaves if not checked?
J. F. Q.
Perth Co., Ont.

Ans.—1. This is due to a want of phosphates in the system. Give 2 drs. phosphate of lime twice daily.

2. See answer to 1st question of F. S.
3. There is danger.

STERILE GRAPEVINE.

I have a grapevine which has the appearance every spring of being loaded with fruit, but about the 15th June all the blows go off and it never bears. Please tell me what I can do for it?
Frontenac Co., Ont. T. I. E.

Ans.—The writer does not mention the name of the variety, or whether it is growing alone or in proximity to others. From the facts stated, however, it is most likely that the failure to produce fruit is owing to its inability to fertilize its own blossoms. There are several varieties of grapes that are self-sterile, such as Black Eagle, Brighton, Wilder, Salem, and several others of the Rodgers hybrids. These should be planted close to varieties that are self-fertile and able to fertilize the blossoms of others, such as Concord, Niagara, Agawam and Delaware. The most likely remedy in this case would be to plant one of the last named list of self-fertile varieties close to the vine in question. Green Mountain, which is a white grape of good quality, is also a good polenizer, and would probably suit the section of country better than some of the others.

GINSENG CULTURE.

In one of your recent issues I noticed a paragraph about ginseng (the variety which is exported to China). I am very much interested and wish to know more about it, as I want to try and raise some. Would you kindly answer the following:

1. Where can the seed or roots be procured?
2. Where can the roots be marketed?
3. What is its market value?
4. Could you tell me where I could get literature on the raising of this root?
W. R. C.
Oxford Co., Ont.

Ans.—1. From the wild plants growing in the woods. You might get the Indians to gather some for you the coming fall.

2. There is a fairly good demand for the root, and almost any enterprising druggist will handle it or put one in communication with wholesale firms that buy it.

3. The market value varies considerably, but ranges between four and five dollars per pound for the dried root.

4. A treatise on the cultivation of ginseng, by M. G. Kains, may be ordered through this office. Price, 50 cents.

PENNY-CRESS.

Enclosed find sample of a weed. Please publish name of same, and if it is troublesome; also give best method of eradication. E. N.
Lambton Co., Ont.

Ans.—The enclosed weed is penny cress (*Thlaspi arvense*), and in some instances where the soil and methods of cropping are favorable to its growth, it becomes quite a nuisance. Where grain is largely grown without the introduction of red clover or root crops the weed grows best. It is one of the worst weed pests of Manitoba. Where the weed is already very thick, mowing and burning might reduce it. Frequent growing of hood crops, and a crop of red clover, will very much check its growth.

WHITEWASH FOR OUTSIDE.

Is the whitewash mentioned in the May 1st "Advocate" for outside use? If not, give a good mixture in your next issue. S. F. W.
Frontenac Co., Ont.

Ans.—This is good either outside or in.

RIGHT TO USE OF WELL.

A has a farm on the south side of highway. On it is a well. The farm is fenced all round. A doesn't use said well. B has a farm on north side of said highway; there is no well on it. B put a gate on A's fence for his own convenience to get to the well on A's farm, without leave from A, or paying anything for use of said well.

1. Can B hold the pathway to said well and use the water, if he, B, has peaceable possession of said pathway, and free use of well for a certain length of time?

2. If so, how long is it?

3. Or can A stop B at any time?

4. Or is B trespassing on A's farm?

5. What steps should A take to make him safe to let B get the use of said well?
Chatsworth, Ont.

Ans.—1. Yes.

2. Twenty years' uninterrupted enjoyment as of right would give B a prima-facie title; forty years of such enjoyment would amount to absolute and conclusive evidence of title, subject to be defeated only by A's producing proof that the enjoyment was by consent or agreement in writing.

3. Yes, unless there has been already sufficient enjoyment to give B the right to the continued use of the gate, pathway and water.

4. He is, if he has not acquired title in manner above indicated.

5. There ought to be an agreement in writing, and, preferably, under seal, between the parties. It could conveniently take the form of a lease from A to B, reserving a nominal rent and the right to terminate at any time.

NOTES OBTAINED BY FRAUD.

Last September the pork factory sent agents through this section to sell stock in that concern, who sold a large amount to the farmers, taking cash where they could get it in payment, and where they could not, taking notes. The company is now, and, practically, was then, bankrupt. The notes are held by the Bank of _____, either as collateral security or being bought outright from the company. Can the amount of these notes be collected from the farmers who gave them, if it can be shown that they were obtained by false pretences regarding the financial condition of the company; and that no value has been received?
Ontario. SUBSCRIBER.

Ans.—Assuming that the bank took the notes over for value and before maturity, and so became holders in due course, without notice of any fraud, they would be in a position to collect from the makers.

UNAUTHORIZED BREEDING OF MARE.

1. I had a man hired by the day who borrowed a mare to plow his garden. While away he served her to a horse without my permission. Can I collect any damage if the mare is in foal?

2. Can the owner of the horse collect any price from me, as he does not travel the horse nor hasn't any bills out?
Ontario. SUBSCRIBER.

Ans.—1. You would be entitled to recover damages, if any, from the borrower of the animal. And it is possible that the horse owner also has put himself in a position to be properly joined as a party defendant to the suggested action.
2. No.

BLADDER CAMPION.

Enclosed you will find a sample of weed of which we would like to know the name, and if it is hard to kill. It grows about three feet high, with roots extending far into the ground. What would you advise to do with it?
Manitoulin. J. T. H.

Ans.—This is bladder campion, the same as described in our last issue, page 609. It grows from six inches to two feet in height, and branches from the base. The flowers are white, about one-half inch wide, and are arrayed in a loose panicle. The calyx or flower cup is veined and inflated like a bladder. The seeds are brown and kidney shaped, with minute tubercles disposed evenly over the surface. The night-flowering catchfly (*Silene noctiflora*) resembles the bladder campion, but has a sticky viscid secretion upon the stem. See last issue for treatment.

BLADDER CAMPION IN VICTORIA CO.

Kindly inform me through the "Advocate," the name and habits of the plant enclosed. It seems to show very little in meadows, but spreads in other crops. Is it a bad weed or not?
Victoria Co., Ont. J. M.

Ans.—See description of bladder campion elsewhere in this department.

BRANDING CATTLE.

1. Does the Government prohibit branding in the Northwest? If so, what way have the ranchers to mark their stock?

2. Can you brand in Ontario if you wish?
Chatsworth, Ont. SUBSCRIBER.

Ans.—1. No. But for regulations respecting brands reference should be had to N.-W. T. ordinance of 1898, No. 31. 2. Yes.

SPITTLE INSECTS.

I noticed on some of my meadows this year on the individual spears of grass something that looks like spittle. A careful investigation reveals a fly hidden away in the white substance, and it finally bites off the stem and thus destroys it. Can you tell me the cause? What is it?
Frontenac Co., Ont. J. W. S.

Ans.—Judging from the meagre description, we are inclined to think this is one of the "spittle insects," or "frog hoppers." This species is not very well known, except that they lay their eggs in the grass in spittle-like masses. A species of these frog hoppers was quite prevalent in the Central States at one time, and the best method found for their reduction was to draw shallow wide pans coated with tar over the field. The insects would jump on the approach of the pan and invariably light in the tar. Such treatment would hardly be practicable at this time of the year, unless the insects were prevalent in long pasture. Breaking up the land this fall will probably reduce them. We should like to have a few specimens of this species, if they could be had.

CHICAGO VOLUNTEER'S PEDIGREE.

Can any of your readers give the breeding of Chicago Volunteer. I have a stallion two years old, whose dam is bred from the above named horse, and I wish to register him.
Lambton Co., Ont. SUBSCRIBER.

Ans.—Chicago Volunteer is registered as follows: 2611—Chicago Volunteer, (4) b. h., foaled 1871; by Volunteer, 55; dam Lady Diamond, by Billy Rex, etc. (See Vol. IV.) Bred by H. C. Goodrich, Chicago, Ill.—American Trotter Register Association, Frank E. Best, Registrar.

[Note.—Apply to Frank E. Best, 355 Dearborn St., Ellsworth Building, Chicago, Ill., for the necessary registration blanks.—Editor.]

SALE OF SOW.

A had a sale of farm stock last April, and advertised one sow in pig. B bought the sow on the terms of the sale, and gave his note for the amount of \$27.50, but the sow proved not to be in pig. Will B have to pay the full amount of the note? Or can B legally make A take the actual value of the sow, which is about half the price of the note given? Or can B take action against A for fraud? Or what redress can B have against A?
Ontario. SUBSCRIBER.

Ans.—It is not a case for proceedings as for fraud, and, strictly speaking, B is liable to pay the note. But if it remains in A's hands until maturity, B would be entitled to be allowed on it by way of damages the difference in value stated, and he ought to pay only the balance. In the event of an innocent third party becoming the holder for value before maturity, B would be obliged to pay the note in full, but would have his remedy over against A by action for damages for the misrepresentation.

GETTING A NEW COLONY.

1. I have a hive on which I put a super this spring. There is now brood in the middle racks. Could I take this top off, and so get another hive?
2. Where could I get a good book on bees for farm use?
Waterloo Co., Ont. L. D.

Ans.—1. You probably put the super on too soon. If you had waited until there was quite a honey flow the bees would have used the second story for storing. As it was, they used it during brood rearing season for this purpose. It would do no good to use this brood for a new hive. Better keep the colony intact until they swarm naturally, or, better still, try not to have new swarms now. Try and get the brood into the lower story, and use the upper one for stores. The fact that the bees had the extra story during brood rearing probably accounts for their not swarming before.

2. The Bee-keeper's Guide, price \$1.25, or the Honey-bee, price \$1.10, are both good practical works, and can be ordered through this office.

MAKING FOUNDATION COMB.

Where can I get a machine for making foundation comb, what is it likely to cost, and is it much trouble to make when one has the machine; also, about how many sheets of comb will a pound of wax make?
Bruce Co., Ont. FRED SPENCE.

Ans.—Foundation machines can be got from any dealer in beekeeper's supplies, and cost from \$20 to \$100, depending on the size. The trouble of making is considerable, and unless making for sale, it is best to send your wax to some dealer, such as Gould, Shapley & Mann, of Brantford, Ont., to be made up. One pound of wax makes about seven sheets light brood foundation, Langstroth size. This is the size suitable for brood-chamber purposes.
MORLEY PETTIT.

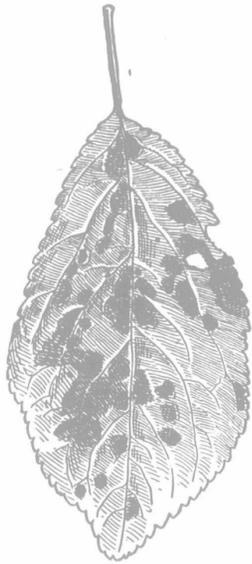
LACK OF VIRILITY.

I have a bear two years old which is getting very slow in service. What would you suggest as a remedy?
York Co., Ont. H. W. F.

Ans.—We can suggest nothing but turning him out to work with the sows or other pigs, feeding no sloppy food but only a little grain, and that scattered on the ground so that he has to work for it and eat it slowly.

SHOT-HOLE FUNGUS ON PLUM LEAVES.

From a Westminster fruit-grower we have received samples of plum leaves covered more or less thickly with brownish spots. We judge it to be the earlier stage of the shot-hole fungus, which first appears in the shape of small, dark purple spots scattered over the leaf. These spots soon become brown, and the leaf tissue composing them dies. This dead tissue generally drops out of the leaf in the course of a few weeks, leaving circular holes resembling shot holes. On the under surface of these spots generally appear one or more blackish points, consisting of the fruiting spores of the fungus, by means of which it passes the winter and propagates itself. Leaves often turn yellow and drop off.



A treatment is suggested similar to that recommended for apple scab: one spraying with dilute Bordeaux mixture before blossoms open, then two or three sprayings with Bordeaux mixture having an excess of lime and one of the arsenites, after the fruit forms, which is the most promising treatment for both insect and fungus pests.

SELLING BOAR—SWEET CLOVER ENSILAGE.

1. I have a pure-bred Yorkshire boar, about 18 months old, which it is intended to turn into pork. How long before being killed should he be castrated? He, apparently, has only one fully-developed testicle. Will removal of that one be sufficient? Can the other be easily removed? If the other be not removed, will it develop when it alone remains? Will it be sufficient to make the flesh rank? Just what had better be done with such an animal? Should such an animal have been sold for breeding purposes?

2. Have any experiments been tried as to the suitability of the tall white or yellow flowered "sweet clover" for mixing with corn in the silo? I refer to the rank-growing varieties which we see along railway tracks. I know it is too woody for hay, but possibly it might do if chopped up and mixed with other material in the silo, where it would become partially fermented and much softer. If it were suitable, it is possible it might solve the problem of how most cheaply to get a nitrogenous food to mix with corn in the silo.

Montreal, P. Q.

Ans.—1. If you make pork of him, he will go as a stag, and bring from two to three cents per pound. This is probably the best you can do with him. As it is evident he is weak in the genital organs, he should not have been reserved for breeding purposes. Two or three months should elapse between time of castration and sale to the drover. If the imperfect testicle cannot be grasped and removed, the meat will not make very choice pork.

2. We are not aware of any experiments having been made with the ensilaging of corn and sweet clover, probably because the clover is not a cultivated crop and of the difference in the time the two crops come in. Late crops of alfalfa have been used for the purpose of improving the feeding value of the corn ensilage, and this clover is perhaps the best of the crops for this purpose, as the first crops can be used for hay and the second or third for the silo.

NOTES AND NEWS.

New President of Iowa's College.

The Board of Regents of Iowa Agricultural College has at last elected a president to succeed the late President Beardshear. It was no easy matter for the regents to decide. Iowa is a great agricultural state, and the farming classes were united in their support of Professor Curtiss for the presidency, while among the alumni, most of whom are graduates in engineering, Prof. Stanton was the popular man. When the votes of the regents were finally cast, six stood for Curtiss and six for Stanton. The deadlock seemed to be hopeless, but a compromise was reached, and Dr. A. B. Stevens, pastor of the M. E. Church at Des Moines, Ia., was elected unanimously. This solution was fortunate for the welfare of the college, for although Dr. Stevens is a minister, his views are sufficiently broad to enable him to direct affairs about the college so that neither agriculture nor mechanics will be discriminated against to the advancement of the other. The decision of the regents seems to be quite popular with the majority of those interested in the college, as it affords both Professors Curtiss and Stanton, who are specialists in their respective lines, an opportunity to continue their chosen work, which otherwise would have had to be laid aside to make room for purely administrative affairs.

Death of Mr. W. B. Watt.

The demise of the well-known stock-breeder, William Barrie Watt, of Salem, Ontario, which took place at his home on July 1st, was not unexpected, as it was known by a large circle of his friends that he had been the subject of a long and painful illness, which he bore with manly courage and christian fortitude. The announcement of his death is, however, none the less sad to those who esteem him highly as a true and honorable man, a man of unswerving integrity, unselfish and always justly considerate of the rights of others. His memory will long be cherished by the stock-breeders of Canada, not only as one of the most successful men of his day in their ranks, but as being fair, frank and reliable under all circumstances, his word being considered as good as his bond. He was, more than most men in the business, gifted, in the highest sense, with the genius of a breeder, the intuitions of a judge, and the skill of a judicious and successful feeder, all of which is attested by the brilliant record made by Shorthorn cattle of his breeding as prizewinners at leading Canadian shows, covering a long series of years, a record which we believe it will be cheerfully conceded stands unequalled by that of any of his contemporaries. The influence of his excellent work as a breeder has been seen and acknowledged far beyond the bounds of his own herd, and will continue to be potent for many years to come. His good judgment in the selection of sires to head his herd was largely the secret of his success as a breeder, as the influence of the noted bulls, Barmpton Hero and Royal Sailor, whose services were retained for many years, amply attests; while Chal-



THE LATE W. B. WATT.

Died at Salem, Ontario, July 1st, 1903.

lenge, bred in the herd, made nearly if not quite as good a record; a trio of sires whose influence for good perhaps has extended further than that of any like number used in any one herd in the Dominion. Mr. Watt was a native of Wellington County, and was in his 57th year at the time of his death. He is survived by his brother John, who was for many years his partner in business and is entitled to a generous share of the honors won by the firm and herd. He also leaves a widow, one daughter and two sons, Robert and James, the former having just attained his majority.

Live Stock Demonstrations.

Mr. Duncan Anderson is at present in the Northwest Territories on farmers' institute work for the Territorial and Dominion Departments of Agriculture. In the course of an interesting letter he says: "Our meetings are quite successful. They are generally held in the open air, but when the weather is unfavorable we make use of a large tent or a skating rink. I have been speaking from two and a half to three hours every afternoon, the meetings beginning at two o'clock and sometimes continuing until five. I have demonstrated every day on heavy horses, dairy cattle and beef cattle, and have had some very fine Clyde and Shire stallions, also Shorthorn, Hereford and Ayrshire cattle for object lessons."

W. A. CLEMONS,
Publication Clerk.

Prof. Day Remains.

Reference was made in the last issue of the "Farmer's Advocate" to the tempting offer from South Africa to Prof. G. E. Day, of the Ontario Agricultural College. The Government was strongly urged by leading farmers to retain his services, and have advanced his salary to \$2,000 per year, and he has consented to continue at the College.

Sugar Beet in Waterloo County.

The Ontario Sugar Company, Limited, made a wise choice of location when it decided to build its factory at Berlin, the county town of Waterloo, which has a typical soil for growing sugar beets. Beef cattle are extensively reared in this country, which is farmed by Germans, who are characterized for their thrift, industry, economical habits and close application. None except the actually experienced realize the tremendous task resting upon company and farmer alike the first year of the establishment of the beet sugar industry, which cannot begin in a small way, but must launch out the first year with four to six thousand acres. Unprepared land, lack of sufficient labor, inexperience, large acreage loaded upon the enterprising few, etc., make the initial difficulties almost innumerable.

Toronto and other papers lately, thoughtlessly, circulated the following injurious and misleading article:

"A number of the clerks of rural municipalities, in making returns to the Bureau of Labor, indicate the widespread desire they have for the establishment of sugar-beet factories. On the other hand, the Clerk of Guelph Township strikes a note which shows that realization is sometimes different from anticipation. He says: 'During the year 1902, a large acreage of sugar beets were cultivated for the sugar factory at Berlin. I may say that for 1903 there is a very small acreage sown.'"

This article states that the acreage of the Berlin sugar factory is less this year than it was in 1902; and, further, it carries the injurious inference that farmers who grew beets in 1902 were disappointed. Such an inference travelling out among the prospective beet growers injures the industry as well as the farmer who reads it. The fact is, there were 830 farmers who grew beets in 1902, while there are over 1,200 who are growing this year for the Berlin sugar factory. That is an increase of over 400 growers this year over last year. Not only is the acreage in Waterloo County under the cultivation of sugar beets for the Berlin factory greater than it was in 1902, but the total acreage is considerably greater this year than it was last.

The necessary evil of large acreages with a few, as was the case last year, does not exist this year. The judicious distribution of those large acreages among many has occasioned the misconception of the Guelph Township Clerk, who is the newspapers' authority for the publication of such incorrect and injurious information and impressions.

In many ways the sugar-beet industry, wisely located and rightly managed, will prove beneficial to the farmer, but these benefits, being confused the first year with the difficulties of inexperience, were not fully realized until the second year after the establishment of the factory.

Farmers who are cultivating their second beet crop clearly perceive increased profits in sight, through decreased cost of production, of which innumerable instances might be advanced.

Generally speaking, the cost of thinning and cleaning is less than half the amount of last year. As an illustration of this fact, take the case of Jacob B. Snyder, Berlin, whose eight acres of fine beets cost Mr. Snyder only \$17.00, out of which he paid hired help \$1.00 and one meal for ten hours' work, and allowed himself the same. Few growing their second crop have estimated the cost of thinning and cleaning above \$4.00 per acre.

They also recognize the stock-feeding value of beet pulp, which is being freely fed mornings and evenings to grass-fed stock, which, as a rule, greatly relish it.

Mr. Allen Battler, of Baden, is drawing pulp regularly from the factory several miles to his farm, and informs me that with pulp given night and morning his cows that are on pasture give milk enough to feed both calves and pigs; while on pasture only the same cows give milk enough to supply only the calves. There is also, he says, much more butter made when pulp is fed. Numerous other instances of good results from feeding pulp might be given. I could mention the names of scores of farmers who have fed and who know that beet pulp is much superior as a stock food to pulped turnips.

Not only is there a direct benefit derived by growing sugar beets, but, indirectly, the farmer is benefited through his land becoming cleaned and improved by the cultivation of sugar beets. Take, for example, the grain crops following the sugar beets of 1902 on the farms of Tilman Shantz, ex-Warden of the County of Waterloo; Frank Shuh, Waterloo; Louis Koehler, Reeve of the Township of Waterloo; Louis Schweitzer, Bridgeport; Simeon Brubacher, Berlin; Daniel Weber, Berlin; and many others whose judgment cannot be disputed.

Farmers have known for years that turnips and mangolds are hard on land, and any amount of talking will not disabuse their mind of the idea that sugar beets are hard on land. This is not the case, however, as hundreds of farmers are now learning by actual experience.

"It suits me all right!" "I'm satisfied!" "I'm just tickled with my beet crop," are the remarks now heard from intelligent leading farmers, whose judgment is based on experience.

The sugar-beet industry is a success in Waterloo County, and will be appreciated more and more by our country as sugar factories become established in suitable localities.

A. E. SHUTTLEWORTH,
Waterloo Co., Ont.,
Agricultural Superintendent.

Successful Candidate.

R. E. Gunn, of Beaverton, Ont., who has been attending the Agricultural College for the past three years, has been successful in his examination for the certificate in agriculture. The courses for certificates in agriculture and horticulture recently instituted are for the purpose of fitting the holders to teach nature study in public or high schools. Third-year students in agriculture who have the required standing can proceed with the work for the certificate of agriculture or horticulture after the completion of the regular third-year work at the Agricultural College.

List of Fairs for 1903.

CANADA.

Winnipeg Industrial	July 20 to 25
Brandon, Man.	July 28 to 31
Regina, Assa.	Aug. 11 and 12
Lacombe, Alta.	Aug. 20
Dundas, Morrisburg, Ont.	Aug. 26, 28
Toronto Industrial	Aug. 27 to Sept. 12
Sherbrooke, Quebec	Aug. 29 to Sept. 5
Winchester, Winchester, Ont.	Sept. 2, 3
East Elgin, Aylmer	Sept. 7, 11
Russell	Sept. 8
Stomont, Newington, Ont.	Sept. 8, 9
Grenville, Prescott	Sept. 8, 10
Kingston, Kingston, Ont.	Sept. 8, 11
Brome, Brome Corners, Que.	Sept. 9, 10
Alexandria	Sept. 9, 10
Nova Scotia, Halifax	Sept. 9 to 17
Western Fair, London	Sept. 11 to 19
Ottawa Central	Sept. 11 to 19
Wellesley, Wellesley	Sept. 15, 16
Guelph, Guelph	Sept. 15, 17
Hamilton, Hamilton	Sept. 15, 17
Ontario and Durham, Whitby	Sept. 15, 17
Brockville	Sept. 16, 18
Perth	Sept. 16, 18
South Lanark, Perth, Ont.	Sept. 16, 18
Frankford	Sept. 17, 18
East Simcoe, Orillia	Sept. 17, 19
East Hastings	Sept. 18, 19
Lansdowne	Sept. 21, 22
Almonte	Sept. 22, 24
Fredericton, N. B.	Sept. 21 to 26
North Hastings	Sept. 22, 23
Petrolia	Sept. 22, 23
North York, Newmarket	Sept. 22, 24
Great Northern, Collingwood	Sept. 22, 25
Peterboro, Peterboro	Sept. 22, 24
West Kent, Chatham, Ont.	Sept. 22, 24
Renfrew	Sept. 23, 24
Amherstburg	Sept. 23, 24
Hay Agricultural, Zurich	Sept. 23, 24
Yarmouth, N. S.	Sept. 23, 24
Charlottetown, P. E. I.	Sept. 22, 25
West Middlesex, Strathroy	Sept. 23, 25
Cambridgeford	Sept. 24, 25
Center Wellington, Fergus, Ont.	Sept. 24, 25
Halton, Milton	Sept. 24, 25
Metcalfe	Sept. 24, 25
Mornington, Milverton	Sept. 24, 25
North Brant, Paris	Sept. 24, 25
Lindsay, Lindsay	Sept. 24, 26
Springfield Union	Sept. 25, 26
Shannonville	Sept. 26
Charlton, Richmond, Ont.	Sept. 28, 30
Richmond	Sept. 28, 30
Ridgetown	Sept. 28, 30
Marmora	Sept. 29
Arran Tara Fall Show	Sept. 29, 30
Blenheim, Drumbo, Ont.	Sept. 29, 30
Center Bruce, Paisley, Ont.	Sept. 29, 30
Haldimand, Cayuga	Sept. 29, 30
Tilsonburg	Sept. 29, 30
North Middlesex, Ailsa Craig	Sept. 29, 30
L'Amable	Sept. 30
Shedden	Sept. 30
Southwestern, Essex	Sept. 29, 30, Oct. 1
Coe Hill	Oct. 1
Peel Co., Brampton	Oct. 1, 2
West Elgin, Wallacetown	Oct. 1, 2
Beachburg	Oct. 1, 2
Gall	Oct. 1, 2
South Norwich, Otterville	Oct. 2, 3
Ameliasburg	Oct. 2, 3
Tilbury West, Comber	Oct. 5, 6
Rodney	Oct. 5, 6
Chapeau	Oct. 5, 6
Moore Township, Briden	Oct. 6
Netherby Union, Netherby	Oct. 6, 7
Blyth and Morris, Blyth	Oct. 6, 7
Sault Ste. Marie	Oct. 6, 7
Warkworth	Oct. 6, 7
Sarnia Reserve	Oct. 6, 8
West Durham, Bowmanville	Oct. 6, 7
Alexandria	Oct. 7, 8
Castleton	Oct. 8
Warrington	Oct. 7, 9
Wooler	Oct. 9
Prescott, VanKleeck Hill, Ont.	Sept. 10, 12
Welland	Oct. 13, 14
World's, Rockton	Oct. 13, 14
Norwood	Oct. 13, 14
Woodbridge, Woodbridge	Oct. 14, 15
St. H. Union, Simons, Ont.	Oct. 13, 15
St. H. Union, Guelph	Oct. 13, 15
St. H. Union, Guelph	Dec. 7, 11
St. H. Union, Guelph, Amherst, N. S.	Dec. 14 to 17

STATE AND GENERAL.

Missouri, Sedalia	Aug. 17, 22
Iowa, Des Moines	Aug. 21, 29
Ohio, Columbus	Aug. 31, Sept. 4
Minnesota, Hamline	Aug. 31, Sept. 5
Maine, Lewiston	Sept. 1, 4
New Hampshire, Concord	Sept. 1, 4
Wisconsin, Milwaukee	Sept. 7, 11
Michigan, Pontiac	Sept. 7, 11
Nebraska, Lincoln	Sept. 7, 11
Pennsylvania, Bethlehem	Sept. 8, 11
New York, Syracuse	Sept. 7, 12
Indiana, Indianapolis	Sept. 14, 18
Kansas, Hutchinson	Sept. 14, 19
Oregon, Salem	Sept. 14, 19
Kentucky, Owensboro	Sept. 21, 26
American Institute, New York	Sept. 22, 24
Illinois, Springfield	Sept. 26, Oct. 3
New Jersey Interstate, Trenton	Sept. 28, Oct. 2

Among the Mining and Lumber Camps.

Last year we laid before you the extent and needs of Ontario W. C. T. U. missionary work, which has its field in Algoma, Muskoka, Haliburton and Nipissing. You kindly responded to the appeal. Desiring that you should know what was done with the gifts received and the present status of the work, we ask your consideration of the following:

Through our Unions and from outside sources we received for this department and toward the grant made our Purity Missionary, \$1,471.07. The following are the expenditures:	
Mr. Leckie's salary	\$500.00
Miss Sproule's salary	400.00
Miss Sproule's travelling expenses	47.50
Printing expenses for Missionary Dept.	20.25
Mr. Beall's grant (Purity Work)	200.00
Printing expenses for Mr. Beall's work	11.50
Paid back money borrowed the previous year from Emergency Fund	200.00
Postage and Supts. expenses for Missionary and Purity Depts., and for literature purchased for distribution	35.00
	\$1,414.25
Balance in hand of treasurer	\$ 56.82

God has indeed been good to us, and we gratefully thank Him for this, the second balance our Missionary Department has ever shown. There is now hope for the additional missionary of whom we have been so long talking. The field is enormous—over 70,000 square miles. Our two workers seem lost in it, yet last year they visited 243 villages or camps, holding 284 meetings, not including the addresses made to day and Sunday schools.

Miss Sproule distributed 5,530 papers, magazines and tracts and leaflets in each of the 850 individual homes visited. Mr. Leckie distributed 4,275 lbs. of literature, 2,965 song sheets, and about 20,000 leaflets. Between them, the missionaries gave out 798 comfort bags. Miss Sproule travelled by rail, boat, buggy, waggon, sleigh and on foot, 4,225 miles, and Mr. Leckie 4,000 miles. Mr. Leckie estimates that he met and addressed 20,000 men.

We have now spread before you: first, the expenditure, and, second, the work accomplished, as far as figures can tell it. May we hope for continued aid?

You will find enclosed with this a copy of Miss Sproule's last letter but one, to me. She had no thought of other eyes than mine seeing it, but I am passing it on because it shows so vividly the nature of her work. Miss Sproule is a gray-haired Scotch woman, whose physical strength is continual amazement to us.

MAY R. THORNLEY.

[Note.—Any contributions towards this worthy work should be forwarded to Mrs. B. O. Britton, Treasurer, W. C. T. U., Gananoque, Ont.—Editor.]

The Jubilee Presents.

The executive of the Dominion Exhibition, Toronto, to be held from August 27th to September 12th, have made a decided hit in securing the Jubilee presents of the late Queen Victoria for Exhibition. The King himself has graciously directed that they shall be so exhibited. It is hardly necessary to say that they are of immense value and are of rare and wonderful variety. There are upwards of 600 of them—613 to be exact—and come from all parts of the world and from all sorts and conditions of people. Every colony, every state and province of India, every country nearly in the world, is represented, including Syria and Samoa. As it is the intention of the Dominion Exhibition Executive to have the full list printed shortly in pamphlet form, particulars of this wonderful collection of presents, richer and more multitudinous by far than those of the Queen of Sheba, will be easily obtainable.

To Secure Cheap Timber.

A system of forestry on a large scale is now being discussed by some of the leading railway companies of the Eastern States. Timber for ties, poles and cross-arms has become so scarce that the companies have begun to inquire into the practicability of growing their own wood material. Cheap soft woods are now being treated with preservatives with the object of determining their suitability as substitutes for the more expensive high-classed timber. An inauguration of systematic forestry by these companies would mean much to the advocates of scientific management of the forests.

Dominion Industrial Exhibition.

The prize list for the Dominion Industrial Exhibition, to be held in Toronto, August 27th to September 12th, is now out, and can be had on application to the manager, 70 King street, East Toronto. The management has endeavored to improve and enlarge the exhibition to meet the expectations that its adopted name arouse. The money prizes amount to \$50,000, those for live stock being considerably augmented this year by a grant from the Dominion Government and from the different stock-breeders' associations. The classification for horses is greatly enlarged, and it is practically certain that the greatest horse show ever seen in Canada is assured. For Shorthorn cattle alone the cash prizes amount to \$2,785, exclusive of four \$50 gold medals, one-half of the amount being contributed by the breed association. The judging competitions for farmers and farmers' sons will again be a feature, and if the interest aroused in this work by the short-course judging classes at Guelph is any criterion the competition this year will be one of the keenest. Everything indicates that the show this year will be the most successful in the history of the Industrial.

The Macdonald Institute.

The appointment of a staff of teachers for the new Macdonald Institute at Guelph has been made by the Ontario Government. Dr. W. H. Muldrew, Principal of Gravenhurst High School, will be dean at a salary of \$1,400. The lady principal of the domestic science school is Mary Urie Watson, of Ayr, Ont., a graduate of the Teachers' College, Columbia University, New York City. Her salary will be \$1,200 per year. Katherine T. Lyman, M. A., of Montreal, will be science teacher, and Helen Given, of Burlington, Ont., is appointed instructor in domestic economy. Dr. Muldrew is very highly recommended for the position of dean by those competent to judge. He has for years given special attention to forestry and nature study, has published a valuable handbook on the subject, and has a large collection of plants and shrubs in the grounds surrounding the high school building at Gravenhurst. The authorities are now at work arranging the course of studies, which it is expected will be begun in September. An effort is being made to adapt the course to the varied needs of the different classes of students that may attend.

Muskoka District.

