

THE FARMER'S ADVOCATE

AND HOME MAGAZINE

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

Vol. XXXVIII. WINNIPEG, MAN. JULY 20, 1903. LONDON, ONT. No. 578

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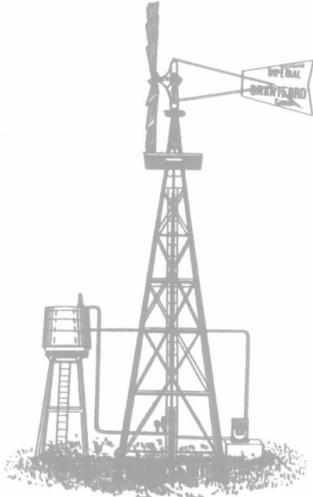
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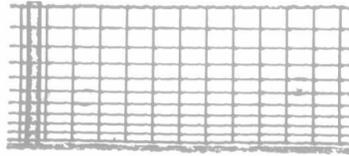
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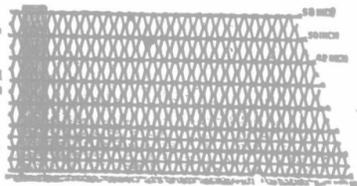


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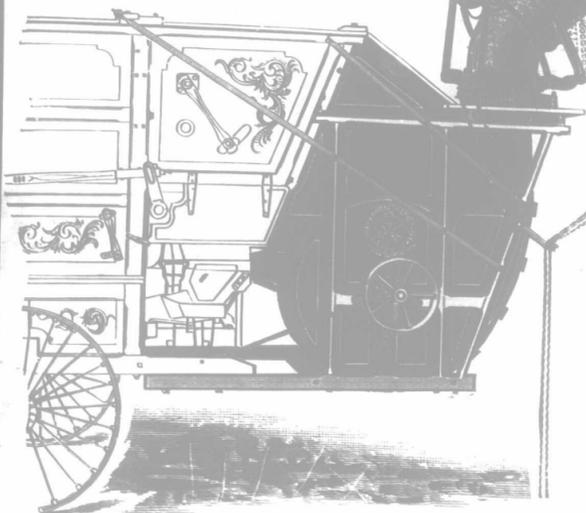
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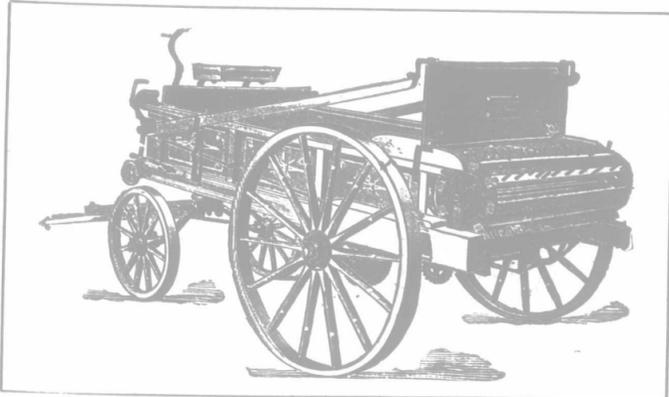
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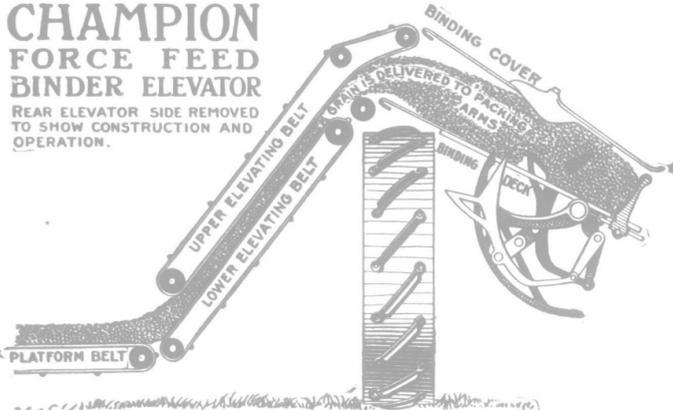
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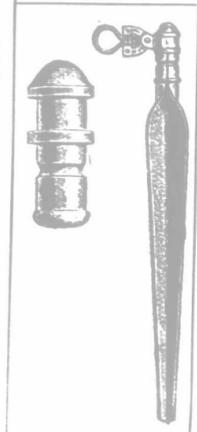
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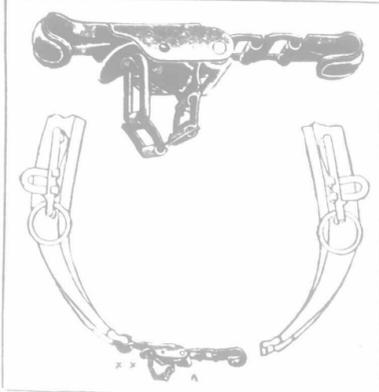
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* AGRICULTURE, STOCK, DAIRY, POULTRY, HORTICULTURE, VETERINARY, HOME CIRCLE. *

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VOL. XXXVIII.

WINNIPEG, MAN., AND LONDON, ONT., JULY 20, 1903.

No. 578

Editorial.

Sittings.

Care is the main requisite in the management of sheep, but it must be supplemented with good feed.

Do not neglect the ventilation of the stable on these hot nights. Keep the stalls clean, and the ventilators open.

Care is, in the vocabulary of the careful farmer, synonymous with good feeding and is confined to no class of animals, but is carried out with regard to every animal on the farm, including even the domestic cat.

Teach the colt to eat oats and chop. The time is not far distant when the apron-strings will be cut loose and he will have to find for himself.

If the hired man is worthy of respect, treat him respectfully. Do not breed discontent and rebellion by always asking him to take the heavy end of the log. Petty tyranny only breeds contempt, and often makes an eye servant of a good man.

Take a thorough look all over the farm, now that plant life is in full bloom, and locate all spots bearing weeds. Take the very first opportunity of killing them. "A stitch in time saves nine" in the case of weed-killing.

It is now time to have the binder out in the yard. Examine it thoroughly, and fix it up so that nothing remains to be done but to hitch up and proceed to cut down the crop.

Teach the boys to show kindness to all the farm animals. It is not only a beautiful trait to display, but it also familiarizes them with the comparative points, types and proportions of the different animals on the farm, and constitutes a grand object lesson in stock-judging, which cannot fail to be useful in after-life.

Now is the time to overhaul the wagon racks. See that all parts are entire and ready to fit in to their respective places. A little attention, and a few nails judiciously driven here and there now may save much delay and possibly the breaking of bones during haying.

See that the lines are without flaw and in a good condition to stand a good pull. There will be some pretty fast driving before the hay is all stacked, and we must not forget that we shall want the teams to stop as well as go forward. A rotten or bad line is one of those things that are worse than useless.

Encourage the children to gather the wild flowers. That is the beginning of the path that leads to knowledge of plant-life, and there is no knowledge more useful for a farmer to be possessed of, nor is there a path more pleasant for the general student of nature.

Alberta Needs an Experimental Farm.

Travelling among the farmers of Alberta no one can fail to be impressed with the great need that exists for an experimental farm, where grains, grasses, clovers, trees, fruits—in fact, everything peculiar to such an institution—may be tested as to their suitability to the climate and soil of the rapidly-developing territory immediately east of the Rockies.

The Experimental Farm at Indian Head has done a great work for the West, particularly Eastern Assiniboia, but the climatic conditions to which its crops are subjected differ almost as much from those of the chief farming sections of Alberta as they do from Eastern Canada. At Indian Head the country is comparatively bare of woods, and the winds of winter blow unobstructed across the prairie, while in the territory to the west, particularly the northern part of it, wooded lands are more common. The soil is somewhat different in texture, and showers in summer are more frequent. In certain sections of Alberta, fall wheat and clover can be grown with good success, while at Indian Head these have so far proved utter failures. The most noticeable feature of the situation is that the average Alberta farmer does not know exactly what may or may not be grown successfully upon his farm. This is by no means due to lack of intelligence, because Alberta husbandmen have evidently been endowed with at least their share, and, moreover, the atmosphere is conducive to anything but sluggishness. The fact is, the country is new and most people are slow to investigate when there are certainties at hand sufficient to occupy their time. Ask some farmers if clover and fall wheat do well in their district, and they at once tell you they are not sure, having had no experience, but they believe it will. Some are experimenting a little on their own account, and others have undertaken the testing of grains sent out by the Territorial Government through the Agricultural Society, which is all right as far as it goes, but is not sufficiently far-reaching.

It is expensive for any single individual to carry out a conclusive experiment, and there are few who can afford at the present time to devote much time or labor in that direction. Work of this nature, in which the entire district must benefit as well as the individual, should be under the supervision of the Government and be paid for at the public expense.

It may be suggested that Alberta is not yet sufficiently populated, and the total value of her farm lands not sufficient to justify the necessary expenditure, but it is now and not twenty years hence that the people need information. Experiment stations continue to be profitable concerns in older countries, where they encourage the introduction of newer and more prolific varieties of grains, etc., but what Alberta needs just now is a trial farm to determine what can be grown and how. Such an institution would be certain to prove a great education, and very soon pay for itself through the increased production of the farms. In the northern part of the territory the need is doubtless greater than in the south, owing to the latter being largely devoted to ranching, while the former is rapidly becoming one solid phalanx of homesteads with cultivated fields. The south may yet yield to the plow to a large extent, but if money is to be expended by the Government in its interest, it can probably best be done by properly conducting an irrigation farm.

The cost of an experimental farm suitable to the present needs of Alberta need not be excessive. There would be no need, for some time at least, of having it conducted on such an elaborate scale as the Indian Head station. Even a quarter section, if managed in the right way, would prove of untold benefit for a time.

It may be regarded as too much to expect that two experiment farms be maintained by the Dominion Government in a country that has not yet been admitted to the status of a Province. This, however, should be no stumbling block to the proposition. Indian Head, as the single trial grounds of the Territories, has not received any greater expenditure than has been justified; quite the contrary, and as the country is rapidly improving, and an increased outlay in this direction must be expected, let it be placed where it will do the greatest good to the greatest number. The "Farmer's Advocate" regards this as an important question, and one well worthy the earnest consideration of Alberta farmers. Nothing can be expected without an agitation in its favor. What is the opinion of our readers in that quarter?

Harvest Excursions.

Reports have been circulated to the effect that no harvest excursions to the West will be run this year. However, we are glad to be able to state that no substantial foundation can be found for such rumors.

This year, as heretofore, it will rest chiefly with Western farmers whether or not an attempt will be made to bring men westward to help harvest the product of the fields. At present the Manitoba Department of Agriculture are busy gathering information from the different municipalities, and just so soon as they get an approximate estimate from the farmers of the additional numbers required, the Government officials will freely circulate in Eastern papers a call for harvesters, and also make provision with the railway companies for bringing them out at such times as will best suit the majority of grain-growers. There is an idea afloat that owing to the heavy tide of immigration which has poured in upon us this season, little if any outside help will be required to harvest the crop of 1903. It is true that many farmers have hired help this year for eight months, who formerly only hired for harvest and threshing, and as numbers have done this there is little doubt but that the amount of harvest help required will be less than in former years. It is also further expected that a great many of the home-seekers who have actually located and commenced breaking this season will be able and ready to take part in the harvest fields. All this is true, but we must not forget that the large army of last year's home-seekers did the same, and they now have changed places, being no longer able to help others, but have themselves joined the ranks of that large army who require additional help.

Although we believe it to be true that owing to changed conditions less additional harvest help will be required this year than formerly, yet we are confronted with the fact that the number of farms has increased amazingly, and that although in many of the older settled districts, where for the last few years most of the soil has been tilled and where to-day less outside help per square mile is required, there are

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other localities which constitute perhaps the largest portion, and we must not forget them.

Perhaps, taken on the whole, less Eastern help will be required this year, and if such proves true it will be a good thing, for our grain-growers would suffer severely if they had to depend as fully on outside help as they have had in former years. In the East laboring men today are about as difficult to get as with us, and wages are equally high, except, perhaps, during our harvesting and threshing months.

Crop prospects are bright; wages will likely be good, and every indication at present points to a return of the harvester in considerable numbers.

Slow Freight Transportation.

An evidence of the imperfect live-stock transportation facilities which are available in the West is to be found in the case of a car which left Smith's Falls, Ont., June 20th, and arrived at its destination in Edmonton, July 2nd. This is a rate of a little less than eight miles per hour for the entire journey. If that is encouraging the live-stock industry of this country, we fail to see the point.

Some Things that Are Needed.

Provincial autonomy for the Territories.

• • •

An experimental farm for Alberta.

• • •

A few more agricultural exhibitions that are not horse races.

• • •

A creamery at Carstairs, Alta.

• • •

A few more farmers to become interested in the stock judging ring, and less in the exciting attractions.

to be kept tight and knaves the power,

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.

Horses.

Runaway Horses.

One can scarcely take up a local paper without reading under the above heading the narration of quite a list of runaways which had occurred during the week. It naturally occurs to one to enquire into the cause of this. The immediate cause is, in nine cases out of ten, carelessness on the part of the driver. But there is a primary cause, also due to carelessness of a grosser nature, which is begun in the training of the colt, or, perhaps, to be more correct, in the omission to train him. To get still nearer the root of the matter, and to begin at the beginning, the boys on the farm should all be taught how to handle and train the colt. If the matter were looked after with the same strict attention which is devoted to other business matters in the ordinary course of everyday life, we would hear little or nothing of runaway horses. A properly trained horse never gets far enough ahead in the "knowledge of good and evil" to discover that he has the power to run away. He may get very impatient and irritable in an uncomfortable position on a cold day, but his pawing and other indications brings any sane driver to his side to remove the cause of discomfort before the animal becomes infuriated to such a degree as to seek refuge in flight. Then if frightened by something which is to him an unnatural phenomenon, he, believing that he is powerless to snap his halter shank, or break away from his driver, may execute some fancy impromptu jig steps, with perhaps a "highland fling" or two thrown in by way of variety; but to gallop madly down the street, while foot-passengers tumble over one another in their fright to get out of the way of the bone-breaking wheels which spin behind him, is an action which has been trained out of his wild free nature, and has no place in his acquired ideas of possibilities. With horses that have acquired a habit of bolting, however, there is no remedy but the constant care, and as nearly as possible the constant presence of the driver; and that should be insisted on both by the owner of the horses and the general public, for runaway horses are a source of very great danger to all property and human life which may come in their way.

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.

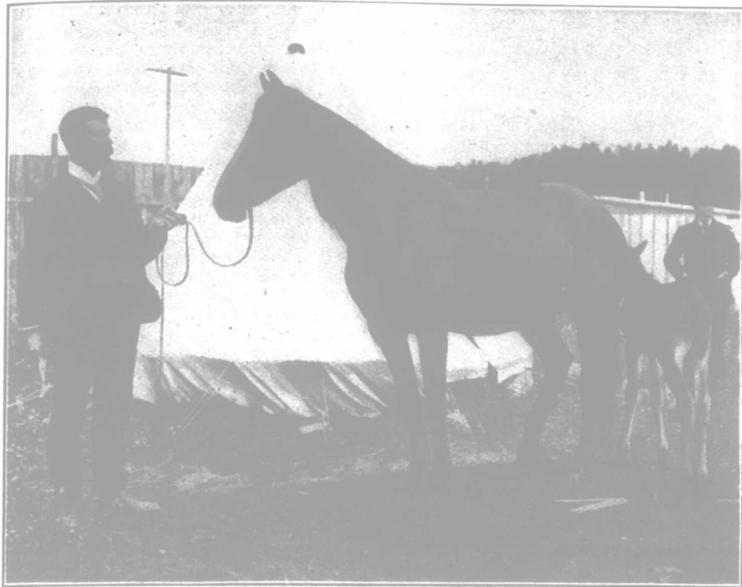
Diseases of the Digestive Organs in Horses.

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 shed, 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 diarrhoea be not present, causing



STANDARD-BRED MARE, CASCADA.

Bred by Gray Bros., Rochester, Minn. Sire Hamdella (2917); dam Star of the West 666. With foal by Bay Nelson (2234).

PROPERTY OF GEO. McNULTY, STRATHCONA, ALTA.

weakness, a moderate purgative, say six to eight drams of aloes, according to the size of the animal, and two drams ginger, should be given. It is well to prepare the horse by feeding bran only for about twelve hours before administering the purgative, which can be given either in the form of a bolus, by moistening the drugs 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. "WHIP."

(To be continued.)

Stock.

Special and General Purpose Stock.

BY J. M'CAIG.

A good deal of discussion has been provoked at different times by the very positive attitude taken by individuals as to the merits of special purpose stock on one hand, and of dual or general purpose stock on the other. Judged from the standpoint of national gain, or from the standpoint of the breeder's skill, special-purpose stock represents higher gain and higher attainment than general-purpose stock. It must be admitted that in relation to each other the special-purpose stock is the more highly-developed or evolved, and that it is the product of breeding skill beginning at the commonplace starting point of the dual or general purpose stock and working on this raw or partially non-descript and featureless material. The existence of special-purpose stock is the evidence of the existence or operation of the same law in animal breeding as operates in other arts as they progress, viz., the law of differentiation. It is another illustration of the law that is displayed in the evolution of the animal organism itself, viz., that of specialization of function. Assuming that the common ancestry of our horse is no myth, it must be evident that the differences between the draft horse and the trotter are not the result of accident, but of a conscious moulding by breeding and selection of the animals to a special purpose and use. The milking and beef families of cattle illustrate the same kind of contrast, and the Spanish and English breeds of sheep. It may be said that of the two classes of horses both possess draft and speed properties, also that all cattle are dual purpose to some extent, and that the same is true of sheep. The contrast, however, between the different families is so great that it very decidedly illustrates what is meant by differentiation and by specialization of function. It would provoke us to have to make a quick jaunt to town and back with a fifteen hundred, feather-legged mare, and it would be foolishness to put a pair of thoroughbreds breaking the virgin prairie.

the total result will be better if each is assigned the duty he can do best by reason of his experience and tastes than it will be if there is no division of labor. The existence of special classes must be regarded as a good, and the recognition and utilizing of these differences ordinary wisdom. This is the theoretical side. We have them, and having them is a good, for the measure of their fitness to survive, and the reason of their survival is their utility.