Spring opened early in April, and in this district farmers commenced seeding as soon after as they could get on the ground to work it. Grain that was put in before the spring rains and got sprouted is doing fairly well, but that which was put in later is, in many cases, a failure. Hay also is going to be very short, and some is not going to be worth cutting. A rake will not gather it up. Hay that is on low, damp ground is not showing so badly. Very little corn is grown here, but we believe the silo will be introduced into this district before long, as it takes less ground to feed a greater number of cattle. Farmers are breeding a heavier class of horses than they used to, mostly Clydes and Percherons. Thousands of visitors from all parts of Canada and the United States come here for their summer holidays, ample accommodation being provided by the many hotels on the shores of the beautiful lakes. A large number of farmers in this part are going into more poultry-raising, and I believe still more would if there could be a reasonable price assured. There are three large hotels here, and some of their owners would think it ridiculous if we asked more than 15c. or 20c. each for early spring chickens, but farmers are beginning to find out there is a market outside of the district, and these will soon have to give a fair price, such as the Toronto prices quoted in the "Farmer's Advocate." Farmers cannot raise good chickens and sell them for such prices as they are offered here, nor do these people deserve to get them at such prices, as they are making enough out of the business to come up to the times and prices. The same applies to butter also, for which the prices paid are so low as to furnish no encouragement or incentive to the making of a first-class article.

Co-operative Testing of Dairy Herds.

Last winter the Dominion Department of Agriculture called attention to the co-operative system of testing dairy herds which prevails in Denmark, and recommended the establishment of a somewhat similar system among Canadian farmers. At the present time dairymen can make it almost impossible to get milkers, and it is very necessary before that they should save time feeding and milking inferior cows. A recent letter from Mr. Dan Drummond, of the Department of Agriculture, mentions several breeders about Danville, P. Q., who are very anxious to have a system of records of production established and kept under reliable supervision. They are giving up keeping pedigree records. If any system could be devised by which the records would be recognized as official and reliable, the breeders mentioned would be quite willing to assist in making it a success. Mr. Drummond continues: "At St. Liboire, I met the president of the farmers' club, who told me that they had just concluded their competition for the best milk cows. There is the cows giving the largest amount of milk in twenty-four hours, at home and under supervision. They had thirteen cows in the competition, the best giving 62 pounds and the poorest 42 pounds of milk in the day, a showing very creditable to the French Canadian farmers of that district."

Eighth Annual Meeting of the American Association of Farmers' Institute Workers.

(Continued from July 1st issue.)

A very interesting address was that of Mr. Andrew Elliott, of Galt, who discussed the subject of "Institute work from the standpoint of the worker. He first raised the question as to whether the institute would outlive its usefulness? The answer lay in the character of the speakers. Institute thought must be advanced and modern.

An institute speaker should not be a "smart Aleck." The delegate should have a purpose. He should not be a political "hack," but should be an enthusiastic worker. He should be alive. There is no room in this fast age for a slow man. It is a disadvantage to a speaker to have a paper. We must have something new each year, something practical. Farmers now want advanced thought and scientific facts. The practical farmer, as a speaker, has served a great end by bringing people up to this point. A wide-awake man can often tell what a district needs better than those at home. The delegate must know how to do this. The bowed heads of those observing farmers can tell at once whether this is the case. Just now, a vital point is to teach farmers to appreciate the efforts of their wives to maintain and improve the home. The home is the bud of the tree of human life. Care for it, protect it. It is of more importance than the land, stock or anything else in this world. Coming from a hard-headed, practical Scotch-Canadian farmer, these remarks carried unusual weight with the convention.

Mr. Hy. Glendenning, of Manilla, followed on the same line, and said a delegate should be on good terms with an audience, and to be on these terms one must be on good terms with himself. When appearing before an audience, try and pick out the strong faces, and look in their direction rather than to the more flimsy. Keep a question drawer for each meeting, and bring it on first to secure a large attendance. Deal with all questions on farming, and ignore anything that is introduced for a "lark." Always try and draw out something in discussion. If possible, get the questioner to answer his own question. If it is unanswerable, say so at once. Use tact in dealing with a man with a pet scheme, and try to make a friend of him, as he often makes a good institute worker. A problem for us now is to get men out to the afternoon meetings. Many come to the evening session, and get a false impression of the work of the institute. Too much entertainment has crept into some districts. It is not good. We should try to introduce stock and grain judging at some neighboring farm, where the merits and demerits of stock could be discussed. Two-day meetings would help to this end.

W. G. Vincenbeller, of Arkansas, raised the question of disposing of the universal "auntie," who is always tearing the arguments to pieces on false grounds. Mr. Elliott says he would give him enough rope to hang himself. Hy. Glendenning says he would get the fellow to answer his own questions if possible.

F. E. Dawley, N. Y., finds fewer smart Alecks every year. They are thinned out before they get to seed. Don't hit him unless you can hit hard.

WOMAN'S PART OF INSTITUTES.

On Wednesday evening, the programme took the form of a discussion of woman's institute work. Our American friends were much interested in this part of the convention, and took notes copiously. Miss Maddock, of Guelph, was the first speaker. The work of the institute in relation to the woman of the farm is both direct and indirect. It broadened the view of woman. It discouraged gossip. It brings together kindred spirits to discuss questions bearing directly upon the every-day life of the home. It endeavors to induce people to discard some of the antiquated schemes of decoration, of dress, of cooking, etc. Think of cheap paper flowers in the country (blue roses, yellow geraniums, plaster-of-Paris images, etc.). The Institute at present was endeavoring to help women solve the servant-girl problem. The address all through was suggestive, and everyone could make their own application of its truths.

YOUNG PEOPLE AND THE FARM.

The Honorable John Dryden took up the question of enlisting the interest of the young people in agriculture, and his remarks were first negative in substance. No young man should be induced to follow farming that has a passion for other lines of work. The boy who is fond of outdoor life and animals is the boy to select for the future farmer. Too long we discouraged the bent of such a boy, but now we are becoming wiser. We will soon in Canada do as is done in Britain—exalt the successful farmer. So far, the most persistent depreciator of farming has been the farmer himself. He has continually directed the boy away from the farm to other occupations, of which he has the most wretched misconception. Never give a boy money to spend unless he earns it. Give him special work of his own, and see that his work is profitable. Guard against making a slave of a boy. Letting toil soon sets a boy thinking of other occupations. Give the boy good agricultural reading. Parents must be careful when giving a boy secondary education. High schools are good and essential education is imparted, but the influence of other students who are training for other lines often turns the boy from the farm. Contrasted with this

influence is that which exists in our agricultural colleges, where the boys are farming enthusiasts.

MISS ROSE SPEAKS.

Miss Laura Rose, of Guelph, followed. Miss Rose has been identified with the Women's Institute since its first inception seven years ago. The need of such work was all too evident. The Institute is a wonderful developer of talents, where women practice intelligent discussion. Women now make their institute a bureau of information.

THE ROMANCE OF AGRICULTURE

was the subject of the address of C. C. James, Deputy Minister of Agriculture for Ontario. The romantic side of agriculture could well be introduced into institute work by giving racy talks on the lives of such men as Bakewell, the Booths, Cruickshank, etc. Every person has heard of our political benefactors, but few of the attendants at our Institute meetings ever heard of the great agricultural benefactors. Other romantic features would be a recount of the development of a clover plant, of a grain of corn, of live stock, of butter, of horticulture, etc., for behind the humdrum of every-day work with these subjects is a romance more interesting than the brightest fiction.

Miss Smith, of Hamilton, outlined the methods of organization and conducting of Women's Institutes, and outlined the objects of the same in stimulating a higher ambition. Man lives on his ideals, not on bread alone.

Prof. Hamilton, recently appointed Institute Specialist for the U. S. Government, told how the Institute specialist and the associations could help each other. Although Prof. Hamilton has had but a short time in which to formulate his plans, he has already outlined the nature of his work, which will be much appreciated by all those engaging in Institute work in the United States.

Dr. Voorhees, of New Jersey, looked into the future of Institutes and said that whether the institute will continue as an educational factor in the same sense that the agricultural college and the experiment station will continue will depend upon the effectiveness of the organization and of the character of the work done by the institute managers. He did not believe that the institute will be permanent along present lines, for he thought that the time will come when the necessity for the institute as now conducted will have passed away for the practical man, not that it will be abandoned, but that it will develop and be of higher grade, and perhaps be renamed as an institution for the instruction of teachers in the public schools, and thus reach the child rather than the man. This, however, is a matter of speculation, for the institute is here to stay until those happy days are realized.

A trip to the Agricultural College and sight-seeing about Toronto were features of the convention which the Americans enjoyed immensely, and all voted the 1903 convention the most successful in the history of the association. Next year's convention will be held at St. Louis, Mo.

Travelling Dairy Maids.

Miss Laura Rose and Miss Annie Rose, of Guelph, have been engaged by the Government of Nova Scotia to superintend travelling dairy schools throughout the Province. This work was introduced two summers ago by Miss Laura Rose, instructor in farm dairying at the Ontario Agricultural College, and has met with great success and been much appreciated by the people.

Ottawa's Popular Exhibition.

The prize list of the 16th annual Central Canada Exhibition, to come off at the Capital City, Sept. 11 to 19, presents an excellent bill-of-fare in the form of a long list of cash prizes and gold medals in a liberal classification of live stock. The horse and cattle classes are especially well provided for, and all indications point to an unusually strong exhibit in all classes of stock. Exhibitors in this department always enjoy the Ottawa Fair on account of the excellent, comfortable and convenient stabling provided, and visitors see the stock with greater comfort and satisfaction at Ottawa than at any other fair in the Dominion. No less than thirty-three gold medals are offered as special prizes this year in live stock, dairy and agricultural products. The exhibition grounds at Ottawa, which comprise most of beautiful Lansdowne Park, are picturesque and pleasant, while a visit to the capital in September is a genuine treat, the scenery from Parliament Hill and other points in the city being scarcely excelled for beauty and extent in any of the Eastern Provinces, while the city itself has grown into one of the most beautiful in the Dominion. Many new and interesting features in the way of practical demonstrations in the manufacture of useful articles are being introduced, while the grand-stand entertainments, it is claimed, will be of a much better class than heretofore. Intending exhibitors should note that entries must be made not later than September 9th, and the sooner the better. Applications for prize list and entry forms should be made to the secretary and manager, Mr. E. McMahon, 26 Sparks street, Ottawa.

London's Great Fair.

Without being bolstered up by special Government grants, the old and ever-popular Western Fair will be found doing a bigger business than ever at the old stand in London, Ont., from September 11th to 19th. As a matter of actual fact, there are already more entries more enquiries for space than ever before at this date. Available space in the regular carriage building has been already all taken, and arrangements made for the overflow display of vehicles. The machinery hall and implement space will be fully occupied, one of the new arrivals being the J. I. Case Threshing Machine Company, who will doubtless make a grand display of the products of their great enterprise. In the art department, many of the leading painters of Canada will display their work, particularly in competition for the special \$75, \$30 and \$20 prizes. The Western Fair Board are to be heartily commended for their efforts to improve the art exhibit. The live stock entries are coming in earlier than ever before, one entry of eighteen horses having already been made. A big feature of the show is likely to be Percheron horses by a couple of the big American breeders, who, taking advantage of the agricultural prosperity of Ontario, do not propose to let the Clydesdale and Shire people have things all their own way for the future. A larger and better room will be provided for dairy exhibits and the buttermaking competitions, which proved such a popular feature last year. The Western will certainly be one of the best all-round shows of the year.

The embargo on live stock shipments from New England ports is booming business at Montreal. Everything is going Canada's way just now.—Chicago Live Stock World.



"THE COLT."

Thirty-year-old driving and general-purpose horse (bred by Sir Archie—Thoroughbred). Property of the driver, Mr. Geo. Hill, Delaware, Ont., who has owned him twenty-eight years, and worked him regularly on the farm during that time. "The Colt" was harnessed but twice on the Sabbath during his life, and never hitched after dark.

Oxford Co., Ont.

A few days ago I received the following letter, which helps to add to the many items of testimony to the great value of the "Farmer's Advocate" to intelligent people who make a good use of what they read. I might mention that the lady who wrote that letter is a prizetaker in butter and bread making, and while we do not in any wise despise accomplishments in the line of music, drawing and painting and such-like, yet bread and butter are the staff of life:

"Dear Sir,—Knowing that you are interested in all the branches of agriculture, I thought I would tell you how I raised a fair crop of early potatoes. In looking over an old number of the 'Farmer's Advocate' I found a few hints, which I followed. I planted my seed potatoes early, in a box in the house, and when all danger of frost was past I planted in the garden on the 15th of May. I dug them on the 21st of June, and found them a fair quality, and I think I can have potatoes two or three weeks earlier by this plan.

"Yours, etc."

We are having beautiful July weather, just perhaps a little too much wet for getting along well with the hoeing, but grand for filling the grain. I have really been astonished at the way the grain has improved these last few weeks. Our fall wheat is immense; barley is good, and oats improving splendidly. Haying, fall wheat and barley are going to follow in quick succession, and the farmer will be very busy from now until the snow flies.

D. L.

Straw-cutting Device Perfected.

Since the demand, about a year ago, for a straw-cutter attachment to the ordinary thresher became urgent, the George White & Sons Co., of London, have been constantly at work perfecting such a device. Hitherto, it was found difficult to keep the cutting knives sharp, but a Mr. Stewart, of Molesworth, Ont., came forward with a contrivance for this purpose, and his device was so successful in a recent trial that it will in all probability be used on all straw-cutter attachments to the Geo. White & Sons' machines.

The construction of the new cutter, as attached to the Challenge, is such that all threshing and separating of grain is done before the straw comes in contact with the cutting knives. The cutting cylinder is slightly above the straw deck, and the straw is carried by a short steel rake to the feeding rollers, the chaff from the shoe not going to the cutter, but drops into the blower, below the shoe, the cut straw dropping upon it. The feed is evenly mixed, or the chaff can be saved separately. By throwing off the cutter shaft belt, and removing the grate, the straw is delivered to the stackers the same as before. One man can take care of the straw easily, and the same can be delivered sixty feet away.

The cutter can be attached to any machine, and its merits are being investigated by the Waterloo Co., of Waterloo; the Sawyer-Massey Co., and others.

Middlesex Co., Ont. JOHN C. WALLIS.

Concerning Ferrets.

In our July 1st issue, we published an enquiry by G. G. H., of Lambton Co., for ferrets. Since then we have received a great many letters from owners of ferrets asking to be put into communication with the enquirer. Those sending a stamped envelope have been accommodated, but there are a great many who have not. In all matters of business it is well to be businesslike, and in cases of this kind, to send stamped envelopes. A still better way would be to send a small ad. for insertion in our columns, to which we could refer enquirers.

The Gymkhana at Whitby Fair.

The problem of interesting our young people in the saddle horse, and showing them how to fit for market the many excellent hunters and jumpers bred in Canada, is engaging the attention of the directors of the so-called "model fair" at Whitby. At a meeting held on July 2nd, they decided to put on at their exhibition this fall a gymkhana, or series of games on horseback, which they think will prove attractive, both as an educational and as an amusement feature. Mr. S. B. Fuller, the well-known Woodstock horseman, has undertaken to manage the gymkhana.

Cumberland County., Nova Scotia.

We are having a few showers now, but the soil is still very dry and crops are growing very slowly. Of course, these showers are too late for hay, which cannot be more than half a crop, which means a great loss to this great hay section. Grain is a good color, and with favorable weather from now on may be a fair crop. Mangolds were nearly all plowed under and the ground seeded to turnips. Turnips are coming now fairly well, especially the later sown ones. Dairywomen are feeding some mill feed, and are somewhat worried about the prospects for early autumn feed.

C. H. BLACK.

New Westminster District, B. C.

The weather has been unsettled. No haying done on lower mainland. Prospects are for better weather. Our wheat is falling fast, and the freshest has not done nearly as much damage as was feared at one time. The wheat on the coast, however, stood firm, and the damage done by the rust is trifling. We will take care to get the wheat in the east, as we think, by the end of the month. W. H. L.

What Institutes Should Fight For.

To the Editor "Farmer's Advocate":

Sir,—I would like space in your paper to reply to my critics in April 1st and May 1st numbers, 1903, in regard to our Farmers' Institutes paying more attention to transportation than production. For the last six or seven years we have heard a good deal about the bacon hog, and many of our farmers have gone in for Tamworths, long Berkshires and Yorkshires for the purpose of producing the type, but so far have not been able to get one cent per hundred more for them than their neighbors who have taken no pains at all to improve theirs, but have raised "thick fats" or anything that was hog. We also had speakers tell about winter dairying and making butter for the English market. Several of our cheese factories put in a batter plant and ran for one or two years, but could only get from 16 to 20 cents per pound for their butter. We paid four cents for manufacturing, which left us 12 to 16 cents for the farmer's winter butter! That settled the winter butter business. One creamery was built to run the year round, and that lasted two or three years and was turned into a cheese factory, and is going yet. It's no use to talk up the English market for butter in this section. This is an old cheese district. We have been sending milk to the cheese factory for thirty-six years. Cheese has had its dark and bright days, but we have reached a high standard of excellence, and at present we are getting a paying price. So we are for bacon. As for eggs, last year we got twelve cents per dozen, this year ten cents. Several parties bought at twelve cents last year for the English market, but could not send them on at a profit, and had to sell them in our own market for ten cents per dozen. Some of them came to the town of Nananee. I have myself been producing eggs in winter for the last thirty years, and was getting twenty cents per dozen, but when these packed eggs were dumped on our market they fell to fourteen cents on the 1st of March. When a man buys eggs at twelve cents for the English market and has to sell them in our own for ten cents, and finds the cause Russian competition in the English market, it is what Mr. Johnston calls hop, skip and jump. Hop, skip and get left is what boys called it fifty years ago when I went to school. That our trade has increased in bacon, eggs and butter I was well aware of before Mr. Johnson told us, but Russia is increasing her butter product faster than we are; is getting quite as good a price, if we can believe market reports, and can or does produce eggs cheaper than we can. If His Majesty or his subjects want to eat Canadian eggs they will have to pay more money for them, or eat those from that measly little Tartar hen for some time yet. In this section, farmers are not increasing their output, but are curtailing, as present prices do not pay. We know how to produce the eggs, but we want more money for them, and if we cannot get cheaper transportation so as to get a better price we farmers will have to adopt the policy of the manufacturers, "Canada for Canadians," and produce only enough for our own table and a few for the local market at a good price, and the same with our bacon and cheese. At present, our export cattle are at such a price (\$4.50 to \$5.00) that all profit is gone. Is not the exorbitant price of freights one cause of the loss of about \$1 per hundred in price. I still think that it's more important for our Farmers' Institutes to turn their attention to how to get more money for what we produce than how to produce it.

Lennox Co., Ont. FRANCIS VAN DE BOGART.

Dominion Exhibition Arrangements.

Everything will be found improved at Toronto Exhibition this year, owing to the fact that it is a Dominion affair. The prize list, which is now ready, has been greatly extended and the amount of money to be given in prizes largely increased. In fact, the premiums that will be distributed this year in specie, medals and plate will total up to the magnificent aggregate of \$50,000, of which \$30,000 is to go to all manner of live stock. The new Manufacturers' and Liberal Arts Building, erected and equipped at a cost of \$125,000, will be open, and the plan of the ground has been materially changed. A New Women's Building will be one of the features, as will also be a large extension to the Dairy Building, erected at a cost of \$15,000. In short, the buildings now at Toronto Fair have cost, in the aggregate, to build close upon one million dollars. It is not necessary to expatiate upon what this means, but it shows the scope of this great, grand and comprehensive national institution. In this connection, mention should be made that the King has been graciously pleased to direct that the presents received by his royal mother, the late Queen Victoria, on the occasion of the Jubilee and the Diamond Jubilee celebrations, shall be placed on exhibition at Toronto on the grounds during the holding of the fair, August 27th to September 12th. By gracious permission of the Dowager Marchioness, the presents received by herself and the late Marquis of Dufferin and Ava during their stay in Canada and India will also be on view, as will, too, some treasures kindly loaned by the Countess of Aberdeen. All information, prize list and entry blanks can be had from J. O. Orr, 70 King St. East, Toronto, Ont.

Lay your plans to attend the dispersion sale of Hon. M. H. Cochrane's imported and home-bred Shorthorn cattle, at Hamilton, Ont., Aug. 11th. If interested, apply for the catalogue.

Our Western Letter.

TRANSPORTATION.

Bright anticipations have arisen in the West over the success, at the present time, of the delegates sent to Ottawa on behalf of the Grain Growers' Associations of Manitoba and the Territories. The reception given the delegates has inspired hope that at least the crying injustice accorded our Western farmers through the insufficiency of the Grain Act to regulate the relations between buyers, railway corporations and farmers, and the maladministration of the provisions of the Act, will soon be remedied, and that a better state of matters will prevail in marketing and transporting the produce of the harvest of 1903. The grain-growers have worked hard and have organized well. Their case was one of urgent necessity, and one that would demand redress from any administrative body worthy of the name. The matter is now in the hands of the committee of the Dominion Parliament, composed of all the members for Manitoba and the Territories. The committee have pledged themselves to use all their influence to get embodied in the Act provisions granting all the demands made by the Grain Growers' Associations, and to get into clearer and less ambiguous phraseology those provisions capable of misconstruction and abuse, and which were misconstrued and abused in the administration and application of the Act.

IMMIGRATION.

The visit of the American agricultural editors is the great event bearing upon immigration of the last fortnight. The editors have toured over a large area. Some of them have been over the Northwest before, and are only renewing their acquaintance with the country under conditions of advanced progression and wider and closer settlement. Though needing more rain, the crops were in a good seasonable condition during the tour, and the representatives of agricultural journalism from over the border will carry home with them a good impression of the country and a message of goodwill from the people of Canada, along with a cordial invitation to the young farmers under the Stars and Stripes to come over the line and try their fortunes under the freedom of the Union Jack. General immigration is proceeding steadily and quietly. Train-loads are arriving in Winnipeg from the east and from the Old Country, and are being distributed by the Immigration Department and by land agencies to locations for homesteading, to land bought by settlers and to situations on farms. There seems to be no hitch occurring in the distribution of new settlers, and the class coming in seems to be mostly composed of good men, who will prove capable of standing on their own sturdy legs and wrestling successfully with all drawbacks likely to be met with in their new surroundings. The foreign element still continues to arrive in somewhat large contingents. They are also settling down quietly; some to laboring on railroads, but most of them to agricultural pursuits.

IMPROVEMENTS.

In our towns and villages all over the West, as well as in the cities, improvements are proceeding apace. New places of business, as well as many new dwelling houses are in course of erection all over the country. Fine modern dwellings and commodious barns and granaries are to be seen in course of erection on a great many of the farms. Lumber constitutes a large percentage of the freight of the railways, and all over are to be met the evidences of a degree of prosperity never before enjoyed in Western Canada.

CROP PROSPECTS.

Crop prospects continue to look bright. More rain is wanted, however, and to ensure a bumper crop it has got to come. Wheat crops are looking as well as they possibly could be expected to at this season, and the reports from all districts are highly favorable. In some cases, however, rain would do good, but even should a dry spell set in an average crop is assured.

Winnipeg, Man., June 25th. OBSERVER.

A Great Fair.

The Central Canada Exhibition, the great favorite with the people, will this year surpass in a great many respects many of the best shows ever given in Canada. The directors of Ottawa's grand fair say so, and they have never yet exaggerated.

The prize list has been revised and considerably augmented in every department. In the horse department there are new classes for agricultural, runabout and express horses. In the cattle section, there is a Derby 1903 class. In the live stock classes there are thirty special prizes, twenty-two of them the magnificent gold medals; the exhibition has been in the habit of giving. All together there are over sixty special prizes, thirty-one being gold medals.

The dates of the fair are September 11th to 19th. A holiday cannot be spent to better advantage than at Ottawa and its great fair.

National Exhibition of Manufactures.

The new manufactures and liberal arts building at the Dominion Exhibition, to be held at Toronto, from August 27th to September 12th, has taken a couple of months to construct, but it will be a magnificent building and will receive its inauguration this year. The exhibits will be shown in trade sections, so that visitors may know exactly where to find what they want. An especially interesting feature will be a display of the latest processes of manufacture, such as cotton spinning, silk weaving, needle making, and so on. Information required will be furnished by J. O. Orr, Manager, Industrial Exhibition, Toronto.



"The Sun's text is, 'Begin the day
With shining purpose as your ray';
The Rain's, 'Let tears fall only where
They'll make the world more bright and fair';
The Wind says, 'Let your voice be sweet
And only wholesome things repeat';
The Flowers whisper, hid apart,
'Show to the world a perfect heart.'"

Mrs. Watson's Silver Set.

Mrs. Watson was supremely happy when she came home from Topeka with her silver set.

It had been the dream of her life to possess a set of silver: a coffeepot, a teapot, a sugar bowl, cream pitcher, teaspoons, tablespoons and silver knives and forks. For years she had skipped and saved and worked, but some calamity always came to Kansas to prevent the fulfillment of her wish.

One year it was the grasshoppers; another year it was the drought; another year they had great floods; one year all the swine died with cholera; another year all the chickens died with some new disease; again, the cyclone brought destruction and ruined all the growing crops; then came a year when the cows gave plenty of milk, the swine had no cholera, the chickens flourished, the rains fell regularly, and the corn crop was the largest in the history of Kansas. But when the corn was ready to gather, the price went down so low that very little ready money could be realized.

But Mrs. Watson did not give up. She wore her old bonnet and dress that winter, and skipped more than ever. The prying eyes of her neighbors discovered that her underclothes were patch upon patch. Mrs. Ricketts said that was the reason that she dried her clothes in the cellar.

"She says she can't give any more to the Children's Aid Society, and she mixes rye with their coffee. I saw her with my own eye."

"They must be dreadful hard up," said another. "She hasn't paid any missionary money this year, and she used to be president of the society. And just see how shabby she looks. She often looks blue with the cold when she wears that threadbare blanket shawl."

The villagers continued to gossip about the closeness of Mrs. Watson; but when October came 'round again she had the hundred dollars ready to purchase the coveted silver set.

The day before the visit to Topeka, Mrs. Watson was very busy. She put the house in perfect order, and then laid out all the clean clothes on the best bed ready to put on in the morning. Mr. Watson stood and watched his wife as she went about her work of getting ready for the journey on the morrow, and at last cleared his throat and said:

"Hannah, it does seem to me that you hadn't ought to get that silver set. There will be lots of suffering this winter right here in this town. John Paul told me yesterday that his hogs had the cholera, and there is no telling how soon ours—"

"Jacob," Hannah spoke in a hard voice, "I set my mind on having that silver set fifteen years ago, and I've denied myself for it ever since. I've scraped the money together at last to get it, and now I'm going to have it. I take notice when you want a corn-planter, or a patent hay-rake, or a riding plow with a canopy top, you usually get it. I have earned the money, every bit of it, to buy the silver set, and I'm going to buy it to-morrow. I guess you needn't say any more about it."

"Hannah, the case is entirely different. I have to have implements to farm with, and you do not have to have—"

"Jacob, some one is knocking at the kitchen door. Who can it be at this time of night? Wait a minute, I will go to the door, for you are nearly undressed."

After some conversation with the person at the door, Mrs. Watson closed the door with a bang and came back with a stern look on her face. Mr. Watson looked at her inquiringly, but she did not look at him.

"Well, Hannah, who was it come?"
"It was Tom Graham. Lucy's got the croup awful bad, and they can't find the doctor. Gone out in the country somewhere, and didn't leave any word where he was going."

"Hannah, did he want you to go home with him?"
"Yes, he did, but I ain't a-going a step. I ain't a hospital nurse. I gave Tom Graham the croup medicine and told him he would have to get somebody else, for I was a-going to Topeka to-morrow."

Mr. Watson for once was silenced. He began to feel worried as he thought of his wife. She must be taking one of those new-fangled nervous diseases that women have nowadays. She had for years been an authority on children's ailments, and was noted for her kindness to the sick and needy; but something was wrong with his wife. She was a changed woman. Yes, he felt sure that she had some nervous disease working on her.

The trip to Topeka was made the next day. Mrs. Watson went to every jewelry store, and some other stores where silverware was offered for sale, before she could make up her mind. Then she went back to Nicholson's and bought the first set she had looked at.

The next morning Mrs. Watson unpacked the silver set, placed each piece carefully on the table and sat down to look at it. She must be dreaming. She pinched herself to make sure. Yes, it must be true, there was the teapot, the sugar bowl, the cream pitcher and the coffeepot. She was still looking at it with sparkling eyes when Mrs. Bolly came in.

"Sold silver?" said Mrs. Bolly, in a doubtful tone.

"Are you sure?"
Mrs. Bolly was small and wizened looking, and had a wrinkled, sour face, with envy showing from every wrinkle.

"Yes, I'm sure," said Mrs. Watson. "Look at the mark on the bottom of every piece. Sterling it says, and that means solid silver. Land knows I paid enough for 'em. It just took an even hundred dollars to buy 'em."

"You don't say so," said Mrs. Bolly, in a doubtful tone. "I wonder you didn't get a water pitcher while you was getting."

"Well, I must be a-going," Mrs. Bolly put on her sunbonnet and shawl and went home; and some of Mrs. Watson's happiness went out at the door with her.

She was wrapping the white tissue paper about the teapot when Mrs. Denning came in.

"I have just heard that you had bought a solid silver set, and I came right over to see if it was so. Is it?"
"I am just all out of breath, I walked so fast."

"Yes, it is so," said Mrs. Watson, in rather a subdued tone. "Here it is on the dining-room table; I was just getting ready to put it away."

"Oh, how strange," said Mrs. Denning. The tone and the look that accompanied it sank like steel into Mrs. Watson's brain. "How much carving and what large designs?"

"Yes," said Mrs. Watson. Plenty of carving that's what I like. They asked just as much for a plain, small set with tiny little sprays of ferns on it. I wanted to get the best value I could for the money."

There was an ominous silence.

"Oh, it's real pretty, and it took lots of work to do those flowers. Yes, it's real pretty, if it is a little out of style."

"Out of style! Why, I hunted all over Topeka and I only found one set that was anything like this. I wanted this kind of a set."

"Oh, then, if you are suited I guess the rest of us can stand it. Mrs. Crowley has a new set. It's the very latest style. You know she always gets everything the very latest. It's all plain, with very little carving on it. She said it was the Colonial style, I believe. Oh, yes, she got the water pitcher too. Well, I'll have to go. Your silver set is just real pretty," Mrs. Denning said, in the polite tone one uses to conceal insincerity.

Mrs. Watson sat down and looked at her silver set very soberly. Was it old-fashioned? Was that the reason this design had been so hard to find in Topeka? No, of course it wasn't old-fashioned. Any woman in her senses would know that it was worth more than the plain kind. No, Mrs. Denning was just a little jealous, that was the reason that she had hinted so strongly that it was old-styled.

Just then her only daughter, Susan, came in with her school books and placed them rather carelessly on the table.

"Oh, my goodness!" cried Mrs. Watson, "don't you know any better than to push my silver 'round that way. You get one of them pieces scratched and you will see what will happen to you."

Susan looked frightened, for in all her life her mother had never spoken to her in that tone.

"I didn't do any harm," she said.

"No, but it's a wonder. You mustn't push silver around that way. Do you understand me?"

"Yes, mother." There was a sound of tears in the girl's voice as she replied.

From that day Mrs. Watson was afraid to allow any one to touch the silver.

"Susan, I'd just as 'leve' you'd put it in the stove and melt it up as to scratch it."

Susan trembled every time she put the sugar bowl lid on, or carried any piece to the china closet. Before the end of the week she hated the sight of the silver set.

Mrs. Watson invited some company to celebrate her

husband's birthday. The expected guests came, and the supper was excellent; but Mrs. Watson could eat little for watching her silver. The school teacher's wife praised the supper, but she did not say anything about the new silver set. Finally, Mrs. Watson said, in a kind of apologetic way, "How do you like my new silver set?"

Mrs. Green answered and said: "Excuse me, but I did not know it was new. It is such a quaint, old-fashioned pattern, that I thought that it might have belonged to your mother. One seldom sees large designs. Nearly all the new styles are very plain with little carving. Mrs. Smeltzer has been hunting for just such a pattern, and she said she couldn't find one in Kansas City. Of course, it is just a matter of taste, anyway. It is a beautiful set, if it is a little different from other people's."

"Have you heard about Lon Hickson? The doctor says that he will go blind if he don't go to New York and have an operation performed on his eyes. He has spent everything he had trying different things. His wife is so delicate she can hardly do her own work, and can't do anything to earn money."

"How much will the operation cost?" asked Mrs. Watson.

"Oh, seventy-five or a hundred dollars. I wore my old clothes last winter, and gave the money to the poor, and I know you have been doing the same thing."

"I am afraid not," said Mrs. Watson, in an embarrassed way.

"Oh, of course you won't let people know how much good you do. I've been saying, for a long time, that you had not been wearing your old bonnet and that rusty shawl for nothing. When I have heard people criticize you for being so close, I just up and told them that I knew you better than they did, and that if you hadn't been giving so much publicly as usual, you had been giving privately. I was sure. No, we can't raise seventy-five dollars. I am afraid that Lon Hickson will have to lose his sight, and then the family will have to go to the poorhouse. I can't bear to think of it."

"Can't the church raise the money? Lon is a member in good standing."

"No, Mrs. Rogers only gave fifty cents to our collection on Thanksgiving day, after we had made a special plea and told just what the money was to be used for. The very next week she went to Topeka and bought a new parlor set and an organ for Lucy. I couldn't sleep if I had done such a thing. I have always said there was nothing like having a clear conscience. Now, Mrs. Watson, don't you look so cast down. You always were so sympathetic."

It was three weeks afterward that Mr. Watson missed the silver set.

"Why, Hannah, where's your silver set at? I haven't heard you say anything about it for a week. You surely haven't got tired of it already, after wanting it so many years."