As in many other matters, practice and theory do not here universally agree. It must always be conceded that the economy of producing a particular commodity rests with a particular class of animal: of beef, with the beef classes of cattle; of milk, with the milkers; and so on. There is always another factor that cannot be eliminated with the producer, and that is the factor of demand. The condition of the farmer too, is unlike that of most producers or manufacturers. He is a jack-of-all-trades in many ways. His business is not capable of the same organization and division of labor, even on a large scale, that most industries are subject to. He is teamster and horse-breeder, dairyman and cattle-breeder, shepherd and agriculturist combined. His horses are generally not sufficient in number to make it possible to keep both drafts and drivers, and a general-purpose horse may fill the bill better for him. He may find it profitable to breed more horses than he uses, and put in spare time shaping up an occasional one for sale. He may not be near enough to a city to enjoy a steady demand for milk all the year round at a good price, but he may enjoy a fair general demand for milk products, such as butter, and likewise for beef. In such a case, the special demand being absent, he would be a loser on the beef side if he kept a special milk class of cattle, while he would not be a distinct gainer on the milk or butter side. The best illustration of the position of the farmer on the cow question is to be gathered from actual facts. The ranges or most distinctly suburban and sparsely-populated districts are given over to beef. The dairies are just on the fringe of the cities, and the farmer is between them, so his interests are somewhat split, or, perhaps, we should say composite. These general contrasts have their exceptions, and the profit of the farmer is in seeing his opportunity. In the small

Jersey steers make very poor beef, and a beefy Shorthorn or Polled Angus would not make an ideal village milk-cow. Pure Merino mutton tastes too sheepy, and the fleece of the greedy English mutton sheep would not bring the wealth of the Merino where mutton was nothing and fine wool everything.

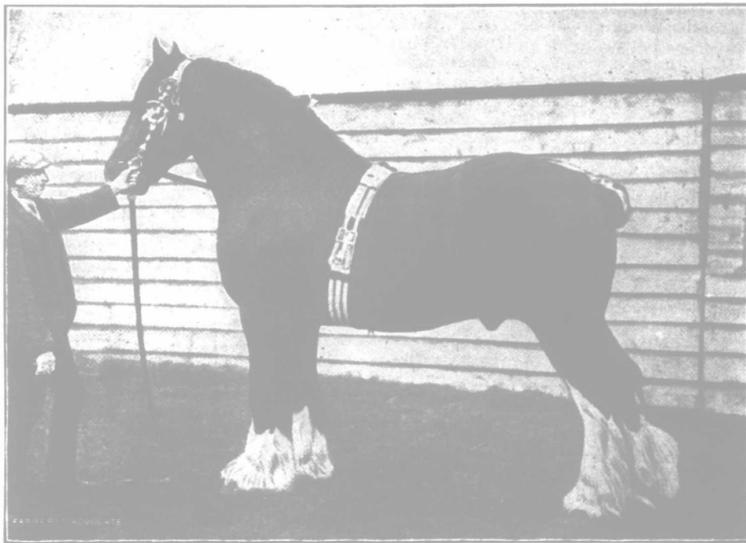
By these examples the induction is easy that specialization is a very prominent feature in livestock classes, and that this specialization means special utility. It must follow infallibly that this condition is an economy. It corresponds exactly with the division of labor among men in the mechanical arts, and is the corresponding sign of efficiency for the ends in view. Given two men and two tasks,

in towns of the ranching district it just happens that the beef business is so fashionable that dairying is left to the few, and is highly profitable near the cities; likewise, the convenience of the beef that is grown near the city gives it an enhanced value to local butchers, which all goes to show that profit is a matter of opportunity. The neighborhood of cities is usually highly cultivated, and is adapted to the concentrated feeding that is necessary for making pork. Pork-making, likewise, fits in well with certain phases of dairying, particularly cheesemaking, but there is the best possible market for pork in all our Western ranch towns. The advantage arises from demand rather than facilities for its production. The ordinary farmer seems to be in a middle position, enjoying ordinary facilities and ordinary demand.

It is this condition that has given rise to the talk about the dual purpose cow. The advocates of the dual purpose cow seem at times to imply the existence of a cow as good in two respects as the special purpose cows are in only one. This, of course, is a mistake. The flesh-making and the milk-secreting processes must obviously be opposed to each other as simultaneous processes, and the development of one has universally been accompanied by the suppression of the other as a constitutional tendency. This does not mean that a given grade of stock could not be simultaneously improved by selection and breeding as to both fleshing and milking qualities above the condition they were in when improvement began, but simply that you cannot carry two features to the same perfection in a single animal as you can one. It must be said, however, that it is possible to select from existing stock families that will suit the species of commonplace dual demand of the farmer better than others will. The Shorthorn is essentially a beef animal, but there are certain strains with good milking qualities among them. Such animals as belong to this class will do fair work as dairy animals, will fatten up after their usefulness is over, and will produce steers that will make good beef and will not have to be knocked on the head like the Jersey male calves of a pure dairy herd.

The question of equipment is an important one likewise. A dairy plant is more or less elaborate and special, and its management a matter of some skill. It is not always possible, either, to reconcile ordinary farm needs with the demands of the dairy in the matter of labor and attention.

Probably the consideration of the dual-purpose animal is more important in the case of cattle than it is in the case of sheep or horses for the farmer, but there is something to be said with respect to each. Our dairy and beef products are much more important than our wool and mutton products, but there is the same gain in being susceptible to general demand and general conditions. In Canada our sheep are practically all English sheep, and so we feature the mutton side of the business. Most of our mutton is sold as lamb; that is, of our farm mutton, but there is early lamb and late lamb. We have a special-purpose sheep for the early lamb business, which will doubtless receive better recognition with the growth of our cities. This is the Dorset. It is like the special dairy cow in being a good sheep for good lands near the good markets for tender cuts in the large cities. Outside of this there is not any special-purpose sheep



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.

among our Canadian classes. Wool is wool, and it is nothing more. Lamb is lamb, and any of our Canadian lamb is easy to take. There is, of course, a species of specialization possible depending on soils, but none on markets so far as breeds are concerned. The heaviest plains sheep should not be put on the hills, while on the other hand the hardy middle-wooled or upland breeds will do well in either the hills or the fields. There is a tendency, which is general rather than being confined to particular localities, to prefer light or medium quarters and cuts to heavy ones. This may be to some extent a matter of quality as well as weight, as the middle-weight breeds have earned the credit of having a more mixed and finer grained meat than the coarser breeds have.

The Sheep's Mouth.

BY J. M'CAIG.

The incisor teeth in the sheep are situated only on the lower jaw, just as they are in the cow. It is important to understand when the sheep gets these teeth, for the condition of the mouth is the best index of usefulness of the sheep. The mouths of the ewe flock should be gone over in the fall, when they are being culled and selected for the breeding season. It is not difficult to know the age of a sheep up till four years at least.

When a lamb is dropped it generally has one pair of incisor teeth showing in the lower jaw. Sometimes there are none in sight, but all the incisor teeth appear in the course of a few weeks. They are eight in number. The first teeth of the lamb are only temporary. They drop out in time and are succeeded by permanent ones. The temporary teeth are narrower and smaller in every way than the permanent ones. The permanent teeth come in in the same order as the temporary ones, from the center of the mouth outwards. When the sheep is one year old the center pair of temporary teeth drop out, and are succeeded by a strong, broad pair of fine looking permanent teeth. By two years old another pair of permanent teeth, one on each side of the center pair, can be seen. They are broad like the first ones, but take some time to come up even with the center pair. The same thing takes place the third year, so that by the time the sheep is four years old it has all its permanent teeth, or is said to be full-mouthed. Sometimes, particularly with regard to the first pair of teeth, there is considerable variation. Highly nurtured animals generally have their first pair before a year old, and sometimes have two pairs before eighteen months old. Again, the periods between each succeeding lot of teeth and the one before it shortens with the age of the sheep. There is not a full year between the changes. For example, the first pair comes in at about a year old, or perhaps fourteen months; the second at a year and nine months; the third at two years and six months; and the fourth at three years and three months. It is still a safe rule, however, that a sheep with a full mouth is four years old.

Once the mouth is complete the decay begins. The usefulness of a sheep's mouth varies with the breed and the feed. Highly improved sheep, or early improved sheep, which are distinguished by early maturity or by delicacy of any sort, are not distinguished by the same longevity as rustlers, slow growers, or as the later improved breeds. Then if a sheep has fed on short pastures and on gravelly land, its mouth shows wear and breaking sooner than it would if it had grazed on better land and better pasture.

It is hard to tell the exact age of a sheep after four years old. If the last pair have lost their new look, their chisel edge, and show some top wearing with the three older pairs between them, the ewe cannot be under five. The center teeth show age by their becoming narrower, and by spaces showing between them, particularly towards the roots. By observation and comparison it is possible to make a good guess as to whether a ewe is nearer to four than she is to eight years. Generally, however, before a ewe has reached eight one or both of her center incisor teeth will be missing, and sometimes the whole lot of them. A tooth may drop out at five years old; one or two are almost sure to at six. A ewe having lost one or more teeth is said to be broken mouthed. Her value for breeding purposes is lessened by the loss of teeth, for the reason that she cannot gather food for her own sustenance as well as before, and certainly she would not be able to support lambs well, as her milking value depends on her masticative and digestive machinery being in good condition. There are ewes, however, which it is desirable not to part with on account of their blood and proved excellence as breeders. They can do all right in summer on good pasture, but need to be near the bran-box in winter.

The molar teeth are six in number in each jaw, but a knowledge of their growth is of very little practical importance.

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 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 bye 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 particularly well judged by Mr. T. B. Freshney, Somercotes, South Lane. 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, Stony-toun 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, Killblean 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 Cairo 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 77506; 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 Chief 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,



SWEEPSTAKES HERD OF HEREFORDS, EDMONTON EXHIBITION, JULY 1ST, 1903.
OWNED BY JAS. TOUGH, EDMONTON, ALBERTA.

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, Auchnagauie, 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 Auchertorlie, is the other exhibitor of Ayrshires. He has taken a first prize. "SCOTLAND YET."
25th June, 1903.

Hints to Beginners.

BY T. SPERRS, OAK LAKE.

In breeding beef cattle, the points upon which we should lay most stress are: first, constitution; second, quality; and, third, all the size we can get without losing sight of quality. To have a good feeder we must have constitution. To lead the show, or get the top price, we must have quality, and then the larger the better. I would say to any young beginner, in speaking of Short-horns: Don't be led away by any color craze. Red, white and roan are all good colors. If you are starting to breed Shorthorn cattle, go to some reliable breeder and try to select something good to begin with. Feed them well, and breed the females to the best bulls you can find. Should you not have a bull of your own, do not neglect the latter matter, even if you have to send the cows twenty or thirty miles for service. Attend diligently to these matters, and the chances are that in ten years you will have good cattle to show and sell, and the men who want

agricultural education of such importance. The result of the stock-judging demonstrations held in Manitoba last winter led us to believe that the farmers of that Province were as ready for and as anxious to receive good practical instruction in live stock as any place on this continent, and the outcome of the meetings in the sunny territory of the West makes it certain that this feature of agricultural education must not be neglected in future.

Stock-raising in B. C.

ADVANTAGES OF THE LOWER FRASER VALLEY AS A HOME FOR PURE-BRED STOCK.

When we come to take into consideration the smallness of the area of the British Isles, it almost passes comprehension to find that it has been the cradle of the live-stock of the farm, and still continues so to be.

Divergencies have arisen, and will doubtless do so again and again, but the fact remains that to keep up the true symmetrical type of the animal, recourse must be had to the parent strain from the home of original production. In discussing this subject it might be profitable to consider whether that portion of British Columbia called the Lower Fraser Valley does or does not possess both soil and climate which simulate very closely those portions of the British Isles from which have sprung the progenitors of nearly all the live-stock of the farm, and of which the Anglo-Saxon race is so justly proud.

The answer, to my mind, can only be in the affirmative, and under such conditions British Columbia must sooner or later become the cradle for animals which will rival those of the mother country in type, size and quality, and thus make it an imperative necessity for those breeders in other portions of the North American continent where long, rigorous winters prevail, coupled with extreme debilitating heat in the summer, to come to British Columbia for new and vigorous blood wherewith to keep their animals up to the original type of excellence. It may also follow that the Australasian colonies will find it to their interest to do likewise. The immutability of impress of soil and climate on both man and beast is a stern and unalterable decree, which must be admitted by all who are not wilfully blinded by prejudice. In the not very distant future, British Columbia will be an important factor in the production of the live-stock of the farm, in its most superlative excellence. Hitherto farming in this Province has had but little encouragement from those whose duty it was to foster it, but the time has come when imperative necessity demands that it shall receive the attention and assistance its paramount importance warrants. The laissez faire of past governments has gone, never to return, and the urgency of the agricultural potentialities of the Province will not admit of any further dolce far niente business to prevail, but requires that a strenuous forward policy of active development be inaugurated on very practical lines.

The development of agriculture in British Columbia is the pressing necessity of the moment, and any man who attempts to hinder that progress, either by implication or overt act, is a direct enemy to his country, and should be treated as such. The lumbermen, the canners, the mining men and charter mongers have one and all exploited the public domain of British Columbia to an unwarrantable degree, and in many instances to its detriment, but the time has now come for the farmer to claim his rights and privileges, and demand them in the name of public necessity. The first right of man is the right to live, and as the land is the heritage of the people, bequeathed by the Almighty for man's subsistence, with the proviso that it should be cultivated—for only by the sweat of his brow should he live—

good cattle will come to you to buy animals to improve their herds. Aim to breed to the thick-fleshed, short-legged, good handlers. They always do well. Do not lose sight of having the cows fair good milkers, and do not get discouraged if all your young stock do not come up to your standard. If you get a sire that does not suit your females, get rid of him and look for another. Attend all the fairs and show your stock. You may not make any money, but you will learn what will be worth money to you later on in the business.

Stock-judging Institutes.

The first series of meetings held in the Northwest Territories for the purpose of giving practical demonstration in judging live stock, closed on Saturday, June 27th, under the supervision of Mr. Duncan Anderson, Rugby, Ont. At Medicine Hat, Olds, Ponoka, Innisfail, Red Deer and Lacombe, a good number of stockmen and farmers turned out and took a great interest in the lecture. At the three latter places the largest meetings were held, at each of which about one hundred were present. A beef cow, a dairy cow and a horse were used at each meeting, by means of which the desirable and undesirable qualities were pointed out.

In contrasting the two classes of cows, it was shown that while the valuable parts of the beef animal were above, those of the dairy were below. Without a good udder and well-developed milk veins, it was impossible to have a first-class dairy cow. In the beef, it was necessary to have a large development of the most valuable parts, and these were to be found on the back or upper portion of the animal. In each case, constitution was required, because without it the highest function of the organs of the body in their effort to transform food into either beef or milk could not be carried out. With the heavy horse, Mr. Anderson impressed upon his audiences the necessity for quality in the feet, pasterns, and legs in particular. "No foot, no horse," was an old maxim that should never be forgotten. A clean, smooth, flat bone was always best. He deplored the fact that many inferior stallions were coming into this country of late, as the result could not fail to be disastrous to the future of our horse-breeding industry.

The "Farmer's Advocate" is gratified to know that the first efforts of the Territorial Department of Agriculture to hold meetings for the purpose of giving instruction in live stock have been so successful, and that Alberta farmers have shown themselves so ready to appreciate a branch of



SWEEPSTAKES HERD OF SHORTHORNS AT EDMONTON EXHIBITION, JULY 1ST, 1903.
OWNED BY P. TALBOT & SON, LACOMBE, ALBERTA. (SEE GOSSIP, PAGE 797.)

therefore to abrogate those laws is flying in the face of Providence, and if continued will sooner or later bring disaster in its train.

"Oh, is there not some patriot in whose power
That best, that Godlike luxury is placed,
Of blessing thousands, thousands still unborn
Through late posterity—some large soul
To cheer dejected industry—to give
A double harvest to the pining swain
And teach the laboring hand the sweets of toil."

In conclusion, permit me again to state with all emphasis that the soil and climate of the Lower Fraser Valley of British Columbia are far more eminently fitted for the production of the live-stock of the farm in the greatest perfection of excellence than any other portion of the Dominion of Canada. The combined populations of France and Germany are about 90,000,000, while the area on which they exist is identically the same as that possessed by British Columbia. Truly it is time to be up and doing, that the stigma cast upon Canada by Mr. Carnegie may be no longer true of British Columbia.

J. G. V. FIELD JOHNSON.

Vancouver, B.C.

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 Bapton 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 69, 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 representa-

tive 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 SHROPSHIREs were not so numerously 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 Twentymen 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. Fife, 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, of the Yorkshire section, found its leading winners for aged 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 entry, 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.

TAMWORTHIS, 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.

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 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.

SOUTHDOWNS 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.

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."

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), 25 gimmers (ewe lambs), 15 tip lambs (ram lambs), 1 chest of drawers (bureau), 1 grape dungfork, 1 slaughter spade (an implement for skimming 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 pitch crowbar, 1 spoon creel (hanging spoon-bucket), 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 stave higher than the rest for a handle), 1 twy swifts (for winding yarn to be made into

skins), 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.

Farm.

Edmonton Exhibition.