"No, John, but I let Mrs. Smeltzer have it. It was just the pattern she wanted, and she paid me more than I gave for it. I gave Lon Hickson a hundred dollars to go to New York and have the operation performed on his eyes. He started Tuesday morning, and is in New York by this time. I am going to buy some new things for myself and Susan with the other twenty-five dollars."

"Well, I never!" Mr. Watson came near his wife and looked at her. "Well, I never! Why, Hannah, you are your old self again. It seems for a year or two you have hardly been yourself. It made me feel so bad to see you have so little sympathy for the poor and sick. I just think some new disease has been working on you."

"Yes, I think so, too." She looked up with a cheery smile and said: "I guess I've had the silver craze."—[B. C. Estes (National Magazine).]

My Creed.

I hold that Christian grace abounds,
Where charity is seen; that when
We climb to heaven, 'tis on the rounds
Of love to men.

I hold all else, named piety,
A selfish scheme, a vain pretence;
Where center is not, can there be
Circumference?

This I moreover hold and dare
Affirm where'er my rhyme may go:
Whatever things be sweet or fair,
Love makes them so.

Whether it be the sickle's rush,
Through wheat fields, or the fall of showers,
Or by some cabin door a bush
Of rugged flowers.

'Tis not the wide phylactery,
Nor stubborn fast, nor stated prayers,
That makes us saints; we judge the tree
By what it bears.

And when a man can live apart
From works, on theologic trust,
I know the blood about his heart
Is dry as dust.

—Alice Cary.

THE QUIET HOUR.

"What Hast Thou in the House?"

"Never fret yourself to do
More than lies within your power
Let your work be always true.
Steady, patient, hour by hour
It is better far to build
Good foundations, slow and sure,
Than to rear in haste unskilled
Towers, whose strength is insecure."

Some one remarked to me the other day: "I should like to be very rich, for then I could do a great deal of good." I suppose we all understand that wish—it is so pleasant to think of being able to give a great deal of pleasure to others without much trouble to ourselves—but that was not God's way of helping the world. If our object in life is to serve Him faithfully, then it would be as well to remember that all the riches of the world are His, and He could easily make everybody rich if that would be good for them. If He has not given wealth to you, then it is very plain that you can do more good without it—can do more real, lasting good to your neighbors, as well as more acceptable service to Him. When a poor woman once came to Elisha for help, the Prophet did not give her money, but said to her: "What hast thou in the house?" Her house was very bare and empty, for she had nothing but a pot of oil, but that was enough for her needs—with God's help. What have you in the house? What means of doing good?

When the disciples were told to feed thousands of hungry people, their resources seemed very small—they had only five loaves and a few fishes—but with God's help it could be done.

When Moses was sent out to free Israel from the bondage of the Egyptians, he was not equipped with new weapons for the new work. "What is that in thine hand?" the Lord asked him, and his answer was "a rod." That rod, probably a stick he used in his work as a shepherd, was all he needed. God could use it to work miracles with as well as anything else.

David found the sling he carried in his hand quite weapon enough for his battle with Goliath. Shamgar had nothing better to fight with than an ox goad, yet he slew with it six hundred Philistines. Samson was in need of a weapon, so he looked round and "found a new jawbone of an ass, and put forth his hand and took it, and slew a thousand men therewith."

It is said that when Faraday, the celebrated English chemist, wrote to Sir Humphrey Davy, asking for employment, he was set to work washing bottles, as a test. "If he is good for anything he will do it directly; if he refuses, he is good for nothing," was the remark made about the matter. How do you know that God is not testing you to see if you consider any honest work beneath you? If Joseph had not served God and his master faithfully when he was a slave, he would never have been fit to rule over Egypt. David was chosen to be king because he was a faithful shepherd. Our Lord has promised that each servant who has been faithful over a few things shall be made ruler over many things.

Are we faithfully making use of our opportunities of doing good now, or are we only pleasing ourselves with the thought of what we should do if we were only rich? It is quite possible for anyone to imagine the pleasure of being able to give a hundred dollars in charity, and at the same time to refuse to give the dollar he could afford.

"What hast thou in the house?" Some opportunity of doing good to someone, surely. Why, even Robinson Crusoe on his desert island had man Friday to minister to. You have at hand the means of doing all the work God wants you to do to-day, although you may not have a chance to do anything the world may admire. Still, the opportunity for heroic action may arrive any minute. The Buffalo Express, speaking of the recent floods in the Southern States, says: "If the floods did not give the country at large cause to show its generosity, plenty of opportunity was afforded for individual heroism. Men who had themselves escaped from danger, procured boats and labored for hours in rescuing imperiled persons. The hero seems always to be at hand when needed. He comes from every calling and risks his life without a thought. One day an unimpressive, bald-headed clerk or tradesman or bookkeeper, the next a hero by virtue of battling in angry waters for the safety of some fellow creature. It is one of the marvels of life, this transformation, and something that speaks well for the human race in spite of all its weaknesses and follies."

But is it a transformation? The man who reveals his heroism to-day was really a hero yesterday. The world did not know it, he probably did not know it himself, but certainly God knew it.

When the Master gives only one talent He expects good use to be made of that one. If He expects us to have ten they could easily have

been given; but if we are wasting even the one we have, how much worse it would have been if we had been trusted with more. How true it is that—

"The highest duties of life are found
Lying upon the lowest ground,
In hidden and unnoticed ways,
In household works, on common days."

HOPE.

THE CHILDREN'S CORNER

A Change of Work.

"Oh, dear!" sighed Winnie, as she sat peeling potatoes under a lilac bush in the yard. "I wish I didn't have to work so hard. Mother says she likes me to be as busy and happy as a bee, but I am sure those bees flying about in the sunshine wouldn't be very happy if they had to peel a lot of dirty old potatoes. I could enjoy work too if I only had to fly about and play hide-and-seek in the flowers. Gathering honey isn't very hard work, is it, Mrs. Bee?"

The bee she addressed was poking her head into a flower, but she drew it out in a hurry and exclaimed, in a queer, buzzing voice that sounded like a baby threshing machine, "Would you like to try it for a time, my dear?"

Winnie was so surprised that she dropped the pan of potatoes and sprang to her feet. "Oh, I do wish I could!" she said, "I am so tired of this kind of work; and then I have hardly a moment to myself, for I have to mind baby for hours every day."

The bee flew up and held out a bit of lilac blossom, on which was lying a drop of honey. Winnie put it into her mouth, for she had often read "Alice in Wonderland," and felt sure something would happen as soon as she had eaten it. And something did happen. She suddenly found herself flying about the bushes, with a lot of other bees, and it certainly seemed very pleasant.

"Buzz! buzz! hurry up! fill your pockets with gold dust!" said Mrs. Bee, working away to make up for lost time. The pockets, which were fastened to the bees' hind legs, were soon filled with the yellow pollen from the flowers, and off they flew with their "gold dust" to the hive. It was a long way, and Winnie's wings ached long before she reached it, but the bees in the hive crowded round her and the other travellers, using the tiny brushes on their front legs to take away the heavy loads of pollen they carried. Winnie soon found that there was a great deal of work to do in a bee city. Instead of one baby to mind, the busy maiden aunts had thousands of hungry mouths to fill. The queen mother never had time to look after her own children. You would think a hen was busy if she laid a hundred eggs a day, but the queen bee thought nothing of a thousand a day. The clever sculptor bees made neat little wax rooms as fast as they could. The queen would poke her head in at each doorway to see that the nursery was in proper order, and then put an egg inside. Winnie and several other bees followed her and fastened up the doors. In a few days there was a hungry baby grub in each room. It would never do to feed them altogether on candy,

so the busy nurses made bee-bread with the pollen which had been carefully packed in the store-rooms of the hive. A little pill or pellet made of bee-bread and honey was dropped into every room of the big nursery. Not one baby was overlooked among all the thousands which had to be fed every day. They did not cry to attract attention, but the nurses followed each other and peeped into every room as they passed, to make sure that no one was forgotten. Sometimes Winnie was set to work to help in ventilating the hive, for bees believe in having plenty of fresh air in their houses. Some stood with their faces to the entrance, while others placed themselves back to back with them, and backwards and forwards went all the wings like living fans. This was very tiring work, as it had to be kept up day and night when the weather was hot. But Winnie was never forced to work too long at a time, for a fresh batch of bees soon relieved guard. Before long the babies began to show that they too were "busy" bees—although they certainly did not look like bees. Each one made a nice silk dress for itself, as if it intended to go to a party, but as soon as a nurse discovered what the child was doing she fastened a wax lid on its little cell, and there it had to stay until it turned into a perfect bee and was able to bite its way out. Although all were children of the queen, they could not all grow up to be queens, but a few were fed on "royal jelly," and taken special care of. The young queens were not allowed to bite their way out like the others, but were fed with honey through little slits in the doors of their rooms. Winnie found that even after they were allowed to leave these cells the princesses were carefully watched by the nurses, who bit them and pulled them back if they tried to visit their sisters in the nursery. The old queen seemed to hate these royal children, although they were her own daughters. Indeed, she would gladly have killed them if the maiden aunts had not prevented such murder.

The hive grew more and more crowded, so one day a swarm, headed by a queen, went out to seek a new home. Winnie slipped out with them, but flew away by herself to the lilac bush, and was surprised to see the pan of potatoes still lying under it.

"Oh, dear!" she buzzed, "I am so tired of living in a rush and a flurry. I do wish I could be a little girl again."

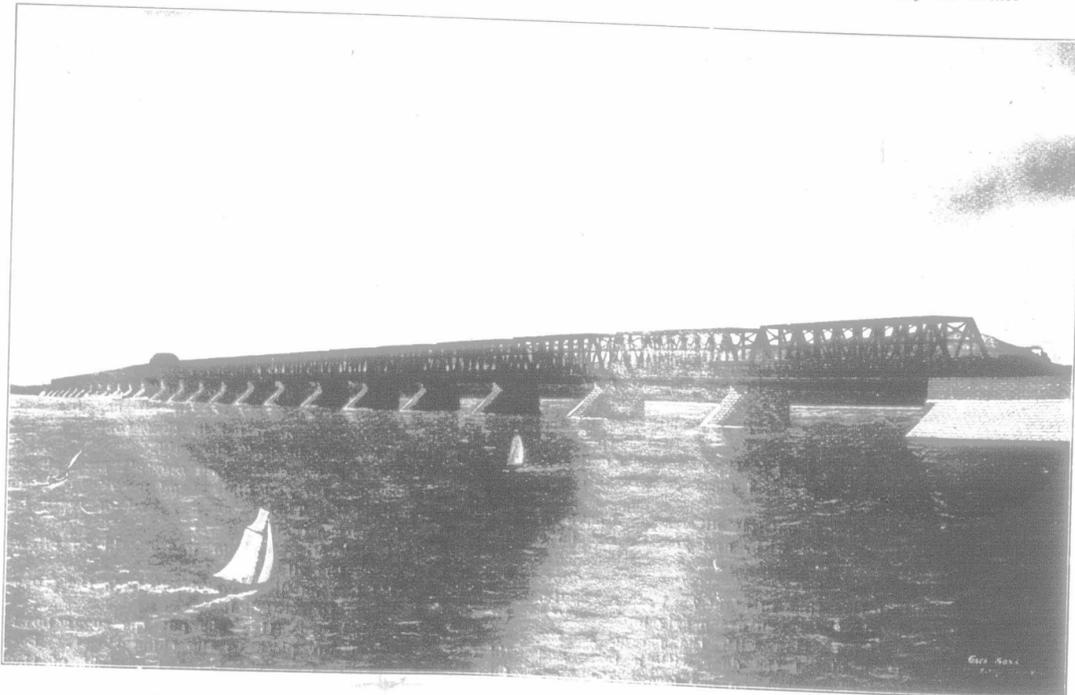
"Winnie, Winnie, haven't you finished peeling those potatoes yet? Hurry! dear, it's time they were put on to boil for dinner."

The voice came from the kitchen, and Winnie jumped up from the grass, rubbing her eyes and wondering whether she could have been dreaming, or whether her strange adventure had really happened.

COUSIN DOROTHY.

There are cheerful hearts and lives that are glad,
Which wake to a day of praise;
There are those whose hearts for a weary while
Have long forgotten the joy and smile
Of life's sunny days.
Let those who gather the joys of life
So easily day by day
Remember the lives which grieve and are sad,
And, remembering, strive to make them glad,
And brighten life's sombre gray.

—Mary D. Brine.



VICTORIA BRIDGE, MONTREAL, CANADA. GRAND TRUNK RAILWAY SYSTEM.

Jottings from the Isles of Scilly.

NO. II.

I am afraid that No. I. of my little Scilly series was rather dull reading, but I could hardly expect to make my personal experiences understandable without some such an introduction by way of a background.

It was on a bright day about the middle of April that I left sunny Teignmouth for Penzance, from which place I was to take the small steamer for St. Mary's, Scilly. As the train passed rapidly by from station to station until Devonshire was left behind, my eye was attracted by streaks of pale gold, dots of purple, and bits of blue and white, sometimes continuously, sometimes intermittently, trying to run races with us as we flew by. Of course I knew they must be myriads of pale primroses, of deep blue violets, star-eyed daisies, and a wealth of other beautiful wild flowers, but not until we began the usual Cornwall crawl, a leisurely pace the train seems always to fall into when it enters the last county in England, could I begin to see just what name to give those lovely flashes of color which lined the hedgerows and clambered up and down the steep banks which sentinelled the route between tunnel and tunnel. The thought crossed me as we kept emerging from darkness into light and beauty, that so it really was with us in life, if only we would let our eyes see it and our sad hearts acknowledge it, that out of dark hours of gloom and despair we could surely find some of the glorious compensations which are certain to await us when once more we come back to the blessed sunshine which is of the Father's own bestowing.

It was quite night by the time I found myself settled into snug quarters at the modest little hostelry I had chosen, alike close to the station and point of departure on the morrow. On the pier a pleasant experience awaited me. A cheery young voice greeted me, "How do you do, Mrs. B.?" I am having a holiday at Marazion, and thought I would run over and see you safely on board the Lyonesse for Scilly. Oh! don't I wish I were coming too?" Now, was not that nice? and from a friend—for I shall never again call Mrs. L. a mere acquaintance—whom I had met, with her husband, upon the Cotswold hills about which I told you some months ago, the hero and heroine, in fact, of the delinquent automobile which had come to grief, as automobiles will, upon one of the crankiest of the hills upon the Cotswold range, forcing them to shelter awhile in the hotel at Birdlip, from which my Gloucestershire letters were dated. A bad passage had been predicted, but except for an occasional "skurry" of rain and wind there was nothing to complain of, unless by those unfortunates who would succumb to seasickness in a flat-bottomed punt upon an artificial lake. I had yet to see what bold Boreas could do with a merry little sailing yacht amongst the Islands of Lyonesse. As we backed out from the pier we took in the full sweep of the bay from Marazion and St. Michael's Mount to Newlyn, a quaint little fishing village on the Cornish coast, and to the picturesque village called from some traditional story, "Mousehole." If you are wise you will call it "Muzzel," and utterly ignore the tell-tale spelling thereof. Just beyond it we passed Point Spaniard, from which a Spanish force had once descended upon Mousehole, the Cornishmen thereof having made a stout but ineffectual defence against surprise and numbers. The whole of the coast stands out somewhat grimly, indented with caves and fissures and scarred by quarries. On one stately cliff stands the far-famed Logan Stone, and near by it, in Porth Curnow Bay, the Eastern Telegraph cables come ashore. Before the Lyonesse stood off the shore and made direct for Scilly, the outlines of the Land's End were clearly seen, and the doleful tolling of the bell-buoy off the Runnel Stone, heard by those who knew how to recognize the sound. We could distinctly see the Longships and the Wolf light-houses, the latter being considered exactly half way to the Islands. Here there were far more signs of sea-traffic than we had observed nearer the coast; fleets of fishing boats with dark sails flowing, and here and there the smoke from a steamer homeward or outward bound. I think, perhaps, the first sight of Scilly is a little disappointing, the Islands from a distance not impressing one with the sense of height and grandeur conveyed by a closer view of the bold granite rocks which mount guard over even the very smallest of them.

The guidebook claims that the short voyage of about three hours from Penzance to Scilly transports one from prosaic Britain to a sub-tropical land, and avows that whilst the Scilly Isles can offer a climate equal to any upon the shores of the Mediterranean, there is no need for invalids to undertake the fatiguing and expensive journey to Mentone, or other spots of similar temperature. Taking this with just a tiny grain of salt, I am willing to endorse the assertion, acknowledging, however, that I am no authority, for I have not been to Mentone, and

am willing to believe that there one finds perpetual sunshine, and never needs the comfort of a fire. Now in Scilly, after each day's tramp, I like nothing better than to sit with my feet upon my fender, and, looking into the glowing coals, think over my adventures and plan how much of them I may tell and how much I must leave out when the time comes for me to send my little contribution to the limited space allotted to the "Spindle Side" of the "Farmer's Advocate."

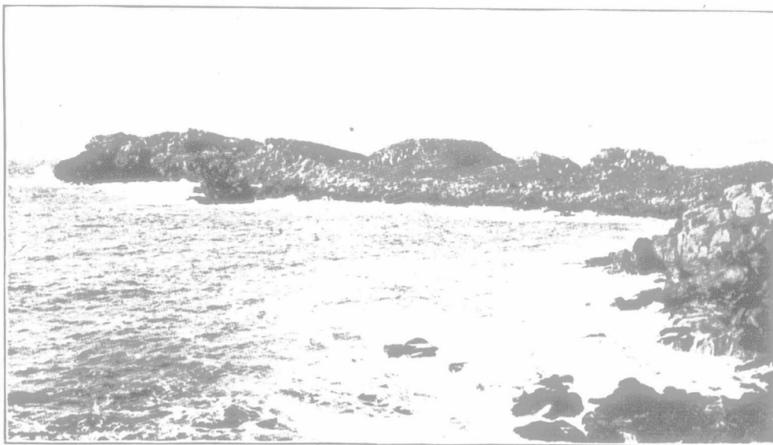
"Am I too late for the flowers?" was my first question. "Well, yes, to see them in their



FLOWER CULTURE IN SCILLY.

full beauty you are, but many remain to give you a very fair idea of what Scilly can produce for the early flower markets of Great Britain." I found flower farms, flower gardens, flower fields, flower corners, flower yards, everywhere; the Island of St. Mary's looking to me almost like a checker-board, every available space being divided into squares, bordered and hedged in by growing flowering walls to protect the precious blossoms; the narcissus, the jonquils, the lilies, the daffodils, all in bewildering but beautiful varieties. Everyone with a yard of land grows flowers in Scilly, not only lilies, but wallflowers, stocks, marguerites, etc., whilst over the cottage walls climb fuchsias and geraniums, right up to and sometimes over the thatched roofs surmounting them. I will not attempt to offer botanic names, but amongst the flowering shrubs which fenced in and protected these tiny garden squares were the laurel, the laurestina, and what looked like myriads of marguerites growing upon shrubs so strong and stout and thick that the strongest man could not force a passage through them.

Now, flower culture has become a science, and glass-houses and scientific appliances further its success amongst the wealthier Scillonians, but in its earlier stages nature was left to work single-handed, and such a happy-go-lucky plan naturally often lead to disappointment. I am sending some illustrations, in the hope that our editor may be indulgent enough to spare from time to time a corner for them. If he does you will agree with me that the grim rocks which barricade the shores, the tropical growths of the wonderful gardens of Tresco Abbey, and the



SHIPMAN'S HEAD, SCILLY ISLANDS.

flower miracles worked on its behalf by man's skill and heaven's bestowings thereupon, all give proof that the Archipelago of Scilly is not only a land of wonders and surprises, of folk-lore and true history, but a land of vivid contrasts too. If you are fond of such, and would like to see the world you live in under new aspects and varied conditions, try to leave at least a week for Scilly when next you visit the motherland.

H. A. B.

Travelling Notes.

My notes this time will be just a letter from my Cousin Eleanor, the lady doctor of whom I wrote in my last. I do not think that anything I could say can add to the interest which her experiences, told in chatty form by herself, will, I hope, have for the readers of our Home Magazine. Eleanor thus writes from her boarding-house in Madrid:

"My dear Mollie,—There is such an awful lot to tell, I really do not know where to begin, and there is such a hubbub it is impossible to collect one's thoughts. We have had a very good time so far, and have not lacked excitement, both as concerning baggage and passengers. My last letter was written from Biarritz. We were up on the morning of leaving Biarritz a little after eight, and then after having our rolls and coffee we left for the station, taking an earlier train than we intended, so that we might make sure of better positions in the train at Irun (the frontier town). The country around Biarritz is beautiful: grassy slopes, with all kinds of English trees, many overgrown with ivy. Wild flowers of various kinds abound the country, so rich in lovely streams. We reached Irun about 11.30, and here we had to exchange our English for Spanish money, and put both French and English away. The mountains surround Irun, and remind one very much of the little Italian scenery I have seen at Genoa. Here we first met the Spanish with their mantillas, patched, vari-colored breeches and stolid manners. We had to have our luggage examined; fortunately mine did not take long. A fellow passenger had kindly carried in the dress basket for me. Mrs. M., Mrs. H. and I took a little walk before lunch, and almost witnessed a Spanish bridal. There was a double line of girls and boys standing outside a cottage, and the road around was strewn with green leaves, apparently awaiting the completion of the wedding ceremony, but all the same they were deeply interested in us. When we returned to lunch we found the large dining saloon packed with people of all nations, the noise and excitement intense, and the fun fast and furious. We had a desperate struggle for seats. The confusion was dreadful, as we only had twenty-five minutes before the train started.

The scenery as we ascended the Pyrenees was very fine. The sides of the hills were overgrown with fruit trees in the orchards, all just coming into blossom. In the valleys were crops growing, beautiful streams with waterfalls, and old stone bridges. At one spot we saw the women washing their clothes on the stones in the flowing stream. As we climbed higher up the mountains the air became colder, and snow was seen in patches on the hilltops. Some of the glimpses down the valleys were very fine indeed. What struck one most as we passed through the country was the abundance of priests and churches. The smallest township, of not more than a dozen houses, always had its church of considerable pretension, and sometimes as many as eight could be seen within a short distance of each other. The houses in the country looked very old and poor, mostly two-storied, and had precious little glass in the windows. We had a much better night in the train on this occasion. The carriages were very comfortable, nicely padded, with double racks, curious little windows looking into the adjoining carriages, and fitted up with electric lights. We awoke early the next morning to find ourselves pretty high up in the Sierra Nevada, very rocky, poorly vegetated mountains that show in parts the action of glaciers and the ice ages. We had to leave the train at 6.30, so after a hasty wash, we put our traps to ether. Del Escorial is a curious old town. Philip II. chose it as a summer residence for the Spanish kings, and the houses grew up around it. It is on the side of a hill. Its streets are cobblestoned, and the noise of the traps as they roll over them is deafening, but there is a look of solidity about all the buildings, which are placed very irregularly. The gardens were resplendent in wisteria, laburnum, purple irises, and lovely avenues of chestnuts. The monastery is the chief attraction, for here, in the crypts, still lie many Spanish kings. We had a guide to take us over the immense building, in which are lovely tapestries, fine paintings and old curios. The

cathedral is a fine structure, much after the style of St. Paul's in London. We had coffee and rolls at the hotel, also lunch. The coffee was made with goats' milk, the rolls were sour, and the butter, also made from goats' milk, was like sour cheese. I rose more hungry from a meal than I had ever done before. Lunch was an improvement. Spanish lunch seems invariably to begin with an omelette. This is followed by several meat courses, sometimes one being the flesh of kid, and always there is hot poultry, with a salad, a pudding, and cheese to follow. Wine of a particular kind is free of charge. In the afternoon we visited, on our way to the station, a country house of the princes. The rooms were small, and overcrowded with beauty; the ceilings were painted, the walls were covered with pictures or tapestries, or most lovely embroidery; even the chairs and tables were decorated, while the walls of the passages and the rails of the staircase were of marble.

"The country to Madrid from Del Escorial is rather uninteresting. When we arrived at Madrid there was a division of our party at the station. Five went to the hotel, the rest came in omnibuses to our quarters, which are quite 2½ miles from the station. We thought we were never going to arrive. When we did, we had the luxury of a good wash. I have a very nice, comfortable bedroom. Everything is beautifully clean, but there is an appearance in the place as if it has been rigged up temporarily, and such is the case with many of the rooms. However, we are very comfortable, and if the waiting at table is slow and the meals are not quite regular, they are good, and there is plenty to eat. I was hearing to-day that enormous prices are being asked during the congress for lodgings; a miserable room and board, with no great comforts, is realizing £20 for eight days. This day has practically been wasted as far as sight-seeing goes, for we have been hunting round for our invitations and tickets for the congress. It has been a lively time. We went to the bureau, which is only five minutes' walk from here, the first thing this morning. There we found all the Spanish getting prompt attention, but the foreigners could find nobody to give them their tickets or attend to their affairs. After waiting for a considerable time, I went off with two doctors to see if I could find Dr. Greatrex, my friend of Biarritz. Fortunately, he was in his hotel, and was then just going out with his wife. He said he would do what he could for me, and arranged that I was to come back to hear what he had to tell at two o'clock. Meanwhile, a little doctor and I went off to the Faculty of Medicine, and getting no satisfaction there, returned to the bureau, where we found Dr. Greatrex again, to learn that he could not find his friend, and was exhausted with the search. At last I did get somebody to listen to me. A boy who could speak English was told off, and he informed me that my name and subscription had never been received from the Australian Secretary. However, after showing my card, etc., I was given my credential of identity. We had to present our cards of identity this afternoon, and it was the worst managed crowd I was ever in. The struggling and pushing was dreadful; great big men came out with perspiration rolling off their faces. I gave up trying till the crowd began to thin, and then found myself quite in the upper circle of the medical world, for I had Sir William Broadbent, Dr. D'Arcy Power and other big guns, all of whom were good to me. Dr. D'Arcy Power greeted me with a cheery laugh, and said, 'So you got here.' They say there are nearly 7,000 doctors assembled here in Madrid for the congress. I begin to doubt if it will be of much benefit to me after all, as the Spaniards have so mismanaged everything, but 'hope on, hope ever,' is a good motto, and, anyway, it has so far been a novel and interesting experience, and I am thoroughly enjoying it. ELEANOR."

Surely a gathering of 7,000 doctors must leave its impress upon this generation. It cannot be possible but that to Eleanor its result must not only be full of interest, but also of much profit. May it repay her for her long journey from Australia. MOLLIE.

A New Motto.

Senator Quay, while dining at a country hotel, noticed among the signs on the wall one reading, "Ici on parle Français." The Senator was somewhat amused and surprised, because the necessity of being able to speak French in that particular section of rural Pennsylvania had never before appealed to him. Therefore, he called the proprietor to him, and said, "Do you speak French?"

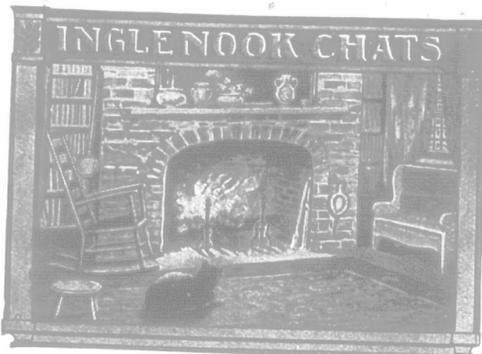
"Not much," was the answer. "United States will do for me."

"Then why do you have that sign stuck up here? It means that French is spoken here."

"Ye don't say so?" replied the astonished publican.

"I'll be hanged if I didn't buy that from a young fellow who told me that it meant 'God bless our country'!"

—The Home Companion.



July! Can it be possible that it is July again! Can it be possible that the days are once more shortening toward the death of summer! Melancholy as the fact is, it is one that must be admitted, and since there's no use of grumbling about it, we are obliged to make wisdom the better part and be glad; first, as the old-time preacher used to say, that we have a part of the summer left; secondly, that, for the most part, we have had such a good sort of summer weather so far. Wasn't it dreadful last year? And didn't it seem as if something must have gone wrong with the whole universe? And, now that we have got back to the old-fashioned species of sunshine and shower again, I hope we are contriving to keep interested during every minute of it.

You'll be thinking I am a regular "crank" on this matter of keeping interested. Well, so I am. I have found out that nothing can keep me happy as well as being thoroughly interested all the time. Hence, having discovered so good a thing, I feel like proclaiming it from Dan to Beersheba, shouting it from the housetops—Goodness! I'm forgetting again—I mean that I feel like telling it, in a very stately and impressive fashion, from the arm-chair of the Ingle Nook.

So, in this matter of being interested in all we see, hear and do,—but let us stop at the seeing. How many of you are noticing the wild flowers during these glorious, bright summer days? The Cardinal flowers and blue Lobelias will be out now along the creeks, I am sure; and by the lakes, the white pond-lilies, the wild roses and feathery Meadow Rue. How I long to get out to see them, and all the other jewels of field and forest. But—it's the down truth—I haven't had time to "get off," even for a day, so far. There, it is out. You see, even the Ingle Nook isn't a corner of leisure. But never mind, the summer isn't over yet, and there are golden days still.

However, I have had time to poke about in the fields near home, and there are a thousand and one things there also. Have you noticed how many of the composite flowers are in bloom now?—daisy, fleabane, thistle, belated dandelions, ox-eye daisies, cone-flowers and many others. Very pretty the most of them are, too, when you look into them, but likely to be troublesome if not guarded against when they creep into meadow lands. Just take time some day to pull one of them apart, an ox-eye daisy for example. You will find that it is composed of a circle of white rays enclosing a dense head of tiny yellow florets. Pick these apart with a needle, and you will discover that each one is in itself a flower, which will bear a seed at its base. Hence, what appeared to be one large flower is, in reality, a head formed of hundreds of tiny flowers, each perfect as a seed-producer. This is a characteristic of the whole family Compositæ, which, as will be readily seen, is a tribe most admirably fitted for spreading itself and fighting its way against less aggressive inhabitants of the field. In fact, the greater number of its species need watching. Burdock is one of this kin; also, tansy and the ragweed, "Ambrosia" of the botany books, to whose name Burroughs takes exception. He doubts if the billy-goats would eat it, much less the gods.

All the species, however, are not mischievous. We would be very sorry to do without the asters that brighten the marshes in autumn, or the golden-rod, whose depredations seem trifling compared with the pleasure of seeing its blaze of color running in lines along the fence-corners, or massing itself on fallow or woodside, golden, as though it were trying to grasp all the sunshine of the fading summer and hold on to it just as long as it could. . . . I find Blazing Star, also, mentioned as an especially beautiful member of the family. I have never seen it. I do not think it grows around here. I should be glad if some one would send me just one specimen, pressed.

What a pity that some person who knows all about it does not write us a practical book on botany, one suitable as a handbook for the farming world, and interesting enough to be used in rural schools. It would seem that every farmer and gardener ought to know something of botany, both for its utility and for its interest. Of course, there are many fine books on farming and gardening, but these, as a rule, only deal with the culture of plants and the destruction of in-

sects and weeds. . . . Quite enough, one would say. And in a flatly practical way it is enough. . . . But there is something more than just that. One would wish to know something of the wonderful structure of plants, too, even of the commonest weed; something of the great divisions and subdivisions of the vegetable world; something of the great system of order and economy that reigns even in the unnoticed green covering of our door-yards.

Moreover, with such a book, we might escape many blunders which we commit through ignorance. I remember very well when the first round-leaved mallow appeared in our garden. Would it had been the last; but, alas! thereto hangs a tale of woe! I knew all about that mallow! Hadn't I studied all about it at the collegiate? And couldn't I sum it all up in a pretty little rhyme: "Order, Malvaceæ; genus, Malva; species, Malva Rotundifolia!" Oh, yes! And it was such a pretty little plant, with dainty little blossoms hiding down among the green leaves, and the cutest little seed-cases! But I did not know, by the way, that that same dear little mallow was one of the most aggressive little monsters that ever polluted a garden, casting its seed in the greatest profusion, sending up shoots from the most infinitesimal portion of root left in the ground. Hence, the little plant nestling in the border was allowed to live in peace. But, and hereto comes the tale. It is short, if not sweet. Before very long we simply had to abandon the garden to that innocent-looking mallow, and start a new one. I have since heard of several other people who had to do the very same thing on account of it.

It reminds one of the "pusley" of which Mr. Charles Dudley Warner tells in his humorous "My Summer in a Garden." The unequal combat between Mr. Warner and pusley was so long and fierce that the poor man became seized with an utter horror of even writing the word. To obviate the difficulty, he took to abridging it, and writing it first "p—s—y," then, finally, "p—y." Mr. Warner has my sympathy. I thank him for the suggestion, and breathe a sigh of relief as I bid good-bye to m—w.

With infinitely more regret do I bid adieu for this time to the members of the Ingle Nook.

DAME DURDEN.

Domestic Economy.

SNOWBALL PUDDING.

Boil a quart of milk; thicken with three tablespoonfuls of cornstarch. Beat the yolks of four eggs with half a cupful of sugar, and add to the milk; pour into a pudding dish and set in the oven to bake for ten minutes. Beat the whites of the eggs until stiff, with four tablespoonfuls of sugar; add half a teacup of boiled rice; flavor with extract of lemon, and drop in little balls over the pudding; set in the oven until a slight crust is formed, but do not let color.

JAM PUDDING.

Chop three tablespoonfuls of beef suet fine; add half a pound of sifted flour and a pinch of salt; mix with cold water to make stiff dough; roll out an inch thick on a well-floured bread-board; spread thickly with blackberry or currant jam; roll up in a well-floured cloth, and steam for two hours and a half. Serve with foaming sauce.