The principal summer fair of Northern Alberta, which closed at Edmonton on July 2nd, was the most successful ever held under the auspices of the Edmonton Industrial Exhibition Association. Although a good result was anticipated, owing to the rapid development which has been going on for some time in various lines of production, to which this northern country is so well adapted, yet the weather was by no means favorable, and the loyalty with which the farmers for many miles around supported the show is worthy of the highest commendation. As one worthy officer remarked, "The soil-tillers of this country work hard, but they believe in taking a holiday and in spending it well." This was borne out by the receipts at the gate, which far exceeded former years, and although the association went to considerable expense in securing prizes, when the books were balanced they were enabled to rejoice in having a very satisfactory balance on the right side. The entries altogether amounted to nearly four hundred more than in 1902 and accommodation was made for the housing of every exhibit in a way that visitors could see it properly. As an industrial exhibition, the chief criticism that could be offered was in regard to the interest taken in the racing events. These may be all right in their place and necessary to draw a crowd, but it was noticeable that when a race was on the excitement was generally sufficient to draw many away from the ring where the stock was being judged and where the farmers and young stockmen were having a rare chance to improve their knowledge of animal form. The officers in charge of the show worked hard to make it a success, and inasmuch as it may have lacked management at any point, it was perhaps due to the inexperience of the leaders. Edmonton exhibition has grown, and will continue to do so, and those who are at the helm must realize that good management is necessary to secure the best results. The directors in charge of the live-stock did faithful work, and to Messrs. Daly and Kennedy much credit is due. Hon. Dr. Elliott, Commissioner of Agriculture, favored the show with his presence, and was very favorably impressed with what he saw.

HORSES.

Taking the show of horses in general, it was scarcely up to the mark. In some sections there was fair quality to be seen, but in others it was only medium, and it was noticeable that in some instances the horses to come into the ring were

inferior to others of the same class to be seen upon the streets of the town. The reason for this could not be attributed to the smallness of the prizes, for in most cases these were of fair size. There was also a remarkable absence of entries in the sections for colts under two years old. If the farmers of Edmonton district are not breeding colts that will make good farm horses they are making a mistake, for which in future they will surely be sorry.

In registered heavy draft stallions of mature age there were four entries, out of which Geo. Hutton's (Edmonton) Godolphin, sired by Macgregor, and out of a Baron's Pride mare, was easily placed first by Mr. Geo. Gray, Newcastle, Ont., whose services as a judge had happily been secured for the occasion. Second went to a heavy-boned fellow, owned by Graf & Newhr, of the same town. Hon. Wm. Beresford's (Calgary) Matchless was a close third, and would have been second if in better show form; while a high-priced Percheron, syndicated a few months ago by an American concern, was properly turned down to fourth place.

In registered heavy draft teams, the Brackman-Ker Milling Company, Strathcona, showed a pair that was a credit to any show-ring. Heavy drafts, not registered, were not plentiful in numbers, nor exceptional in quality. P. H. Winter, Lacombe, had a fairly good heavy draft team; J. D. Foster, Strathcona, the best brood mare over 1,400 pounds; and Jos. Tough, Edmonton, the best mare any age.

The general-purpose class, intended for horses suitable for wagon, buggy or plow, had eight entries in the section for double teams. This was, undoubtedly, the best ring of the show. Alb. Kuhl, Spruce Grove, got first on a pair that were fully entitled to the honor they won. E. Dowling, Strathcona, had also a good pair, and received the second place. In brood mares there was also keen competition. Geo. Creswell, Edmonton, secured a well-earned first, and Geo. Hutton second. C. McPherson, Edmonton, had the best foal, and Geo. Creswell second.

The honors for roadster horses were not very keenly contested; a few good ones, however, were in the ring. Dr. T. R. Forest, Uxbridge, Ont., showed a nice mature stallion, and W. R. Stewart, Meadow Creek, a good colt one year old. J. H. McNulty, Strathcona, had the best brood mare, and J. Gainer, Strathcona, the second. For filly, one year old, H. Miller and Thos. Allin, Strathcona, were first and second respectively. Single drivers found Edmonton horses the winners, John T. Miller being first, and R. J. Manson second. W. R. Stewart, Meadow Creek, was placed first for double team, and J. Gainer first for best foal.

Typical carriage horses were, generally speaking, conspicuous by their absence. H. A. W. Tyford, Edmonton, got first for team over sixteen hands, and Dr. E. A. Braithwaite, the same for single driver.

Strange to say, in a town where saddle horses are quite common, there was but a small entry in this class, and these were only of ordinary merit. It would appear that no effort is being made to breed the really typical saddle horse, for which high prices may now be secured.



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 Sedbergh, 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.

CATTLE.

Northern Alberta is fast becoming noted for its herds of pure-bred cattle, and this year the exhibit of bovine excellence can truly be said to be one of the chief features of the exhibition. Duncan Anderson, Rugby, Ont., was present to grant the awards, and the exhibitors were invariably satisfied with his decisions. The Shorthorns, as would be expected, were the most numerous, and in many sections the quality was of a high order. In aged bulls, P. Talbot, Lacombe, had an easy first in Royal Macgregor, bred by H. Cargill & Son, of Cargill, Ont. This bull is full of Shorthorn character, and would stand a lot of beating in any ring. He was later given the sweepstakes. Bulls two years old and under three brought out four very nice specimens of the breed. S. K. English got first on a nice roan, possessed of remarkable smoothness as well as breed type. He has also proven himself a stock-getter of no mean order. Dr. B. Wilson, Namao, had the second-prize animal, and Thos. Daly, Clover Bar, third. In yearling bulls, English got first, and Uren & Ottowell, Clover Bar, second. For bull calves, English was also to the front, winning first and second.

In aged cows there were five entries, making a ring of considerable merit. For first place there was a close call between Talbot and English, both having remarkably good cows. The former, however, was placed first, and Uren & Ottowell third. The three-year-olds were also a good lot, but one of the best had to go unplaced because she showed no evidence of being in calf. S. K. English secured first on a nice, smooth heifer.

For heifers two years old, Talbot was first and Uren & Ottowell second. The best ring of the Shorthorn show was the one for heifers one year old and under two. Altogether there were six to come forward, and for the first three places there were specimens any one of which would do credit to the largest exhibitions in America. The order of placing was Beresford, Talbot and English, and it is seldom that any judge has a better opportunity of illustrating what is meant by uniformity of type than was afforded and taken advantage of by Mr. Anderson on this occasion. For best herd, including bull and three females, the honors went to P. Talbot & Son, Lacombe. Through an oversight the latter herd was not entered for the prize given for the best herd of any breed, which they surely would have won. For bull and two of his get, S. K. English was the winner.

A few Galloways were on exhibition, but they were not in show condition, and, consequently, brought forth no favorable comment from the judge. The only Herefords on exhibition were shown by Jos. Tough, Edmonton, but they showed breed character and were brought out in such good condition as to be a credit to any exhibitor and a worthy feature of any pure-bred cattle show in this country. Had there been opposition they would have stood a lot of beating. The same exhibitor expected to have had two more females in time for the show, they having been shipped from Compton, Que., twelve days previously.

Polled-Angus cattle were not out in sufficient numbers to make a good show, and the same could be said of the Jerseys and Guernseys. In Holsteins, A. B. Potter, Whitewood, Assa., had seven head on exhibition, and secured all the prizes for which he had entered. His stock were in good show condition, and would have stood a hard encounter had opposition been on hand. There was a fairly good exhibit of fat cattle, and a number of grades showing good beef type.

SHEEP.

In long-wooled sheep, J. K. Thompson, Calgary, had a large pen of choice Leicesters and secured all the prizes. The short-wooled breeds were not present in any number. A nice pen of Angora goats were on the grounds and attracted considerable attention.

SWINE.

The exhibit of swine was the best that has ever been seen at Edmonton. In Berkshires, Swift Bros., Clover Bar, had a fine herd, notwithstanding that some months ago many show animals had been disposed of. Their stock was brought out in good condition, and showed breed type such as no judge could pass over. They secured first place in all sections in which they had entries, and in one or two cases second place also. Jos. Tough was the only exhibitor of Poland-Chinas, but he had some choice ones. In Yorkshires, A. B. Potten had a herd showing the bacon type to perfection, and with these he secured all the prizes.

An imposing feature of the live-stock exhibit was the parade of the prizewinners on the evening of the second day. As they approached the grand stand a beautiful sight was presented, and when Farmer Daly, who led the way, raised his straw hat the crowd cheered vociferously. The animals marched with stately tread, and even three fat steers which were chained together and without a guide seemed to realize the importance of the occasion.

AGRICULTURAL PRODUCTS.

So early in the year as July 1st a show of agricultural products representative of a district cannot be expected, consequently the agricultural hall on Edmonton's beautiful show grounds was not very well filled. There was, however, a choice lot of grains that had been carried over from last year, sufficient to show what may be grown in the surrounding country. A feature of this department was the competition for a silver medal and twenty-five dollars given for the best seed oats grown in Alberta. Out of eight exhibits, Thos. Daly, Clover Bar, was the happy winner. The exhibitor secured first out of nine competitors for the best milling oats. There were seven lots of spring wheat to choose from, W. D. Carscadden got first and Hugh McKay second. In fall wheat a few samples of very high-grade were to be seen, showing conclusively what may be accomplished with this grain in Alberta. J. W. Suddaby was first with a white wheat, and John A. McPherson second with a red variety.

The exhibit of barley was the most remarkable of the grains. Nowhere in Canada or the United States has the writer seen such splendid samples of this grain, some of which would weigh not less than 55 pounds to the bushel. For six-rowed the prizes went to Clover Bar, Wm. Wakefield and Wm. Carscadden being the winners. In the two-rowed variety, John M. Brown, Agricola, and H. J. Crawford, Strathcona, won in the order named. For collection of grains, Crawford won first and Tough second.

The exhibit of grains, clovers and grasses in the sheaf grown this year was full of education for the visitor. Fall wheat was to be seen cut on June 29th, heading out; brome grass and timothy of remarkable growth; and alfalfa, alsike and red clover grown in the district, that was truly surprising.

STOCK-JUDGING DEMONSTRATION.

On the morning of the second day Mr. Duncan Anderson, who was judging the cattle, gave a practical talk upon the requirements of a beef animal, using Messrs. Talbot and English's bulls as object lessons. Three points, he said, must be looked for—constitution, feeding quality, and the right shape. As in buying land, it was necessary to see that the title deeds were right, so in buying a pure-bred animal it was necessary to see that the right foundation be secured upon which to build. He believed in pedigree, but would never buy a bull that had not the right individuality, that should be placed first. In general conformation the beef animal should be low-set, thick in the body, with strong top line, and well let down in the flank. Where breeds were crossed it was best to get rid of the crosses and not breed to them, as the next generation would have no breeding. The best results were obtained by men who chose the breed that suited them best, and then stuck right to it. He reminded the audience that in good times there was a tendency for the farmer to give up the dairy cow, but when money was not so easily made he generally went back to his old friend. He strongly advised those who contemplated going into beef-raising to secure the low-set sire, broad in the forehead and full in the eye. This address was greatly appreciated, and from the large crowd that gathered round, it is evident that the farmers of Edmonton district are open to receive all the practical instruction on live-stock that is obtainable.

By the Way.

LIVE-STOCK INDUSTRY.

Speaking of the live-stock industry, Mr. Johns, of Kaleids, says: "The raising of live stock will eventually take the place of wheat-raising in this Province. Mr. Johns has himself laid the foundation for a pure-bred herd of Shorthorns in his Pink II, and Pretty II., both of which were bred by Mr. Elworthy, of Exeter, Ont., and trace back to Hubbach, of Colling Bros. fame. Pink II. is a particularly fine animal, having a beautiful head, fine neck, a very deep chest, and a straight, broad back. Such animals will do much to improve the live-stock of our Province."

SHEEP VS. WHEAT.

Mr. Howatt, of Kaleids, says: "Sheep-raising is a better paying industry than is wheat-raising. The expense of fencing for them is considerable, but after that the amount of work and expense is small. Rape and oats sowed together makes an excellent pasture for them. Provision should be made that the sheep can be admitted to only small portions of this crop at a time."

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.

Stacking Hay.

Up till quite recently the making and stacking of hay was a branch of farm work which received little study in the Northwest. No method was followed. The several processes were gone through, and the hay stacked up anyhow, there being such a superabundance of it available that if a part got spoiled through lack of care there was always enough good hay left to meet the needs of the farm. Where part of a stack gets spoiled, however, it is safe to surmise that the other part is not of the first quality, and the extra work caused by the necessity of separating the good from the bad is enough inconvenience to make any sane farmer pay attention to stacking in the best possible way to protect the hay from the consequences of wet weather.

In our issue of June 20th we gave some hints on the important process of curing hay, and it is now our purpose to follow that up with a few remarks on the equally-important subject of stacking. Owing to the amount of hay used, and the rush and hurry prevailing in the haying season, it would be out of place to talk of stacking as practiced where land is costly and labor comparatively cheap, yet as a good rain-proof stack can be built quickly, with little more labor than a bad one, there is no reason why all haystacks should not be made in the best manner possible to secure the hay against rain. Stacks are often made in sections of about the length of the wagon load, and it is a very good plan to do so, as each section can be heaped up to "throw" a shower before commencing the next one. The one point requiring attention from the base to the peak is that the center be kept higher and harder packed than the outside. If the center be not harder than the outside; or, in other words, if the heart does not contain more hay to the cubic yard than the outside in the body of the stack, the layers will settle to the center. The reason for this is obvious, as the weight of the head or top of the stack is heaviest in the center and lightest on the outside. The width of the foundation should be in proportion to the height. If the hay has to be pitched from the wagons, from twelve to fourteen feet will be found wide enough to finish with a slope steep enough to cast rain. When a mechanical fork is used, which is rigged to carry the hay to a considerable height, an extra proportionate breadth will be required to guard against wind storms. If these matters be attended to a pretty solid body of hay, almost proof against rain, will be the result. Care should be taken to have a uniform breadth, and also to pack well the joints of the sections, and a final topping, where stacks are built in sections, will ensure a lapping of the joints, which is often a weak point in stacks so built. The hay should be used first from the end which was built last.

Crystal City Fair.

The 24th annual exhibition of the Mountain Agricultural Society No. 1 was held under the auspices of the society on the 10th of July. There was a gratifying number of entries, and all came forward on the show day. There was a good class of cattle, and the show of horses was excellent in every respect, making a keen and close competition in almost every section. The judges in the horse classes were Messrs. W. Gemmill, Pilot Mound, and R. D. Searfield, Crystal City. Mr. P. B. McLaren acted as director in attendance. The show was strong both in quality and numbers in the general-purpose class; the animals competing in the heavy draft class were of a high standard; and the carriage and roadster classes were composed of fine animals all through. In Shorthorns there were very good animals, though they ought to have been more numerous to fairly represent what is being done in the breeding of Shorthorns in the district. Herefords were a good show, and in numbers were a fair representation of the breed. Grades were a good class, but the number forward was anything but gratifying. There were three classes of sheep without any individual competition, as only one breeder represented each class. The animals forward, however, were of a good type, and all in good condition.

Pigs were next to being unrepresented. The judges awards seemed to be popular in every section, and they each and all did their work in a thorough and impartial manner. The one disappointing feature of the fair was the poor turnout of spectators, and several of the directors in commenting on the circumstance expressed the opinion that small local shows have survived their usefulness, and that the amalgamation of two or three district societies to hold a show in each district in rotation, is the only way to infuse energy and interest into the shows of the future. (See prize-list in Gossip column.)

Wetaskiwin Fair.

The fifth annual show of agricultural products, held under the auspices of Wetaskiwin Agricultural Society, took place on Friday, July 3rd. Owing to very unfavorable weather but few entries were made. Even those who were most interested in the success of the fair were so undecided during the forenoon as to whether it would be possible to hold a show that they did not bring out their stock for inspection. The only class in which any particular exhibit was made was horses, and it was so lacking in competition that the judge, Mr. Geo. Gray, Newcastle, Ont., found his task quite easy. A good deal of interest was taken by local horsemen in the contest for honors among heavy draft stallions, of which there were three to appear—two Clydesdales and a brown Percheron, with white markings, brought in by an American company, and syndicated at \$3,750. When the latter was placed second, there was a little dissatisfaction among interested parties, who, however, were not practical judges of horseflesh. In fact, had the third horse been mature and in show condition, the high-priced individual would not have enjoyed even second. It is scandalous, to say the least, that any number of farmers should be induced to invest in such a specimen at figures more than double the value of the best of the class.

At the conclusion of the horse show, Mr. Duncan Anderson, Rugby, Ont., who was present to judge cattle, delivered a short lecture on the points to be observed in the breeding and selection of horses. He believed that the farmer should stick to the draft horse, because fifty per cent. of the light horses bred on the farm were culls, and the chief demand in this country at present was, and for some time to come would be, for horses fit to do heavy work. The draft horse could only be secured by breeding to the draft sire, but he should be of the right conformation. "It is a shame," Mr. Anderson continued, "the prices which are being paid for heavy sires by syndicates of farmers in this country. Some of the horses that are bringing the highest money would not score sixty points." He reminded the audience that without a good foundation it was impossible to have a first-class animal. Forty-five out of one hundred points were allowed for the parts below the knee and back. One of the most prominent breeders in the Old Land considered the first essentials in a good draft horse were patterns, feet and feather. A good feathering of fine hair, running well down the back of the leg, denoted good quality of bone and body throughout. He did not want a horse with a dull eye. An open nostril was essential, and good width between the eyes denoted intelligence. Coming to the shoulder, the speaker pointed out that it should have a fair amount of slope. Upright shoulders were associated with short upright pasterns, and the latter always accompanied a horse that was stilted in his action. Good spring of rib was also desirable, because the best horses were deep in the body. A strong back with good width over the rump and croup must also be looked for. With these, the horse should have a flat bone. "As flat as a shingle," the speaker remarked. Gummy legs always gave the groom much trouble in winter. He concluded this interesting talk by advising those present to not get caught by a horse with a showy top, but having no bottom.

During the evening, Mayor Dixon and his council, with Mr. Rosenroll, M. L. A., gave a banquet to Hon. Dr. Elliott and others, including the judges who were the guests of the Agricultural Society, when a very pleasant time was spent.

A visitor to Wetaskiwin cannot fail to be impressed with the air of business enterprise that prevades the town. Everyone appears to be imbued with the same spirit of progressiveness, and although the disastrous conflagration which wiped out several of the best buildings a short time ago means quite a setback for the present, yet it is certain that with a class of men such as are behind the enterprises of the town, the ashes of what has been only mark the spot from whence structures grander and better than ever will surely rise. The Agricultural Society, too, expressed themselves as not in any way discomfited by this year's setback, and with the good stock which are now being bred in the district and the further development of the cultivated lands, success in future is assured.

Timothy Sod.

The seeding with timothy is deservedly gaining in popularity, not only for its value as a forage crop, but also because of its effect on the land on which it is sown. The roots hold the soil together so that the plowing operation may be more satisfactorily performed, and another advantage after timothy is that the soil will not blow easily for several years, and it also improves the tilth.

Seeding to timothy has also been found beneficial in the control of the mustard plant in badly affected districts. The sod prevents the growing and spreading of the weed. Taking advantage of this, the land may be broken in such quantities as can be so thoroughly worked that the seed in the ground will be nearly all germinated and destroyed. By following this system up, year after year, the pest could be largely overcome.

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



RESIDENCE OF THOS. JACKSON.

Clover Bar, Alta.

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 largely 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 up and apply a coat of paint, besides the cost of the limewash is considerably less.

Glenboro Exhibition.

The Glenboro show took place on the first of July. A large crowd of pleasure-seekers were present, larger than ever before, but the show of cattle was a very limited one. This is the more to be regretted as we know of quite a number of pure-bred animals, and also a large number of high-class grades in the district, which ought to have been on exhibition. The weather of the previous afternoon no doubt was the cause of some of the herds not being represented, but were a little more enthusiasm shown, such difficulties would have been overcome. Although small in numbers, the show was a good one in the quality of the animals brought forward. Mr. W. B. Meredith, who has just gone into pure-stock breeding, made a fine showing. He won the trophy for the best herd of Shorthorns. His six-months-old bull calf took first in one-year-old class. He is a calf of great promise, and well deserved the position. Mr. Meredith also took second in the same class with an older bull. In cows and heifers he had the two first positions in each. Mr. Macfadden took first for aged bulls, and with the same animal he won the sweepstake prize for bull any age. Owing to the downpour of rain on Tuesday evening, Mr. Murdock did not have his choice herd represented, although he had fourteen entered. In Herefords, Mr. James Barr took first for bulls any age, and females any age first and second. Beef grades made a good showing, though limited in numbers. The prizes were awarded as follows: Cows—1, R. H. Ferguson; 2, W. Armstrong. Heifer, 2 years old—1, R. H. Ferguson; 2, R. A. Fawcett. Heifer, 1 year old—1, R. A. Fawcett. Calf of 1903—2, Thos. Hamilton.

The show of swine, though good, was also limited to a few breeders. The following is the prize-list:

Berkshires.—Boar, aged—S. Anderson. Boar, under 1 year—S. Anderson. Sow, aged—S. Anderson. Sow, under 1 year—1 and 2, S. Anderson. Sow and litter—S. Anderson. Pen of pigs—S. Anderson.

Improved Yorkshires.—Sow, aged—1, Allan Card; 2, A. Gowanlock. Sow, under 1 year—A. Gowanlock. Sow and litter—A. Gowanlock.

Sheep were out in small numbers, though several pretty good specimens represented the two classes shown. The following are the prize-winners:

Sheep, Long-Wools.—Pair of ewes—1, H. Anderson; 2, Wm. Douglas. Pair fat sheep—1, H. Anderson; 2, F. Murdock.

Sheep, Short-Wools.—Aged ram—F. Murdock. Ram lamb—1 and 2, F. Murdock. Pair ewes—1 and 2, F. Murdock. Pair shearling ewes—1 and 2, F. Murdock. Pair ewe lambs—1 and 2, F. Murdock.

Horses were a good show in all classes. In

heavy draft stallions the horse owned by the "Glenboro Syndicate" took first; W. Waller's (Cypress River) horse was second; and Geo. Creamer, Baldur, took away the third. In two-year-old stallions, Jos. Barker carried off the prize.

Mr. Geo. Mooney showed in all classes, and was highly successful. Mr. Mooney comes from the Wawanesa district, and his enterprise in coming to Glenboro with such a number of suitable animals was well rewarded. The teams in agricultural and general-purpose classes were particularly admired. Four teams showed in the former and eight in the latter class.

The following are the further awards in the horse classes:

Agricultural Horses—Gelding, 3 years old—1, Geo. Mooney; 2, Jas. Caslick. Filly or gelding, 2 years old—1, Allan Card; 2, J. Kirton. Filly or gelding, 1 year old—1, Jas. Caslick and R. Armstrong; 2, Ed. Down. Team, 2,700 and up—1, W. Down; 2, G. Mooney.

General-Purpose Horses.—Filly or gelding, 3 years old—1, Geo. Mooney; 2, L. McFadden. Filly or gelding, 2 years old—1, Ed. Down. Filly or gelding, 1 year old—A. Gowanlock. Pair of geldings or mares, under 2,700—1, L. Hayes; 2, Ed. Down.



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.

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 was sixty years old, though his appearance would indicate a much younger man. His wife, two daughters and three sons survive him.

ing, 2 years old—1, Allan Card; 2, J. Kirton. Filly or gelding, 1 year old—1, Jas. Caslick and R. Armstrong; 2, Ed. Down. Team, 2,700 and up—1, W. Down; 2, G. Mooney.

General-Purpose Horses.—Filly or gelding, 3 years old—1, Geo. Mooney; 2, L. McFadden. Filly or gelding, 2 years old—1, Ed. Down. Filly or gelding, 1 year old—A. Gowanlock. Pair of geldings or mares, under 2,700—1, L. Hayes; 2, Ed. Down.

Road Horses.—Brood mare—1, Geo. Mooney; 2, A. J. Stewart. Gelding or mare to harness—1, Jas. Ross; 2, W. H. Donald. Yearling colt—1, J. O. Hettle. Colt of 1903—B. Campbell. Best saddle horse—1, Jas. Mitchell. Best lady rider—1, Miss Garrie Mitchell.

Carriage Horses.—Brood mare—1, L. McFadden. Filly or gelding, 3 years old—1, R. H. Ferguson; 2, John Townsend. Two years old—Geo. Mooney. Yearling colt—B. Campbell. Colt of 1903—L. McFadden. Gelding or mare in harness—1, Mrs. Waugh; 2, Jos. Kerr. Carriage team—1, Thos. Burns; 2, G. Creamer.

There was a good show in the dairy section, and the industrial exhibition was a treat to all. Poultry was a weak show. The following are the names of the judges, and their awards seemed to have given entire satisfaction:

Heavy Horses—W. Swenerton, Carberry.
Light Horses—R. J. Nelson, Wawanessa.
Cattle—W. Jackson, Holland.
Sheep and Pigs—J. Steel, Nebraska.
Garden Vegetables—H. Leechman, Wawanessa.
Butter and Dairy Produce—W. T. Lutley, Asst. Dairy Inspector, Winnipeg, and J. Duncan, Glenboro.

Carman Fair.

The 24th annual exhibition of the Dufferin Agricultural Society was held at Carman on July 10th. The weather was all that could be desired, and the crowd an exceedingly large one. A large number of animals, many of them specimens worthy of competing in the rings of our leading fairs, were early on the grounds. Owing to a large picnic of Winnipeggers, which was held in Carman that day, a special train ran from Winnipeg to Carman by C.P.R., returning the same evening. This made it very convenient for those along that line who wished to attend the fair.

One of the special features of the fair was the walking-team race, open to members of the Dufferin Agricultural Society. The distance was half a mile, and the rules specified that to compete a farm team must necessarily be coupled to a lumber wagon. The prizes were, first, \$6.00; second, \$4.00.

HORSES.

The judges for all classes were J. Ewen, of Morden, and J. Briton, Carman. These gentlemen are to be congratulated on the dispatch with which they did their work, and the general satisfaction with which their decisions were received.

The various sections in this department were well represented, particularly in the heavier classes, and the general excellence speaks well for the future of the horse-breeding industry in that part of the Province.

The first horses shown were those intended for the general-purpose class. Three good brood mares opened the ring, first money going to C. R. Taylor, of Carman, and second to Mr. McLellan, of the same place. Mr. McLellan's foal, however, from the mare taking second in the previous class, won first. With two-year-olds Mr. McLellan was again successful; A. Walker coming in for second place. A particularly fine year-old, shown by C. R. Taylor, was a leader in his class, followed by a worthy rival owned by Jos. Walker. General-purpose teams, of which there were four competing, were the next called. In weight and build there was a very noticeable difference, as is found at most fairs when this class enters the ring. Robt. Wood, of Carman, took first prize with a pair of fine rangy blacks, with plenty of snap, approaching very closely to the carriage class; and Wm. Wood took second with a team of heavier build. Wm. Garnet showed a team of blacks that would please the eye of most horsemen, but which were, in the opinion of the judges, better suited for the agricultural class. The distinction at present between the general-purpose and the agricultural horse is very vague, and as a consequence each class often becomes the dumping-ground for those disqualified, either by weight or build, from the other.

In the agricultural class the foals of 1903 were shown first, and a colt owned by T. Graham, Carman, won. W. H. Elford's colt, a somewhat smaller animal, took second from another colt owned by Mr. Graham. Only one brood mare was shown, and she belonged to Andrew Graham, Pomeroy, well-known as a breeder of excellent stock. Mr. E. Sutton, of Roland, showed the winning two-year-old, a fine dark bay; low-set, with strong back and clean, well-set limbs. Wm. Woods' entry, a good, rangy sorrel, came second. John Hardy was the only exhibitor in the yearling class, and carried off first and second with two very good colts. A. Hodgson, Roland, was an easy winner in the "team in harness class," with his span of spirited bays. Three teams were shown, and the second

place was awarded to a rangy bay and gray, owned by J. A. Huston. In the heavy draft class, the competition was particularly close. E. August, of Bates, won first prize with his brood mare, Princess Lochill 2639. She is a well-known prizewinner, a beautiful animal, and was shown in excellent condition. The second prize went to M. E. Sutton's entry, a registered Clydesdale mare, bred by Clarke, of St. Cloud, Minn. The latter showed good weight and excellent quality, but stood at a disadvantage in being slightly low in condition. The foals of these mares won in the same order as their dams. Andrew Graham's "Cherry" was the winning two-year-old; she is of typical draft type, and worthy of special mention. Geo. Parkinson's colt, also a very neat animal, took second. A black, scarcely up to the first-class standard, was the only exhibit in the year-old class. E. August was again successful in good company with his year-old stallion, "Fred Erskine 3926," and also in the three-year-old section, taking first with both. His team, "Victoria MacNeillage" and "Princess Lochill," were first for draft team in harness, with W. J. Woods' team a good second. The "General," owned by Jacob Shunk, Carman, and "Methuen," owned by the Bayview Horse-breeding Co., were the competitors in the section for stallions over four years. The "General" was awarded first. He is a particularly active horse, with good head and neck, fine, smooth quarters, and fair quality. Methuen (imp.) was sired by Prince of Airies; he by Prince of Wales; and was purchased by Andrew Graham for the present syndicate. Methuen is a very compact horse, of good quality, low-set and of very drafty type. Mr. Shunk was the only exhibitor in the class for registered stallion and three of his get.

In the light horses, the rings were not so well filled. In Standard-bred, Jas. Garret showed a very nice brood mare. In carriage horses, while some very fine animals were shown, the desirable high action was quite noticeably lacking in most cases.

CATTLE.

The judge, W. S. Lister, of Middlechurch, filled his position in a manner which seemed to give almost universal satisfaction.

Shorthorns were the predominating breed on the grounds. They were well brought out and fairly numerous. The herd of A. & J. Morrison, Carman, especially called forth comment of a very favorable nature. Golden Flame =27770=, Morrison Bros.' well-known stock bull, was an easy first in the aged class, and also winner of the diploma for best bull any age. This thick, meaty sire is one of true Scotch type, standing on short legs and massive in form. He has a straight, strong back, splendid loin and well-filled quarters. As a calf he won second in Toronto in '98, and wherever shown since he has always taken first. He was sired by Gold Dust, dam Gipsy Maid; by Golden Crown (imp.). The diploma for best female also went to the same herd. Golden Crown, a well-developed yearling, of good quality, and a son of Golden Flame, got first honors in his class. He also belongs to the same herd. In cows and two-year-old heifers, the Morrison herd captured all prizes, and also first in yearling heifer section, with a well-fitted white heifer of fine quality. In this class (yearling), A. C. McCallum, Roland, got second with a somewhat larger heifer of good conformation and quality. W. F. Somers, Carman, got second place in bulls over four years with Lord Stanley 25th, a good, useful sire, strong in heart-girth, but not in show condition. Bulls two years old found a winner in W. Rae's entry, Grand Quality, sire Pomeroy Favorite. He is strong in constitution and fairly good throughout. The first prize for heifers under one year was given W. F. Somers, for a very promising red heifer of straight lines and good quality. A. & G. Morrison got first for calf, and also the herd prize.

In Ayrshires, there was only one shown. W. Hardy, of Roland, brought out his young bull, King of Prairie Home, and as he is a very good animal he was awarded first and diploma.

In Jerseys, W. Squires, of Carman, had a nice bunch of good ones on exhibition. He won first and sweepstakes with his bull, Jubilee Billy; first and second with his cows, and first with heifer under one year. R. McKnight, of Carman, took first with his two-year-old heifer.

In grade cattle, W. Elford, Carman, had some extra good ones at the fair, which easily won. They would be worthy of a place at any of the larger fairs, for they possess the thick, meaty form and good handling qualities which stamp beef cattle of any origin, whenever they compete.

SWINE.

In Yorkshires the prizes were fairly well divided between Andrew Graham, Pomeroy, and W. Hardy, Roland. Mr. Graham won first with his aged boar, second with young boar, first with aged sow, and first with young under one year. Mr. Hardy got second for aged sow, second for sow under one year, first for sow and litter, and first and diploma for boar under one year.

With Berkshires, Mr. Pritchard, of Roland, got five firsts, two seconds and one diploma, and Geo. Woods got two seconds.

In Tamworths, W. H. Smith got all the prizes given. The exhibit of pigs was more than creditable for a fair of Carman's size, and the directors had to use considerable ingenuity to accommodate the large number of arrivals.

A very nice flock of Oxford sheep, owned by J. B. Jickling, were the only representatives of the wool and mutton industry on the grounds. They were a good lot, worthy of the many prizes and diplomas which they got.

The Crops in Southern Alberta.

Owing to a somewhat dry spring the crops did not get a very early start. However, the snowstorm of May gave the necessary moisture, and since then we have had a couple of light showers, which will see us through until July without much irrigation. Though the crop generally is not any earlier than last year, a very decided improvement can be seen in the luxuriance of the growth on lands that are now bearing their second or third crop. The lands that were cropped last year or the year before are carrying magnificent crops. It is evident that the fact of tillage itself is going to conserve the moisture that we do get. Lands that were well cultivated last fall and put in in good time will ripen up a heavy, early crop.

The meadows that have been seeded are showing up pretty well—not as well as they will when the land gets in better tith—but they have caught well and are pretty even, and they will cut a couple of tons to the acre. The chief tame grasses sown are timothy, brome grass, Western rye grass and alfalfa. All are going to succeed. It is expected that alfalfa-growing will become pretty general as stock-growing increases on the cultivated farms. It yields two or three crops in a season, penetrates very deep into the soil, and is the most characteristic and most successful fodder plant of the western parts of United States subject to the same conditions of soil and climate as ours. The demand for timothy for the British Columbia market is at present the big feature of our hay business, and it is likely that timothy will become an important crop.

A drive through the Lethbridge, Stirling, Raymond, Magrath and Cardston districts shows a very large addition to the crop acreage of last year. The Spring Coulee country has had quite an acquisition of settlement, and shows some very good crops. Breaking in this neighborhood has gone on briskly. Some activity in land will result from the extension of the St. Mary's road from Spring Coulee to Cardston this summer. A fine outfit belonging to McKenzie & Parr is on the ground to rush on the grading.

In addition to the usual crops of wheat, oats, barley, potatoes, turnips and tame hay which have already been a success, the whole line of railway from Stirling to Spring Coulee and beyond as far as Cardston is dotted with patches of beets, chiefly, however, in the neighborhood of Raymond. The crop looks well. Labor is scarce to cultivate the crop. Children from ten up make a dollar and a quarter a day. Some very promising pieces of barley are to be seen. The local brewery is making a good strong bid for the grain, and the samples already grown cannot be beaten any place.

Brome Grass.

1. Will you please let me know what is the right season to sow brome grass?
2. How many pounds should be sown to the acre?
3. What is the price of brome grass seed per pound?
4. I live on the flat of the Saskatchewan. Last year the river overflowed its banks and left a deposit from six inches to one foot deep on the flat, completely killing my hay meadow. The deposit is mixed clay and sand. Do you think brome would grow well on it?

Medicine Hat, Assa., N.-W. T.

Ans.—1. Brome grass may be sown at any time during the growing season, but unless circumstances render it inconvenient or impossible to do so, it should be sown in the spring in the ordinary seeding season. It may be sown with or without a nurse crop. It gives better returns when sown alone, but when that is done a year's crop is lost. On the other hand, a grain crop, if not sown too heavy, could be raised as a nurse crop without seriously retarding the brome.

2. If your seed is clean, free from weeds, and of the highest vitality, fourteen pounds is sufficient. Should you have reason to suspect that it does not come up to that standard, it would be prudent to sow two or three pounds more.

3. About nine cents per pound is the usual price paid for good clean seed.

4. We know of nothing to prevent brome from doing well on the deposit of sand and clay you mention. The high standard of vitality of the grass has been well established, and we have every confidence in recommending a trial of it on your meadow.

Calgary Exhibition.

The Inter-Western Pacific Exhibition, held at Calgary, July 7th to 10th, was rather unfortunate this year in having bad weather. Not only did rain fall on every day of the exhibition, but for some days previous, until the mighty Bow and its tributaries almost overflowed their banks. In some cases the people were entirely cut off from the Sandstone City, through culverts and bridges being washed away. As an outcome of this, the entries, although high as compared with recent years, were not up to the mark of what had been anticipated and prepared for by the management. A special effort was made to carry out a really clean show, devoid of the professional horse-race, and prominent in features calculated to educate and enlighten the people and at the same time afford amusement of an elevating character. A prize-list was prepared, offering every encouragement to exhibitors to come out. The classification was, in general, satisfactory, and good prizes were offered. Expert judges in live-stock were secured, and a catalogue of all the entries in live-stock printed, so that interested visitors might have the best opportunity of receiving profit from the show. It is, hence, to be regretted that climatic conditions prevented a true test of Calgary's efforts and ability to carry out an up-to-date agricultural exhibition. As it was, the people of the town did not give the support by their attendance which the show deserved. On one or two afternoons, however, there was a fair number on the grounds, and the management feels in no way discouraged by this year's result. It would appear that a prejudice has, unfortunately, arisen against this show, and those who now have it in charge hope to overcome this in a very short time. There is no reason why Calgary could not hold one of the best if not the largest show in the West. The country immediately surrounding it is, of course, not so fully settled as that in the vicinity of other growing centers, but with the present railway facilities this can in a great measure be overcome.