TAPIOCA PUDDING.

Wash a teacup of tapioca through several waters, and put to soak for half an hour; pour over a quart of milk and let stand on the back of the range until warm; add a teacup of sugar, a tablespoonful of butter, and four well-beaten eggs; flavor to taste; turn into a pudding dish, and set in a hot oven to bake for three-quarters of an hour. Serve hot or cold.

SOUTHERN BREAD PUDDING.

Put a coffee-cupful of grated stale bread-crumbs into a bowl. Beat five eggs with half a cupful of sugar and three tablespoonfuls of rice flour together; add them to a quart of milk; pour over the bread-crumbs; flavor with a little nutmeg; pour into a greased mould, cover securely; put into a kettle of boiling water, and let boil one hour. Serve with lemon sauce.

LAUNDERING LACE CURTAINS.

When the lace curtains need laundering, take them down and shake them, to remove the dust. Heat the water until it is as hot as you can bear your hands in, dissolve a little borax in it, and enough good soap to make a strong suds. Put the curtains in it, let them soak ten or fifteen minutes, then wash with as little rubbing as possible to get them clean. Rinse through two clear waters and dip in very thin boiled starch, which should be slightly blue if you wish them to be a clean white. If an ecru tint is desired, add a little clean coffee. Saffron tea gives them a creamy tint. Do not hang them on the line to dry. Spread two or three sheets on a floor that is not used for anything, holding them in place by pinning them to the carpet. Spread the curtains on the sheets, smoothing them smoothly, and pinning each end in place. Open the windows so they will dry quickly. They will not need ironing.

MARKETS.

Toronto Markets.

There was a very light run at the Western Cattle Market. The quality not very good. Chicago market down 10c. per cwt. Old Country markets off one-half cent per pound. Very few stall-fed cattle, and grass cattle not very good quality.

Export Cattle.—The quality of offerings not choice. The demand good for best quality. Choice loads of export cattle sold at \$5.00 to \$5.25; good, \$4.85 to \$5.00.

Mr. W. Levack had six carloads of export cattle from Chicago at the Union Stock-yards, West Toronto Junction.

Butchers' Cattle.—Best quality of butchers' cattle sold at firm advanced price over recent quotations. Picked loads, stall-fed, \$4.60 to \$4.90; one very choice load reached \$5.00; best butchers', \$4.50 to \$4.65; medium to fair, \$4.10 to \$4.40; butchers' cows, slow, \$2.50 to \$3.75.

Mr. S. H. Reynolds, of Bowmanville, purchased two carloads of butchers' cattle at from \$3.25 to \$4.50.

Bulls.—Export bulls, \$3.75 to \$4.15. Feeders.—Very few on offer, only a small demand at from \$3.00 to \$4.60; best quality feeders, 1,100 to 1,250 lbs. are worth \$4.75.

Stockers.—This trade is quite at a standstill. No demand, and quotations are nominal at \$2.75 to \$4.00.

Sheep.—Trade dull; prices easier. Export sheep are from 10c. to 20c. lower, at from \$2.75 to \$3.70 per cwt. Best butchers' sheep are dull and unchanged at \$2.50 to \$3.50.

Lambs.—There is a good demand from butchers for choice spring lambs at from \$2.50 to \$4.50 per head.

Calves.—Trade steady and demand easy at prices a little firmer, at from \$2.00 to \$8.00 per head, or from \$3.50 to \$5.25 per cwt.

Hogs.—The run about 500 to-day, and wanted, but the price declined 10c. per cwt. To reach top price they must not exceed 200 lbs., live weight, off cars, not fed or watered, and not below 150 lbs., or they are culled as too light. Most of the hogs coming forward are too heavy, over 200 lbs. This is due to the fact that farmers are trying to beat the market, and are culled at \$5.40 per cwt. Best choice singers, right sort, \$5.50; market weak.

PRODUCE MARKET.

Wheat.—One hundred bushels sold in Toronto at 76c. The following quotations are from the Board of Trade reports. Manitoba first patents are \$4.10 to \$4.20; second, \$3.00 to \$4.00, bags included, on tracks, Toronto. Ninety per cent. patents in buyers' bags, east or middle freights, \$2.65.

Manitoba bran, in sacks, at \$18.00 per ton. Barley.—No. 3 extra, 44c. to 45c., and No. 2 at 42c. for export, in Toronto at 44c. per bushel.

Oats are quoted at 31c. north, and 34c. at Toronto. In Toronto, 200 bushels sold at 36c. per bushel.

Bran.—City mills sell bran at \$16.00 to \$17.00 per ton, and shorts at \$18.00, car lots, f. o. b. Toronto.

Hay.—Slightly firmer, as farmers are busy with the new crop. Only five loads on offer, at from \$14.00 to \$15.00 per ton.

Straw.—Scarce and wanted. Two loads on offer at \$8.00 per ton.

Hides and Wool.—No. 1, inspected steers, 8½c. per lb.; No. 1 hides, 8c. per lb.; calfskins, 9c. per lb.; sheepskins, 90c. each; lambskins, 30c. each; wool, fleece, 15c. per lb.; wool, unwashed, 9c. per lb. There is a brisk demand for export wool.

Dressed Beef.—Beef, for quarters, \$5.50 per cwt.; beef, hind quarters, \$9.50 per cwt.; mutton, \$8.00 per cwt.; spring lambs, \$4.50 each; spring lambs, \$12.50 per cwt.; veal carcass, \$9.00 per cwt.; dressed hogs, \$8.25 per cwt.

Poultry.—There is a good demand for choice stock; chickens, \$1.25 per pair; spring chickens, \$1.00 per pair; spring ducks, \$1.50 per pair; turkeys, 15c. per lb.

Chicago Markets.

Chicago, July 14.—Cattle—Prime steers, \$5 to \$5.50; poor to medium, \$4 to \$4.90; stockers and feeders, \$2.50 to \$4.50; cows, \$1.50 to \$4.25; heifers, \$2.25 to \$5; canners, \$1.50 to \$2.75; bulls, \$2.25 to \$4.35; calves, \$2.50 to \$6.

Hogs.—Mixed and butchers', \$5.15 to \$5.40; good to choice heavy, \$5.25 to \$5.35; rough heavy, \$4.90 to \$5.15; light, \$5.40 to \$5.65; bulk of sales, \$5.25 to \$5.30.

Sheep.—Good to choice wethers, \$3.75 to \$4; fair to choice mixed, \$3 to \$3.50; native lambs, \$3 to \$6.50.

Buffalo Markets.

East Buffalo, July 14.—Prime and shipping steers, \$4.90 to \$5.40; butchers' steers, \$4.25 to \$4.90; cows and heifers, \$2.75 to \$4.75; bulls, \$3.25 to \$4.25; stockers and feeders, \$3.25 to \$4.15; veals, steady, \$5 to \$6.25.

Hogs.—Heavy, \$5.60 to \$5.75; mixed, \$5.60 to \$5.65; Yorkers, \$6 to \$6.10; light Yorkers, \$6.10 to \$6.15; pigs, \$6.20 to \$6.35; roughs, \$4.80 to \$4.90; stags, \$4 to \$4.25.

Sheep and Lambs.—Lambs, \$4 to \$6.50; yearlings, \$4.50 to \$5; wethers, \$4.25 to \$4.50; ewes, \$3.50 to \$3.75; sheep, mixed, \$2 to \$4.

British Markets.

London, July 13.—American cattle, 6d.; Canadians, 5½d.; sheep, 6d.

Liverpool, July 13.—Canadian cattle, 5½d. to 6d.

Montreal Markets.

Montreal, July 13.—Cattle—Choice butchers', 4½c. to 5c.; good, 4c. to 4½c.; medium, 3½c. to 3¾c.; common, 2½c. to 3c. Calves—Poor stock, \$2 to \$3 each, and good \$4 to \$11. Sheep and Lambs—Sheep, 3c. to 3½c.; lambs, 2½c. to 3½c. Hogs, 4½c. to 5c.

Cheese and Butter Shipments.

Despite the long drouth in Quebec and Ontario, the shipments of cheese, since navigation opened up to the first of July, were 400,000 boxes, as compared with 330,000 last year. Butter, on the other hand, showed a falling off from 82,000 to 30,000 pounds. This is quite largely due to the strike of the longshoremen and the consequent inability of transportation companies to handle perishable goods during a considerable time in May.

Canadian Horses Successful.

At the horse show recently held in St. Paul, Minn., Mr. Geo. Pepper, of Toronto, gathered in several rosettes with his high-stepping pair, Creighton and Parader. In high jumping, his Pearl, Myopia and Rupert lead in the order named. The winnings are decidedly creditable to Mr. Pepper, as it requires no little courage to campaign a string of such high-class horses as those owned by this Toronto horseman.

GOSSIP.

FEMALES IN THE HILLHURST SHORTHORN SALE.

Reference is made elsewhere in this issue to the exceptionally superior list of bulls in the dispersion sale of the Hillhurst herd of Hon. M. H. Cochrane, to be disposed of by auction at Hamilton, Ontario, August 11th, as announced in the advertisement on another page. Space will not admit of reference to many of the females catalogued, but some idea, though necessarily an imperfect one, of the character of the offering may be had from a running comment on a few specimen numbers. The group of imported junior yearling heifers in the picture in the advertisement are show things, every one of the finest type and quality. The roan Imp. Beauty 37th, a year old in January last, bred by Mr. Simmers, Whiteside, sired by the Marr-bred Conqueror's Crown, a Missie bull by Golden Ray, and her dam by Spice Box, is a very thick, even one with grand crops and spring of ribs. Florence 2nd, a roan coming two in September, bred by Mr. Shepherd, of Shethin, and sired by the Duthie-bred Cyprus, a Cruickshank Cicely, by William of Orange, dam Florence, by Ferguson, is thick, blocky, smooth shouldered, strong back, has a handsome head and horns, and is settled in calf to Imp. Royal Champion. Heather Bloom, bred by Mr. Reid, Cromleybank, who has one of the best herds in Britain, got by the great Kinellar Mina sive, Kitchener, and out of Rose Bloom, by Lord Granville, is of model type, with wonderfully good back, ribs and shoulders and a sweet face—a show heifer in any company. Imp. Martha 2nd, red, a year old in March, bred by Mr. Morrison, Phingask, got by the Marr-bred Spicy Peer, dam by Star of Destiny, is a beautiful heifer, lengthy, level and smooth. Scottish Maid, a red two-year-old heifer, bred by Mr. Durno, of Jackston, sired by Scottish Victor, dam by the great Star of Morning, is of ideal type, deep ribbed, straight lined, smooth shouldered, and in calf to Royal Champion. An Inverquhomery Augusta

READER

ALWAYS insist on your dealer supplying you with

E. B. EDDY'S WARES.

Matches, Washboards, Woodenware, Indurated Ware, Etc.

There are none so reliable.

FOR SALE EVERYWHERE.

FOR SALE: Six Shropshire shearing rams roan yearling Shorthorn bulls, by imported Duthie bull, Count Sarcasm. For further particulars apply to L. BURNETT, Greenbank P. O., Ont.

(83rd), red, two years past in March, bred by Mr. Morrison, and sired by King of Fashion, is of true type, low set and level, and also in calf to Royal Champion. Joyful Girl, bred by Mr. Gordon, Newton, is a roan yearling of the same family as Joy of Morning, the Jealousy tribe, that should grow into a grand cow. She is by Charming Star (76333). Jessamine 10th, bred at Cromleybank, is a handsome white two-year-old heifer, by the Marr Goldie bull, Wanderer's Gift, by the grand old Brawith Bud sire, Wanderer. Imp. Vain Belle 2nd, a red seven-year-old, Duthie-bred Miss Ramsden, sired by the renowned Scottish Archer, and her dam by Field Marshal, is noted as the dam of the grand young bull, Good Morning, by Joy of Morning, that sold

for \$1,800 at a Chicago sale last year, and she has in Joy bell a beautiful full sister to Good Morning, a red heifer, a year old this month. Rosemary 205th, bred by Mr. J. Marr, Cairnbrogie, and sired by Prince Horace, a Prince Royal bull, by William of Orange, is an excellent young cow, and has a good heifer calf by Joy of Morning. Imp. Craibston Beauty, also bred at Cairnbrogie, is a handsome roan five-year-old cow of ideal type. Imp. Butterfly 49th is a richly-bred roan cow of that favorite Sittyton family of which there are few in Canada. She is a daughter of Prince Horace, and her dam was by Sergeant-at-Arms. Imp. Fancy Lady will be remembered as one of the handsome young herd shown by Mr. Cochrane at Toronto in 1900, and sweepstakes winner at Ottawa same year, a Buchan Lassie, bred by Mr. Moir, Waterton, and got by Prince of the Vale, by Golden Ray, by Scottish Archer. She is a typical Scotch cow, full of character and quality. Imp. Helena, a substantial four-year-old Shethin-bred cow of true type, got by the Duthie-bred Pride of the Roses, by Pride of Morning, is due to calve to the service of Lord Mountstephen, and should be a profitable investment. Imp. Flower Princess, a roan three-year-old, bred by Mr. Reid, breeder of Lord Lovat's great sire, Royal Star, is a cow of nice type and full of quality, and will have a calf at foot on sale day. Imp. Doris 3rd, bred by Mr. Morrison, Phingask, a red two-year-old, blocky and smooth, is due to calve in July to Lord Mountstephen, and the Shepherd-bred Rosemary 127th, a roan five-year-old, has by her side a capital roan bull calf by Imp. Scottish Beau. Imp. Rose Bloom, bred by Mr. Reid, a rich roan five-year-old cow of fine type, by Lord Granville, is the dam of perhaps the best junior yearling heifers in the herd. These should serve to give an idea of what may be expected to come before the public at Hamilton on August 11th, and it is safe to say that they are as good individually as in breeding, and will meet the expectations of even the most fastidious fanciers of the breed. All interested should apply for the catalogue, and study its contents, which are of more than usual interest.

Alma College
FOR YOUNG WOMEN.
Influences that tend to the development of noblest woman.
College pleasantly situated; most southernly location in Canada.
Able staff of professors and teachers. Illustrated announcement free on request.
REV. R. I. WARNER, M.A., D.D., PRINCIPAL.
St. Thomas, Ont.

Ordered Corsets by Mail
FOR THE NEXT 30 DAYS
As a Special Inducement to give our Corsets a trial we will send FREE with your first order our 40" Hose Supporter, described on page 14 of catalogue.
Write for Free Catalogue which shows how to order exactly what you want. Our guarantee covers everything.
Durability, Perfect fit, Finish.
Robinson Corset Co., London, Ont.

TRADE TOPIC.
CANADA BUSINESS COLLEGE, Chatham, Ont.—This popular business school has closed its 27th year, which has proved to be the most successful in its history, both as to the number in attendance and the success of its graduates in securing and filling good positions. Three hundred and forty-six students securing good positions in a period of 11 months is a record they may well feel proud of. We wish the institution the success which it so well deserves. The fall term opens on Tuesday, September 1st.

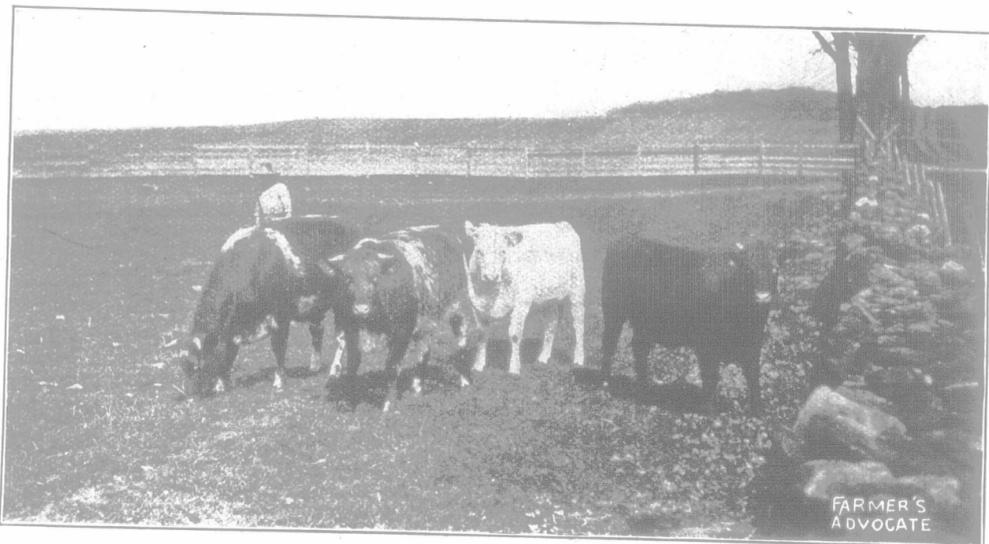
GRAND DISPERSION SALE

OF
Hillhurst Shorthorns

Live Stock Sale Pavilion,

HAMILTON, ONTARIO,

TUESDAY, AUG. 11



A QUARTETTE OF JUNIOR YEARLINGS IN THE HILLHURST DISPERSION SALE.

===== **58 HEAD** =====

INCLUDING ALL THE BEST ANIMALS IN THE HERD,

of which thirty-three are imported **Scotch** cows and heifers, a number with calves at foot: The celebrated sire **Joy of Morning**; the red two-year-old imported Missie show bull, **Lord Mountstephen**, and three imported Scotch yearling bulls are included; also a **young show herd**.

The record prices brought by the yearling bulls, Good Morning (\$1,800) and Golden Mist (\$2,010), last year, attest the public appreciation of the high character of the herd. Catalogues on application to

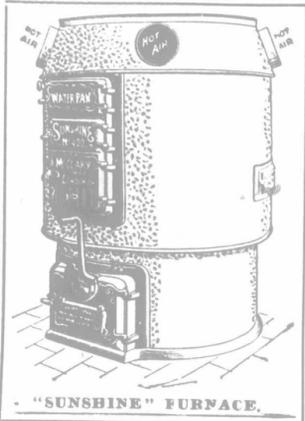
JAS. A. COCHRANE,

CAPT. ROBSON,
THOS. INGRAM, } Auctioneers.
GEO. JACKSON,

Hillhurst Station,
P. Q.

In answering the advertisement on this page, kindly mention the FARMER'S ADVOCATE.

HEATING and COOKING SPECIALTIES.



"SUNSHINE" FURNACE.

**SUNSHINE
Furnace.**

Burns coal, coke or wood.
Large feed-doors will admit rough chunks.
Large ash-pan catches all the ashes—keeps furnace room clean.
All wearing parts are extra heavy; radiators and dome are made of best steel.

**CORNWALL
Steel Range.**

Burns coal, coke or wood.
Has well proportioned and good working fire-box.
Oven is roomy and bakes perfectly.
The heaviest, best working and most handsome kitchen steel range on the market.



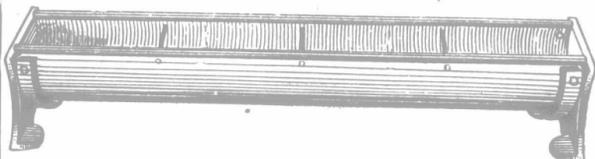
"CORNWALL" STEEL RANGE.

BOOKLETS FREE
on TO ANY ADDRESS.

McCLARY'S.

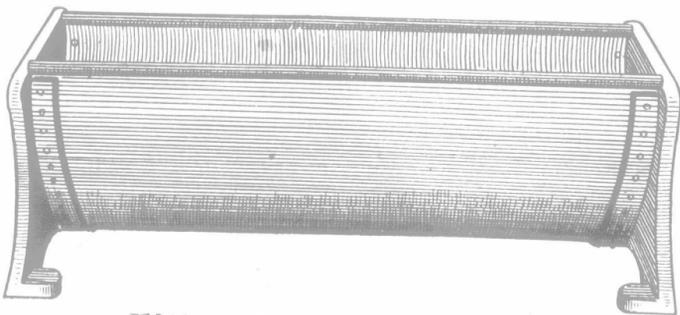
London. Toronto. Montreal. Winnipeg. Vancouver. St. John, N. B.

**PATENT STEEL
HOG AND WATER TROUGHS**



Hog-proof
Rust-proof
Frost-proof

I am placing on the market the Steel Hog Trough, made of 14-gauge sheet-steel boiler plate; a trough that it is impossible for the hogs to chew or destroy. Edges finished with 3/8 pipe, slotted and driven on and riveted. Cross-bars to prevent hogs from crowding or lying in trough.



Fill a Long-felt Want.

Here you have a water trough, or tank, made like the hog trough, only much larger. These troughs are made first-class in every particular, and fully warranted. They are something every farmer is going to have when he finds out what they are. They are practically indestructible.

WRITE FOR PRICES AND AGENCY.

WILBER S. GORDON, TWEED, ONTARIO.

TRAMP TROUGHS.
BEST...
durability...
deserts by

Personally acquainted with this firm, we take pleasure in recommending the Robinson Corset Co., London, Ont., a change in whose advertisement appears in this issue. Read it, and order at once a free catalogue. It will please you.

GOSSIP.

Mr. R. H. Harding, Thorndale, Ont., writes: "My stock is all healthy and thrifty. Several of my Dorset ewes are safe in lamb again. They are not pampered up, but are in the right shape to do well for whoever is lucky enough to get them. Anyone intending to invest in some should not delay."

The single-judge system was adopted this year for the first time at the Royal Show of England, and gave good satisfaction in nearly all classes; indeed, in only one class have we noticed any adverse criticism, and in that case no fault was found with the judge's decision, but owing to the very large entry in the class it was held to be too heavy a task to impose upon one man. In the class for Shorthorn cattle, two sections were made, one for males and one for females, with a single judge for each. The single-judge system is growing in favor in the estimation of the directorate of the leading shows in Great Britain and America.

The attention of our readers is directed to the advertisement of Truman's Pioneer Stud Farm, of Bushnell, Illinois, which has for the past season been running regularly in the "Advocate." This stud farm was established in 1878 by Mr. J. H. Truman, who was at that time breeding Shire horses in England, and also engaged in the exporting of cattle from the Union Stock-yards, Chicago, and during the past twenty-five years it is claimed this firm has imported more strictly first-class, sound, prizewinning Shire stallions to the States than all their competitors put together. This fact, they claim, is borne out by their exhibits at the two last International Shows at Chicago, where they won more first prizes on imported Shire stallions than all exhibitors of Shire stallions put together, and at each show they won the two gold medals. There is no place that requires first-class draft stallions more than our own Provinces, and nothing will pay the farmer better than to buy a strictly first-class draft stallion, and while doing himself a great deal of good he will be doing the community a great deal more. Any of our readers contemplating buying a stallion will do well to get in correspondence with Mr. J. G. Truman, who will be pleased to send one of their catalogues, which contains a very select lot of Shire, Percheron, Belgian, Suffolk and Hackney stallions, and he will make it quite an inducement to buyers from Canada. Mr. J. G. Truman writes, under date of 10th inst., that he has received advice from his brother, W. E. Truman, stating that he will sail from Liverpool next week with a very select shipment of Shire, Percheron and Belgian stallions, purchased by himself and brother, Mr. H. H. Truman, M. R. C. V. S., expressly for show purposes. A few choice Shire mares are included in the shipment. Their importation of Shire and Hackney stallions that arrived on April 10th are now in fine condition, the Hackneys all being reserved for show, and should do well in the rings this fall.

From their Brandon, Manitoba stables they report a very fair trade, and Mr. J. H. Truman is attending the Western shows, where he is exhibiting the renowned Shire stallions, Prince Shapely and Gore's Boast, also a Suffolk and a Percheron stallion.

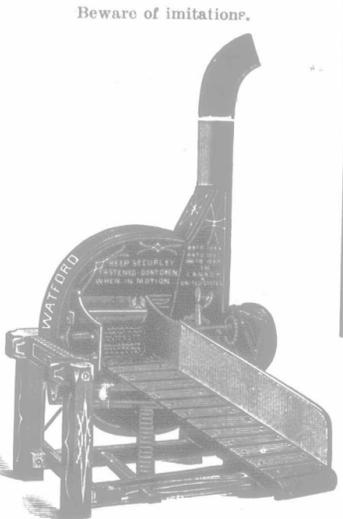
Generally Useful.

Tuxedo Park, N. Y.
W. F. Young, P. D. F.:
Dear Sir,—I have thus far found the Absorbine worthy of the high reputation to which it has attained, and for many cases of soreness after hard day's work, windgalls, strains and sore backs, I am without knowledge of a more effective cure, and horsemen of whom I know are equally pleased with the many results. Believe me, dear sir, Yours truly,
JOHN MATHEWS

Pine Bush, N. Y.
Please send me another bottle of Absorbine. It will do all it is recommended to do.
A. CRAWFORD.

Ensilage Cutters

with BLOWER ELEVATORS.
**THOM'S PATENT
SILO FILLER.**



Adapted for all kinds of farm power, from the two-horse tread up to the heavy engine; capacity up to 30 tons per hour. Thousands in use. Send for testimonials. Also

**GRAIN GRINDERS
AND
TREAD POWERS.**
CANADA'S BEST.
Thom's Implement Works
WATFORD, CANADA.

HELP WANTED

If you are open to invest your time in return for good pay, write us.
We are in need of more reliable salesmen. Perhaps you have tried selling goods and failed because you had not the proper backing. We know how to meet the demands of both customer and agent. Write us. It will be to our mutual interest.
STONE & WELLINGTON,
Canada's Greatest Nurseries, TORONTO.

HOLLWELL MANOR FARM.
FOR SALE:
7 Scotch Collie Puppies
For price apply to
D. G. GANTON, ELMVALE, ONT.

CANADIAN LANDS!
Farming and Ranching Lands for Sale
in the best districts on the Calgary & Edmonton Railroad and in the Yorkton, Beaver Hills, Quill Lakes, Prince Albert and Carrot River Districts, and in all parts of Manitoba.

LOANS MADE. INSURANCE EFFECTED.
Companies represented:
Calgary and Edmonton Land Co., Ltd.
Qu'Appelle, Long Lake & Saskatchewan Land Co., Ltd.
Western Assurance Co.
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Ontario & Qu'Appelle Land Co., Ltd.
Law Union & Crown Insurance Co.
North of Scotland Canadian Mortgage Co., Ltd.

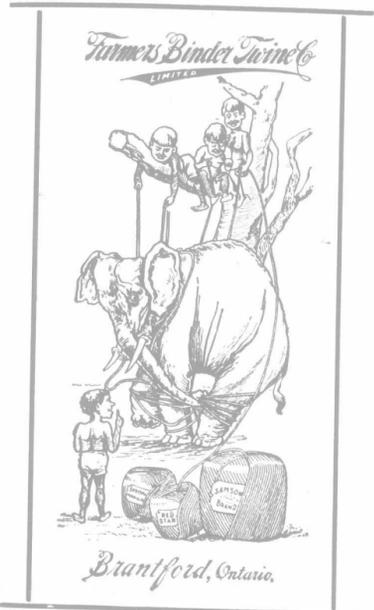
OSLER, HAMMOND & NANTON,
LAND DEPARTMENT,
WINNIPEG, CANADA.

DAVIDSON'S Latest Improved Warehouse and Farm Fanning Mills and Bee Supplies. Circulars free.
B. DAVIDSON,
Box 48, Uxbridge, Ont.

any advertisement on this page, kindly mention the FARMER'S ADVOCATE

Binder Twine

HARVEST OF 1903.



THIS COMPANY has again set its prices on Binder Twine for the harvest of 1903. It may well be said we lead the way. The duty of every intelligent Canadian farmer in this deal is easily defined. For ten years we have put up a good fight in the interests of co-operation, and have absolutely regulated the price charged you for Binder Twine in every locality where we have made a shipment. If you want us to continue this same deal, give us your undivided loyalty and patronage. Don't order or buy a single pound of twine from any other concern until you know this Company's is actually exhausted. If we fail to have a farmer agent in your district, give us the name of a good man or two, and we will immediately make the appointment.

You have it in your power, as Canadian agriculturists, to say whether this organization is to continue or not. No other element or opposition can pull down our standard. The country is in danger from trusts. Farmers, you are up against it.

JOSEPH STRATFORD,
General Manager.

THE MODEL CONCRETE MIXER.

Do you want a Concrete Mixer? If so, send to
A. E. HODGERT,
EXETER, ONT.
Best of testimonials. Saves cement, and stronger wall. Also extension steel silo curbing, building any size silo.

BRITISH COLUMBIA.

"Fruitland," Kamloops, B. C.
Newly-developed irrigated lands in the beautiful fertile valley of the Thompson River, on the main line of the C. P. R., within half a mile of the City of Kamloops, the inland capital of British Columbia, and a well-known health resort. Magnificent soil for fruit of all kinds: Apples, pears, cherries, plums, peaches, grapes, strawberries, and all kinds of vegetables grown in abundance. Perfect climate; air dry and bracing. Good schools, churches, boating, shooting, fishing, etc. For full information apply to: **Manager, Canadian Real Properties, Ltd.,** Box 185, Kamloops, B. C.

Eggs for Hatching

We offer eggs from pure Barred Plymouth Rock pens at \$1 per 15, \$2 per 15, \$1 per 100. Pekin Duck eggs, \$1.50 per 12. Free circular.
H. GEE & SONS, o Fisherville, Ont.

Barred Rocks Exclusively.

Stock for sale: 1 good year-old male bird of Bradley Bros. strain, and a number of good breeding hens of Hawkins' strain, to dispose of. Write for prices.
A. E. SHERRINGTON, Walkerton, Ont.

WE WANT GOOD reputable persons everywhere to sell our new Sanitary Combs. They sell on sight, and are absolutely guaranteed unbreakable; will remove dandruff, cure falling hair and headaches. Money refunded if not satisfied. Sales large, and active agents are actually being sought. Work your own town or travel. We pay on how. Write for terms without delay. 50c. sample 25c. postpaid. Address **PROF. LONG,** 5 Day St., St. Thomas, Ont.

GOSSIP.

The prize list of the International Live Stock Show is now in press, and applications for it should be addressed to W. E. Skinner, Union Stock-yards, Chicago.

If interested send for a catalogue of the Hillhurst Short-horn sale, to take place at Hamilton, Ontario, on August 11th, as advertised.

Mr. W. H. Ladner, breeder of Short-horns, Ladner, B. C., writes, under recent date: "My cattle are doing well, and the calves by the Provincial champion bull, Squire Wimple, are coming strong, full of quality and of the right type, and will be heard from in the near future."

Provision has been made for five cash prizes and two honorable mention awards in each section of the live-stock exhibits at the St. Louis World's Fair in 1904. This is a very marked broadening of prizes in cash over former international shows and will afford a prize to many a worthy animal that would just barely fail of distinction in less liberal prize distributions.

Another feature in the classification of live stock at the St. Louis show that will meet universal favor among live stock exhibitors is the division of age periods into six months instead of one year as has been the custom. This plan is in recognition of the now general practice of breeding and feeding for early maturity, and will prove a popular innovation.

Messrs. J. A. & A. B. Armstrong, breeders of pigs and poultry, Warkworth, Ontario, in ordering change of advt., write: "Sales have been numerous in both pigs and poultry. Have not been able to supply the demand for collies. The pigs we are offering now are extra fine, both in quality and breeding and have fashionable pedigrees. We are offering some snaps in W. Wyandotte breeding stock, some of which have been imported from Massachusetts."

COLQUHOUN'S CLYDESDALES.

Mr. Wm. Colquhoun, Mitchell, Ont., the veteran importer of Clydesdale horses, orders a change in his advertisement, calling attention to his new importation of stallions personally selected by himself in Scotland this summer. Mr. Colquhoun has had a long and successful experience in importing high-class horses and is acknowledged as one of the very best judges in America. He will not handle a second-class horse, and deals on the square. See what the Scottish Farmer says about this new importation in another column in this paper; also, what is said of them in our Scottish letter, and call on or write Mr. Colquhoun for full information.

THE RIBY GROVE SALE.

Mr. Henry Dudding's sixth annual sale of Shorthorns and Lincoln sheep took place at Riby Grove, Great Grimsby, England, on July 3rd. The attendance was large. In addition to most of the leading buyers for export at present in the country, there were present, either in person or by their representatives, most of the principal British breeders of Shorthorns and Lincolns. Argentine and Uruguay buyers secured a very large and important consignment. Mr. Wm. Duthie secured the top-priced female of the sale, Hawthorn Blossom 10th, one of the best cows of the year, first at Nottingham Show, and third at the Royal, at \$725, and her two-months-old bull calf by the Marr-bred bull, Wanderer's Chief, at \$350. Mr. Charles Jewel, who was buying for the Argentine, secured at \$625, the top price of the two-year-olds, Campfollower's Belle, of a family that has been bred by three generations of the Dudding family. Mr. P. L. Mills secured for \$355 Riby Marigold, who made top price in the yearlings. The average for the 62 head sold was \$260. The Lincoln rams were keenly sought after, particularly the better ones, the winner of the first prize at the Royal making, to Mr. F. Miller for the Argentine, \$1,100, the same buyer also taking another at \$900, the remainder making from this price down to \$35, the average of the 37 yearling rams being \$128.26.

Going to the Northwest

DO YOU REALIZE what opportunities await you in the West? Surely you do not. You have not investigated, have not figured, and have no idea as to what the possibilities are. IF YOU DID KNOW you would not continue year after year to work a living and nothing more, out of the light soil of a little farm on a sidehill. Nor if you are paying rent, would you continue to give the best of your life tilling a farm for another man? You can easily own one of the best farms in the West. All it requires is a small amount of capital, pluck and energy. If you have the pluck and energy, you can get the capital. Write us, or come and see us, and we will tell you how to get the farm.