At present the exhibition is carried on by a company, who lease the park from the town for the occasion. In conversation with the manager, it was learned that this is the last year the exhibition will be undertaken under such auspices. It is proposed to organize a Royal Agricultural Society, on lines similar to those of England's Royal. A membership fee of about five dollars will be charged, and all parties who wish to become identified as members will be, on

payment of the fee, eligible to vote at all meetings and have a say in the general management of the show. It is also expected that the city will undertake to improve the grounds by erecting substantial and elaborate buildings, planting trees, etc. Should these changes be made, Calgary exhibition will become something to be looked forward to each year. The efforts to run a clean show at present are on the right lines, and the "Farmer's Advocate" only hopes that more exhibition boards in this country will decide to cut out fake attractions and features that only allow the blood-sucking toilers' hard-earned cash.

HORSES.

For some time the Calgary country has been gaining an enviable reputation for first-class horses, and, hence, had fair weather been forthcoming a good show might have taken place. As it was, all the horses entered did not appear, and the exhibit in the stallion classes fell short of the Spring Stallion Show. In the class for registered heavy draft stallions four years or over, Clydesdales and Shires came out against each other. This was in some respects not satisfactory to everyone, as it seldom is, and had there been separate classes for each a better feeling with some exhibitors might have existed. J. A. Turner, Calgary, got first with Royal Verdict (imp.), a big, heavy-boned Clyde, rather lacking in quality, but one that should be a getter of strong geldings suitable for the foreign market. Second place went to the Truman Pioneer Stud Farm, Brandon, Man., on Imp. Prince Shapely, a Shire with an uncommonly good top, but as the judge, Mr. Geo. Gray, Newcastle, Ont., declared, showed signs of wear in the legs. The winner of third was the worthy old Clyde, Balgreggan Hero, owned by R. G. Robinson, Calgary, and had he not come into the ring a little lame the placing might have been different.

Only two three-year-olds came before the judge. These were Orpheus, a Clyde imported by J. A. Turner, being a son of Prince Sturdy, and Gore's Best, a Shire imported by the Truman Pioneer Stud Farm. Orpheus is one of the best horses that has been seen in this country for some time; his symmetry is beautiful, his bone of fair quality, and he moves with the step of a true Clydesdale. The judge not only considered him fit for first in this class, but worthy of sweepstakes and the silver cup donated by the Dominion Clyde Association, for the best Clydesdale stallion any age.

In yearling stallions there was only a pair to appear, but these were good ones, and well deserved the honors they secured. Sonnie's Best, by Lord Charming, and owned by Wm. Moodie, De Winton, was placed first, and afterward commended when showing for the sweepstakes. J. R. Thompson's Improver was the winner of second prize, and is the making of a fine horse.

Brood mares with foals by their side made a good showing, there being five in the field, and all possessing fair quality. First went to J. A. Turner, with the noted old prizewinner, Sonnie's Best, a mare possessed of ideal Clyde pasterns. The same exhibitor won second with Jenny's Heroine, by Balgreggan Hero, while third went to R. G. Robinson, Calgary. In three-year-old fillies, Turner had the only one to appear, a get of Balgreggan, and a nice one. The section for two-year-olds was better filled, but Turner again came first, with Charming Maggie, by Lord Charming. R. W. Micklejon, Cochrane, was second with Miss Houston (imp.), and third with Maggie 2nd of Logan. In yearling fillies, Turner was first and second, and for foals, H. Banister, Davisburg, was first, and Turner second, the latter's being quite young. The prize for best three bred from one stallion used in the Territories was won by Turner, as was also the same honor for brood mare and two of her progeny.

The class for Percheron or Suffolk Punch had only one entry, "His Grace," an English prizewinner, imported by the Truman Company, and now owned by the Gazelle Live-Stock Company, Innisfail, Alta. He is an animal of stately appearance, and moves with remarkable style, considering his weight.

The heavy draft class was not well represented, but a few fair representatives came forward for the coveted ribbons. Jos. McPherson, Calgary, was first for brood mare, and H. McPherson, of the same town, was second for brood mare, first for two-year-old filly or gelding, foal and brood mare and two of her get.

In the agricultural class H. McPherson was first, Jos. McPherson second, and A. L. d'Eyncourt, Calgary, third. These were a nice lot, well worthy the prizes offered. The latter exhibitor also won first and second for two-year-old filly.

The carriage horse did not figure conspicuously at Calgary this year, the entries scarcely exceeding a dozen. For brood mare H. Banister, Davisburg, showed a good animal and got first. A. Wallis, Calgary, secured second, and Press



CLEMENT'S STEAM PLOW BREAKING 20 ACRES PER DAY IN THE ARCOLA DISTRICT.

Scott third. The best pair of carriage horses judged for appearance, shape and action, was found in Lady Bird and Sportsman, owned by A. H. Eckford, High River. These were of the breedy sort, and being well hitched they were a sure thing for first. Second was J. P. Johnston's (Calgary) Lucy and Molly, and they were not a bad pair either. R. F. Beven had the best single driver, and L. A. Scott the second. Two-year-old gelding or filly found Beven again to the front, with H. Banister, Davisburg, and A. Wallis, Calgary, standing in the order named for foals.

Roadsters were no more numerous than the previous class. Jos. Smart, Calgary, was first for mature stallion, and G. H. Minor, Cranbrook, second. For brood mare and foal, A. Wallis, Calgary, had the only entry. P. Burns got the red for the best team, and Messrs. Riley & Sons second, while for single driver L. A. Scott was first and Hall & Clark second.

A few choice Hackneys were present to win deserving honors. Rawlinson Bros' Black Doctor was placed first for mature stallion, and J. R. Thompson's Blackfoot second. In two-year-old fillies there was a pair that hereafter are sure to be heard of. Imp. Rubina, owned by J. R. Thompson, is out of a full sister to the dam of the renowned Fandango. Wm. Moodie, De Winton, had a worthy second. For yearling colts, the rating was the same as for two-year-olds.

The different sections of the saddle horse classes were very well filled, and as the judge remarked, they were about as satisfactory a lot as came into the ring. In mare or gelding over 15½ hands, R. F. Beven, Calgary, was first, and J. D. Pemberton, Nanton, second and third. Under 15½ hands, S. French, Calgary, was placed first; J. L. Johnston second, and A. L. d'Eyncourt third. There was a large entry in the boys' saddle pony, to be ridden by boy 12 years or under, and it was interesting indeed to see the young horsemen make their debut in the show-ring. Master R. Brown, Calgary, was placed first, on a clean-cut, smooth-bodied pony. Master Russell Turner, the youngest of the lot, came second; and Master E. C. Johnston, Calgary, third.

A feature of the exhibition, which it is intended to develop, was the riding and driving competition in front of the grand-stand. J. A. Turner got first for team over 1,500 pounds; and in the class under that weight, F. L. Johnston was first; P. Burns second; and Robt. Turner, third. Prizes were given for polo ponies and high-jumpers, and in both classes good entries were made, and it is expected that hereafter these classes will be more encouraged than in the past.

CATTLE.

The classes for cattle were divided into Short-horn, Hereford, dairy, grade beef and grade dairy, and in each the different sections were very well filled, and taking the bovine exhibit as a whole, it was very creditable. In Shorthorn bulls, two years and over, Trout Creek Hero, now owned by R. K. Bennett, Calgary, was alone, but afterwards was given the sweepstakes for best Shorthorn bull any age. The best yearling bull was found in W. Beresford's Royal Edward, by Imp. Merriman, an animal of superior merit. C. W. Peterson had the second, and W. White, Crossfield, third. The bull calves were a nice class. J. & W. Sutor, Gladys, having the winner in Wellington Boy, the making of a strong bull. In females there was a hot contest between J. A. Turner's Gene and W. Beresford's Golden Princess 3rd. The former, however, had a thick coating of evenly-placed flesh, and was placed first by the judge, Mr. Duncan Anderson, Rugby, Ont. H. McPherson's Cherry Bloom 14th got third, and three others went away unplaced. The latter had the first-prize two-year-old heifer, and J. & W. Sutor the second in the same class. For yearling heifer, W. Beresford had an easy winner in Lady Townsend 6th, a beautiful, low-set animal, of thick body and splendid quality throughout. W. White, Crossfield, came second. In heifer calves, J. & W. Sutor came out particularly strong, and with Daisy Good, an exceptional calf, both in conformation and quality, headed the line. She is a regular young Cicely, and with careful handling will figure prominently in future show-rings. H. McPherson got second with a very fair specimen of the breed. For bull and herd of three females, the order was Beresford, Sutor and McPherson.

The Canadian Pacific Railway offered special prizes for the best animals bred in Manitoba, Northwest Territories and British Columbia, with the result that only small entries were made, and in some cases the quality scarcely justified a prize being given. Messrs. McPherson, White and Sutor were the principal exhibitors. The former got second for bull and herd of females, female over one year, heifer calf, and third for bull calf. J. & W. Sutor got first for bull and herd of females, bull over one year, heifer calf, and second for bull calf. White was second in bull

over one year, and third for female the same age. For females one year or over, W. Beresford showed his Lady Townsend 6th, and was easily first.

HEREFORDS.—The ever popular white-faced cattle did credit to their breed at this year's show. Three good herds were on exhibition, and in many sections the contest for honors was very keen. Robt. Sinton, Regina, came west with his splendid herd, which has increased quite rapidly during the past year. The other exhibitors were Oswald Palmer, Lacombe, and Jas. Shouldice, Gleichen, each of whom had praiseworthy stock. In bulls two years and over, Sinton had in Premier the first prize, a bull of remarkable smoothness, a low-set animal of the type that is popular in American Hereford circles. Country Boy, shown by Shouldice, was a big, strong fellow, possessed of much Hereford character. The call for yearling bulls brought out Palmer and Sinton with two entries each. After careful deliberation, the Lacombe herd was given the red on Bonnie Brae Hesiod 5th, a promising young male of good Hereford type, being strong in the back and very well filled in the hind quarter. Second was placed on Renswick Captain, of the Regina bunch, and a very nice animal he was. In bull calves, Sinton's Orphan Boy was placed first, and Maple, from the same herd, second.

The most interesting section of the class was that for cows three years or over, in which there were seven entries, differing somewhat in general conformation, and it was not until the best animals had been carefully examined that the judge could decide upon the order of placing. The red was finally placed on Sinton's Vesper, an evenly-fleshed cow, and not particularly lacking at any point; Palmer's Deborah came a worthy second; and the Gleichen entry, a strong-boned, useful matron, that had been dehorned, third. In two-year-old heifers, Sinton had something worth seeing, and got both first and second out of an entry of five. For yearling heifers he was again placed first, and for heifer calves Palmer had a young beauty that could only wear the red.

The ring presented a beautiful sight when bull and herd of three females was called, and it would have been even better had not one exhibitor been under the mistaken impression that only one prize would be given. Sinton had four representatives, each of which had won first in its respective class, and Shouldice had a string that was very creditable indeed. No one could look upon this splendid showing of white-faces without being impressed with the fact that in this country they were rapidly improving as a breed and becoming more popular with the stockmen.

DAIRY BREEDS.—In the class for dairy breeds the entries were not numerous, Calgary not being a dairy country. Holsteins were most numerous, and won the bulk of the prizes. A. B. Potter, Montgomery, Assa., had the only herd of these cattle on show, but they represented some fair specimens of the breed. In bulls two years and over, and in bull calves, Potter had the only entry, and for bulls one year old he was first, and J. A. Munroe, Calgary, second. For cows, Potter was again to the front, and Munroe second with a nice type of Jersey. In heifer calves and yearling females, Potter was again the only exhibitor, and for best herd he was first and Munroe second.

There was a number of good grade beef cattle to appear in the respective rings to which they belonged, some of which had descended from families that were eligible for registration in the old Dominion Shorthorn registry. J. & W. Sutor, Gladys, had a few choice ones, and won first in all sections in which they had entries. Messrs. Riley & Sons, and Thos. Laycock, Calgary, also won prizes.

In grade dairy cattle a nice ring of cows appeared. Thos. Laycock had a worthy old matron that gave evidence of being a veritable milking-machine, and she had to go first. Riley & Sons were second, and Laycock third. Some very promising heifers were also shown.

SHEEP.

J. R. Thompson, Calgary, had the only exhibit of long-wooled sheep. They were Leicesters, and a very fair lot. In medium wools, intended to include Shropshires and Southdowns, the prizes were not so easily placed as in the previous class. For shearing ram, J. A. Turner was first and second. C. W. Peterson, the same for ram lamb. For ewe, shearing or over, the order was Peterson, Turner; and for ewe lamb and best flock, Turner got all that was going.

There were a few grade sheep shown, but the competition was not of a particularly keen order.

SWINE.

The only exhibitor of swine was A. B. Potter, Montgomery, and he had a very creditable herd. In bacon hogs he was probably the strongest, and it was noticeable that in placing the tickets

he had unjustly been rewarded with only second prize, probably owing to the fact that he had no competition. One of the weak points of many of the shows in this country to-day is that prizes are given quite frequently to animals that are by no means deserving of it, but it is seldom that an error like this is made in the opposite direction.

OTHER EXHIBITS.

The poultry department was not well filled, there being not more than two score of birds in the show.

His canine majesty was represented by a few Pointers, Terriers, Coyote-hounds and Collies.

Inside the agricultural hall, as would be expected at this season, the exhibit was very slim. Only a very few samples of grain were shown, and these were only of medium quality. In dairy products there was a small exhibit, mostly prepared by the Calgary creamery, but in general there was little in this feature to educate the visitor. The most striking exhibit outside of live-stock was the bread. A great many entries were made in this department, and the show was very creditable indeed.

Dairying.

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.

Wetaskiwin Creamery.

The creamery at Wetaskiwin, Alta., has been turning out from 1,000 to 1,200 pounds butter per week for shipment to the cold-storage department at Calgary. There is abundant pasturage in this district, and there is little reason why the machinery should not be kept in operation six instead of three days of the week. A. R. Flett has charge of the work, and is turning out a desirable quality of butter. The Babcock test is used in this creamery.

Poultry.

Cholera in Hens.

Mrs. Irvine, of the Calf Mountain district, finds the following a specific remedy for the cure of that dreaded poultry disease, cholera. Procure a quantity of green oak bark, boil thoroughly, and evaporate the liquid procured to a strong syrup. Give instead of water, depriving the fowl of any other means of quenching their thirst. The concoction should be of the consistency of water. Fowl do not like it, but will drink it if obliged to do so for want of water.

Eggs Rolling In.

The Government Cold-storage Dept. at Calgary has been a very busy place of late. So ambitious this season has been the family hen of Alberta to excel her previous record, and so ready have been the farmers in certain districts to take advantage of the splendid opportunity afforded them of marketing their eggs in connection with the Dairy Dept., that an unusually large number of the shelled product has been received. This system has been only two years in operation, but it is giving such universal satisfaction that the capacity at Calgary for handling eggs very soon may have to be greatly enlarged.

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.

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 finally determined that they would use no more buckwheat honey, for of late it had been very unsatisfactory 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 symptom 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."

Teacher and Scholar.

The public school, its associations and improvement are subjects of growing interest and vital concern to every farmer's family in the West. We should be pleased to receive concise communications of a helpful and suggestive nature for this department of the "Farmer's Advocate" from those interested.

The Nature Study of the Dandelion.

Hodge, in his admirable book, "Nature Study and Life," has said: "The love of a flower in

secure such a fellow-feeling for the dandelion as the poet has expressed in the following lines:

"But let me read thy lesson right or no,
Of one good gift from thee my heart is sure;
Old I shall never grow
While thou, each year dost come to keep me pure
With legends of my childhood; ah, we owe
Well more than half life's holiness to these
Nature's first lowly influences,
At thought of which the heart's glad doors burst open,
In dreariest days, to welcome peace and hope."

There must be something better about the dandelion for the boys and the girls of our elementary schools than a study of its form and

structure. There is even something better than a study of its relation to other plant forms resembling or differing from it, and this something is only grasped when the plant is considered in its relation to the sun, the air, the soil, other plants, etc. It is this point of view that will enable us to see in this despised weed a life-history full of interest and wonder. Such alone can give us patience sufficient to grasp the marvellous adaptations of root, leaf and flower, by which the whole plant is so well able to master its environments. Let us examine a few of these: A dandelion free from

mother earth soon dies. Why? What does this mean? A plant in the deep shadows is sickly. How is this accounted for? Sunshine and air are its delight. Have you seen this? The dew and the clouds are welcome. For what purpose? As the dandelion evidently depends upon these, it must be fitted to help itself, but how?

First, the root. Try to pull a sturdy plant up by grasping its many leaves. What is the meaning of this? If you succeed in detaching the large root from the earth, just examine it and notice where you have broken off many branch roots. What are these for? In all these questions, nature should be permitted to answer for herself. Dig up a large plant carefully, wash away all the earth adhering to the roots, and take a look at the magnificence of the root system. Is there any wonder that the dandelion refused to come out of the ground? What do all these rootlets mean? Why are they so crooked? Why does the root go so deeply into the ground? Now press the main parts of the root firmly between the fingers. If the plant has completed its flowering, you will find that this is soft and yielding, and an examination of the interior will reveal a spongy texture quite different from the firm and solid plant that is just ready to put out its flowers. Here is something for your class to think about. Here is something that is worth while discovering. You



FIZZAWAY.