The TRACKSELL LAND & INVESTMENT CO., Ltd.
REGINA, N.-W. T.

PICKING UP BARGAINS.



OUR 1903 catalogue, "Engineers' Bargains," will be sent to all who write for it. It gives the actual net prices we charge for all kinds of engineers' supplies, also the weights of the different articles, freight rates to different points, etc. Here are a few sample prices, which are decided bargains: Cylinder oil, 650 fire test, half-barrel containing 25 imperial gallons, \$9.75; jacketed can, containing 8 imperial gallons, same oil, \$3.75; jacketed can, containing 4 imperial gallons, same oil, \$2.00; four-tone chime whistle, 3-inch bell, \$6.00; tank pump, capacity 2 1/2 barrels per minute, \$6.65; 2-inch wire-lined suction hose, made by N. Y. Belting & Packing Co., 3/4c. per ft.; 2-inch Scott quick-opening throttle valve, \$7.75; Excelsior cylinder wrench, will fit any tooth, \$5.00; Excelsior belt guide, \$5.00; 14-barrel steel galvanized tank, \$22.50; 2-inch tube expander, \$3.75; style O. Weiler jack, capacity 4 tons, \$7.50. Our Veteran Canvas Drive Belts are heavier, stronger and more durable than any other belt sold in Canada. The 6-inch Veteran has 37 rows of stitches, other makes have but 23 rows; the 7-inch Veteran has 31 rows of stitches, other makes have but 27 rows; the 8-inch Veteran has 27 rows of stitches, other makes have but 21 rows. Count the rows of stitches when you go to buy a belt, and insist on getting a Veteran. Our prices for the 6-inch, 4-ply Veteran is 19c. per ft.; for the 7-inch, 4-ply, 21c. per ft., and for the 8-inch, 4-ply, 25c. per ft. For our Veteran Rubber Drive Belt, our prices are, for the 6-inch, 4-ply, 37c. per ft.; for the 7-inch, 4-ply, 42c. per ft., and for the 8-inch, 4-ply, 49c. per ft. This Veteran Rubber Drive Belt is made for us by the Rubber Goods Mfg. Co., the largest manufacturers of rubber belting in the world, and is guaranteed by them to be the best rubber belt it is possible to make. Every one is guaranteed; in fact, every article we sell is guaranteed, and we will replace or return money in case any are found defective.

WINDSOR SUPPLY CO., WINDSOR, ONT.

ESTABLISHED 1868. INCORPORATED 1887.

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THIRTY-FIVE YEARS OF CONTINUED SUCCESS.
AN UNPRECEDENTED RECORD,
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Liberal prizes. Competitions added.

The Stock-breeders and Manufacturers' Favorite Exhibition.

Everything to please. The best attractions. Special trains and rates over all roads.

ENTRIES CLOSE SEPT. 10.

PRIZE LISTS NOW READY.

LIEUT.-COL. W. M. GARTSHORE,
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Poultry and Eggs Wanted

Empty crates forwarded upon application.
Highest prices paid.
Payments weekly by express order.
Correspondence solicited.

TORONTO POULTRY & PRODUCE CO.,

470 YONGE ST.,

TORONTO.

Dominion of Canada Industrial Exposition

LIVE STOCK, \$30,000 in Premiums. PRESENTS of the late Marquis and Marchioness of Dufferin on exhibition.	TORONTO, ONT. August 27 to September 12, 1903. \$50,000 \$40,000 IN PREMIUMS. IN ATTRACTIONS	"A Carnival in Venice" \$15,000 Direction of Bolossi Kiral'y — TREASURES loaned by the Countess of Aberdeen, in Women's Building.
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By order of the King **The Jubilee Presents** will be on view FREE.

Industries, Live Stock, Fine Arts, Dairy Products, Dogs, Cats, Poultry, Minerals, Cereals, Flowers, Fruit.

SPECIAL ATTRACTIONS. All on a Grand and Great National Scale! Excursion rates on all lines of travel. For information, Prize Lists and Entry Blanks, address:
W. K. McNAUGHT, President. **J. O. ORR,** Manager and Secretary, Toronto, Ontario.

THE National Cream Separator!



WE CLAIM that the National Easy-Running Cream Separator is the most efficient and satisfactory Cream Separator that was ever set up on a farm. It represents the very latest principles in Cream Separator construction. It embodies every valuable feature that has ever been discovered in the separation of cream from milk by centrifugal force, and discards all the cumbersome, intricate features which characterized the early type of Separators. It is, in short, a 20th century product a little ahead of the times. It is manufactured by us under what are conceded to be the most valuable patents ever issued by any government on Cream Separators. The

Special Features

which distinguish the National from other Separators are:

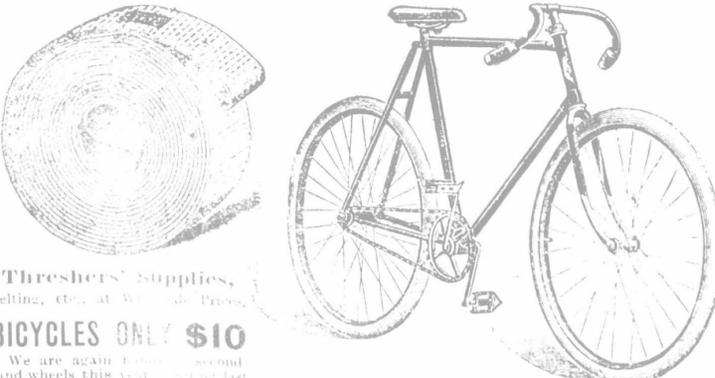
- FIRST**—Its extreme simplicity.
- SECOND**—Its entire freedom from complicated parts.
- THIRD**—Its large capacity as compared with weight of Bowl.
- FOURTH**—Its ease of turning as compared with capacity.
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- SIXTH**—The ease with which it is cleaned and kept clean.
- SEVENTH**—Its economy of operation.
- EIGHTH**—Its durability.
- NINTH**—Its absolute safety.
- TENTH**—Its handsome design, finish and appearance.

MADE IN THREE SIZES:
 No. 1 A—150 to 500 lbs. per hour.
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 STYLE "B"—Capacity 250 lbs. per hour.

Write to the following General Agents for our booklet, "Will It Pay?":
 The Creamery Supply Co., Guelph, for South-western Ontario.
 The T. C. Rogers Co., Guelph, for Northern and Eastern Ontario.
 Mr. Jos. A. Merrick, Winnipeg, Manitoba, for Manitoba and the N.-W.T.
 Mr. John A. Robertson, 108 Union Avenue, Montreal, for Quebec.
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The Raymond Mfg. Co. of Guelph,
 GUELPH, ONTARIO. LIMITED.

SEND FOR Illustrated PRICE LIST.



Threshers' Supplies. Belting, etc., at Wholesale Prices.

BICYCLES ONLY \$10

We are again taking second hand wheels this year, and last year we sold more than a dozen. We sent them to all parts of the Dominion. They are nearly as good as new, with a few new ones. The fact is, after they are used for a while, they are a cash business and make a great many of us sell them. With each wheel we send a tool bag and a full kit of tools. All repairs are guaranteed. Order early and you will get a better price.

\$10

WILKINS & CO., 166-168 BAY ST. EAST, TORONTO, ONT.

BOOK REVIEW.

Any book reviewed in this department may be ordered through this office.

A ROYAL TOUR.

The tour throughout the Dominion of Canada in 1901 of their Royal Highnesses the Duke and Duchess of Cornwall and York has been fittingly recorded by Joseph Pope, C. M. G., Under Secretary of State, in a beautiful volume issued by the King's Printer, Mr. S. E. Davison, Ottawa. Mr. Pope was in every way qualified for the authorship of such a work, which he has executed with characteristic skill and tact. In the introductory chapters, a general reference is made to this memorable tour of the Heir Apparent around the world, of which the Canadian visit formed a part, and the tour in the Dominion given sufficient detail to be of great local and historical value. The portraits and other engravings that embellish the work add very greatly to its value and attractiveness. We congratulate the distinguished author and the King's Printer upon "The Royal Tour in Canada in 1901."

The summer number of the Live Stock Journal, which is published as usual during the week of the Royal Agricultural Society's Show, contains many interesting articles dealing with the origin and development of agricultural and horse shows, and the improvement of live stock generally. There are contributions by well-known authorities on "The Hunting Sires of the Past"; "Hackneys 100 years ago"; "Coach and Cart Horses in Early Times"; "Early Show Reminiscences and Jumping Prizes"; "Polo Pony Breeding"; "The Horse of the Future"; "First Lessons for Young Hunters"; "Shire Horse Breeding as a Farmers' Industry"; "The Oldest Industry"; "Young Blood"; "The Export Demand for Stud Sheep"; "Pig Breeding"; "Poultry Keeping in the Home Counties," etc. Three colored plates are presented with the number, and there are eighteen illustrations in black and white. The price is 4d., or post free 6d. The publishers are Messrs. Vinton & Co., Ltd., 9 New Bridge Street, London, E.C.

GOSSIP.

The young Jersey bull advertised by Mr. R. J. McCulloch, Snelgrove, Ont., in this issue, should make a good one for some dairyman. His sire, Bin of Dentonia, was sweepstakes over Ontario; his sire, Prince Frank, also a sweepstakes bull, and his dam, St. Lambert's Lucy, also a show cow, and with test of over 20 lbs. butter in seven days. Mabel of Lawnridge, his dam, is by Mighty Dollar, also a sweepstakes bull and sire of a number of cows making from 14 lbs. to 20 lbs. per week, and is son of Hundred Per Cent., a pure St. Lambert bull. Mabel was best cow in Mr. J. L. Clark's late sale. She is a grand, long, deep-bodied cow, with large udder and teats well placed—a dairy cow all over, and a persistent milker. The young bull is in show shape now, and good server.

THE SHERBROOKE SHOW.

The prize list of "Canada's Great Eastern Exhibition," to be held in the town of Sherbrooke, Quebec, August 29 to September 5, is a very liberal one, and should draw out strong competition. The prizes are good and the classification generous. The Sherbrooke Show has an excellent reputation as one of the most useful and interesting in the country. It is well managed and up-to-date in character, and well deserves the patronage of the public.



A New Design in Phaetons, No. 21.

McLaughlin Vehicles

Are the Standard of Canada.

The largest carriage factory in the Empire. Over 100 styles of Carriages, Carts, Demoscrats, etc., to choose from; all one grade.

McLAUGHLIN CARRIAGE CO., OSHAWA, ONT.

Branches—Winnipeg and St. John, Ont.

CLYDESDALES

AYRSHIRES and POULTRY.



R. Ness & Sons, Howick, Que.

Importers of Clyde, Percheron and Hackney stallions, Ayrshire cattle, and poultry, have for sale 5 Clyde stallions, sired by Baron's Pride, Sir Everitt, and Royal Carrick, 1 Percheron, and 1 Hackney, winners. Ayrshires of both sexes, and poultry.

RED RIBBON STUD

Largest Importers and Breeders of

Shire Horses

in the Dominion,



including first-prize winner at Royal Agricultural Show in England, and winning more prizes at Industrial and other large shows than all others combined.

Stallions and mares all ages, home-bred and imported, always for sale. Over 50 to choose from.

MORRIS & WELLINGTON, Fonthill P. O., Welland County, Ont.



To Cure a Wind Puff or Strained Joint:

Steam the part with very hot water for 20 minutes, rub dry, and apply.

ABSORBINE

once or twice a day, rubbing it in. At night saturate the hair full of the following wash: 1 oz. **ABSORBINE**, 1 pint vinegar and 1 1/2 pints water; cover with a layer of cotton, and bandage over. Repeat as above until cured.

ABSORBINE sold by regular dealers or delivered for \$2 per bottle. Mfg. by **W. F. YOUNG, P.D.F.,** Springfield, Mass. om
 Lyman, Sons & Co., Montreal, Agts. for Canada.

Thorncliffe Stock Farm

ROBERT DAVIES

usually has on hand some fine specimens of Clydesdales, Hackneys, Jersey and Ayrshire Cattle, Yorkshire Pigs.

Correspondence solicited. Visitors always welcome at

THORNCLIFFE, TORONTO.

CLYDESDALE MARES

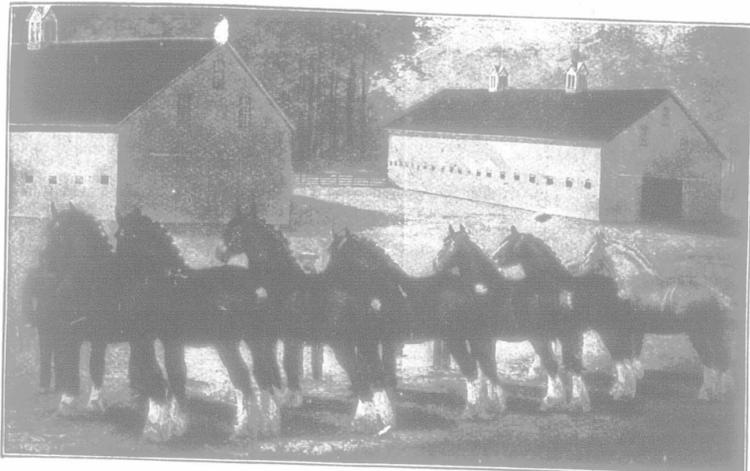
Registered mares, from three years old and upwards, for sale.

NELSON WAGG.

Claremont station, C. P. R., 2 miles. Stouffville station, G. T. R., 1 1/2 miles. om

kindly mention the FARMER'S ADVOCATE.

TRUMAN'S PIONEER STUD FARM



BUSHNELL, ILL., U. S. A.

Has for 25 YEARS been headquarters for the CHOICEST SHIRE, PERCHERON, SUFFOLK AND HACKNEY STALLIONS.

SEVENTH importation for 1903 arrived April 10th. Our importation of exclusively SHOW STALLIONS will arrived Aug. 1st.

20 to 30 Good Practical Salesmen Wanted.

Best lot of draft stallions in the United States or Canada. Notwithstanding the superior quality of our horses, it is a fact that our prices are lower than can be obtained elsewhere in America. If there is no first-class stallion in your neighborhood, please write us. For our 24th annual catalogue, etc., address—

J. G. TRUMAN, Mgr., Bushnell, Illinois, U. S. A.

INTERNATIONAL IMPORTING BARN, SARNIA, ONTARIO

J. B. HOGATE, PROPRIETOR.



IMPORTER OF

Clydesdale, Shire and Hackney Stallions, and Spanish Jacks.



68 head imported in 1902. All sold but 2 stallions and 4 jacks.

My next importation will arrive about Sept. 1st—60 stallions and 20 jacks. Hogate buys bread-winners, and sells them at bread-winning prices. Hogate doesn't advertise all of his stallions to weigh a ton, but some of them do. You can fool some of the people some of the time but you can't fool all the people all the time. Be sure and see my stock before you buy in the fall. Prices to suit all, consistent with quality. I will be pleased to see all my old customers in the fall, and as many new ones.

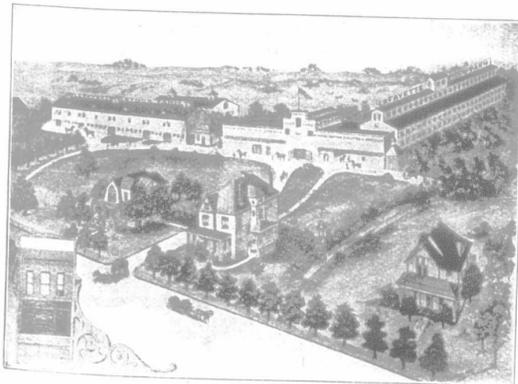
H. H. COLISTER, MANAGER AND SALESMAN.

LA FAYETTE STOCK FARM, J. Crouch & Son, Props.

Importers of all breeds of STALLIONS.

We are the largest Importers and Breeders of Oldenburg German Coach horses in America. We also import Draft horses of all kinds, including Belgians, Clydesdales, English Shires, and Normans. 359 head of Coach and Draft stallions imported in last 15 months.

La Fayette, Ind., U.S.A. Terms easy. All stock guaranteed.



ALEX. GALBRAITH & SON, JAMESVILLE, WIS., BRANDON, MAN.

Have a few choice STALLIONS left that they offer at a special bargain.

New importation of prizewinners of the various breeds will arrive in August. Buying orders executed on commission.

GOSSIP.

Messrs. Geo. F. Weston and Reuben Gentry, agents for Biltmore Farms, North Carolina, have been in Great Britain the last two months, selecting Berkshire hogs for importation, and have sailed with 76. The lot is said to be described by old breeders like Mr. Hayter and others, as even better and more uniform in type than the former consignments for Biltmore Farms.

Mr. A. E. Hoskin, breeder of Shorthorn cattle, Cobourg, Ont., writes: "I have three Shorthorn heifers by Count Amaranth 2nd, all roans; also one red bull calf, from the imported cow, Nonpareil 32nd (imp.), sired by W. D. Flatt's Imp. Republican, all for sale and all good ones. I sold one young Clydesdale stallion for shipment to the N.-W. T.; also, some young Yorkshires and sows in pig. These stay in Ontario. Am breeding seven sows for the fall trade."

Arthur Johnston, Greenwood, Ont., has recently sold to the Messrs. Challand, Carlton, Ill., three very fine Shorthorn cattle of the very finest Scotch breeding, including an imported four-year-old cow of the Kilblean Beauty tribe, now so very popular in Scotland and England, where they have within recent years won the highest honor in the national shows and made very high figures in the sale-ring. The next in importance is a yearling heifer of the Marr Princess Royal family, a most excellent heifer and like winning in good company. She is a daughter of Imp. Princess Royal, for which Mr. Johnston says he was offered more money than he ever sold a Shorthorn for. The third is also a yearling of splendid proportions, excellent quality and first-class Scotch breeding.

The recent death, from milk fever, is reported of the noted show cow, Imp. Missie 165th, owned by Mr. E. W. Bowen, Delphi, Indiana. She was the second-prize cow at the International Show at Chicago in December last, and was generally considered the best Shorthorn cow in America. She was a roan cow, born in March, 1899, bred by Mr. W. S. Marr, Uppermill, Aberdeenshire, and imported in October of the same year by Mr. C. L. Gerlaugh, Osborn, Ohio. Her sire was Captain Inglewood, by the Duthie-bred Captain of the Guard, and her dam was Missie 156th, by Golden Ray. She had produced two living calves, a bull, now a yearling, and a heifer a few days old at the time of the cow's death, sired by Imp. Lord Banff.

The Ohio State College of Agriculture, under the direction of Prof. C. S. Plumb, Professor of Animal Husbandry, in laying the foundation of an up-to-date herd of Shorthorn cattle, has recently made some notable purchases at public sales, and has secured the services as herdsman of Alex. Argo, a Scotchman, once on the herdsman staff of the sage of Sittytown, Mr. Amos Cruickshank. Among the purchases at the sale of Mr. Wood, of Williamsport, Ohio, was the bull, Imp. Bapton Lovat, a rich roan of unusual quality, bred by Robt. Taylor, of Pitlivie, Scotland, sired by Bapton Ensign, selected by Mr. Taylor from J. D. Willis' crop of 1899 calves, as the first choice of the lot, and later bought and imported by N. P. Clarke, of Minnesota. The dam of Bapton Lovat is Caroline, and she was sired by Ringleader, of the Broadhooks family, a bull sold at a long price to go to South America. At Mr. Gerlaugh's sale, the imported heifer, Queen Quality, was purchased. She is a two-year-old, sired by Brilliant Star, a son of Star of Morning, Mr. Duthie's famous bull. This heifer had for dam, Queen Victoria, a daughter of Village Archer, by Scottish Archer. Queen Quality was bred by Philo L. Mills, of Nottingham, England, and her breeding is of the richest Scotch character, while as an individual she has high merit. One of the favorites of Mr. Gerlaugh's sale, Beckie's Favorite, was bought by the University. Her sire is Royal Favorite, bred by W. S. Marr, sired by Wanderer, a son of William of Orange. On the dam's side she is a Beck Taylor for five generations, tracing to Young Mary.

HORSEMEN! THE ONLY GENUINE IS

GOMBAULT'S CAUSTIC BALSAM.

Take genuine without the signature of The Lawrence, Williams Co. Sole Importers & Proprietors for the U.S. & CANADA, CLEVELAND, O.

The Safest, Best BLISTER ever used. Takes place of all liniments for mild or severe aches, rheumatism, Blisters or Hemorrhoids from Horses and Cattle. SUPERSEDES ALL CAUTERY and IRONING. Impossible to produce scar or blisters. Every bottle is warranted to give satisfaction. Price, \$1.50 per bottle. Sold by Druggists, or sent by Express charges paid, with full directions for use. Send for free descriptive circulars.

THE LAWRENCE-WILLIAMS CO., Toronto, Ont.



New Book on how to prevent and cure diseases of horses and cattle, to know sound horses, age, constitution, valuable recipes, etc., prepared especially for farmers, from facts gathered in 20 years' practice, by S. S. Dickinson. (Out shortly.) Advice by mail, \$1.

Address S. S. Dickinson, Port Hope, Ont.

DR. PAGE'S ENGLISH SPAVIN CURE



For the cure of Spavins, Ringbone, Curbs, Splints, Windgalls, Capped Hock, Strains or Bruises, Thick Neck from Distemper, Ringworm on Cattle, and to remove all unnatural enlargements. This preparation (unlike others) acts by absorbing rather than blistering. This is the only preparation in the world guaranteed to kill a Ringbone or any Spavin, or money refunded, and will not kill the hair. Manufactured by DR. FREDRICK A. PAGE & SON, 7 AND 9 YORKSHIRE ROAD, LONDON, E.C. Mailed to any address upon receipt of price, \$1.00. Canadian agents:—

J. A. JOHNSTON & CO., DRUGGISTS, 171 KING STREET, EAST, TORONTO, ONT.

BAWDEN & McDONELL Exeter, Ont.



IMPORTERS OF Clydesdale, Shire and Hackney Horses

are now offering several imp. Clydesdale, Shire and two Hackney stallions, prizewinners in England, Scotland, and Canada, and representing the best blood alive; also several choice Canadian-bred ones. These animals are all true to type, and possess substance, quality, style and action.

THE KINDERGARTEN STUD FARM, GUELPH JAMES HURLEY, Proprietor. Breeder of Thoroughbred horses from noted sires and dams. All classes of horses for sale.

GEO. STEWART, Howick, Quebec,



IMPORTER OF Clydesdale Horses,

has now on hand for sale 2 three-year-olds, 3 two-year-olds and 1 yearling stallion (all imported), carrying the blood of Baron's Pride, Mail of Airies, Darnley and Prince of Wales, combining size, style, quality and action. The best lot I ever imported. Write quick.

GEO. STEWART, Howick, Quebec. High Park Stock Farm Galloway Cattle. 6 choice young bulls, from 10 months to 2 years old, for sale. Prices right. Come and see them. Shaw & Marston, P. O. box 291, Brantford, Ont. Breeders of Galloway cattle.

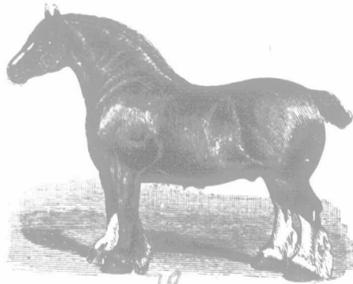
ABERDEEN-ANGUS. For Sale: One two-year-old bull and one yearling bull, sired by Laird of Tweedhill. Will sell right. W. HALL, Washington P. O., Drumbo Station.



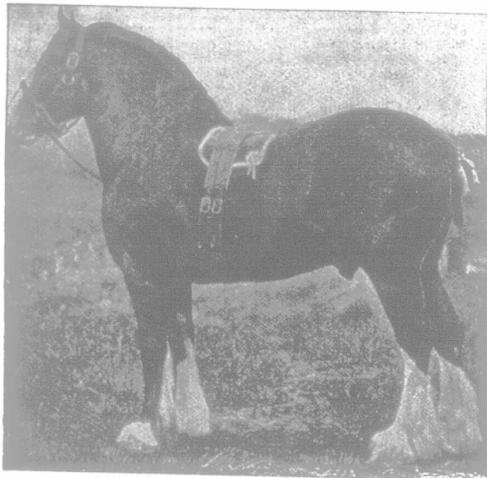
DEATH TO HEAVES Guaranteed. NEWTON'S Heave, Cough, Distemper and Indigestion Cure. A veterinary specific for wind, throat and stomach troubles. Strongly recommended. \$1.00 per can. Dealer, Mail or Ex. paid. Newton Horse Remedy Co., Toledo, Ohio. Druggists supplied by Lyman Bros. & Co., Toronto and Montreal.

CLYDESDALES and HACKNEYS.

Another large importation will arrive in August. Mr. James Dalgety is now in Scotland for the purpose of selecting a better lot of horses than he ever before imported. Some of the lot have already been purchased, and include some extra big prizewinners. Others will come out that have made the season in Scotland. Intending purchasers should have this shipment in mind.



DALGETY BROS., LONDON, ONT. AND DUNDEE, SCOTLAND.



ROBERT BEITH, BOWMANVILLE, ONT., IMPORTER AND BREEDER OF

Clydesdale AND Hackney Horses

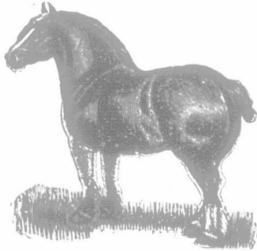
Is offering for sale a number of choicely-bred Clydesdales and Hackney stallions; also a number of Hackney mares. The Clydesdales are sired by the noted horses, Prince of Albion, King of the Roses, Lord Stewart and The Prior.

ROSEDALE STOCK FARM. IMPORTED SHIRE and CLYDESDALE HORSES. SHORTHORN CATTLE and LEICESTER SHEEP.

Newnham Duke, the gold and silver medal four-year-old Shire stallion, and the imported Clydesdale stallion, Royal Kerr, in service; also Clyde and Shire stud colts for sale. Imp. Chief Ruler, bred by W. S. Marr, heads the Shorthorn herd. Of the females, 15 are imported, from such families as Marr Missies, Strathallans, Jealous Girls, Crimson Flowers, Orange Blossoms, Wimples, Lovelys, Jilts, Secrets, Verbenas, etc. Farm 15 miles from Toronto, on G. T. R. and C. P. R. Post office, telephone and telegraph.

J. M. GARDHOUSE, Weston, Ont.

JOHN BRIGHT, MYRTLE, ONTARIO, BREEDER OF Clydesdales and Shorthorns,



Is now offering for sale 8 stallions, sired by such horses as Prince Patrick (imp.), Erskine's Pride (imp.), Sir Erskine (imp.), Royal Laurence (imp.). Also a number of mares and fillies. Shorthorns of all ages, of such families as Miss Ramsden, Clementina, Strawberry, Crimson Flower, Village Girl, Stamford, Rachel, etc.

Myrtle Station, G. T. R. and C. P. R. Farm connected by long-distance telephone.

BELGIAN STALLIONS and MARES

IMPORTED LAST SEPTEMBER. THOROUGHLY ACCLIMATED.

The up-to-date drafter, big and medium weight, dark colors, short, straight back, no hair on legs, rump, pony-built body. Not a heavy lump of fat. A Klondyke in your stable. Honest value for honest money. Write, or better, come to

BARON DE CHAMPLONIS, Importer, DANVILLE, QUEBEC.



IMPORTED CLYDESDALES

Another edition of imported Clydesdale stallions just arrived in Scotland. Carefully selected. All in good health and splendid condition. These horses are all from noted sires, and range in age from six to six years. Our motto: "Superior quality with honest value." Intending purchasers should call or write to

WM. COLQUHOUN, LONDON, ONT. AND DUNDEE, SCOTLAND.

GOSSIP.

There were despatched from Dalmeny Home Farm, by the Donaldson steamer, Marina, from Glasgow, June 13th, twelve yearling Shorthorn bulls to the order of Mr. W. D. Flatt, Hamilton, Ontario. This was a very select lot of high individual merit and the best of breeding, got by such sires as Prince of Archers, Spicy Robin, Villager and Principal of Dalmeny.

DOLLAR WHEAT.

Henry B. Geer, writing on behalf of the new American Society of Equity, says: "Dollar wheat is a simple proposition. The only action necessary on the part of the producers is to set the price and stick to it. This is their right and privilege, and, in the name of equity, it may be done, and done now, for it is not an exorbitant price, and now is the accepted time for action. Shall we not say the word 'dollar'—aye, stamp our wheat one dollar a bushel, and take no less! Let not one bushel of wheat leave the farm except under contract at this price, and the matter will be settled—settled in justice and equity—that the producer, the man who follows the plow, may have just reward for his labor."

PIGS AT THE ROYAL.

Following are prizewinning records in three classes named at the Royal Show, London, England, last month:

Berkshires.—Boars born 1901-02—1, R. W. Hudson's Manor Hercules; 2, Morant; 3, Sir H. de Trafford. Pen three boars born 1903—Lawrence, Fricker, Harwood, Henderson. Breeding sows born 1899, 1900, 1901, 1902—Prince Christian, Duchess Devonshire, Berners, De Trafford, Hiscock, Horwood, Hudson, Fricker. Three sows born 1903—Prince Christian, Henderson, Fricker, Kember, Duchess Devonshire.

Yorkshires.—Boar born 1901-02—1 and 2, Sir G. Grenall, Knowles, Earl Ellesmere. Pen three boars born 1903—Daybell, Ellesmere, Mills, Greenall. Breeding sow—Greenall, Ellesmere, Daybell, Knowles, Mills. Three sows born 1903—Ellesmere, Daybell, Greenall.

Tamworths.—Boars born 1901-02—Ibbotson, Phillip, Stephens. Pen three boars born 1903—Phillip, Stephens, Mitchell. Breeding sow—Stephens, Phillip, Ibbotson. Pen three sows born 1903—Mitchell, Ibbotson, Phillip.

MORE CLYDES FOR CANADA.

By the Allan Liner, Sicilian, on June 20th, Mr. Robt. Ness, Howick, Quebec, sailed with four Clydesdales, four French Coaching horses, one Hackney and one Percheron stallion. Two of the Clydesdales were bought from the Messrs. Montgomery, one from Mr. Taylor, Park Mains, Renfrew, and one from Mr. Kilpatrick, Craigie Mains. The four are particularly well-bred horses. The two bought from Messrs. Montgomery are Black Guide (11626), a thick chunk of a son of Baron's Pride (9122), from a mare by Sir Harry (9411), while the other is Garrarle (11718), by the grand breeding horse, Up-to-time (10475), out of a mare by the Prince of Wales horse, Prince Romeo (8144), grandam by the celebrated prize horse, Calnbrogle Stamp (4274). From Mr. Taylor came a very bonnie, thick horse in Prince Fauntleroy (11850), got by Mr. Webster's highly successful breeding and prize horse, Lord Fauntleroy (10370), from a mare by the great breeding horse, Prince Lawrence. This colt is very well-bred, and is quite good enough to win prizes in good company at home. From Mr. Kilpatrick came the sweet, true Clydesdale horse, Senator's Heir (11525), got by the well-known prize horse, Senator, from a mare by The Summit (9442). These horses are of the type which Mr. Ness has always been in the habit of buying, and they and the other horses taken by him on this trip are sure to be popular in the Province where his lot is cast.

THE SUNNYSIDE HEREFORDS.



Onward 120463, by Imp. March On 76035, at head of herd. **FOR SALE:** 2 bulls fit for service. Choice females, all ages. Registered large English Yorkshires, 6 to 8 weeks old. Visitors welcome. **O'NEIL BROS., Southgate, Ont.** Iderton station, L. H. & B.; Lucan station, G. T. R.

SALE! INGLESIDE HEREFORDS.



Young bulls, cows and heifers of most up-to-date type and breeding. If you want good Herefords at good-value prices, send for illustrated catalogue, and state requirements. Also requirements Hereford cows and heifers. **H. D. SMITH, Compton, Que.**

CEDARDALE SHORTHORNS

FOR SALE—3 bulls from 1 to 2 years old, two of them of Lord Gloster 26995 and Flora dams, the other by Cedarville Chief 28338, Beauty dam; a big, growthy, sappy lot. **Dr. T. S. Sproule, Ont., Markdale, P. O. and Sta.**

MANITOULIN SHORTHORNS

Edwin Beck, Gore Bay, Manitoulin Island. Breeder of SCOTCH and SCOTCH-TOPPED SHORTHORN CATTLE. A few choice animals.

SHORTHORN CATTLE

and Oxford Down sheep. Imp. Prince Homer at head of herd. Present offering: Young bulls and heifers from imported and home-bred cows; also a choice lot of young rams and ewes from imported sire. **JAMES TOLTON & SON, Walkerton, Ont.** Farm 3 1/2 miles west of Walkerton Station, Ont.

Shorthorns, Clydesdales and Leicesters

FOR SALE: Young animals of both sexes always on hand for sale; bred in the purple, and as good as the best. 20 Leicesters, both sexes, all ages.

WM. McINTOSH, Burgoyne P. O., Port Elgin Sta.

H. SMITH, EXETER, ONT. SCOTCH SHORTHORNS

Bred for utility. More fat show champions produced than in any other herd. Some choice heifers to spare. Come and see them, or write. Farm joins Exeter, on G. T. R.