Two-year-old Ayrshire bull. Winner of first prize as a yearling at the Highland Society's Show in 1902, and first as a two-year-old in a class of 14 at Ayr in 1903.
IMPORTED AND OWNED BY ROBT. REPOD, TREDINNOCK FARM, ST. ANNE DE BELLEUF, QUE.

the heart of a child is the highest thing that nature study can hope to develop, and no amount of knowledge about flowers can take its place, nor compare with it in life-value." Keeping the above in mind as a goal toward which our nature work shall travel, let us inquire how it is possible for the teacher to study with the child, so common a wayside weed as the dandelion, that some of this "flower love" may develop by the way.

How has the "Dear common flower, that groweth beside the way,
Fringing the dusty road with harmless gold," been studied in the past? It is not too much to state that in the great majority of instances the dandelion might as well have been fashioned out of clay, so far as the formal description was concerned, for the big thing about this plant, and the big thing about every plant, namely, its life, was never thought of in a point of view that was completely satisfied when, the form and the structure had been closely examined. Now, we do not object to such an examination when made by students of botany, though, even here, a greater love for living things could be secured, by retaining much of the nature study spirit, but we do object to dignifying such formal work nature study. There is no nature study about it. There is nothing about it that will



SHORTHORN HEIFERS.

Imported junior yearlings in the Hillhurst dispersion sale, to be held at Hamilton, Ont., August 11th, 1903.

PROPERTY OF JAS. A. COCHRANE, HILLHURST, QUEBEC.

See Ad. on page 787, and Gossip on page 792.

are not to tell, for you will thus deprive your pupils of the joy attending a discovery. Search is a fundamental element in all life, in all education. Allow the children to gratify this desire by their own endeavors. When the discovery has been made, they will know better than we knew, in our botanical days, the meaning of the milky juice, the taproot and the branching of the root of the dandelion. All these may not be discovered in one year, but this does not matter. We are educating, not stuffing with information. In the second place: What do the leaves do? Why are they alternate? A glance at a fine rosette of dandelion leaves from various points will explain the whole arrangement. Give the children a chance; yes, a half-dozen chances to find this also for themselves. You, as their teacher, must be content to play the part of a supervisor, a position in no wise easy. Why are there dead leaves under the rosette? Why are the lowest leaves the longest? Can you see how the leaves are arranged to catch the rain and the dew, and carry the moisture to the center, where the roots may benefit? How are the leaves able to push away the high grass and the other plants that encroach upon the dandelion? Remove the leaves from the healthiest and biggest plant you can find, and measure the area of bare ground from which the dandelion excluded all competitors. Such an examination will help a child later in life to recognize the importance of keeping the dandelions out of the lawns, but at first young children will see only beauty and wonder surrounding these plants. In other words, a child can not be expected to see in a weed a menace to a field or a lawn, but this should not discourage, for such acquaintance with the dandelion as we are making is bound to produce the best economic results as the days go by, only learn to wait. Why are the dandelion leaves all on the ground? Have the children watch the behavior of the dandelion on the lawns, when the mower or the scythe is going its rounds. Have them also watch the boldness of these plants in braving the cold weather of early spring and late fall. Why are the leaves of the dandelion so beautiful and fresh when all the grass around is scorched? Here is where this plant has reversed a custom recommended to all persons, namely: "Put by something for a rainy day."

In the third place: Let us take a glance or two at the hollow stock bearing the flower. How long is this stalk when the flower appears? Why is this? When the stalk commences to shoot up how fast does it grow? Can you see any reason why the long stem is needed? Why are the leaves all placed about the flower-cluster, and not here and there along the stem? Why do the outer and middle rows of leaves turn back to the stem, while the inner leaves lengthen and stiffen and keep their erect position? Watch this carefully; it is one of the many wonderful things about a wonderful plant. Why is the stem hollow? What becomes of the stem when the seeds have blown away?

Do not pass by the involucre with a word or two of dry description. Keep a close watch upon its behavior, and you will find that its structure embodies a thought. There is a something about it that tells most forcibly of its source. It is only such an examination that can help us to understand and appreciate the thoughts from Tennyson—

"Flower in the crumpled wall,
I pluck you out of the crannies;
Hold you here, root and all, in my hand,
Little flower—but if I could understand
What you are, root and all, and all in all,
I should know what God and man is."

If we carry the same patience into our study of the flower, if we are willing to mark several flowers and watch them unfold and tell their own story in their own way, we shall find out why the stock lengthens, why the inner leaves of the involucre guard so well the florets in that critical portion of their history, namely, from fertilization to ripened seed, and why at a certain time the last row of the involucre bends back and rolls away its leaves to prepare for the final act in the little drama—the scattering of the baby-dandelions. But there are dozens of questions we feel like asking. Why are so many little flowers placed upon the one stalk? Would they not look better if each had its own little stalk? Why are the heads so high? Why has the flower so bright a color? Why is the calyx fringed with silky hairs? Why do so many insects visit the dandelion flower? Here is a something too often overlooked. There is nothing more interesting than watching how dusty these insects get as they move about from flower to flower. Have you ever seen the dandelion pull all its corollas off? How is this done? Have you ever watched how the stigmas push up through the ring of anthers and then slowly open? If you have not, there is something here for you and something for the child.

In the last place, imagine you have before you a dandelion of an old age. This is the plant's old age, for are not the baby-

dandelions all waiting for the leave-taking on the convex stage of the receptacle, each occupying a choice position? No one seed has any advantage over another. With umbrellas raised, all are waiting for the passage of some friendly breeze. One by one they are carried far away from the mother-plants, borne safely along by means of the little parachute, until by and by each drops slowly or is tossed into some favorable corner, when the grappling-hooks catch and the seed gradually works downward through grass and weeds to mother earth, where a new round of dandelion-life is commenced.

Such are a few of the many wonderful facts of a remarkable plant. To these, scores of other facts may be added by the teacher who has learned to see more in the dandelion than a bare form and structure. ALEX. MCINTYRE,
Vice-Prin. of the Normal School, Winnipeg.

Horticulture and Forestry.

Tree-planting in Alberta.

As an evidence of the progress of Alberta, farmers are turning their attention to beautifying their homes by planting trees. At Olds alone, Lewis Steadshem, Ole Joksrud, Brade Anseth and J. P. Strong are this year cultivating the ground for next year's plantation, in compliance with the regulations of the Dominion Forestry Department. At Bowden, A. Lougheed is doing the same work, and at Innisfail, as well as at other points along the line, there are several farmers making similar preparations. In a very few years there will be many farms in these districts worthy the name of a "home."

Northwest Fruit Market.

[From our Ontario and Eastern edition.]

With the present influx of settlers to the Western prairies, there should follow the development of a great market for the orchard products of the older Provinces. The prospects for a profitable exchange of commodities between the various Provinces of our great Dominion are indeed bright. The hard wheat of our Northwest is a standard article that cannot be discounted or displaced by that grown in any other part of the world. The miller of to-day cannot sell his flour unless it is made from Northwest wheat, or a mixture of it at least. The baker must have his flour made from it, or he cannot compete and keep his trade. Certain areas in the older Provinces and British Columbia, where the climatic conditions are favorable, produce the best orchard fruits in the world. There are, no doubt, faults to be corrected in the methods of packing and marketing, but as to the question of quality and flavor we stand pre-eminent.

And here is where an opportunity exists for an exchange of commodities between the various sections of our country that ought to be utilized and developed. Why should Canadians send their money to another country when they can get a better article at home? The older Provinces say to the people of the West: "We want your wheat—we can't do without it. And you want our fruits—they are the best in the world. Let us trade." Why not? What are the difficulties in the way? "Oh, the distance is great, the freights are too high, and you don't put your stuff up in as good shape as the Americans do, and so we deal largely with them. Your fruit has a much better flavor than theirs—we know that; but you don't put it up as well, and the freight is too high." These are difficulties that are surely surmountable by a progressive and enterprising people. Cannot our legislators do something in the interest of interprovincial trade? May we not expect that with the advent of one or more competing lines of railway, and the appointment of the Railway Commission now under consideration, the difficulties will be largely overcome. The transportation question is one of the great questions of our Dominion to-day, and claims the most earnest consideration and best efforts of our Government and Parliament to work out a satisfactory solution. The Great West must have fair and reasonable rates and quick transport for their wheat to the Eastern Provinces and the seaboard, and the East wants the same for the transport of their commodities to the West. The people of Canada have to a very large extent actually built these roads, and proper development of the country should not be blocked by inefficient service and excessive transportation charges. But there still remains a question to be considered, and one of vital importance and which is under the control of the individual grower and shipper, and that is the question of quality of the product. The Western farmer must be supplied with an article in the fruit which he buys that will correspond in high quality with the world-famous wheat that he grows.

When these difficulties have been overcome—and they surely will—a great and ever-increasing volume of interprovincial trade will be developed that must certainly make for the benefit of our whole Dominion.

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.]

Subscribers are kindly requested to read the conditions at the head of this department before writing or mailing their enquiries.

OCCLUSION OF TEAT.

Two-year-old heifer lost her calf about two weeks before it was due. She was on the range, and when we found her she had not cleaned, and her milk had gone back considerably. Brought her in and fed her bran mashes and boiled oats, with plenty of water, which had the chill taken off. Kept milking her till the flow increased, and gave her gunpowder (twice) in the oats. Short time ago her right fore teat seemed as if bitten. The very end swelled and became quite hard, and would not let the milk come through, until we inserted a small quill, and even then only a very small stream could be obtained. We bathed the teat with hot water, salted, and rubbed it a great deal, but before it got better that quarter had gone dry, and I believe the hole in end of teat grew up.

1. Was it lack of salt that caused her to lose her calf before time?
2. Did we do right in giving her gunpowder to make her clean?
3. Can that teat be made to milk again; if not, will it be dry another summer?

The heifer had been stabled all winter, and at night till warm weather came. READER,
Towalta, Alta.

Ans.—The inflammation of the end of the teat, from whatever cause, has resulted in adhesion of the walls of the duct. This condition might be remedied by inserting into the teat a self-retaining silver milking-tube, and keeping it in position, except its removal once every alternate day for cleansing purposes, until the passage remained open. I am afraid, however, that the quarter of the udder to which the defective teat is attached will not regain its secretory functions, so it will not be advisable to expend any money or time on the teat until you have evidence that the secretory apparatus will perform its work.

1. Not at all likely.
2. You do not state how much gunpowder you gave the animal, but it would have very little, if any, effect in making her clean.
3. See first part of answer.

FAULTY TEATS.

One of my cows has quite a hard lump on one of her teats, which prevents the natural flow of milk. Without the use of a tube, only a little bloody mixture can be drawn. The milk seems quite good when the tube is used. Another of my cows has both her front teats obstructed this way, and still another one of her hind ones. Your answer will very much oblige.
Grenfell, Assa.

A. L.

Ans.—Occasionally, pealike concretions form in the udder, descend into the teat, and partially or totally prevent the flow of milk. These small bodies are movable, and sometimes may be extracted through the natural passage by gently but firmly manipulating the teat. At other times their removal can only be accomplished by a delicate surgical operation. The lump in the teat, however, more often consists of an attached fibrous tumor, the extirpation of which altogether depends on surgical measures, which, even when skillfully employed, seldom restore the teat to its normal condition. Such cases require the personal attention of a good veterinarian.

PROBABLY ANTHRAX.

A calf, two weeks old, sucking the cow, was rather dull—not lively as usual in the evening. The next morning it died. A frothy slime seemed to fill and run from its nose, breathing labored, slime slightly tinged with blood at the last. No swelling of the limbs or body.

There has been blackleg on several ranches in the neighborhood for several years, and some cattle have died. Was this blackleg? J. E. A.,
Crowstand, Assa.

Ans.—The rapid course and fatal termination of the disease, the frothy spume, streaked with blood, issuing from the nose, and the labored breathing are symptoms of anthrax proper, which, unlike symptomatic anthrax (blackleg), is unaccompanied by external or superficial lesions. Anthrax is contagious, and remedial measures, owing to its rapid development, are seldom of any avail. This disease is to a large extent prevented by the vaccination of exposed animals with lymph prepared for the purpose.

WEAKLY COLTS.

Have lost both my foals this spring. Mares are fine, and five and seven years old, respectively. Have not been overworked, and have access to grass for a while daily this spring. Both colts were carried nearly twelve months. Were weak when born, but were helped to nourishment and gained strength for the first twelve hours, but then began to weaken. Weakness seemed to be in the back across the kidneys. Were able to use fore limbs, but hind limbs were useless. Openings were normal, but quite large quantities of urine were passed. Umbilical cord received no attention, but did not leak.

1. In case of a mare carrying the colt over time, should any drug be given to bring about parturition?
2. Had the long period of pregnancy anything to do with the colts' weakness?
3. How should the case be treated?

J. C. R.
McKenzie, Man.

Ans.—This condition of the colt is frequently noticed when the dam has been pampered in feeding, insufficiently exercised and in plethoric condition. It also often occurs when the dam has been debilitated by being underfed and overworked, or when disease, either acute or chronic, has weakened her system. To insure strong and healthy colts, the health, feeding, exercise and sanitary environments of the pregnant mare are of paramount importance. Overtaxation of the generative functions of the sire is probably another cause of the weakly condition of newborn colts.

1. No.
2. No. It is not unusual, nor is it considered unnatural, for a mare to carry her colt one year.
3. To see that the little animal receives nourishment, that its bowels are acting naturally, and to look after its general comfort, is about all that can be done. Medicinal treatment is of little value, unless in case of rectal constipation, when injections of warm water, to which should be added a little castor or linseed oil, should be given.

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.

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.

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.

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.

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.

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.

S. McD.

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



FALL WHEAT, CLOVERS AND GRASSES.

Grown at Clover Bar, Alta.; cut June 29, 1903.

1. Red clover.
2. Alsike clover.
3. Brome grass.
4. Timothy.

CHRONIC LAMENESS.

About a year and a half ago my horse ran a nail into his foot, and has been lame ever since. The hoof is growing out of shape. I have blistered his coronet without benefit. My veterinarian talks of firing him, but will not guarantee a cure. I will pay the price if cured. No cure, no pay, as I have before paid without benefit.

W. S.

Ans.—Veterinarians of any standing will not undertake to treat a case on the system of "no cure, no pay." A reputable practitioner will honestly tell you the probable results of treatment, and after being informed on that point, if you desire to have the case treated he will treat it, and make a reasonable charge, whether you derive benefit or not. Only quacks or practitioners of very low standing and with little respect for themselves will guarantee a cure in any case. An honest practitioner will honestly tell his patron the probable results of treatment, and if he (the owner) decide to have the case treated will proceed to treat and collect a reasonable fee, whether or not treatment has been successful. Quacks only treat on the principle of "no cure, no pay." From the symptoms given it is doubtful whether treatment would result in benefit, but your veterinarian, having seen the case, is in a much better position to judge than I, and I would advise you to follow his advice. If he treats he will doubtless do his best, and if this fails it will

be your misfortune and not his fault. If practitioners received large fees for successful treatment they might afford to cancel fees when treatment is unsuccessful.

SUPPURATIVE ARTHRITIS.

My horse acquired the habit of kicking the stone wall of his stall. I could not stop the kicking. The hock swelled and became very sore. I employed a veterinarian; he placed the horse in slings, and had the joint bathed with warm water and a liniment applied. It broke and ran a little matter for a few days and then healed, but the leg remained very large and painful. I wanted the veterinarian to blister or open and allow the pus to escape, but he said the liniment was better. In six weeks he died. I opened the joint and found about a quart of dark matter, and the bone had commenced to decay. I found that the liniment had not gone through the hide. Do not you think it should have been blistered or lanced?

H. B.

Ans.—The bruising of the joint by kicking caused arthritis (inflammation of the joint), which resulted in decay of the bone and formation of pus. The veterinarian treated it properly. The pus was so deep seated if the part had been opened it would have caused open joint and hastened death, and then you would probably have blamed the practitioner. Liniments are not supposed to penetrate the skin, but the effects of the application are deep seated. When we want a liquid introduced beneath the skin we inject it hypodermically. No treatment would have saved your horse. This is one of the many cases in which the veterinarian is blamed when he has done all that possibly could have been done.

ECZEMA.

Last August mange broke out on the neck and shoulders of my two-year-old colt. It got better in November. I want to drive him now. What is the treatment for mange, and can I prevent its reappearance?

T. B.

Ans.—Your colt did not have mange. This is due to a parasite, and is very contagious and hard to treat. He had a skin disease (non-parasitic) called eczema. This is usually due to high feeding and want of exercise and grooming. If it should appear again, purge him, wash the parts thoroughly with strong soapsuds, and apply twice daily a five per cent. solution of carbolic acid, Zenoleum or creolin, three times daily.

ENLARGEMENT FROM CALK.

Mare calked herself in front of fetlock. The parts have healed, but there is a hard lump left.

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.

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.

J. S. G.

Ans.—The pigs have eczema. Wash thoroughly with strong, warm soft-soap suds. Then rub well twice daily with a four per cent. solution of zenoleum or creolin. Disinfect the pens in which they have been kept by thoroughly washing with a five per cent. solution of carbolic acid, and in a few days whitewashing.

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.]



BARN-RAISING.

On the farm of Jas. Bryden, four miles west of Portage la Prairie, Man.

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? 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.

Miscellaneous.

TRANSFER OF PEDIGREED STOCK.

I bought thirteen head of pedigreed cattle from an Ontario dealer in pure-bred stock. He furnished me with a transfer of pedigree in the name of the stock-breeder from whom he bought the cattle. I think I am entitled to receive a certificate of registration made out in my own name. Kindly let me know, through the columns of the "Farmer's Advocate," what is the legal and usual form followed in such cases. Thanking you in anticipation. STOCK-BREEDER. Glenboro, Man.

Ans.—A certificate of pedigree in the name of the buyer is usually given by the seller of pure-bred stock. A transfer certificate is due you, and a certificate is generally given as a matter of courtesy, especially when such a number as thirteen head change hands in one transaction. Certificates of pedigree, duly made out in your name, can be procured from Mr. Henry Wade, Secretary, Dominion Shorthorn Breeders' Association, Toronto. A fee of twenty-five cents is charged for each certificate of pedigree, and to secure such certificate you will require to present your transfer certificate in making your application.