FOR SALE: 2 SHORTHORN BULLS

11 and 17 months old; also 2 bull calves got by Director 2nd (imported in dam) = 32060. Also 2 Tamworth boar pigs.

J. F. BELL, Amber, Ont.

LORNE STOCK FARM. SHORTHORNS, OXFORDS and STANDARD - BREDS.

We now offer possibly the best 2-year Wildbrino colt in breeding and quality in Ontario. Young stock for sale. Address: **A. McKILLIP & SONS, West Lorne, Ont.**

Queenston Heights Shorthorns

Two bulls, 16 months, got by Lord Gloster = 28995; dams by Crimson Chief = 18801, by Indian Chief.

HUDSON USHER, - QUEENSTON, ONT.

Farm 3 miles north of Niagara Falls.

R. & S. NICHOLSON

Sylvan P. O. Parkhill Station, Ont. Importers and breeders of

SHORTHORNS

Have for sale: 13 IMPORTED HEIFERS, 20 HEIFERS (choice), Safe in calf, to Imp. Spicy Count.

Home-bred herd composed of Nonpareils, Minas, Clementinas, Cruikshank Lovelys, Shethin Rosemarys, A. M. Gordon's Estelles, Miss Symes, etc.

For Sale:

4 bulls, sired by Imp. British Statesman (63720) = 20833; 2 reds, 1 roan and 1 white, from 12 to 17 months old. Also a number of calves, bulls and heifers, sired by Imp. Diamond Jubilee = 28861. Some of their dams are cows sired by Imp. British Statesman, Diamond Jubilee is now at head of our herd. **FITZGERALD BROS., Mount St. Louis P. O.; Elmvale Sta., G. T. R.; Hillsdale Telegraph Office.**

Maple Grange Shorthorns

CLARETS, LAVINIAS AND RED ROSES. Sired by such Scotch bulls as Albert Victor (imp.) 6313; Baron's Heir (imp.) 28854; Scottish Bard 2542, and Commodore 28854. Golden Abel (imp.) heads the herd. Stock always for sale, male and female. **R. J. DOYLE, Owen Sound, Ont.**

The Watch of the Period



THE ELGIN

With ordinary care and usage—anywhere, at any time—

Through heat and cold, or jar and jolt—

The Elgin Watch will never fail in its faithful performance of perfect timekeeping. Guaranteed against original defect.

Every Elgin Watch has "Elgin" engraved on the works. Booklet free.

ELGIN NATIONAL WATCH CO., Elgin, Illinois.

GOSSIP.

The Canadian-bred gelding, Charlie B., sire Octoroon, won the trotting race at the Royal Agricultural Society's Show in London, England, June 29th. Time, 2 minutes 12 seconds

MAPLE HILL HOLSTEINS.

A member of the "Advocate" staff recently had the pleasure of a visit at Maple Hill Stock Farm, the home of Mr. G. W. Clemons, at St. George, Ontario, secretary of the Canadian Holstein Association, where bountiful crops of alfalfa, clover and corn are grown and where is maintained a high-class herd of about forty of his favorites, at the head of which stands the noted sire, Count Mink Mercedes, winner four times of the championship as the best bull of any age at Toronto, Canada's chiefest exhibition. He is a model of the approved modern type of Holstein, low-set, level, long quartered, and having the best handling qualities of skin and hair, characteristics which are reproduced with pleasing uniformity in his progeny, which have taken prominent places in the prize list at leading Canadian shows. He is seconded in the herd by his sturdy son, Count of Maple Hill, first at Toronto last year as a yearling, a chip of the old block, promising to discount even his illustrious sire and make it interesting to all comers, as he combines in high degree the virtues of the best of breed type with quality, vigor and correct dairy conformation. Prominent among the milking matrons of the herd is the six-year-old Flosetta Teake, winner of sweepstakes at the Winnipeg exhibition last year, a cow of faultless dairy form and function, long, low and level, with fine feminine features, carrying a large and well-balanced udder with well-placed teats, and having a record of 75 lbs. milk daily for three weeks. She is the daughter of Ykema Mink Mercedes King 41 and of Daisy Teake's Queen 126, twice champion at Winnipeg, whose yield of 84 lbs. milk and 3 lbs. butter in a day in a fair-ground test stands as one of the most phenomenal dairy performances on record. Flosetta Teake has further distinguished herself by giving birth this spring to twin heifer calves, which give good promise of maintaining the excellent character of the family and of the herd, which contains many deep-milking and high-testing cows, some of them giving over 50 lbs. daily six months after calving, conforming well to the approved type in form and quality and amply confirming the claim that beauty and high-class usefulness in the dairy can well be combined in a Holstein cow, together with good feeding and assimilating qualities. The young things show much uniformity of type kept in view by the owner and which the herd is fast being moulded, a type which takes with the people, sells readily and giving good satisfaction in practical use.

SPECIAL To Stock Raisers

500 Packages Given Free.



We will give a 35-cent package of cream for calves free to any person purchasing 50 lbs. of Day's Aromatic Stock Food; price, \$3. Send cash by P.O. note or express.

Ask your dealer, or write to

The Day's Stock Food Co., MIMICO, ONT.



For high-class imp. and Canadian-bred bulls cows and heifers, write to

H. J. DAVIS, Woodstock, Ont.

HIGH-CLASS Shorthorns AND CLYDESDALE HORSES

Imp. Spicy Count 36117, 3 years old, Four bulls, 12 to 20 months. Cows and heifers.

JAS. McARTHUR - Goble's, Ontario

Greengrove Shorthorns Number 35 head of choice Scotch families. For sale: Several young bulls, by Wanderer's Last, Imp. Fitz Stephen and Fre-booter. Females of all ages.

W. G. MILLSON, Goring P. O., Markdale Station.

SUPERIOR

MATERIAL, DESIGN, WORKMANSHIP IN ALL

WAGONS

MADE BY

MILNER PETROLIA WAGON CO. LIMITED

PETROLIA

GOSSIP.

HORSES AND CATTLE AT THE ROYAL SHOW.

The first exhibition of the Royal Agricultural Society of England in Park Royal, its new and permanent show-ground, in the suburbs of Old London, was quite as successful as could fairly be expected of the initial event under the new conditions, and the show will doubtless grow in favor.

In the class for Shire stallions, the champion, as best of any age, was Hendre Royal Albert, the first-prize three-year-old colt, bred and exhibited by Lord Llangattock. There was no class for older stallions. The first-prize two-year-old was Mr. Walter Hammond's Lowesby Gallant. The champion Shire mare was Sir J. Blundell Maple's Queen of Shires, first-prize mare with foal at foot. In the class for Clydesdale stallions, the championship fell to Messrs. Montgomery's Premier Pride, the first-prize two-year-old, a son of Baron's Pride. The champion female was Royal Ruby, the first-prize three-year-old, owned by T. Smith, Chester. The champion Hackney stallion was the first-prize three-year-old chestnut, St. John, shown by T. & R. Black, Malton. The female champion was Queen of the South, a six-year-old chestnut shown by Harry Livesey, Rotherfield, Sussex.

In the Shorthorn cattle class, the champion bull was Pearl King, a roan three-year-old, shown by Mr. John Handley, Greenhead, Milnthorpe, the first-prize winner in the section for bulls calved in 1899 or 1900. He was born July 18th, 1900. Second to him in his class was Baron Abbotsford, bred and exhibited by Mr. Wm. Bell, Alnwick. The reserve for championship was Bapton Sceptre, the first-prize yearling, a roan, bred and shown by Mr. Deane Willis, and sired by Bapton Duke. The first-prize cow was Mr. Willis' White Heather. The champion female was the King's red two-year-old heifer, Sylph, sired by Royal Duke, the champion bull of last year. The champion Aberdeen-Angus bull was Maranere, shown by T. H. Bambridge. He was the first-prize three-year-old. The champion female was Mr. R. W. Hudson's Effulgent of Danesfield, first-prize cow. In Galloways, the first-prize bull, two years or over, was H. C. Stephens' Jasper, and the first-prize cow, J. Cunningham's Lady Harden 2nd. The champion Hereford bull was the King's two-year-old, Fire King, and the champion female, Mr. T. R. Thompson's two-year-old, Bonny Mary.

Jerseys were the largest class in the show, the entries numbering 186, the Shorthorns being next with 131 entries. In the butter test, open to all breeds, Dr. Watney's six-year-old Jersey cow, Red Maple, won the first prize and gold medal, yielding in two days in the show-yard, three months after calving, 105 lbs. 12 ozs milk, and 5 lbs. 9 1/2 ozs. butter, a ratio of 1 lb. butter to 18.90 lbs. milk.

GILLETT'S

HIGH GRADE



CREAM TARTAR

ABSOLUTELY PURE. SOLD IN PACKAGES AND CANS. Same Price as the cheap adulterated kinds.

E.W. GILLETT COMPANY LIMITED TORONTO, ONT.

T. DOUGLAS & SONS,

STRATHROY STATION & P. O., BREEDERS OF Shorthorns and Clydesdales

88 Shorthorns to select from. Herd bulls (Imp.) Diamond Jubilee = 28861 = and Double Gold = 37854 =. Young bulls, cows and heifers for sale at all times. Also one (imp.) stallion and two brood mares.

ROSEVALE SHORTHORNS. Herd comprises Augustus, Polyanthus, Crimson Flowers, Minas, Strawberrys and Lavinias. For sale, both sexes, the get of Imp. Marengo Heydon Duke, Imp. Baron's Heir, Imp. Golden Able and Imp. Golden Conqueror.

W. J. Shean & Co., Owen Sound P. O. & Sta.

Scotch-Topped Shorthorns—(Imp.) Captain Mayfly (No. 28858), winner of sweepstakes at Toronto (1900), 1st at Toronto and London (1902), at head of herd. Ania also of all ages and both sexes for sale.

JOHN C. BRICKER, Elmira P. O. and Station, on G. T. R.

SHORTHORNS FOR SALE:

10 choice Shorthorn heifers and 10 young bulls, of choicest quality and breeding, at reasonable prices.

G. A. BRODIE, Stouffville Sta., Bethesda, Ont.

Choice Shorthorns and Shropshire Sheep.

I am now offering bulls from 8 to 16 months old. Heifers of all ages, some in calf. Present stock bull, Roan McKay = 37867 =.

CHAS. CALDER, Brooklin.

Shorthorns and Leicesters.

HERD ESTABLISHED 1855.

Scotch Booth and Bates families to select from, grand milking qualities being a special feature. (Imp.) Rosicrucian of Dalmeny = 45220 = heads the herd. Young stock of both sexes to offer; also Leicester sheep.

JAMES DOUGLAS, Caledonia, Ont.

Shorthorns and Yorkshires—Stock bull, Scottish Lad = 35908 =, and 1 bull, 12 months, for sale. Up-to-date Yorkshires, bred straight from imp. stock. Pigs of spring litters for sale.

G. W. KEAYS, Hyde Park, Ont.

SHORTHORNS AND BERKSHIRES. Six bulls fit for service; also a few cows and heifers—best breeding and quality. A few Berkshires, 6 months old, both sexes. Prices moderate.

F. MARTINDALE & SON, Caledonia Station, York, Ont.

HIGH-CLASS SHORTHORNS

Now offering 5 bulls, from 4 to 17 mos. old, sired by Royal Duke, he by Royal Sailor (imp.). Also females, all ages, some in calf. Prices moderate.

J. R. McCALLUM & SON, Iona Sta. & P. O., Ont.

Shorthorns and Lincolns A few choice bulls from 12 to 15 mths. One bull 23 mths. Also females any age for sale.

J. K. HUX, RODNEY, ONTARIO, L. E. & D. R. R. and M. C. R.

Shorthorns, Leicesters and Berkshires. FOR SALE—1 yearling bull, bull and heifer calves; Berkshire bears and fows, ready for service, and suckers ready to wean. Write for wants, or come and see **E. Jeffs & Son, Bond Head P. O., Bradford and Beeton Stns., G.T.R.**

CHAS. RANKIN, WYEBRIDGE, ONT.

IMPORTER AND BREEDER OF SHORTHORN CATTLE and OXFORD DOWN SHEEP.

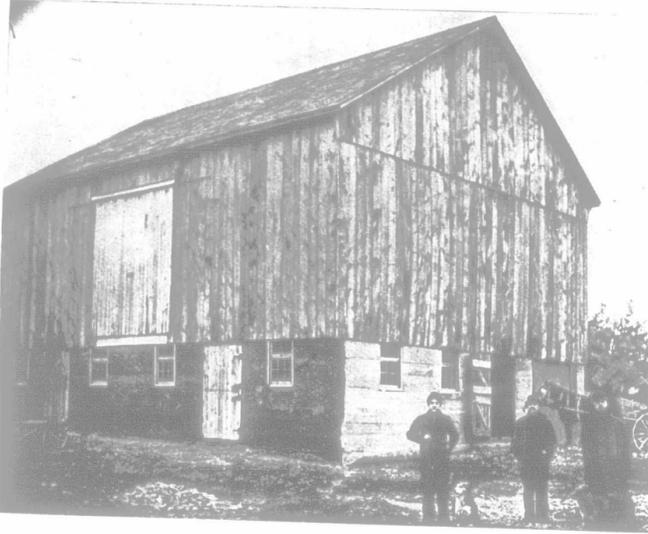
Herd headed by Pride of Scotland (imp.). FOR SALE—Fen ales and bulls of all ages, from noted Scotch families.

BETTER THAN STONE OR BRICK!

GOOD QUALITIES OF

THOROLD CEMENT

RECEIVE ANOTHER TESTIMONIAL.



BARN OF F. H. EICHENBERGER, DELAWARE, ONT.
Size, 36x46 feet. Basement built with Thorold Cement.

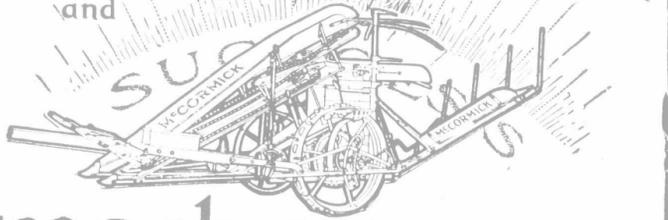
Read what Mr. Eichenberger says:

Delaware, Ont., December 22, 1899.
Gentlemen.—It gives me great pleasure to testify to the good qualities of your Thorold Cement. I built a barn, 36x46 feet, in the wall of which I used 35 barrels of your Thorold Cement, and consider there a first-class job—better and cheaper than either stone or brick.
Yours truly,
F. H. EICHENBERGER.

EST. JOHN BATTLE, (Manufacturers of Thorold Cement, and Dealers in Portland Cements,) THOROLD, ONT.

Get the
McCORMICK
CORN BINDER

and



reach success

THE farmer who reaches success is the one who not only works hard, but who utilizes all of the means within his reach. The McCormick corn binder is within the reach of every man. It will save your corn crop—ears, fodder, stalks and all—and will help double the value of this great crop.

H. R. THURBER, Toronto, Ont. A. B. CLANCY, Montreal, Que.
General Agents for McCORMICK MACHINES.

GOSSIP.

DISPERSION SALE OF THE HILLHURST SHORTHORNS.

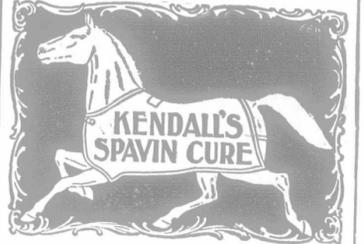
Hillhurst Farm, in the beautiful eastern townships of Quebec, the first home in America of the great prizewinning celebrities, Baron Booth of Lancaster, Rose-dale, Queen of Diamonds and others, needs no introduction to the older generation of Shorthorn breeders. Hillhurst is historic ground, but its history is not all ancient by any means, as is amply attested by the presence in its bountiful pastures at this time of a really high-class herd of typical Scotch-bred Shorthorns, more than half of which are carefully selected imported animals, the balance being mostly the produce of imported sires and dams, including representatives of many of the best families of the breed, all sharing largely in the benefits of the blood of the most noted sires of recent years, and showing it strongly in their individual conformation and quality. It may be considered a strong statement, but it is, we believe, fully justified by the fact, that no single herd of Shorthorns in America to-day can show four stock bulls equal in personal merit and character to the four imported sires in service at Hillhurst. Chief among these is the massive roan three-year-old Duthie-bred Joy of Morning, Mr. Marr's choice of the Collynie calves at the '99 sale, sold there for \$300, and purchased after by Mr. Cochrane at £400, the highest price for a Scotch bull to come to Canada at that time. He is of the Jealousy tribe, sired by Pride of Morning, a Highland Society breed champion, by Star of Morning, and his dam by Scottish Archer, a trinity of Star sires such as is seldom seen at the top of a pedigree. Joy of Morning is a prince among his peers. Remove his head and legs and there remains a parallelogram of the best of beef, but his head and his legs are as good as the rest of him, and properly belong to him, a model head for an impressive sire, and legs squarely set under him. His back and loin are phenomenal in their depth and thickness of smoothly-laid natural flesh. His shoulders are smoothly laid, his brisket prominent, his flanks, fore and aft, low down, and his butt end is as broad as a barn door, while his progeny among the young things partake largely of his peculiar excellencies. Scottish Hero, in his five-year-old form, also bred at Collynie, a roan son of Scottish Archer, and his dam, Missie 134th, by William of Orange, represents a judicious combination in his breeding of the great Sittyton tribes, Missie, Secret and Orange Blossom, and carries in his individual make-up and princely bearing the promise of his prepotency as a sire, which is richly fulfilled in his offspring as seen in the herd. Lord Mountstephen, a red two-year-old, bred by Mr. Duthie, the second best in his 1901 sale of calves, who was got by Rosicrucian, bred by the Queen, sired by Robin Nonpareil, dam Mistletoe 11th, by Captain of the Guard, is a remarkably handsome, stylish bull, smoothly turned, straight in his lines, with a muscular crest, a first-class head and a thickly-fleshed form, a show bull in any country, and proven a potent sire of the right sort of calves. Imported Royal Champion, a lengthy, level, well-proportioned roan yearling, in use on the daughters of the older sires, was bred by Mr. Reid, of Cromleybank, sired by Morning Pride, purchased at a Collynie sale for 150 guineas, by Pride of Morning, dam the Marr-bred Roan Lady 23rd, by Minstrel Boy, and he has back of this in his pedigree the noted sires, Elocutionist, William of Orange, Athabaska and Heir of Englishman. This list does not exhaust the supply of excellent bulls in the herd, for Royal Kitchener, a red yearling, also bred at Cromleybank, sired by the Mina bull, Kitchener, and his dam, an Inverquhony Augusta, is straight, level, smooth and of capital character; and Rose Noble, a roan yearling bred by Mr. Shepherd, of Shethin, sired by the Collynie-bred Cyprus, used with excellent results in the Shethin herd and sold at eight years old for £125, dam a Rosemary, a favorite and prolific family, is a low-set, thick, sappy bull with capital head, crops and

(Continued on page 669.)

THE HORSE MARKET

Demands Sound Horses Only.

Lame horses sell at less than half their actual value and are neither desirable for use or sale. The remedy is easy. A few bottles of



will work a permanent cure for Spavins, Ringbones, Splints, Curbs, etc., and all forms of Lameness. It cures thousands of cases annually. Such endorsements as the one following are a guarantee of merit.

Cured two Bone Spavins of Ten Years' Standing.

Enfield, N.Y., Mar. 11, 1901.
Dr. B. J. Kendall Co., Gentlemen:—Some years ago I used your Kendall's Spavin Cure on a horse that had two Bone Spavins, and it removed them entirely. The Spavins had been on him from birth, and were of ten years' standing. I now have a case of a mare that was injured by falling through a bridge, and am going to give her complete treatment with your Spavin Cure. Please send me a copy of your "Treatise on the Horse and his Diseases." Yours very truly,
CLARK G. FORT.

Price \$1.60 per 5¢. As a liniment for family use it has no equal. Ask your druggist for Kendall's Spavin Cure, also "A Treatise on the Horse," the book free, or address
DR. B. J. KENDALL CO., Enosburg Falls, Vt.

W. R. Bowman, Mt. Forest,

IS OFFERING

YEARLING DURHAM BULL

of an excellent dairy strain (weight 1,200 lbs.) for \$75.00. Two Aberdeen-Angus bull calves 13 and 9 mos., at \$75 and \$90. Yorkshire boars and sows, Suffolk Down sheep, shearling ewes and ewes in lamb.

MERCER'S SHORTHORNS

Comprise Missies, Stamfords, Floras, Clarets, Princesses, Red Roses, Young Sterlings, Fashions and Matchless. They number 60 head for sale. There are several choice heifers, 17 heifer calves, 3 bulls fit for service and 4 bull calves. A few older females.

Thos. Mercer, Markdale P. O. and Station.

Shorthorns, Cotswolds, Berkshires

FOR SALE.—Seven bull calves from 1 to 8 months old; a few young cows with heifer calves at foot; a choice lot of yearling ewes, ram lambs and ewe lambs; young pigs of the long bacon type, from 6 weeks to 2 months old.
F. BONNYCASTLE & SON,
Campbellford P. O., Ontario.

S. DYMENT, BARRIE, ONT.

Breeder of Scotch Shorthorns

Imported Morning Star at head of herd.

TROUT CREEK SHORTHORNS



IMP SPICY MARQUIS
LONDON 1901
1ST & CHAMPION Toronto 1902

JAS. SMITH, Manager, Millgrove, Ont. W. D. FLATT, 378 Hess St. South, Hamilton, Ont.

OAK LANE STOCK FARM.

Shorthorns, Cotswolds, Yorkshires and Barred Rock Fowls.

FOR SALE: Three bulls (2 imp.), cows and heifers, both imported and Canadian-bred. Still open to take orders for N.W. trade. Write for prices. Satisfaction guaranteed.

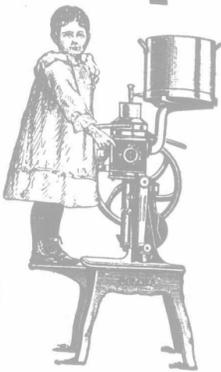
GOODFELLOW BROS., MACVILLE, ONT.

DE LAVAL

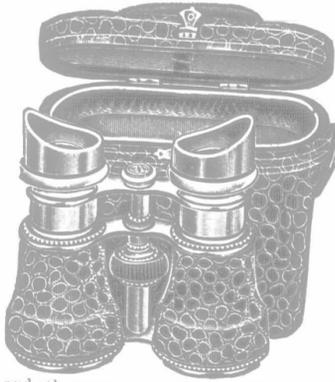
Stands for everything that is of any real value in a Cream Separator, for back of the name is an unapproachable reputation extending over a period of nearly a quarter century and a guarantee that the **DE LAVAL** is the **BEST** in every particular, or no sale.

For proof of this write us or our agents.

THE DE LAVAL SEPARATOR CO.
77 York St., Toronto.



Regular \$15 Field Glasses for \$3.95



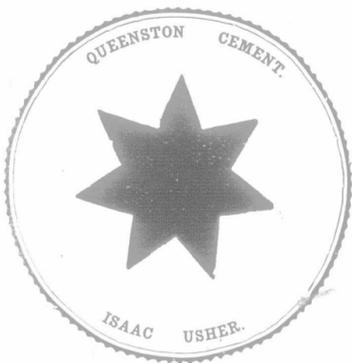
POWERFUL ACHROMATIC LENSES, FULL 50-MILE RANGE.

During the month of May we advertised a sample lot of 3 doz. pairs of Special Field Glasses, which were to arrive from France, June 10th. Long before the glasses reached here every pair had been spoken for, and our customers were so well satisfied with them that we immediately cabled to France for another shipment of 12 doz. As we said in our last advertisement, these are regular \$15 Genuine Achromatic High-grade "Hunters' Favorite" Pocket Field Glasses of remarkable power, and the reason we are able to sell them so cheap is because we buy direct from the manufacturer, in large quantities, and thus save the jobbers', wholesalers' and retailers' profits. The finish throughout is extra fine, crossbars and draw-tubes being heavily nickel-plated, and the trimmings in both gilt and nickel. The tubes are covered with the best grade of green alligator leather, and are fitted with 6 genuine achromatic lenses of high magnifying power and great clearness. Each pair of glasses is enclosed in a beautiful satin-lined, alligator leather case, and in the lid protected by a satin pad, is a highly-polished mirror, which can be used for heliograph signals and other purposes. As you will notice in our illustration, these glasses are shaped to fit close to the eyes, a feature which adds wonderfully to the clearness of the view. We are so confident that any person who had an opportunity of examining these glasses would realize at once what a bargain they are, that we are willing to send a pair by express for free inspection to any address in Canada. You pay not one cent till you see them. Simply write us that you would like to examine a pair, and we will at once ship them to your nearest Express Office. When they arrive, call and test them thoroughly, and then if you are all well pleased with them, and a real bargain at our price, pay the Express \$3.95 and express charges. If you are a farmer, ranchman, fisherman, prospector, sailor, or are in any position where you require a powerful instrument, you will find our Glasses worth many times this price. Read what some of our customers say: Allan C. Atkinson, Regina, N.-W. T., said: "The glasses arrived O. K., and I must say they are excellent value, and I am highly pleased with them. There may be better glasses made, but I don't think better value in field glasses is offered to the public." W. A. Snyder, Lyndon, Alta., said: "I received the glasses and am well pleased with them. They are far better than I could buy here for three times the price." If you do not live near an Express Office, or wish to save express charges, send \$3.95 cash with order, and 25 cents to pay postage, and we will forward the glasses by mail, postpaid. We guarantee safe delivery and perfect satisfaction and will refund your money if asked for. Do not delay, but order at once, as we expect to have every pair spoken for by the time they arrive, Aug. 1st. Address very plainly, Johnston & Co., Dept. 553, Toronto.

Going to Build?

A new house, barn, silo, concrete floor, or any other such work? If so, use

Queenston Cement



THE old brand made by a new process. No better cement made. All who contemplate using cement should first inspect the different structures built of the different kinds of cement, and then they would know which is best and cheapest. We especially request those interested to ask our many patrons about the new-process Queenston Cement used during the latter part of last season. Do not be misled by statements from those who sell the goods most profitable to themselves. Write for prices, estimates and full particulars. We can save money for you when building.

ISAAC USHER,
QUEENSTON, ONTARIO.

In answering any advertisement on this page, kindly mention the FARMER'S ADVOCATE

GOSSIP.

(Continued from page 668.)

flesh. Several excellent bull calves are also included in the herd, sons of the splendid sires above enumerated, while the list of females abounds in good things, comprising a number of heifers fit to show in first-class company anywhere, reference to some of which may be made in later issues.

The original intention was to make a two days' sale, including the entire herd of about 75 head, but it has been deemed wiser to weed out all not up to a high standard of breeding and condition, to be disposed of locally later in the season, and to include in the Hamilton sale, on August 11th, all the best, making a uniform and attractive offering, which they certainly will be, for it is no exaggeration to say that no better offering from any single herd has been made at a public sale in Canada in recent years, there being in it material for more than one young show herd, besides the wealthy list of breeding matrons, and the best lot of bulls seen in an auction sale in Canada in many years.

The advanced age and failing health of Senator Cochrane, who has lost his sight and is desirous of closing up his business affairs, renders the necessity for the dispersion of the herd at the present time absolute, and it is with regret that the result of so much careful selection and discriminating breeding is to be submitted for disposal under the salesman's hammer. It will, however, afford an unusually favorable opportunity for securing at the purchaser's own price first-class foundation stock of up-to-date type for the establishment of a herd or for the upbuilding and improvement of existing herds, while the cheerful prospect of a bountiful harvest and the growing feeling of confidence on the part of the people of Canada in the future of this great country should serve as an inspiration to improve the character and quality of our cattle, and so to be prepared for the great and growing demand that must surely come for breeding stock to supply the newly-opening country at home and the increasing requirements of the markets abroad. The catalogue of the Hillhurst sale is in preparation and will be sent to all applying for it as intimated in the advertisement, which appears in this issue.

NOTES OF LIVE STOCK AT THE WORLD'S FAIR, ST. LOUIS.

Warner M. Van Norden, a prominent stock-raiser and financier, of Rye, N. Y., has written to Chief of Live Stock Coburn that he will probably make a large entry from his herd of Highland cattle at the World's Fair next year. Mr. Van Norden's herd is headed by a bull which twice has won first prize at the Highland and Agricultural Society Show in Scotland.

Live stock exhibitors in each breed class at the World's Fair will receive a senior champion prize and a junior champion prize for males and females, and a reserve champion award will follow in the four classes. Competition for the senior championships will be limited to mature animals, and young males and females only will compete for the junior champion prizes. Prospective exhibitors express themselves as highly pleased with the plan of Chief Coburn of providing for a more equitable method of awarding championship prizes and thus increasing the number of honors.

W. M. Springer, President, and C. E. Stubbs, Secretary of the Oldenburg Coach Horse Society of America, have sailed for Germany to increase the interest among breeders of Oldenburg Coach horses in making a representative exhibit at the World's Fair. Mr. Springer, who bears a special commission for the purpose from the Louisiana Purchase Exposition Company, will spend considerable time in calling the attention of German breeders and exporters of horses to the many advantages of large exhibits at St. Louis next year.

The World's Fair live stock shows of 1904 will be the first in which classifications will be uniformly divided by age periods of six months, instead of one year, for beef cattle, swine and sheep, thus giving proper recognition to the general method of feeding for early maturity.

The Books Are Free

**Spavin
Ring Bone
Knee Sprain
Fistula
Poll Evil
Lamp Jaw**

If you have a horse that is lame or blighted by any kind of growth or enlargement, that is Knee Sprain or has Fistula, Poll Evil or Sweeney, or if there is a case of Lamp Jaw among your cattle, write us at once. We will send you two big booklets. One tells you just how to cure these diseases and blemishes. The other proves that you can cure them, and we guarantee you success besides. Same methods employed by over 140,000 farmers and stock owners. Write for the books and tell us what kind of a case you have to treat.

PLEMING BROS., Chemists,
46 Front St., West, Toronto, Ont.

FOUR BULLS (red), Ury and Stamford dams, sired here and British Columbia; now owned by Mr. Ladner, Ladner's Landing, on **ROBERT BATTY**, Glenbourne Farm, Meaford P. O. and Sta.

JAS. GIBB, SUNNYSIDE STOCK FARM, BROOKSDALE, ONT. om
BREEDER OF **SHORTHORN CATTLE.** Stock for sale.

SHORTHORNS.
Importer and breeder of choice Shorthorns. Scottish Hero 156726 at the head of herd, on **JAS. A. CHERAR, Shakespeare, Ont.**

SHORTHORNS. Imp. Christopher = 28859 = heads herd. A few choice young cows, heifers and bulls for sale, of milking strain. Also Summerhill Yorkshire pigs. om
A. M. Shaver, HAMILTON Sta. Ancaster P. O., Ont.

HAWTHORN HERD
Of Deep Milking Shorthorns.
FOR SALE: Four young bulls, from 8 to 24 months old, from AI dairy cows. Good ones.
om **WM. GRAINGER & SON,** Londesboro, Ont.

Lakeview Shorthorns. Herd represented by such noted families as Stamfords, Minas, Marr Floras, Crimson Flowers, Village Girls, Bucan Lassies, and Lavinias. Some yearling and two-year-old heifers for sale, on **James Bowes Strathairn P. O., Meaford Sta.**

W. G. PETTIT & SONS
FREEMAN, ONT., CAN.
Importers and breeder of

Scotch Shorthorns

and SHROPSHIRE SHEEP,

make special offering for January and February.

2 imported bulls coming 2 years old,
4 bull calves, from 8 to 12 months old,
from imported sire and dam.
6 bulls, 10 mos. to 2 yrs., by imp. sire.
Imp. and home-bred cows and heifers of all ages.
Our entire flock of Shropshire sheep, 75 head.

Shorthorns, Berkshires and Leicesters.
FOR SALE: Choice two-year-old heifers, well gone in calf; also yearling heifers, bull calves. Bows and sows fit for breeding, and young pigs. om
ISRAEL GROFF, ALMA, ONTARIO.

ARTHUR JOHNSTON,

GREENWOOD, ONTARIO,

Offers for sale at times' prices, 6 young **SHORTHORN BULLS**, from imp. dams and by imp. sires.

6 **YOUNG BULLS**, of purest Scotch breeding.

10 **YEARLING** and 8 **TWO-YEAR-OLD HEIFERS.**

Pickering Station, G. T. R.
Clarendon Station, C. P. R. om

SHORTHORNS.
Dark red bull calf, Blue Ribbon 2nd, 18 months old, sired by Blue Ribbon (imp.) 17095 (63703), dam by Royal George (imp.) (64728). Bull calf, 10 months old, dark red; also yearling and two-year-old heifers. Imp. Royal Prince heads the herd. om
JOHN McFARLANE, DUTTON, ONT.

GREEN GROVE SHORTHORNS.
This herd comprises such noted families as Cruickshank, Orange Blossoms, Nonpareils, Crimson Flowers, Mysies, Languishes, Butterflies and Jessamines, and is headed by the noted Watt-bred bull, Spicy Robin = 28259 =, winner of second prize at Toronto and London, 1902. A choice lot of yearling and two-year-old heifers off Spicy Robin for sale; also a few young cows in calf, and a good lot of bull calves.
GEORGE D. FLETCHER,
Erin Shipping Station. o Binkham P. O.

"A FREE SAMPLE PACKET"

of Delicious "**SALADA**" Ceylon Tea (Black, Mixed or Natural Green) will be sent to any person filling in this coupon and sending it to us with a two-cent stamp for postage. (Write plainly and mention Black, Mixed or Natural Green.)

Name.....

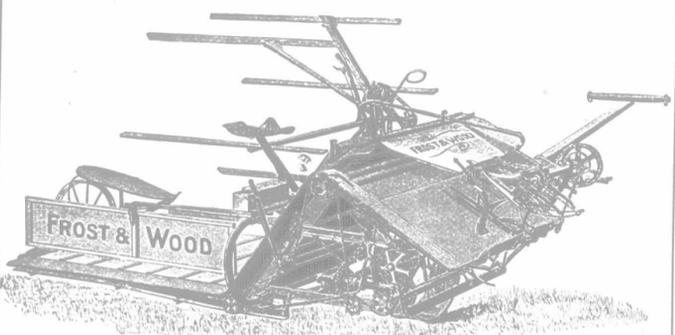
Address.....

"Farmer's Advocate." Address "**SALADA**" TEA CO., TORONTO. -om

THE FROST & WOOD

No. 3 Binder

IS SPECIALLY ADAPTED FOR HARVESTING HEAVY CROPS.



Farmers say the No. 3 BINDER Draws Easily. Many customers have written us that they can use a Light Team to Harvest with the No. 3.

IT IS NOT A HORSE-KILLER!

This fact should appeal to every humane farmer.

Ask your neighbor about the Light Draft F. & W. No. 3 Binder.

THE Frost & Wood Company
LIMITED.

BRANCH OFFICES:
Toronto, Ont.; Winnipeg, Man.; Montreal, Que.;
Quebec, Que.; London, Ont.; St. John, N. B.;
Truro, N. S.

Head Office & Works:
Smith's Falls, Ont.

PINE GROVE SHORTHORNS AND SHROPSHIRE.

Our herd comprises over 150 females, including our last importation of 30 head, all of the most esteemed strains. Of Shropshires, we offer a few choice rams, also high-class ewes bred to first-class rams. Address -om

W. C. EDWARDS & CO.,
Rockland, - - - - - Ontario.

SHORTHORNS

WE ARE OFFERING FOR SALE a grand lot of young imported Scotch cows and heifers with shoes at foot or safe, in calf to the best imported bull obtainable.

Herd Numbers 150 Head.

Send for New Catalogue.

VISITORS WELCOME, AND CORRESPONDENCE PROMPTLY ATTENDED TO.
TELEGRAMS OR TELEPHONE.

H. CARROLL & SON,
Also have a choice lot of O. S. Sheep, either sex, at \$4.00 per head. H. Carroll & Son, Rockland, Ontario, Canada.

GOSSIP.

CANADA AT ST. LOUIS.

The Dominion Federal authorities are planning for a grand representation at the World's Fair, St. Louis, 1904. Canada's exhibit will be the largest and most comprehensive that she has ever attempted to show. The Canadian authorities, represented by their Agricultural Department at Ottawa, Ont., and Mr. Wm. Hutchison, Exposition Commissioner, are putting forth unusual efforts to make such a display of the products of the Dominion as will do justice to this country's magnificent resources. Canada is vitally interested in the St. Louis Exposition. It has been already proved that at the Paris and Buffalo exhibitions she was to the front in securing first positions for natural products, dairy interests and live stock; furthermore, at the Osaka Fair held last winter in Japan, ten foreign countries competing, Canada easily won the medal of honor for the best display. The Hon. Mr. Fisher, Minister of Agriculture for the Dominion, has just caused an item of \$150,000 to be voted for the St. Louis World's Fair. The Canadian building will cost upwards of \$25,000. One of the most interesting features of the Canadian exhibit will be a cold storage plant for the preservation of natural products. In the last five years a great number of Americans have crossed the border, and have settled in the Canadian Northwest. It is obvious, therefore, that a practical illustration of Canada's natural wealth such as she intends to show at St. Louis next year, cannot but stimulate to a high degree a continuance of the emigration. Canada needs settlers of an industrious and earnest character, and she must display all honest and available means to that end.

STALLION SALESMAN IN STATE PRISON.

Mr. Lew W. Cochran, Crawfordsville, Indiana, breeder and dealer in Percheron, Shire and Hackney stallions, whose advertisement appears in this paper, writes, exposing the alleged fraudulent conduct of one John A. Downer, a pretended stallion salesman, who has been travelling over several States for the past few years, getting the confidence of importers and seeking employment for the purpose of selling stallions on the company plan, representing himself to be an expert in this line temporarily out of employment, and claiming he had a location where a stallion could be sold in a very few days to a company of four or five men for a certain price. Downer's story seemed to Mr. Cochran so favorable that he was fitted out with a good three-year-old black Percheron stallion weighing a ton, and set out for business with all necessary papers and money to pay all expenses. Favorable letters came back each week that his prospects were fine, that the deal would be closed in a very few days, but requesting \$50 or \$100 more sent to close the deal. This story continued until Cochran lost hopes and ordered the horse shipped home, when another \$100 was asked for to pay up balance of expenses. This amount was sent. Then another call followed, that the horse was sick, and to wire \$16.00 more to pay vet. This being done, and no horse shipped, Cochran left at once for Ohio, where the alleged deal was on, and, to his surprise, found that as soon as Downer had received the \$16.00 he had left for parts unknown, and the horse, which had not been sick, had been attached for expenses run by Downer. Cochran, on learning that he was not the only horseman who had been so victimized, at once swore out a warrant and a reward offered for Downer's arrest, which, after considerable delay, owing to the rapid movements of the culprit, was finally effected in January, 1903, and Downer taken to Crawfordsville, Ind., where he has been in jail until the present term of court, when his trial came off and he was convicted on June 22nd and sentenced to one to seven years in the State prison at Michigan City, Ind.

SHARPLES

TUBULAR FARM SEPARATORS

Built on the Square,

as everybody knows. Entirely different from other separators, new in principle. Guaranteed more convenient, efficient and durable than any other kind.

Write for catalog No. 193.

P. M. SHARPLES,
West Chester, Pa.
THE SHARPLES CO.,
Chicago, Ill.



MAPLE LODGE STOCK FARM

ESTABLISHED 1851.

SHORTHORNS.—First-prize milking strains, best Scotch breeding. Young bulls and heifers for sale.

LEICESTERS.—A grand lot of ewes, bred to our imported rams, and a few choice rams now for sale.

A. W. SMITH,
Ailsa Craig Sta., G.T.R., Maple Lodge P.O., Ont.
3 1/2 miles.

J. & W. B. WATT

BREEDERS AND IMPORTERS OF

Shorthorns, Clydesdales and Berkshires

We breed our show cattle and show our breeding cattle.

The imported bulls, Scottish Beau, Viceroi and Scottish Peer, head the herd.

Imported and home-bred cows and heifers for sale. A few choice young bulls on hand.

Our herd at Toronto won three firsts, a second and third out of five herd classes.

Salem P.O. and Telegraph Office. Elora Sta., G.P.R., G.T.R.

PENNABANK STOCK FARM

Three choice Shorthorn bulls from 12 to 14 months old, solid reds. Prices reasonable. Also a few Shropshires left, of choice quality and breeding.

Hugh Pugh, Whitevale, Ont.

SHORTHORNS AND CLYDESDALES.

We have for sale five bull calves, from 8 to 24 months, from imp. sire and dams; also six extra good stallions, from two to six years old.

JOHN MILLER & SONS,
BROUGHAM, ONT.

CLAREMONT STATION, G. P. R. -om

SHORTHORNS (IMP.)



Cows and heifers, imp. and home-bred. Bulls, imp. and home-bred—all ages. Representing the fashionable blood of Scotland.

EDWARD ROBINSON,
MARKHAM P. O. & STN.

SHORTHORNS.

THORNHILL HERD, ESTABLISHED 27 YEARS.

Imp. Royal Member and Sailor Champion now at head of herd, which are all bred on straight Scotch lines, and are of the up-to-date kind. Present offering: some choice young bulls.

REDMOND BROS., Millbrook Sta. and P. O.

Spring Grove Stock Farm

Shorthorn Cattle and Lincoln Sheep.



HERD prize and sweep-stake at Toronto Industrial Exhibition, three years in succession. Herd headed by the Bruce Mayflower bull, Prince Sunbeam, imp. Present crop of calves sired by Imp. Wanderer's Last, sold for \$2,005. High-class Shorthorns of all ages for sale. Also prizewinning Lincolns. Apply -om

T. E. ROBSON, ILBERTON, ONT.

BONNIE BURN STOCK FARM

10 rods north of Stouffville station, offers Scotch Shorthorns, 10 Shropshire sheep, cheap, good breeding; also Berkshire pigs.

D. H. RUSSELL,
Stouffville, Ont.

MAPLE SHADE FARM

Home of the oldest herd of

CRUICKSHANK SHORTHORNS

in Canada.

SHROPSHIRE FLOCK founded 1871.

Carload of yearling rams of choice quality, ready for inspection. Call or write -om

JOHN DRYDEN & SON, Brooklin, Ont.



At peace with his neighbors and their animals

Mr. James Martin, of Rounthwaite, Manitoba, gives the following eleven reasons why he likes **Page Wire Fence**. Could anyone wish a better recommendation? He says he likes it,

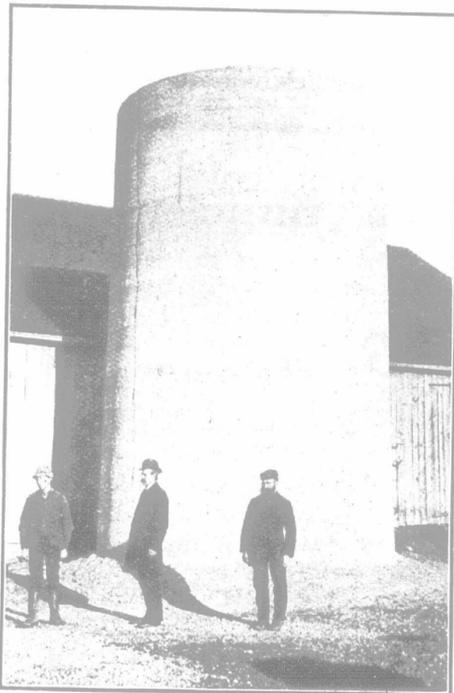
- | | |
|----------------------------------|--|
| Because it is a permanent fence. | Because it is always ornamental. |
| —it is the strongest fence. | —other makers try to imitate it. |
| —it is the safest fence. | —it increases the value of your property. |
| —it is the best looking fence. | —it allows you to live at peace with your neighbors and their animals. |
| —it won't obstruct the view. | |
| —it won't cause snow drifts. | |
| —it requires no repairs. | |

"Page Fences wear best"

PAGE WIRE FENCE CO., Limited
Walkerville, Ont. Montreal, P.Q. St. John, N.B.

109

PORTLAND CEMENT Concrete Silo



BUILT FOR P. CRERAR, MOLESWORTH, HURON CO., ONT.
14 feet in diameter and 30 feet high, with

"RATHBUN'S STAR" BRAND

MANUFACTURED BY The Canadian Portland Cement Co., Limited

SOLE SALES AGENTS:

THE RATHBUN COMPANY

310 and 312 FRONT STREET WEST, TORONTO, ONTARIO

Joseph Rodgers & Sons
Limited,
SHEFFIELD, ENGLAND.

Please see that this **EXACT MARK** is on each blade.

JAMES HUTTON & CO., MONTREAL, SOLE AGENTS IN CANADA.



GRANTED 1882

TRADE TOPICS.

WINDMILLS AT THE ROYAL.—Canadian implement manufacturers were well represented at the Royal Show in London, England, this month. They report trade brisk, more especially with the Continent and South Africa. The first prize and the Society's medal for a wind-pumping engine was awarded to the Imperial, manufactured by Goold, Shapley & Muir, Brantford, Ontario, against 22 competitors from all countries.

"MUSIC HATH CHARMS."—Wm. Doherty & Co., of Clinton, Ont., have just issued a pocket catalogue, which, in completeness and artistic appearance, corresponds well with the beautiful organs which it describes. The engravings and descriptions given of the various styles of instruments are just such as prospective purchasers will appreciate. We presume an inquiry by post card will bring a copy from the company at Clinton, or from any local agent of the firm. It is a beauty.

FINE HARNESS.—On another page of this issue will be found the advt. of MacGregor Bros., of Highgate, Ont., who have this season built and equipped with the latest and best appliances, a fine two-story building for more extensive manufacture of harness. Their specialty is fine hand-made driving harness, the several lines of which are illustrated and fully described in their catalogue, which is now ready for mailing. MacGregor Bros. buy their leather and trimmings in large quantities, and, besides, have every facility possible for making first-class hand-made harness at a minimum cost. To this cost of material and making they add but one profit. They can, therefore, assure a first-class article at a much lower price than if harness were made singly and to order. J. W. MacGregor, the head of the firm, has done a large trade in harness in Highgate for the past four years, and during the past two years has shipped a considerable number of harness to different parts of Ontario and the Northwest. These harness have given the best of satisfaction, and continual inquiries for quotations on harness from places where these harness are known has forced them to make preparation for doing a larger and more complete mail-order business. Being personally acquainted with Mr. J. W. MacGregor, we know that goods made by this firm are strictly first-class and compare favorably with harness sold at several dollars higher than their prices. Every one interested in driving harness will do well to drop a postal asking for their catalogue.

NORTHWEST FARM LANDS.—The Tracksell Land and Investment Company, Limited, of Regina, N.-W. T., box 482, advertise in this paper farms and wild lands in Assiniboia, Saskatchewan, Alberta and Manitoba, to which the attention of "Farmer's Advocate" readers is directed either as homesteads or investments. Americans are showing a much greater interest in Western Canada than Canadians are. There are, of course, many settlers coming from the United States who some years ago went from Eastern Canada, and have done remarkably well in the Western States on prairie farms, and are now selling at good prices and buying farms in Assiniboia and Saskatchewan at low figures. These farms will in a short time be valuable and make their owners independent, and even wealthy. It is well known that the Regina district has a very favorable record in the matter of crops, and there is every prospect of a repetition of the yields of the past two years, the abundant rains and the fine warm weather bringing the crops well along, and are now in fine condition. In addition to a large list of improved and unimproved land in the vicinity of Regina, the company are offering for sale about thirty thousand acres in the vicinity of Battleford, and lying very convenient to the Canadian Northern Railway now being built through the North Saskatchewan Valley to Battleford and on west. These lands are all personally selected, and are recommended as first-class for wheat or for mixed farming and for dairying. They will be very glad to show any of the lands they have, to those who wish to investigate.

GET AN EMPIRE

The Empire Cream Separator turns more easily, is more easily cleaned and kept clean, is more satisfactory in every way than any other cream separator made, because it is simplest in construction and has fewest parts. It will pay you to investigate. Book free.

Empire Cream Separator Co.

28 Wellington St. W.
TORONTO, CANADA.

THE Empire Way MAKES COWS PAY

Present offering in **Shorthorns**: **Old Stock Bull**, Heir-at-law = 34563 =, a grand stock-getter and sure, 3 years old. Also 1 bull, 13 months; heifers and cows, Shropshires, all ages and sex. **BELL BROS., Bradford, Ont.**

SHORTHORNS. Lady Fannys and Beautys for sale 5 bulls, from 6 to 14 months old; 7 heifers, from 1 to 3 years old, some of them in calf to Prince Eclipse 33049. **om James Caskey, Tiverton P.O., Kincardine Sta.**

Shorthorn Cattle, Lincoln Sheep

Imp. Prime Minister at head of herd. Imp. Clippers, Miss Ramsdens, and other Scotch families. Lincolns won more than half the money and first for flock at the Pan-American; International, Chicago, 1901 and 1902.

J. T. GIBSON, om DENFIELD, ONT.

ROSE COTTAGE SHORTHORNS.

Royal Prince = 31941 =, by imp. Royal Sailor, at head of herd. For sale—4 bulls, 3 heifers (3 to 9 months old), 3 yearlings, one 2-year-old heifer and 9 cows in calf, Scotch and Scotch-topped.

H. K. FAIRBAIRN, om Thedford P. O. and Station, G. T. R.

H. PARKER, RIVER FARM, DURHAM.

Breeder of **SHORTHORN CATTLE**. In service, Verschoyle (imp. in dam) = 36125 =. Stock for sale. **om**

GRANDVIEW SHORTHORNS

For Sale.—1 bull, by Royal Beau; also a few females. Herd headed by the Marr Missile bull Marengo = 31055 =. **om**

J. H. BLACK & SON., ALLANFORD P. O. and STATION.

BEAVER VALLEY SHORTHORNS.

Some choice heifers and young cows with calf at foot; also two bulls for sale. Inspection invited. **om E. & C. PARKINSON, Thornbury P. O. and Station, G. T. R.**

Shorthorns and Berkshires.

Shorthorns sired by Arthur Bright, Dunblane and Blue Ribbon (imp.). Berkshires of the bacon type. Visitors welcome. Correspondence solicited.

MAC CAMPBELL, o Samson, Ont.

BELLEVUE SHORTHORNS.

Both sexes. Imported and home-bred. All ages. Prizewinners at home and abroad. **EDWIN BATTYE, Gore Bay P. O. and Port. MANITOULIN ISLAND.**

CHOICE SHORTHORNS.

We are now offering 12 heifers from 6 months to 2 years of age, and 7 bulls from 6 to 10 months old, some of them extra choice and prizewinners—a low-down, thick lot Also, Yorkshires.

WM. McDERMOTT, Living Springs P. O., Fergus Station.

Imp. Shorthorns and Lincolns

A. D. MUGGAN, RODNEY, ONT., P. O. AND STA.,

Imported Aberdeen Hero at the head of the herd, which is composed of the best Scotch families. Ten grand shearing and two-year old ewes for sale, in lamb to a Royal winner. Also ewe lambs from imported Dudding ewes at reasonable prices. **o**

R. Mitchell & Sons,

Nelson, Ont.

Present offering three extra good bulls from 12 to 14 months, two imp. in dams, and one from imp. sire and dam.

Also a number of Scotch heifers in calf. **o**

Burlington Jet, Station and Tel. Office.

GOSSIP.

Two deep-milking and high-testing Jersey cows due to calve in August; also, a two-year-old Jersey bull, son of the Toronto champion, Brampton's Monarch (imp.), are advertised for sale by T. C. Pettit, Burgessville, Ont.

A 225-acre farm in the fine county of Oxford, Ontario, is advertised for sale in this issue by Messrs. Ormsby & Clapp, of Woodstock. The farm is only 2 1/2 miles from the beautiful city of Woodstock, and has three large bank barns.

Mr. D. Leitch, Cornwall, Ont., breeder of Ayrshire cattle, in ordering a change of advertisement, writes: "I am sold out of bulls old enough for service, and just have the four bull calves which I am offering, and which I am willing to dispose of at half their real value, owing to the shortness of feed supply for the coming winter, on account of the long spring drouth. Some of the dams were giving as high as 50 lbs. on grass alone before the pastures failed. The bulls are large, growthy fellows for their age, are light in color and would do for a small herd of cows this summer or fall. We have had a very successful season so far, have sold twelve bulls and could have sold a good many more through the "Advocate," if they had been old enough."

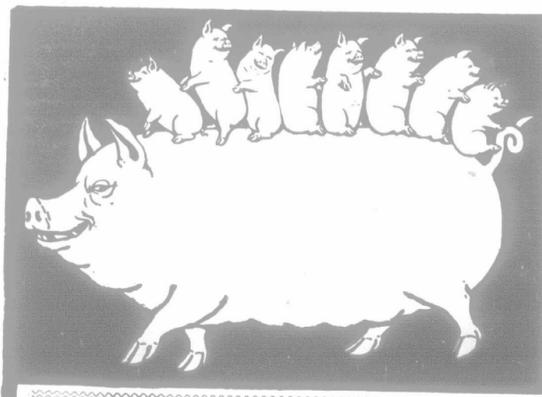
Mr. T. H. Hassard, Millbrook, Ont., reports the sale of his last importation of five Clydesdale stallions as follows: "Lampton Knight, by Knight of Cowal, to Mr. J. D. Elliott, Bolton, Ont. The Prince, by Prince of Kyle, to Mr. Jos. Wilcox, Stayner, Ont. Sir Gilbert, by Admiral of Rosehaugh, to Little Bros., Sand Hill, Ont. Sir Gordon, by Royal Favorite, to R. Shaw, Millbrook. Sir Ernest, by Lord Stewart, to a company, Braughton, Ont. And a choice pair of fillies that he imported, sired by Royal Carrick, to Mr. Andrew Aitchinson, Guelph, Ont." Mr. Hassard sailed June 27th for the Old Country, by S. S. Tunisian, and intends bringing out a number of stallions and mares for the fall and winter trade, further notice of which may be looked for in later issues of the "Advocate."

HIGH-CLASS HURON CO. FARM FOR SALE.

The advertisement in this issue of a first-class farm of 150 acres for sale, offers an excellent opportunity for securing a very desirable property in one of the very best farming districts in the banner Province of Ontario. It is only a quarter of a mile from Brucefield station, on the London and Wingham branch of the G. T. R., where there is a grain elevator and good market for all farm produce, a sawmill, blacksmith shop, P. O., telephone and telegraph offices, doctor, V. S., two churches—Presbyterian and Methodist. Deceased owner was a large feeder of export cattle, and farm is in high state of fertility, as the heavy crops and magnificent orchard now growing on it amply attest. The soil is mellow clay loam, easy to work and well underdrained, rendering it proof against evil effects of heavy rains or protracted drouths. There is no better farming land, no more prosperous district, in the whole Dominion than in this section of Huron Co. Parties desiring to secure a farm they can depend on for first-class crops, should look up the advertisement, and see the farm and its crops at this season, or write Mr. Wm. Murdoch, Brucefield, Ont., for particulars.

\$50 to California and Return

Via the Canada and North-Western Ry. First-class round-trip tickets on sale from Chicago, St. Paul, La Crosse, Ill., to San Francisco and Los Angeles, also to Portland, Oregon, and Seattle, Wash. Correspondingly low rates from other points. Favorable rates for private parties, 50c limit, covering the great coast cities, daily from Chicago, St. Paul, La Crosse, without change, and from other points, and tourist rates, etc. Tickets valid for 60 days and all through to Seattle, Bennett, General Agent, Toronto, Ont.



PIGS ARE COMING MAKES PIGS GAIN 3 LBS. PER DAY

BLANCHARD, IOWA. INTERNATIONAL STOCK FOOD Co., Minneapolis, Minn. GENTLEMEN:—This is to certify that having used "International Stock Food" for three years I cheerfully recommend it to all stockmen, and especially those who raise hogs. Last spring with a bunch of the runtiest pigs I ever had they made a gain of three pounds apiece per day. J. S. BELL.

What People Say About This Book. Dear Sirs:—I received your "International Stock Book" and was more than pleased with it. It is worth more than \$10.00 to me. Very truly yours, RICHARD J. MORRISSEY. Eau Claire, Wis. Dear Sirs:—Your "International Stock Book" duly received, and it is the best thing of its class that I have ever seen. There is a volume of useful articles in it from start to finish. Respectfully, GEO. W. NULL. Odessa, Mo.

A \$3000.00 STOCK BOOK FREE

IT CONTAINS 183 LARGE ENGRAVINGS OF HORSES, CATTLE, SHEEP, POULTRY, ETC. The Cover of this Book is a Beautiful Live Stock Picture. Printed in Six Brilliant Colors. Size of the book is 6 1/4 by 9 1/4 inches. It cost \$2000 to have our Artists and Engravers make these Engravings. It describes common Diseases, and tells how to treat them. It also gives Description, History and Illustrations of the Different Breeds of Horses, Cattle, Sheep, Goats, Hogs and Poultry. It contains Life Engravings of many very noted Animals, and also testimonials. The Editor of This Paper Will Tell You That You Ought to Have This Stock Book in Your Library for Reference. It Contains a Finely Illustrated Veterinary Department That Will Save You Hundreds of Dollars. WE WILL MAIL IT TO YOU ABSOLUTELY FREE, Postage Prepaid. We Will Pay You \$10.00 Cash if book is not as described. Write us at once, letter or postal card, and ANSWER THESE 3 QUESTIONS: 1st.—Name This Paper. 2d.—How Much Stock Have You? 3d.—Largest Stock Food Factory in the World. Capital Paid in, \$1,000,000. 600,000 Feet of Space in Our New Factory.

Shortorns and Shropshires. Scotch and Scotch-Shortorns. Young bulls and heifers for sale. Shropshires, bred direct from imported stock: Mansell and Cooper strains. BRUCE BROS., Soufville Station, G. T. R., Gormley, Ont.

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English Shorthorns. Booth and Bates Shorthorns, topped with Crunk-shank bulls. Young cows, bulls and heifers always on hand for sale. Eligible for the American herd-book. Royal and Highland prizewinners included for the last two years. Close on \$400 won in prizes last year and this. WM. BELL, Ratochugh Farm, Alnwick, Northumberland, Eng.

W. W. CHAPMAN, Secretary of the National Sheep Breeders' Association, Secretary of the Kent or Romney Marsh Sheep Breeders' Association, and late Secretary of the Southdown Sheep Society. Pedigree Live Stock Agent, Exporter and Shipper. All kinds of registered stock personally selected and exported on commission; quotations given, and all enquiries answered. Address: MOWBRAY HOUSE, NORFOLK ST., LONDON, W. C., ENGLAND. Cables—Sheepcote, London.

HAMPSHIRE DOWNS DISPERSAL SALE.

The noted flock of HAMPSHIRE DOWNS, the property of the EARL OF CARNARVON, of Highclere Castle, NEWBURY, ENGLAND.

will be sold without reserve, on the premises, by Messrs. Waters & Rawlence, of Salisbury, early in August, 1903. The flock is of the highest merit, and holds a record both in the show and sale rings equal to any, whilst the selections sent to the States and Canada have won the highest honors. Full particulars from W. T. HALL, Highclere, Newbury, England, or the auctioneers.

SUSSEX CATTLE

The breed for hardiness and early maturity. The highest average daily gain, alive, 2 lbs. 8 3/4 ozs., and also the highest percentage, 68.92, of carcass to live weight of any animal, for its age, at Southfield Show, was given by Mr. Gerard Ward's first-prize Sussex, at the age of 66 days. Leading honors won at the International Show. Selections always on sale.

FARMERS KNOW A GOOD THING. When they see it, which is the reason there is such a large and increasing demand for the U.S. Cream Separator. The U.S. has many points of superiority, but the following three are sufficient to make it The Most Desirable to Own: Clean Skimming—Holds the World's Record. Safety—All gears entirely enclosed in iron case. Durability—Most thoroughly and substantially made. For Manitoba and the West we transfer our Separators from Chicago and Minneapolis, and for the Eastern Provinces from Quebec, Sherbrooke, Montreal and Hamilton. For further information, write for illustrated catalogues. VERMONT FARM MACHINE CO., BELLOWS FALLS, VT.

SPECIAL OFFERING FOR THIS MONTH Ayrshire Bulls. Isaleigh Prince 13438, fine individual, white, brown spots, aged 3 yrs.; one 10 months, brown and white. Few fine calves. Guernseys. One bull, 8 months; one bull 3 years and 6 months. A fine specimen of the breed. Address, for particulars, etc., ISALEIGH GRANGE FARM, DANVILLE, P. Q.

AYRSHIRES WATSON OGILVIE, PROPRIETOR. Ogilvie's Ayrshires won the herd and young herd prizes at Toronto, London and Ottawa in 1900; also at the Pan-American, in 1901, and in 1902 they won all the herd prizes and medals. The cows are all imported, and were carefully selected for strength and constitution, style, size of teats, and milk (quantity and quality). The herd is headed by Douglasdale (imp.), champion at the Pan-American and at Ottawa, Toronto and London, in 1902, ably assisted by Black Prince (imp.). Stock, imported and home-bred, for sale at all times.

ROBERT HUNTER, Manager. Near Montreal. One mile from electric cars. Lachine Rapids, P. Q.

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I GUARANTEE A \$5.00 PACKAGE OF BARREN KOW CURE
 postpaid, to make any cow under 10 years old breed, or refund money. No trouble, no risk. Given in feed twice a day.
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JERSEY BULL FOR SALE
 15 months old. Will make a splendid dairy sire and a show bull. Sire, "Bim of Dentonia," sweepstakes bull over Ontario. Dam "Mabel of Lawbridge," a grand cow; good for over 2 lbs. butter per day. For particulars, see Gossip this issue. First check for \$50 takes him.
R. McCULLOCH, Snelgrove Peel Co., Ont.

FOR SALE.
 Having given up buttermaking, owing to scarcity of suitable help, I am offering two fine, deep-milking Jersey cows, three and four years old, for sale. Butter-fat test, 4.60 and 4.70; due Aug. 24th and 29th. Also Jersey bull, Brampton Hero, two years old, sired by Brampton's Monarch (imp.), out of deep-milking dam.
F. C. PITT, Burgesville P. O. and Station, Ont.

SUNNYLEA FARM.
 For sale: Jerseys—6 yearling bulls; females any age. Tamworth—30 boars and sows, different ages. Shropshire sheep—rams and ewes of good breeding. Prices reasonable.
H. E. WILLIAMS, Knowlton, P. Q.

A SNAP IN JERSEYS.
 Three fine young cows, bred, and a good young bull, not akin to cows or progeny. Price, \$225 for the four. Write for particulars.
W. W. EVERITT, Dun-Edin Park Farm, Chatham, Ont.

Ten Yearling and Two-year-old Heifers
 sired by Nero of Glen Rouge, and bred to Dentonia's Achievement.
E. B. HINMAN & SONS, Grafton, Ont.

Jerseys.
 The Greatest Herd in Canada.
 Just received a shipment of Jerseys direct from England and the Island of Jersey, which brings our herd up to over 100 head. For Sale—10 bulls, imported and home-bred cows and heifers all ages. As we intend to exhibit at the Winnipeg Fair, any cattle sold for the West will be taken to that point free of charge. For prices, etc., write
B. H. BULL & SON, Brampton, Ont.

Lyndale Holsteins
 We are now offering a number of young bulls, fit for service, sired by Lady Waldorf's De Kol, Spring calves of both sexes.
BROWN BROS., Lyn P. O. and Station, Ont.

HOLSTEINS, TAMWORTHS, COTSWOLDS.
 Present offering: Young boars and sows fit to breed, and younger ones. Choice animals. Ram and ewe lambs and two 2-shear rams. Perfect covering.
R. O. MORROW, Hilton Ont., Brighton Stn., Ont.

4 HOLSTEIN BULLS 4
 For Sale: From 4 to 7 months old, having sires in their pedigree from such strains as Inka, Netherland, Royal Aggie, and Tritonia Prince, and out of imported females that have proven their worth at the stall.
THOS. B. CARLAW & SON, Warkworth, Ont.

Maple Park Farm Holsteins.
 Home of all the leading strains. Nothing for sale.
SIDNEY MACKLIN, Streetsville P. O. and Station, C. P. R., Ont.

Riverside Holsteins
 Choice young bulls for sale, from 3 to 7 months old, whose sire and dam are in the Canadian Advanced Record of Merit.
MATT. RICHARDSON, & SON, Haldimand Co., Caledonia, Ont.

Brookbank Holsteins
 16 to 25 lbs. of butter in 7 days' official test are the records of this herd of Holstein cows. Heifers of equivalent records. Bulls for sale whose sires and dams are in the Advanced Registry, with large official butter records.
GEO. RICE, Currie's Crossing, Ontario, OXFORD COUNTY.

Ridgedale Farm Holstein-Friesians for Sale.
 2 yearling bulls; also bull and heifer calves; all of choice breeding. Prices always reasonable. Write, or come and see them. **R. W. WALKER, Utica P. O. Shipping stations: Port Parry, G. T. R.; Myrtle, C. P. R. Ont.**

HOLSTEINS & TAMWORTHS.
 Two bull calves, 8 and 9 months; 3 yearling heifers, bulls and heifer calves, all double De Kols. In Tamworths we have 3 sows, 5 months old; 25 March boars and sows. Bargains if taken at once. Enquiries promptly answered. Write or call.
BERTRAM HOSKIN, THE GULLY P. O., Grafton Station, G. T. R., Ont.

IF YOU WANT A HOLSTEIN BULL, bred from producers, and that is again capable of siring producers, at a living price, write
H. BOLLETT, Cassel, Ont.

Ayrshire Bulls
 Last August, November and March births. Also heifers due to calve in fall and early winter.
W. W. BALLANTYNE, Aldpath Farm, Stratford, Ont.

GOSSIP.

At a meeting at Amherst, N. S., on June 15th and 16th, of the Executive Committee of the Maritime Stock-breeders' Association, arrangements were completed for the holding of the Winter Fair at that place on December 14th to 17th next. The prize list this year is nearly \$9,000.

The Toronto Industrial Exhibition Board has decided that an allowance be made to exhibitors of horses and cattle, in consideration of the longer period in which they will be on exhibition, as follows: Horses, 35c. per day for four days; cattle, 25c. per day for four days. No claim to be allowed unless the animals are on exhibition on the grounds for the full two weeks.