CORN AS ENSILAGE.

On reading D. Munroe's interesting article in the "Farmer's Advocate" of March 20th, "On the Advantages of Corn-growing," I resolved to write and ask if you will kindly give me some more information about this valuable crop.

I have been very much interested in farming for the last three years. I have a large farm, and I have started a creamery. I have raised a considerable amount of corn, but I always cut it green in summer for cows. I had almost made up my mind to build a silo, until I had got such an amount of information of such a varied nature that it has resulted in placing me in an undecided state of mind as to how to proceed. One system experimented on in the States is that of allowing corn to ripen to maturity, then separating the corn from the husks, and shredding the stalks and husks to be used as fodder. My farm is in Maitland, Hants County, Nova Scotia. We very often have wet weather in the fall, and at that season making such fodder would be rather a precarious undertaking. Would not the pulped part spoil if put wet into the mow, and would not the corn have to be thoroughly dried to prevent it spoiling?

Will you kindly enlighten me on the subject, and also let me know where I can procure the variety of corn you recommend. JAMES S. CROWE. Hants Co., Nova Scotia.

Ans.—Your questions cover a very important field of inquiry, but, briefly, I understand it to mean a question of silo vs. allowing the corn to fully ripen, then husking it and cutting or shredding (which latter is probably meant). In view of the facts, as you state that in your locality you are subject to a great deal of wet weather about the time of corn harvest, it would be certainly difficult to have this fodder (properly called stover) in dry enough condition to be shredded in any considerable quantity, unless it is to be used very quickly, as it is sure to heat and spoil if at all damp. Also, the very large majority of reports from those who have handled ensilage for years as compared with any other method of disposing of the corn crop to the best advantage is very largely in favor of the succulent food which good ensilage provides. The great majority of the evidence is in favor of the silo as being the cheapest possible way to make the entire corn plant available, as the husking, handling and grinding of the ripened grain is a question of added cost without adding materially to the benefits derived over the feed of the same grain through the silo, while the advantage of the succulent nature of this food, especially to milking cows, is recognized as being one of importance.

You very truly refer to corn as a valuable crop; indeed, it is doubtful if we know any other food which in all respects is so valuable as corn. The silo is also recognized as the cheapest means of handling this crop, and the round silo, with the present methods of construction is so very much cheaper than the old form of construction that the cost is brought within the reach of ordinary means.

The man who writes that he thinks he gets two crops in one by husking his corn is laboring under a mistake, for husking makes neither more or less, and he gets the whole product of the plant from the silo if he puts the whole into it. The variety of corn which we are best pleased with for our location is called Longfellow, a flint corn. However, this may not be suitable for your locality.

Trusting I have fully answered your queries, I remain, D. MUNROE. The Munroe Pure Mill Co., Winnipeg, Man.

COWS EATING BONES, ETC.

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

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.

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.

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. 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.]

LACK OF VIRILITY.

I have a boar two years old which is getting very slow for service. What would you suggest as a remedy? H. W. F.

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

PIGS RUNNING AT LARGE.

What is the law in the Northwest Territories concerning pigs running at large? READER Alberta.

Ans.—Where the herd law is in force no animals are allowed to run at large; where the herd law is not in force, an animal running at large should be treated as "an estray," and in either case should be taken to the nearest pound to be dealt with under the ordinance.

Field Notes.

Southern Manitoba Pioneers Meet.

This meeting took place at Manitou on Dominion Day, when, in honor of the large number of pioneers assembled, a gala day of pleasure and sport was inaugurated. The meeting, both in its nature and object, partook much of the nature of the ancient custom of "riding the marches" in the Old Country. It was, nominally, a meeting of those who knew Manitoba in all its dreary wastes of twenty-five years ago and upwards, and who during that period have worked and schemed to make it the Manitoba of to-day. But it was also a meeting of those who are too young or of too recent importation to know of the desolation from which the country in that period has sprung. The latter were there to learn and be informed, and to entertain and contribute to the amusement of the older honored guests, which they did by engaging in many of the popular and manly sports of the country. The tales of the old settlers were listened to with wonder and admiration, for little do the settlers of to-day know of the privations and hardships endured by our pioneer friends, and how often is the value of the services rendered by them underestimated. How the recollections of times past and the hardships endured must be looked upon with satisfaction when the state of the country twenty-five years ago is compared with its condition to-day, the phenomenal progress evidenced by the growth of such tidy, up-to-date towns as Manitou, and the no less up-to-date agricultural interests of the surrounding country. May our pioneer friends be long spared to carry on the good work and participate in its pleasures and benefits. J. C. R. Darlingford.

Killarney Fair.

Every effort is being put forth to make this season's fair a success. The Killarney Guide says arrangements are completed for the erection of a tent near the grounds, to seat 300 people, to be used as a restaurant. The Dominion Immigration Department have lent 100 military tents, and the secretary has arranged to set up cots in these for the accommodation of visitors. Numerous other provisions are being made for the accommodation and entertainment of visitors. The buildings have been moved on to the new site. The grand stand has been torn down, and a new and more commodious one erected; also, a new well has been dug on the grounds, which will add materially to the water supply. Entries in gratifying numbers are coming in, and all that is now wanted is a crowd to come and see what the Southern Manitoba Agriculture and Arts Association can produce. This will be the first fair held since the various nearby societies have amalgamated under the present name, and many are interested in noting the outcome of the experiment. One way of judging of the merits or demerits will be to attend the initial fair, which will be held at Killarney on August 4th, 5th and 6th.

Likes the West

In a largely-circulating and highly-popular British weekly paper (T. P.'s Weekly) of a recent date there appears a letter from a young immigrant who left a London warehouse a little over a year ago and bade farewell to his high collar and stiff shirt-front, and came out here to enjoy freedom and wrestle with the prairie for a fortune. The blisters and other trials of the tenderfoot he has overcome bravely, and at the date of his letter he was, as he himself describes it, engaged in tickling the Manitoba soil and watching it laugh wheat. The tone of his letter is cheerful, and he is evidently one of the right stamp to take his share in the building up of this country.

Cement Building Blocks.

The latest industry which has been added to Winnipeg's growing list is the Cement Building Block Company, Limited, which was incorporated a few weeks ago. This firm will place on the market a building material, in the shape of hollow concrete blocks, which have come into very general use in the United States, and have been found to be much more durable and fireproof than even brick and stone, while presenting the fine appearance of the latter and readily lending themselves to all sorts of architectural effects.

The company has secured the rights for Manitoba on Harmon S. Palmer's patents, and have installed at Bird's Hill a plant for the manufacture of these "artificial stone" blocks. The works, when running at full capacity, will employ about twenty-five men, and the company has made provision for more than doubling its capacity at any time, as they expect that the demand will be great for their material as soon as contractors begin to see it in actual use.

The process of manufacture is very simple, as the concrete blocks require no heating or burning, and no pressure. They are composed of a properly proportioned mixture of cement and sharp sand and gravel, which is moulded in a specially patented machine. The most important feature of the process is that the blocks when made are hollow, and the wall built of them has an air space from foundation to roof. In Manitoba, where there are such extremes of heat and cold, this air space is of incalculable value as a moderator of temperature. There are many other advantages in these blocks, such as practically fireproof construction, strong and yet light wall, sanitary effect, and yet it costs no more than brick.

The offices of the company are 41 Merchants' Bank building, where sample blocks are on exhibition.—[Free Press.

Peace River District.

Two prospecting pioneers, Messrs. G. E. Martin and J. B. Macher, have just returned from a four months' tour in the Peace River county. They left Strathcona early in March, going via Athabasca Landing, Lesser Slave River and Lake on the ice, making the trip to Peace River landing in nineteen days. They traversed what is known as the Spirit River prairie, south and east of Dunvegan. They speak very highly of this tract of country as a location for either ranchers or farmers. A few settlers are already located there, and find a very ready market for all their products with the H. B. Co. Wheat brings \$1.50 per bushel at the company's mill or at any of the trading posts along the river. The Grand Prairie, which has been very highly spoken of by travellers, and which is of much greater area than the Spirit River prairie, is further west and has not received more than two or three white settlers yet. Old Johnnie Grant, formerly of Bittern Lake, is one who went in there this spring. Messrs. McEachern and Martin believe there is a great future in store for that district when it is tapped by a railway, especially when the mining properties in the mountains directly west of it are opened up.—[Strathcona Plaindealer.

Open to Homestead.

The Department of the Interior, Ottawa, has placed on the market for homesteading 350,000 acres of land, formerly reserved for the Red Deer Valley Railroad, but owing to the land grant having lapsed, the even-numbered sections in the following townships are now open for homesteading: township 29, ranges 21, 23 and 25; township 30, ranges 22, 24 and 26; township 31, ranges 21, 23 and 25; township 32, ranges 22 and 24, all west of fourth meridian.

These townships are situated about the center of West Calgary, near the Red Deer River, and the opening up of them at the present time cannot fail to bring in a large number of those who are prospecting all over the country in search of homesteads. The location is a good one, and its early settlement would seem to be assured.

Spark Arresters.

Amongst important amendments added to the railway bill during the last meeting of the Legislative Assembly at Ottawa was one which gives power to order railways to provide on their engines such spark arresters most suitable to prevent, as far as possible, a fire from being started along railway tracks. The commissioner is given power to have this enforced, and we trust the matter will be attended to in such a way as to prevent a recurrence of many of the destructive fires which have occurred in the past from engine sparks.

With Practical Men.

That the smaller fruits may be successfully grown in many parts of the Province is now an established fact. Though but eleven years settled, Mr. J. R. Reid, of Silver Plains, has now an orchard of small fruits that rivals, if it does not surpass, many of the orchards of the Eastern Provinces. Strawberries of good size, taste and exceptional flavor are grown abundantly, white, red, black and yellow raspberries give promise of a splendid crop. Currants and gooseberries also respond well to good cultivation. The first essential is a sheltered spot, and this may be easily provided by sowing the seed of the ash or maple. These trees grow quite rapidly, and in a few years not only add to the beauty and comfort of the farm home, but afford a protection which makes it possible for the Manitoba farmer to have on his table at all seasons of the year an abundance of fruit of his own growing.

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-



THE LATE W. B. WATT.

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

dening to those who knew him, for to know him was to 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 Challenge, 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.

Development in the Far West.

CARSTAIRS.

Something like what was taking place in Manitoba in the pioneer days of twenty years ago is being repeated in the far west Territories to-day. Settlers are coming in daily, and where the view was unbroken for miles around yesterday, to-day the smoke rises from many chimneys on every point of the compass. Carstairs is one of those towns not known because non-existent two years ago. It is now a small town, giving great promise of growth and prosperity. A post office has been built and opened, and a school-house of commodious and substantial proportion is well filled and well attended, showing that population is taking a great hold in the neighborhood. Stores and buildings are being erected in addition to those already established, and some of them are of the very best design, reaching easily \$10,000 in value. Fall wheat and rich pastures make the basis on which Carstairs builds its hopes of future prosperity.

OKOTOKS.

Okotoks is another of the Alberta villages which gives promise of becoming one of the leading towns of the Territory in the near future. It is situated in the shelter of the Rockies, yet far enough away to partake of little of the nature of the rugged peaks and deep chasms of the mountains. All around the town unbroken range land, producing nutritious pasture in abundance, is sufficient guarantee that Okotoks will grow and prosper. Already it has a population of about 400, and about 200 buildings, most of them of a neat and substantial kind. The vicinity of the town is an ideal location for stock-raisers, and the fertile soil and mild winters are attracting settlers in a manner gratifying to all interested in the country. Okotoks is on the Macleod branch of the C. P. R., south of Calgary, in Central Alberta.

Time Saved During Haying.

Brome grass between two and three feet high on the first of June is an object lesson to the haymakers who spend half the summer in skirmishing for hay swamps, only to find one half of them too wet and the other half too dry. And that is what can be seen to-day on the farms of those who had the enterprise to sow brome grass seed. Once started, it is independent of almost any kind of season, and gives the farmer a "haying time" when there is no rush of other work. Then look at the comfort of working in a dry field at home, instead of some fly-infested swamp miles away. Every up-to-date farmer in the West has his field of brome grass, just as in the other Provinces they have their timothy and clover. Those who have not tried it should lose no time in beginning—unless, indeed, they fear that without their usual rustling for hay and having it secured before the harvest would make them get too fat.—[Blackfalds Mercury, Alta.



NUMBERS LIGHTEN THE DRAFT.

Following on the farm of Mr. W. H. Bryce, near Arcola, Assa.

Fair Dates.

The dates at which a number of summer shows and exhibitions yet to be held is published herewith. Secretaries of fairs not included in this list are requested to forward the date of their exhibition to this office.

SUMMER FAIRS.

Brandon, Man.	.....	July 28 to 31
Alameda, Assa.	.....	August 4
Moosomin, Assa.	.....	August 4
Killarney, Man.	.....	August 4 to 6
Carberry, Man.	.....	August 5
Melita, Man.	.....	August 5 and 6
Fort Qu'Appelle, Central Assn.	.....	August 5 and 6
Neepawa, Man.	.....	August 5 and 6
Carnduff, Assa.	.....	August 6
Wolsley, Assa.	.....	August 7
Manitou	.....	August 7 and 8
Gainsboro, Assa.	.....	August 8
Prince Albert, Sask.	.....	August 11 and 12
Regina, Assa.	.....	August 11 and 12
Broadview	.....	August 13
Strathcona	.....	August 13 and 14
Wapella, Assa.	.....	August 14
Fort Saskatchewan, Alta.	.....	August 17 and 18
Lacombe, Alta.	.....	August 20

FALL FAIRS.

Central Sask. (Saskatoon)	.....	Sept. 29 and 30
Maple Creek, Assa.	.....	Sept. 29, 30 and Oct. 1
Rosthern, Sask.	.....	Oct. 1
Duck Lake, Sask.	.....	Oct. 2
Carlyle, Assa.	.....	Oct. 2
Medicine Hat, Assa.	.....	Oct. 2 and 3
Kinistino, Sask.	.....	Oct. 6
Fairmeade, Assa.	.....	Oct. 6
Olds, Alta.	.....	Oct. 6
Lethbridge, Alta.	.....	Oct. 6 and 7
Victoria, B. C.	.....	Oct. 6 to 10
Innisfail, Alta.	.....	Oct. 7
Grenfell, Assa.	.....	Oct. 8
Red Deer, Alta.	.....	Oct. 8 and 9
Pincher Creek, Alta.	.....	Oct. 8

Big Ranch Deal.

One of the largest ranch deals ever made in this country has taken place in the purchase of the New Oxley Ranch by W. R. Hall, Calgary. This property consists of five thousand acres, besides considerable leasable land over which it has control, thus affording abundant pasturage for seven or eight thousand cattle that roam upon its hills and valleys. It is understood that the price was one-quarter million.

Previous to this deal, Mr. Hull already had a very large herd grazing in the same district, and this addition makes him, in all probability, the largest cattle owner in Canada.

Fire in Winnipeg Exhibition Buildings.

The exhibition directors were caused some alarm and considerable additional work and expense by the fire which broke out in the barns and pigpens on the 5th inst. Nine cattle barns and all the pigpens, besides a long stretch of fence, were completely burnt down, and it reflects great credit on the management that new buildings have been built and equipped in the short time at their disposal.

Good Yields Indicated.

The rain came just in time for the grain crops of the Souris Plains and many other places. The moisture following the warm weather has given the country a most beautiful appearance, and filled the fields with promises of plenty. Those who watch the grain grow feel like enjoying a holiday, feeling assured that the coming harvest will amply justify a "breathing spell." The farmers hold nature's note, which will be due in August, and payment will not be deferred.

Tall Brome Grass.

D. F. Woosam, a farmer who lives south-east of Carberry, has a specimen of brome grass measuring five feet. It was cut early in July, and is especially good growth for that early period.

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. Storms, 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. Storms 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 to have been laid aside to make room for purely administrative affairs.

The Wall of the Prairie Bachelor.

Oh, this "baching" life is dreary,
And the hours unsweetened go
As I come with footsteps weary
To my shanty 'mongst the snow;
Or it may be in the spring-time,
I'm returning from the plow,
And I think of oft-heard bell-chime,
Heard far off, I hear not now.
Then I stable up my cattle,
While increasing hunger tells
How I'm wearied with life's battle,
Prairie breaking, digging wells,
Cutting scrub on this lone prairie,
Plowing, harrowing, seeding down;
Then that cheerless shanty airy
I aye enter with a frown.
Light a fire midst all uncleanness,
Cook my frame-sustaining brose,
Eat the same 'mongst all this meanness,
Then clean up, and hold my nose
To exclude from nostrils tender
Odors rising from the broom.
I reflect on memories tender,
Then I read the great land boom.
The "Farmer's Advocate," I take it,
And I read it through and through,
And my batch of dough I bake it,
All my little chores I do.
One of two things now I ponder,
Shall I wonder which may be,
Shall I buy that quarter yonder?
Or bring Katie o'er the sea?
Then, again, I want that quarter,
But this lonely, dreary life!
Guess now all my cash I'll barter
For the quarter; hang a wife!

Manners in the Show Ring.

That horses require manners in the show-ring is a fact that is apparently considered unimportant by many exhibitors, but it is none the less a fact. All horses, young and old, whether exhibited on the halter, under saddle or in harness, should have good manners, and such cannot be given without education. Especially in the halter classes, the actions of exhibitors often forces upon judges and spectators the idea that manners are not considered by the exhibitors as a necessary or desirable qualification in their horses. Horses to be shown on the halter should be taught to lead well and stand well; also, to walk and trot without shying, plunging, refusing to go, going sideways or tugging on the rein, etc. They should walk, or trot as desired, in a straight line, both from and towards the judge. They should be taught to stand to attention and allow the judge to examine their mouths and handle any part that may be considered necessary. When the education has not been sufficient for results of this kind, the judge has little opportunity to judge action (an important point in any class), neither is he able to judge of age or soundness without endangering his safety. It is not rare to see an exhibit that under different condition would have won a place, leave the ring without a ribbon.