On June 17th, Capt. T. E. Robson, Ilderton, Ont., officiated as auctioneer in the disposal of 60 head of Shorthorns from the herd of Mr. Geo. C. Cary, of St. Johnsbury, Vermont, the sale being held on the fair grounds at Fort Fairfield, Maine. The attendance was very large, estimated at between 2,000 and 3,000. The prices realized were satisfactory, considering the scarcity of feed in the Eastern States, owing to the long spring drouth. The highest-priced animal sold was Lady Belle, bred by Wm. Grainger & Son, Lonsdale, Ont., sired by Beau Ideal, out of Isabella, by Golden Nugget. She was knocked down at \$295. The average price of the offering, not including calves, was \$107.

Messrs. B. H. Bull & Son, Brampton, Ont., breeders and importers of high-class Jersey cattle, have shipped a carload of twenty-two head from their great herd of 110 head to the Winnipeg Industrial Exhibition, to be held there July 20th to 25th. Their show herd for this season is headed by the imported four-year-old bull, Blue Blood, sired by Aristocrat, a son of the matchless pair, Golden Lad and Nameless. The Brampton contingent at the leading shows in Canada this year, we are assured, will be even stronger and better than in the past, which is saying a good deal in view of the splendid record made by the herd in prizewinning in the last ten years.

The dispersion sale of the noted herd of Shorthorns belonging to Hon. M. H. Cochrane, of Hillhurst, Quebec, to take place at Hamilton, Ont., on August 11th, should interest farmers and breeders throughout the Dominion. Confidence in the present and future of this great and growing country may well be accepted as the keynote in all legitimate business enterprises at this time, and in none with greater prospects of success than in the improvement of the character of our beef cattle, for which there is bound to be a steady and increasing demand for breeding purposes in supplying the needs of the rapidly-opening areas of our own country and of the great corn-growing States to the South, where fresh blood from Canadian herds will always be required. Everything indicates that Canada will continue to be the principal breeding ground for high-class pure-bred stock on this continent. It is rarely that such an opportunity offers to secure the best class of cattle as will be presented in the Hillhurst dispersion. All interested should send for the catalogue and attend the sale.

SUNNYSIDE AYRSHIRES.
 Our present offering is 10 heifers, from 10 mos. to 2 years of age; 1 bull, 6 mos. old, and 8 young cows—a rare good, straight-lined lot, and will be sold right.
J. W. LOGAN, Allan's Corners P. O., Howick Sta., Que.

W. F. STEPHEN, Trout River, Que., breeder of Ayrshire Cattle. A few choice bulls fit for service, and several bull calves, sired by Klondike of St. Annes 8897, and from deep milkers, with good udder and teats. Carr's Crossing, 1 mile, G. T. R.; Huntingdon, 5 miles, S. L. & A. R. O.

High-class IMPORTED AND HOME-BRED AYRSHIRES, including cows, heifers and young bulls out of our prize and sweepstakes cows. Foundation selected with due regard to quality and productiveness. Come or write.
WM. WYLIE, HOWICK, QUEBEC.

DAVID A. McFARLANE, KESLO, P. Q., Breeder of high-class AYRSHIRES. Young stock for sale from imported and home-bred foundation. Prices reasonable.

STOCKWOOD AYRSHIRES. Our herd now numbers 40 head of all ages, with milk records from 40 lbs. a day up. Stock of both sexes for sale. Bulls a specialty.
WATT BROS., Allan's Corners P. O., St. Louis Sta., near Howick, Que.

AYRSHIRES AND YORKSHIRES. My Ayrshires are all bred from imported stock; Yorkshires from Mr. D. C. Flatt's imported stock. Choice young animals for sale.
James McCormick, Sr., Roekton, Ontario.

Menie Stock Farm AYRSHIRE bulls and heifer calves, from 2 to 9 months old. Also cows and heifers all ages. Write **WM. STEWART & SON, Menie, Ont.**

Maple Cliff Dairy and Stock Farm BREEDERS OF AYRSHIRE CATTLE, BERKSHIRE and TAMWORTH PIGS. Special offer this month in young bears of both breeds, fit for service. One young bull, 2nd at Toronto last year as yearling. Farm adjoins Central Experimental Farm.
R. REID & CO., Hintonburg, Ont.

Tredinnock Ayrshires. Imported bulls at head of herd: Glencairn 8rd, Napoleon of Auchenbrain, and Lord Dudley. Forty imported females, selected from leading Scotch herds, and their produce from leading named bulls. Size combined with quality and style, well-formed udders, good-sized teats, and capacity for large milk production. Bull calves for sale; also a few young cows and heifers. For prices and particulars address **JAMES BODEN, Mgr., St. Anne de Bellevue, Quebec, G.T.R. & C.P.R., 20 miles west of Montreal.**

NETHERLEA AYRSHIRES. Present offering: 3 bulls fit for service, prizewinners; also a few young females, sired by Napoleon of Auchenbrain (imp.), whose dam's record was 72 lbs. a day, and all of them out of record cows. **T. D. McCALLUM, Danville P. O. and Station, Quebec.**

HIGH-CLASS AYRSHIRE CATTLE For Sale: Both sexes; bulls and heifer calves from 2 to 9 months old; cows and heifers all ages. Famous prizewinners bred from this herd, including Tom Brown and White Floss, sweepstakes prizewinners at Chicago. **DAVID BENNING & SON, Williamstown, Ont.**

Farnham Oxfords and Shorthorns
 My present offering—125 one and two year old rams, sired by Bryan's 125, Hampton Hero 4th, Royal Windsor 4th, and Kempford Hero 8th (all imported), 35 of which are flock headers, the balance strong, vigorous ranch rams. Also 50 choice yearling ewes, and the rare, nice ten-months-old bull, Royal Arcanum 45133, by Imp. Sittytan Conqueror, and four heifers, from 10 to 20 months old, by 20th Crown Jewel.
Guelph four miles. HENRY ARKELL, Arkell P. O. and Station.

IMPORTED AND HOME-BRED AYRSHIRES FOR SALE.
 5 bulls 1 year old—2 of these imported, the other 3 have such grandams as Alice 2nd of Lessnessock, Edith of Lessnessock and Mayflower 2nd of Drum-suie. Females all ages.
Robt. Hunter & Sons, Maxville, Ont.

HOMECROFT FARM for dairying and pure-bred stock. Ayrshires, Chester Whites, and Barred Rocks. We have some fine bulls fit for service. Also hogs of all ages. Prices reasonable. Try us.
J. F. PARSONS & SONS, Barnston, Que.

Spring Burn Ayrshires and Oxford Downs Our special offer at present: 10 bulls from 1 to 9 months old, 4 two-year-olds, 2 shearling, and 7 ram lambs; a choice lot. Prices reasonable.
E. J. Whitaker & Sons, North Williamsburg, Ont.

AYRSHIRE CATTLE SHROPSHIRE SHEEP, B. P. ROCK FOWL and 20 YOUNG LARGE ENGLISH BERKSHIRES FOR SALE.
J. YULL & SONS, Carleton Place, Ont.

NO HUMBAG. Three Swine, Stock Marker and Calf Dohmer. Stags write from rooting. Makes 68 different size marks. Extensive Horns. Price \$1.50. Send \$1 for trial. If 1 fails, send balance. Paid May 6, 1902. Pig and Calf holder only 75c.
FARMER BRIGHTON, FAIRFIELD, IOWA.

FAIRVIEW SHROPSHIRE A great lot of good young lambs. Home-bred and imported shearing rams. A beautiful lot of home-bred ewes. Whoever wants such, let him write. All 1902 customers fully satisfied, and I am determined to please each and every 1903 customer by furnishing good stock and dealing fair.
JOHN CAMPBELL, "Fairview Farm," Woodville, Ontario.

LINDEN OXFORDS—A fine bunch of fitted and field rams; also some choice ram lambs, sired by English and Canadian prize-winners; a number of show sheep among them.
R. J. HINE, Dutton, Elgin Co., Ont.

A CARLOAD of young Dorset ewes, a few good Chester White hogs, and an eight-months old Shorthorn bull for sale reasonable.
R. H. HARDING, Thorndale, Ont.

American Leicester Breeders' ASSOCIATION.
A. W. Smith, Pres., Maple Lodge, Ont.
 Pedigree now being received for Vol. 4. For information, blanks, etc., address:
A. J. TEMPLE, Sec., CAMERON, ILL., U. S. A.

PRIZEWINNING COTSWOLDS. Imported and home-bred stock, prizewinners at all the leading fairs. **ELGIN F. PARK, Box 21, Burgessville, Ontario, Canada.**

FOR SALE, AT MAPLE AVENUE STOCK FARM, CHOICE Lincoln Sheep and Shorthorn Cattle Bred from best of fashionable families. English stock. CAN SUPPLY EITHER IN CARLOAD LOTS. Write us before buying elsewhere. Address: **F. H. NEIL, Proprietor, LUCAN, ONT., Box 35. Telegraph and Railway Station.**

SAVE 20 CENTS PER SHEEP on every sheep you shear with **STEWART'S PATENT SHEEP SHEARING MACHINE**
 The day of the old fashioned hand shears is past. No owner of 10 sheep or more can afford to shear by hand, even though the work be done for nothing. Don't butcher your sheep. Shear with this machine and get **ONE POUND WOOL EXTRA PER HEAD.** It will more than cover the cost of shearing. Send today for valuable book, "Hints on Shearing." It is free and will save you money.
CHICAGO FLEXIBLE SHAFT CO., 110 Ontario St., CHICAGO.

FLIES ON CATTLE.
HORN FLY OIL Protects Cattle, Horses, Dogs, etc., from Flies of all kinds. Gnats, Mosquitoes, Fleas and other Insects. Especially valuable for Milch Cows and Working Horses.
WM. RENNIE, Toronto.
 Quart Can, 25c. Gallon Can, 60c.
 KEEPS FLIES OFF ANIMALS. SOLD BY LEADING DEALERS, OR DIRECT FROM

You Can Test The Kidneys

And Find Out if You Require the Assistance of Dr. Chase's Kidney-Liver Pills.

Put some urine in a bottle or tumbler and let it stand for twenty-four hours. If there is a sediment at the bottom at the end of that time, or if it is discolored, milky, cloudy or stringy, your kidneys are out of order and not doing their work properly.

Because of their direct and specific action on the kidneys, Dr. Chase's Kidney-Liver Pills bring prompt relief and lasting cure for all derangements of these filtering organs. One pill a dose, 25 cents a box, at all dealers, or Edman-son, Bates & Co., Toronto.

To protect you against imitations, the portrait and signature of Dr. A. W. Chase, the famous recipe-book author, are on every box of his remedies. om

BEST and CHEAPEST
IN THE MARKET.

Kemp's Instantaneous Sheep-Dipping Fluid.

1-gal. Imperial tin for **75c.**

STRENGTH EQUAL TO ANY.

Instantly kills ticks and parasites on sheep and lambs. Improves and waterproofs the wool. A sure remedy for vermin, mange, etc.; on horses, cattle, sheep, and dogs.

Ask your druggist for Kemp's Dip. I will express it, prepaid to any part of the Dominion, for \$1.

W. W. STEPHEN, Agent,
MEAFORD, ONT.

SHROPSHIRE FOR SALE.—Shearing rams, ram lambs, ewe lambs, also shearing and older ewes, about 50 head all told. All registered or eligible. Low-set, well covered, in fine condition and form. Sires from Campbell and Dryden flocks. **MALCOLM McDUGALL,** om
Tilverton, Ont.



LIVE STOCK are free from insects and skin diseases when **West's Disinfecting Fluid** is used. **THE WEST CHEMICAL CO.** TORONTO.

W. S. CARPENTER, "MODEL FARM," SIMCOE, ONT.,
Importer and breeder of Shropshire sheep. My flock was represented at Toronto, and won first on shearing ram, first and second on aged ewes, and second on the pen. First time exhibiting. If in need of a first-class yearling ram, imported or home-bred, write! Your wants can be supplied, and at prices consistent with quality. Have a choice lot to choose from, and can guarantee satisfaction. Come and see them, or a card will bring them. om

Station One-half Mile from Farm, Wabash and G. T. R.

IMP. COTSWOLD SHEEP
Five rams (year-olds), both sires and dams imp.; 10 ewes (year-olds), sire imp. Also this year's lambs, both sexes; Yorkshire and Tamworth hogs. om
BROOKS & LANGMAID, COURTOISE, ONT.

SHROPSHIRE shearing rams, shearing ewes, ram and ewe lambs of choice breeding. Prices right. **GEO. HINDMARSH,** om
Alisa Craig, Ont.

SHROPSHIRE—A flock of 110 head, fine, healthy sheep. Can supply 2-year, 1-year and ewe lambs. Prices reasonable. **ABRAM RUDELL,** om
Hespeler, Ont.

BERKSHIRE FOR SALE.—Two boars ready for service, also a few March hogs. Write at once for prices. Always a choice lot of Holsteins, of all ages, for sale. **A. C. HALLMAN,** om
Breslau, Ont.

Yorkshires, Collies and Poultry
This month we are offering something extra in Yorkshire boars and sows, 6 weeks to 4 months. Will sell 10 yearling W. Wyandotte Fens and two cocks, all fine stock. Choice pedigreed collies, om
J. A. & A. B. Armstrong, Warkworth, Ont.

GOSSIP.

Mr. Fred C. Smith, New Hamburg, Ont., whose dispersion sale by auction of farm, grade cattle and Yorkshire hogs, advertised in the "Advocate," took place, as announced, on June 19th, writes that he had a very satisfactory sale, his grade cattle, which were a good class, selling for good prices, and the farm of 110 acres for \$7,450. Owing to the death of his noted stock boar, Summerhill Member, the herd of hogs was not complete, but sold fairly well, his brother, Mr. Geo. Smith, securing some of the best for a foundation herd. Mr. Fred Smith has gone to Edmonton, intending to spend a few months in Alberta, hoping to regain his health, and if he finds the country suitable may settle there.

ST. LOUIS WORLD'S FAIR NOTES.

F. D. Coburn, Chief of the Department of Live Stock of the Louisiana Purchase Exposition, has arranged for a total of over 26,000 prizes in the classifications for horses, cattle, sheep, swine, poultry, etc., for the World's Fair shows next year. These are unprecedented in amount, and are divided among twelve breeds of beef and dual-purpose cattle, with 2,352 prizes; four breeds of dairy cattle, 560 prizes; nineteen breeds of horses, 3,458 prizes; eleven breeds of swine, 2,772 prizes; fourteen breeds of sheep, 2,548 prizes; 375 varieties of poultry and pigeons, 10,300 prizes; fifty-seven breeds of dogs, 2,604 prizes. There are thirty-two additional prizes for single cows and herds entered in the dairy demonstration, five for oxen, fifty-five for mules, and 1,310 for the estimated displays of pet stock, vehicles, etc.

Provision has been made for five cash prizes and two honorable mention awards in most sections, except poultry. The final arrangements of the classifications may still further enlarge the number of prizes offered.

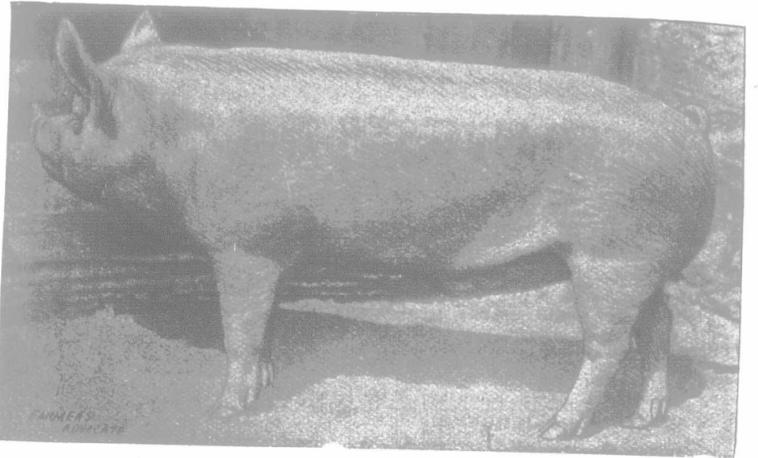
Mr. Coburn will hereafter be officially known as the Chief of the Department of Live Stock. The Exposition has added much to its popularity in making live stock an independent department and giving it a separate chief, with a prize fund of \$250,000. This substantial recognition will do much to attract attention to the great St. Louis enterprise and secure the hearty co-operation of stockmen, fanciers and others interested. This is the first world's fair to give live stock the prestige and rank of a department with an independent chief, and the great extent and high character of the live stock exhibits already assured the World's Fair confirm the wisdom of this liberal policy.

The Louisiana Purchase Exposition will be the first world's fair to provide for the holding of public sales of pure-bred stock. Complete plans have been made for a ring for public sales apart from the main live-stock amphitheatre, so that sales may be held without interfering with the judging or other features of the exhibition. The sales will be under the auspices of the breeders' associations interested, and within the period in which the breed will be on exhibition. The following associations have already asked for assignments of sale dates: Cattle—American Shorthorn Breeders' Association, American Hereford Breeders' Association, American Aberdeen-Angus Breeders' Association, American Galloway Breeders' Association. Horses—American Percheron Horse Breeders' and Importers' Association. Swine—American Poland-China Record Company, National Duroc-Jersey Swine Breeders' Association, American Berkshire Association.

An entirely new departure decided upon as a leading feature of the live-stock awards at the Louisiana Purchase Exposition is the premier or sweepstakes championships for each breed. These are intended as grand prizes to recognize both the skill of the breeder and the enterprise of the exhibitor. It is proposed to give a premier championship award to the breeder making the best showing in each class, the showing to be determined by the largest aggregate amount of prize money received by the breeders of that class. The premier championship award in each class will be given to the breeder who has the highest aggregate amount of prize money received by the breeders of that class.

SUMMERHILL HERD OF Large English Yorkshires

HEADQUARTERS FOR THE IDEAL BACON HOG.



Our winnings at the large shows, for 1901, are as follows: At Toronto every possible first prize and five seconds, two silver medals, and first for pen of pure-bred bacon hogs, also sweepstakes on bacon hogs over all breeds; at London every possible first but two; while at the Pan-American, where our herd was divided, half going to Toronto, we won six out of ten possible firsts, also sweepstakes on boar any age. At the Pan-American (Buffalo), Toronto and London there were thirty-six first premiums and medals given; all the medals and every first prize but six won by the Summerhill Yorkshires. When in need of the best write **D. C. FLATT & SON, MILLGROVE, ONT.** om Telephone: Millgrove, Ont.

HILLCREST HERD OF Large English Berkshires

My brood sows are imported or show animals, and the sires are big, long fellows of the bacon type. For sale: An excellent lot of young pigs, and a few young sows recently bred. Can supply pairs not akin. Enquiries promptly answered. Vine station, G.T.R.—near Barrie. **Jno. Lahmer, Vine, Ont.**

"BROAD LEA OXFORDS."

An offering choice ewe and ram lambs, shearing ewes and a few shearing rams for flock headers. Also young Yorkshire pigs of the best bacon types. Teeswater, C. P. R. **W. H. ARKELL,** Mildmay, G. T. R. om Teeswater, Ont.

TAM WORTHS.

FOR SALE: Two young sows, bred to Dandy =2854=, a good typical sire; also several young boars and sows of very best breeding.

BRONZE TURKEY EGGS—\$3 per setting. **HAZEL DELL STOCK FARM.** om **D. J. GIBSON,** Bowmanville, Ont.

Newcastle Herd of Tamworth Swine

Have for a number of years taken a share of the best prizes offered at Toronto Exhibition, but this year has excelled all past records, having taken the sweepstakes for the best herd; also both worth sows, besides many other prizes in the various classes. Our present offerings are: A few choice young sows, 1 to 5 months old; 2 yearling sows, in pig; and we are now booking orders for spring pigs, both sexes. Enquiries promptly answered. om **COLWILL BROS., NEWCASTLE, ONT.**

WILLOW LODGE BERKSHIRES

Herd headed by Long-fellow 10th of H. F., assisted by the noted prize-winner, Highclere Crown 3rd. Sows, the best money will buy, and are winners. Young stock of both sexes and all ages for sale, not akin. om **W. WILSON, SNELGROVE, ONT.**

Maple Grove Herd of Large ENGLISH YORKSHIRES

From imported and home-bred sires. Choice lot of young sows bred to imported boar, Summer Hill Dalmeny Cavalier =10975=, and a number of young stock from prizewinners. Pairs not akin supplied. om **T. J. COLE,** Bowmanville, Ont.

Large English Yorkshires

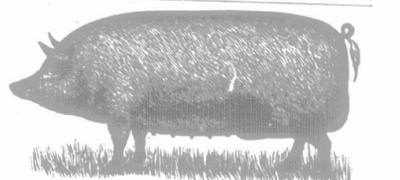
Imported and Canadian-bred Yorkshires, from stock of the best British herds. A choice lot of boars, ready for service, and a number of sows being bred to imported Dalmeny Long Sam, for sale. Also young pigs, all ages. om **H. J. DAVIS,** Woodstock, Ont.

SPRING BROOK STOCK FARM.

Two boars ready for service; also a few March hogs. Write at once for prices. Always a choice lot of Holsteins, of all ages, for sale. om **A. C. HALLMAN,** Breslau, Ont.

Yorkshires, Collies and Poultry

This month we are offering something extra in Yorkshire boars and sows, 6 weeks to 4 months. Will sell 10 yearling W. Wyandotte Fens and two cocks, all fine stock. Choice pedigreed collies, om **J. A. & A. B. Armstrong, Warkworth, Ont.**



One hundred Tamworth and Improved Chester White Spring Pigs of a true bacon type, our herd having won the best prizes offered at the leading exhibitions throughout Ontario and Quebec for the past ten years. Stock for exhibition purposes a specialty. We pay express charges between stations, and guarantee safe arrival of all stock shipped. Pairs furnished not akin. Write for prices. om

H. GEORGE & SONS, Crampton P. O., Ont.

Large English Yorkshires

Sows safe in pig, boars fit for service, sows ready to breed, boars and sows 2 and 4 months old. Satisfaction guaranteed in orders received by mail. om **JAS. A. RUSSELL, Precious Corners, Ont.**

PINE GROVE FARM HERD OF LARGE ENGLISH YORKSHIRES.

The oldest-established registered herd in America. We have 12 imported boars and sows and 20 home-bred animals breeding, and have a limited number of young boars and sows for sale, suitable for this fall's breeding. Satisfaction guaranteed in all mail orders. om

Joseph Featherston & Son,

Streetsville Station, C. P. R., and P. O. and Telegraph. Clarkson Station, G. T. R.

GLENBURN YORKSHIRES won Gold Medal at

Ottawa, 1902. Herd averages 100, headed by the choice boar, Oak Lodge Prior and Pine Grove Squire. Twenty brood sows, 12 six-months sows, due to farrow March and April; 40 sows and boars, four weeks to three months old; pairs not akin. om **DAVID BARR, Jr., Renfrew, Ont.**

LANGELIER'S YORKSHIRES.

My importation of Yorkshires has arrived, and is rather better than I expected. Imported boars and sows now for sale at prices consistent with quality. Correspondence cheerfully answered. om

GUS. LANGELIER, QUEBEC CITY.

YORKSHIRES AND BERKSHIRES.

FOR SALE: Some choice young sows and boars, ready to breed; also Barred Rock eggs, \$1 per setting. om **C. & J. CARRUTHERS,** Cobourg, Ont.

FOR SALE:—

Yorkshires and Holsteins

Best type and quality. Young stock constantly on hand. Prices right. om **R. HONEY,** Brickley P. O., instead of Warkworth.

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Choice young stock for sale, from imported and home-bred stock of highest breeding and quality. Prices low. Satisfaction guaranteed. My motto: "Not how cheap, but how good." Telephone, Telegraph and Stations: C. P. R. and G. T. R., Weston, Ont. (electric cars from Toronto). Address: om

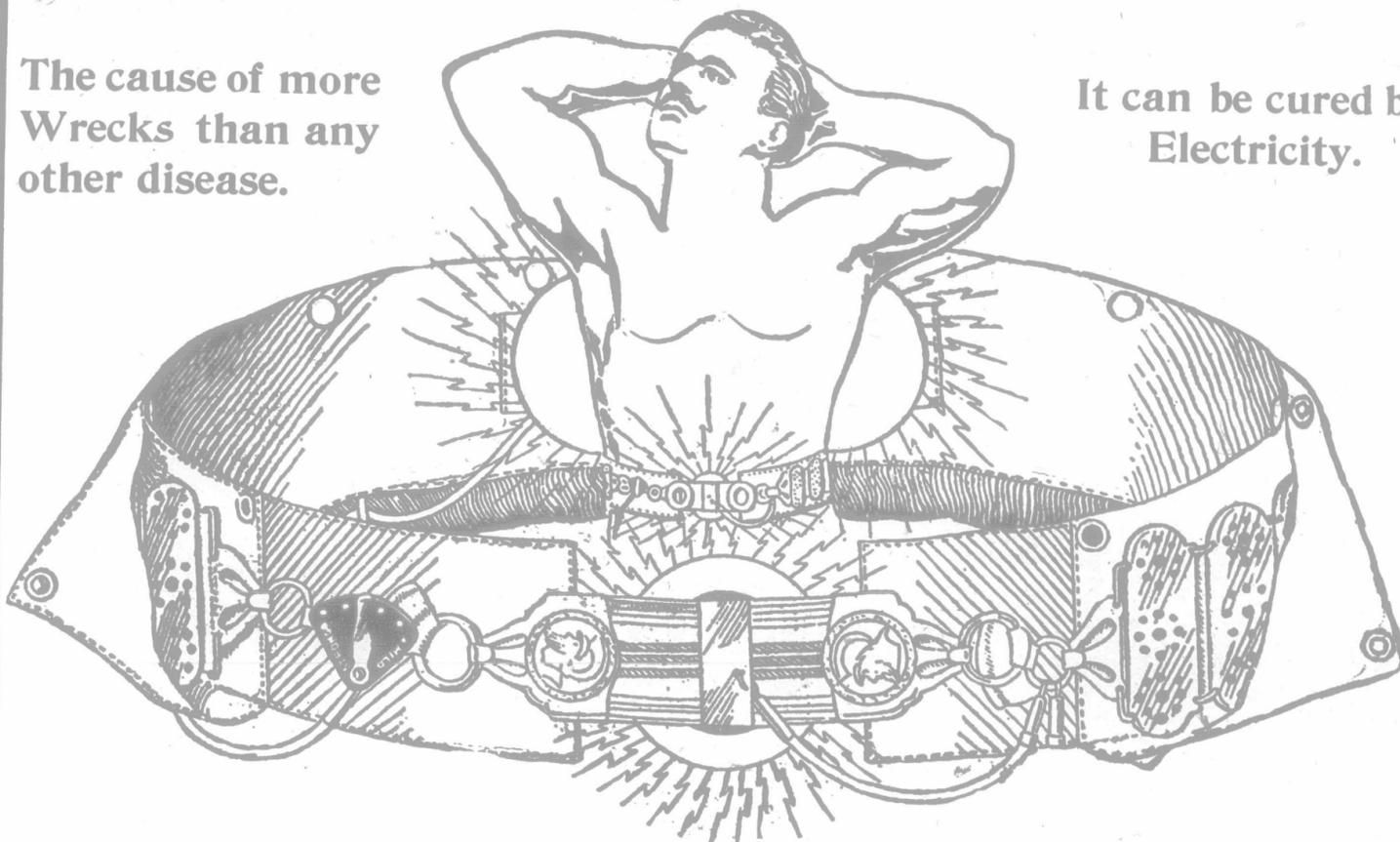
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On this page, kindly mention the FARMER'S ADVOCATE

VARICOCELE CAN BE CURED

The cause of more Wrecks than any other disease.

It can be cured by Electricity.



Thousands of men have Varicocele and are ignorant of the harm which may result; they only know that something is draining the vim and ambition from their bodies and brains, and know of no reason to account for it. This terrible affliction is the most treacherous and certain in its work of all known ailments. It comes on without apparent cause and never ceases in its destructive influence until it robs a man of all his vitality and leaves him a mental wreck.

My method has cured after the knife, injection, ligation and every other known means had been tried and failed. For example, take the case of **G. PARRY, 34 Maude Street, Toronto.** This is his letter:—

Dr. M. A. McLaughlin:

Dear Sir.—After my return from South Africa, where I had been serving as a soldier, I was suffering from rheumatism and lame back and a very bad varicocele. I purchased one of your Belts and am pleased to be able to report that I am free from any pain in the back, and that I have not had a touch of rheumatism since I started to wear the Belt. The varicocele is also cured. I am a moulder and my work is heavy, and it gives me great pleasure to find that I can do it without the old soreness coming into my back and muscles.

Here is another case—**MR. HUGH McCORMICK, Copper Cliff, Ont.** Read what he says of my method:—

Dr. M. A. McLaughlin:

Dear Sir.—It is now thirty days since I began using your Belt, and I find a great improvement from its use. I sleep soundly every night, something I didn't used to do, and my appetite is very good. I haven't had a loss for over four weeks. Thanking you from the bottom of my heart, and wishing you every prosperity in the future.

Varicocele is primarily a weakness in the veins, through which the nutritive blood flows. The failure of this circulative force allows the slow flowing blood to coagulate and gather in a sort of congested state upon the inner walls of the veins; it gradually accumulates then until it almost closes the channel, thus interrupting the private circulation, causing pressure and distension of the weakened vessels and producing that consequent dragging sensation usually complained of in varicocele. This affliction is extremely distressing, for it leads to a most aggravating train of symptoms, often destroying the foundation of the general nervous system and causing total impotency. Of all troubles with which men are afflicted it is the most treacherous in its work and requires the most vigorous and direct treatment.

I have perfected the only appliance which has a special attachment that carries a strong current to the seat of this trouble. In connection with this attachment I also give my Special Spiral Suspensory Free with Belts for Weak Men.

This Belt is worn comfortably at night while you sleep and gives a powerful current that is always under the control of the wearer. It pours its vitalizing energy into the body for six to eight hours at night.

Easy to Wear! Cures While You Sleep! Never Fails!

Cures Nervous and Vital Weakness, Enlarged and Inflamed Prostate Gland, Lost Memory, Wasting of Strength, Weak Back and Kidney Trouble, Rheumatic Pains in Back, Hips, Shoulder and Chest, Lumbago, Sciatica, Torpid Liver, Indigestion and Dyspepsia.

I am not giving Belts away. I am offering to cure first and be paid after you are cured. I have an Electric Belt which DOES CURE. I know there is no better way to prove my confidence in the wonderful curative power of my Belt than to cure you before you pay for it. This offer is open to anyone who will secure me. All I ask is that you give me evidence of your honesty and good faith by offering reasonable security. You can use the Belt and

PAY WHEN CURED.

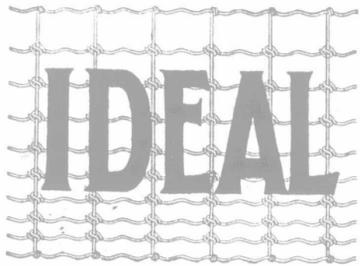
READ WITH CARE. Dr. McLaughlin's Electric Belt is positively the only electric appliance sold where you receive the advice of a practical physician. I give you my advice FREE of charge during the time you are wearing the Belt.

FREE BOOK. I have a book which gives many hundreds of letters from men whom I have cured. Tells all about the signs of decay in men, how they are caused, how they first appear, the way the vital power is wasted, and how all these troubles are cured by Electricity. It inspires a man with a desire to be "a man all over." It is full of things a man likes to read. If you will send for it I will send it to you closely sealed Free. Consultation Free. You are invited. If you cannot call write for this Book at once. Get all the good you can out of life while it lasts.

Dr. McLaughlin's Belt is as good for women as for men. I have a Book especially for women. Free on application.

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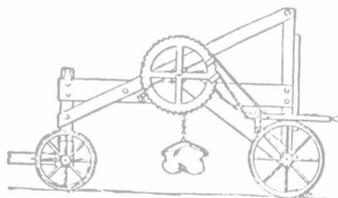
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Write for particulars.



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Guaranteed as mentioned above. Agents wanted.

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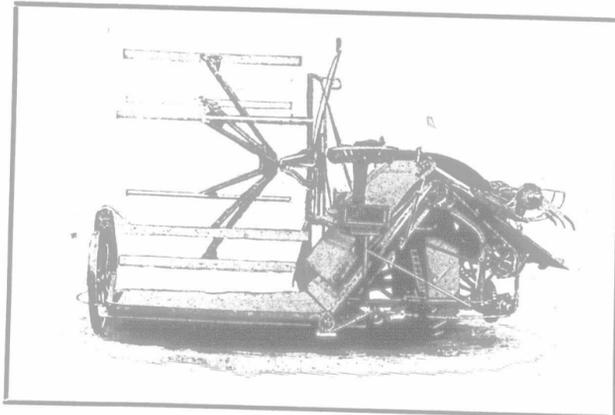
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Try our Carnefac Poultry Food 65 Front St. East,
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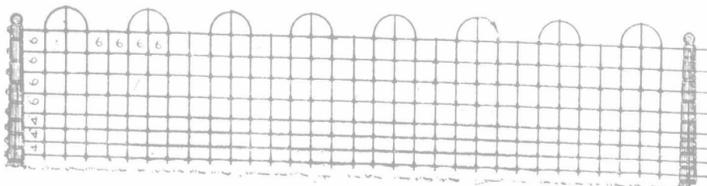


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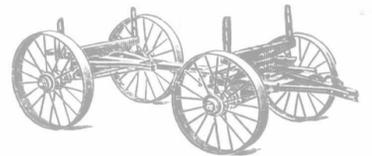
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