In the saddle classes, manners is a point that often is, apparently, not valued highly enough by the judges. A saddle horse without fairly good manners should not be considered in awarding the prizes, as he is not valuable for the purpose for which he is shown. He should be taught to stand steady to attention when asked, in order to allow the judge to look him over. He should show the recognized saddle gaits, viz., walk, trot and canter, and should take the different gaits promptly, responding readily to the will of his rider, indicated by rein, word, heels or knees. He should not tug on the bit, nor yet refuse to bear slightly upon it. If asked to leave the other horses in the class, he should go promptly and readily. We frequently see an otherwise good horse refuse to leave the bunch and perform alone. The hunter, in addition to the manners necessary in the saddle horse, needs good manners when performing over obstacles. He should be taught to take his jumps willingly, and in good form; should be apparently anxious, but not too eager; should not rush or tug on the bit, and should go straight between the obstacles, and should not refuse to come up to a jump nor take it.

In the harness class, manners is also an essential. A restive, nervous, fidgety horse or team or one of a team not only renders the work of the judge unpleasant and difficult, but endangers the safety of both his driver and other exhibitors. A horse that will refuse to stand or that acts badly when in motion, that will rear, plunge, kick or shy badly, should at once be ordered out of the ring, even though he be of high quality. A horse of this description is fit for neither show nor sale ring, and is not valuable for any purpose. A harness horse should be taught to walk and trot well at the will of the

driver, and when drawn up for inspection by the judge should stand well to attention and allow himself to be handled with safety. He should back quietly but promptly when asked to, going straight and not rushing. Horses that under ordinary circumstances act well will occasionally become excited by band music in the show-ring. Allowance should be made in such cases, and I think it would be well if music ceased during the exhibition of a class. This would give the horse unaccustomed to music an equal chance with those that are familiar with it and hence do not become excited.

Bad manners in the show-ring is not in all classes confined to horses. Exhibitors often act in a selfish way towards each other by trying to excite each other's horses, and hence lessen their prospect of winning. Exhibitors are also sometimes rude and discourteous to the judges, and when they are not awarded the place they think they deserve will either refuse to take any award or pass rude remarks. Such rudeness is generally punishable by the society, but the judge does not always report. Then, again, the person in charge of an exhibit frequently calls the attention of the judge to the merits of the animal as regards breeding, individuality, performance, owner, etc. This should not be allowed. If the judge wants any information he can ask for it, but exhibitors should not be allowed to volunteer information. An exhibitor should take it for granted that the judge is an honest and capable man, who recognizes merit in a horse when he sees it. He should also be sportsman enough to wish the best horse to win, and should not in any way interfere with the exhibitors of other entries, nor yet draw special attention to his own other than the visible merits of the animal demand. "WHIP."

New Book for Horsemen.

Canadian horsemen will remember with pleasure a couple of instructive and entertaining articles published in the "Farmer's Advocate" from the pen of that well-known author of equine literature, Capt. M. H. Hayes, F.R.C.V.S., of England. From his publishers, Messrs. Hurst & Blackett, we have just received a copy of the sixth edition, revised, enlarged, and otherwise improved, of his standard work "Veterinary Notes for Horse Owners." In brief, it is a manual of horse medicine and surgery, written in popular language, a volume of 828 pages, with no less than 267 illustrations. In consequence of the excellence of the paper and typography, it is by no means a cumbersome volume, and it is a fair indication of its practical and popular character, especially in the treatment of ailments, that each successive edition has had an increasing sale, the total number of copies now reaching nearly 19,000. As a horse-owner, trainer, rider, traveller, military officer and veterinarian, of good general scholarship, Capt. Hayes was peculiarly well qualified to write this book, which is designed to be of equal benefit to the horseman of ordinary education and to the veterinary surgeon. The work of revision has occupied three years, and in it Capt. Hayes acknowledges many valuable hints and kindly criticism from a number of other eminent authorities. An examination of the book will show that he has succeeded well in the undertaking. The more technical paragraphs for professional readers are given in smaller type. The table of contents and lists of illustrations are alike complete, and will be appreciated by the reader. The closing chapters on soundness and unsoundness, examination for age, dentition and shoeing, accompanied by so many clear engravings, are not the least valuable of the work, which we can cordially recommend as an addition to the libraries of our horsemen where it may not already have found a place. The price of the volume is \$4.00, and may be ordered through this office.

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.

The Schmidt Treatment for Milk Fever.

To the Editor "Farmer's Advocate":

Sir,—Regarding the results in series of cases with oxygen treatment by udder injection for milk fever, I must say that Drs. Tennent and Barnes have had great success, of which, I for one, am very glad to learn. Nor are they the only ones who have proved the seemingly great value of oxygen in the treatment of parturient paresis. I have not yet tried the oxygen treatment, but intend doing so at an early date. My success with the Schmidt method has been so good that I am not in a hurry to discard it for one with which I have had no experience. The Schmidt treatment is something like the tuberculin test—bad results follow only when not properly administered. The most effective method administered by empirics, or in careless and slovenly hands cannot be expected to produce the good results that may be expected when in the hands of an up-to-date practitioner. The Schmidt treatment has proved a good friend to me and to many of my clients. Drs. Tennent and Barnes' cases seem to have recovered more quickly than my cases, but not more certainly. My cases generally remain down from six to twenty-four hours, and frequently only about eight hours. I first get my patient into as comfortable a position as circumstances will permit, then thoroughly cleanse and disinfect the udder, administer the solution, followed by a large quantity of air; massage well, irrigate the uterus, and give an enema. Then I give the necessary directions to be followed during my absence. I give no other medicine; do not even use the catheter, unless in cases that have been down for quite a time before my arrival. I feel quite safe in leaving my patient, if in good hands, for eight or ten hours after the first treatment, when I generally find bossy on her feet, eating and requiring no further treatment. I never expect any udder trouble following the treatment, as I never had but one case (my first case with this treatment), and that was so slight that treatment was not necessary. Udder trouble is not the result of the infusion, but is due to the manner of administering. I have yet to treat a case with iodide of potassium that was not successful, in so far as milk fever was concerned. I do not mean by this that every case that I have treated recovered. I have had two or three bad results, but only when I had to deal with complications; for instance, one when a very nauseous and severe purge was administered by a quack before my arrival, and which did not operate until the cow had been on her feet twenty-four hours. By this time I was absent from town, and as the case did not receive proper attention, a fatal result followed. This cow was down twenty-two hours before I saw her—most hopeless looking case. Another case developed bronchial pneumonia, no doubt due to the administering of medicine previous to my arrival. Even this cow resumed the standing position some time before she died.

As to parturient paresis, Schmidt holds that the cause of the disease must be located in the udder, which, by the suddenly increased lactation after birth, loosens great masses of old glandular cells (colostrum), in a sort of cleaning process. This undergoes decomposition, and forms toxins which are absorbed into the blood circulation, resulting in auto-intoxication. It is a well-known fact that the iodide potassium reduces the secretion of milk. This is what first led Schmidt to adopt the I. P. treatment.

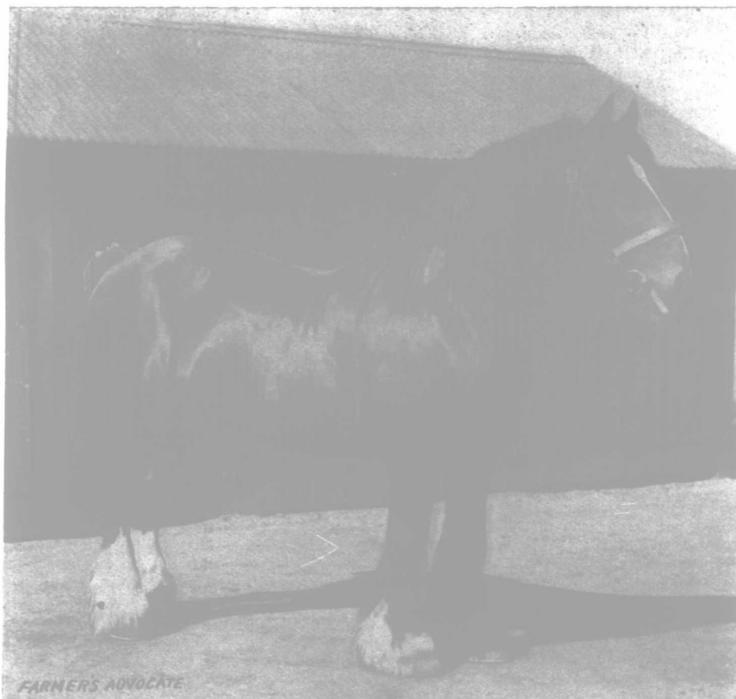
You ask me for my opinion "as to the nature of the action which takes place in this treatment"—oxygen treatment. I am not at present prepared to do so. Some writers claim that parturient paresis is caused by bacteria in the udder. If this is so, and it is quite possible, the bacteria may be anaerobic, which would

easily account for the action of oxygen in this treatment. Those advocating—and they are many—carbolic acid and glycerine, tricesol and glycerine, etc., etc., instead of iodide potassium, and claiming just as good results, would tend to bear out the idea that the disease is due to bacteria. The administering of oxygen and ordinary air with such grand results might prove that the disease is due to bacteria, and that the bacteria are anaerobic. I fully believe that the Schmidt method, especially when a large quantity of air is injected and well massaged, will prove just as successful as the oxygen treatment, but may not give as quick results.

Brockville Co., Ont. T. A. ALLEN, V.S.

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



(Photo by G. H. Parsons.)
APOSTLE.
Famous Shire stallion. Winner of a great number of prizes, including a first at London Shire Show, and sire of many prizewinners.
THE PROPERTY OF J. W. KENTWORTHY, CASTLE HALL, KELSALL, CHESTER, ENG.

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.

Fair Reports.

The reports of the Yorkton, Portage, Pilot Mound and Stonewall fairs were received too late for publication in this issue of the "Advocate," but will appear in prominent positions in the August 5th number, along with the reports of Winnipeg and Brandon exhibitions. Although the weather has not favored some of the shows this year, yet on the whole considerable interest has been taken in them, and the people by their attendance and enthusiasm evidence the prosperity that is being visited upon the Western country.

Markets.

Winnipeg Markets.

Cattle.—Demand and supply about balance, with a fair trade. Butchers' ordinary is bringing from 4c. to 4½c. Choice steers are scarce, and range from 5c. to 5½c. for top of market.

Sheep.—Demand continues brisk and supply limited. Prices are 4½c. to 5½c., off cars, at Winnipeg.

Hogs.—A fair to brisk demand at 6c. for the choicest quality.

Horses.—All classes of horses are bought up as they are offered. Heavy teams sell from \$300 to \$450, and drivers are in good demand.

DRESSED MEATS.

Beef.—Market continues steady, with some activity at 6c. to 7½c. per pound.

Cured Meats.—A fairly active market. The price of hams is quoted at 13½c., and best breakfast sides at 14c.

POULTRY AND EGGS.

Poultry.—Poultry all along have been scarce and prices unduly high. Exhibition week has still further increased the price, and the supply is not equal to the demand, even at the higher figures.

Eggs.—The supply continues to be far short of the demand, and the high price of 15c. in Winnipeg fails to bring in a full supply.

DAIRY PRODUCE.

Creamery Butter.—There is little demand in the West at present, generally speaking, but the market is being centralized in Winnipeg for exhibition week. A large amount of smaller packages will be taken out of cold storage, and it is expected that the market will be pretty well cleared out. Shipments of larger parcels to Montreal are bringing about 16c.

Dairy Butter.—Dealers offer from 12c. to 13c. for pound lots of choice quality.

Cheese.—9½c. is offered for Manitoba, and a number of purchases are being made at that price.

Vegetables.—Old potatoes are still being put on the market, and a fair demand exists at 60c. to 65c. New potatoes are more plentiful every day, and prices are gradually adjusting themselves.

GRAIN.

The continuance of good prospects for the coming harvest keeps the speculative element quiet and prices steady at: No. 1 hard, 82½c.; No. 1 northern, 80½c.; No. 2 northern, 78c.; No. 3 northern, 75c.; No. 4 northern, 66c., for spot or July in store at Fort William, Port Arthur or Duluth.

Oats.—Market well balanced, with lots of enquiries, at steady prices: No. 1 white, 32c., in car lots; No. 2 white, 31c. feed grades, 29c.; seed grades, 35c.

Barley.—There has been little offering in barley. Prices are quoted at: No. 3, 38c., in car lots; feed grades, 30c. to 34c.

Hay is pretty steady. Fresh baled is selling from \$7 to \$7.50 per ton; loose, from \$7 to \$8.

Mill Feed.—Bran is worth \$16, and shorts \$17 per ton.

Ground Feed.—A good demand, quite abreast of the supply, is still the tone of the market. Oat chop is selling at \$21 per ton; barley chop, \$16.50; barley and oats, \$18; chop spelt, \$16; chop screenings, \$12; oil cake, \$27.

Flour.—The demand holds steady, and prices are unchanged at: No. 1, \$2.15 per sack of 98 lbs.; No. 2, \$2.00; No. 3, \$1.65; No. 4, \$1.35.

Chicago Markets.

Chicago, July 18.—Cattle—Good to prime steers, \$5.10 to \$5.50; poor to medium, \$4 to \$5; stockers and feeders, \$2.50 to \$4.50; cows and heifers, \$1.50 to \$4.75; canners, \$1.50 to \$2; bulls, \$2.25 to \$4.35; calves, \$3 to \$6; Texas steers, \$3.25 to \$4.75.

Hogs—Good to choice, heavy, \$5.55 to \$5.75; butchers, \$5.75 to \$5.77; rough heavy, \$5 to \$5.40; light, \$5.35 to \$5.70; bulk of sales, \$5.40 to \$5.65.

Sheep—Good to choice wethers, \$3.75 to \$4.10; fair to choice, mixed, \$3 to \$3.75; native lambs, \$3 to \$6.55.

British Markets.

London, July 18.—Live cattle steady at 11c. to 12c. per lb. for American steers, dressed weight; Canadian steers, 10c. to 11½c. per lb.; refrigerator beef, 9c. per lb. Sheep, 10½c. to 12c.

Montreal Markets.

Montreal, July 20.—Prime beefs sold at 4½c. to 5½c. per lb.; medium cattle at 3½c. to 4½c., and the common stock at 2½c. to 3½c. per lb.

Sheep sold at 3c. to 3½c. per lb., and lambs at \$2.50 to \$4 each, very few bringing more than \$3.50 each.

Good lots of fat hogs sold at about 5½c. per lb.



"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 skimped 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 skimped 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 cornplanter, 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. Come 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.

"Solid 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 gettingtin'."

"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 dining 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 pety,
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 staid 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 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

wanted 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 travelers, 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.

The Boy Next Door.

Yells that brought to mind the savage
In his war paint, all alert;
Raids that oft recalled the ravage
Of some borderland expert!
Hanging on to trees and fences,
In his efforts to explore;
Startling to a body's senses
Was the little boy next door!

If a window pane was shattered,
Or a missile cleaved the air,
If the street's repose was scattered—
Heads out peeping everywhere—
Little need for explanation
All had happened oft before;
Mite of terror and vexation
Was that little boy next door!

Cats and dogs, by intuition,
Knew of his approach and fled;
Jaunty was the hat's position
On his roguish, curly head;
As, with bearing independent,
He would bound the crossing o'er,
With good nature all resplendent
Was the little boy next door!

Brave, chivalric and respectful
To the old who came his way,
With a sympathy regretful
Toward each beggar, day by day;
How the wild and tame were mingled
In his nature's bounteous store;
How my nerves were hourly tingled
By that little boy next door!

When, at sunset, homeward walking,
Once I missed the children's noise;
Marked their group in whispers talking,
Leaving all their romping joys;
Saw the snow-white ribbon streaming
From the house I stopped before—
Tear-drops on my cheeks were gleaming
For the little boy next door.
—[George Cooper, in the Independent.

How Does it Seem to You.

It seems to me I'd like to go
Where bells don't ring, nor whistles blow,
Nor clocks don't strike, nor gongs don't sound,
And I'd have stillness all around.

Not real stillness, but just the trees'
Low whispering, or the hum of bees,
Or brood's faint babbling over stones
In strangely, softly tangled tones.

Or maybe a cricket or katydid,
Or the songs of birds in the hedger hid,
Or just some such sweet sounds as these
To fill a tired heart with ease.

If 'tweren't for sight and sound and smell,
I'd like a city pretty well,
But when it comes to getting rest
I like the country lots the best.

Sometimes it seems to me I must
Just quit the city's din and dust
And get out where the sky is blue,
And, say, now, how does it seem to you?
—Eugene Field

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.

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 there of 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."

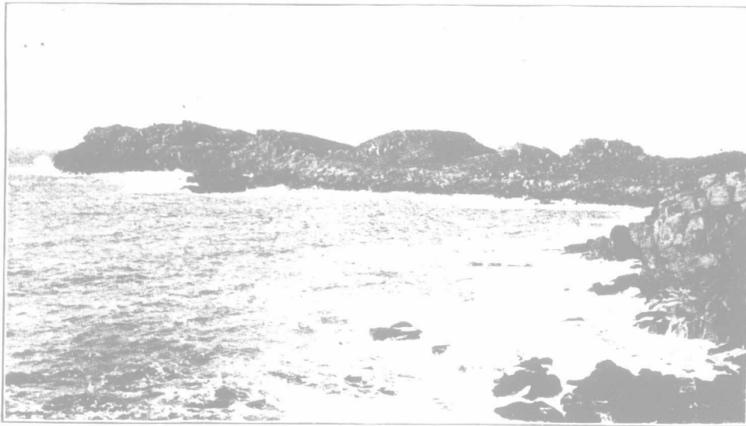
"Am I too late for the flowers?" was my first question. "Well, yes, to see them in their



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 botanical 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 led 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 together. 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."

"When will you do you have that sign stuck up here? It says that French is spoken here."

"I don't say so?" replied the astonished publican. "It's changed if I didn't buy that from a young fellow. He told me that it meant 'God bless our home.'"—Woman's 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 clear white. If an ecru tint is desired, add a little clear 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 constantly, holding them in place by pinning them to the carpet. Spread the curtains on these, stretching them smoothly, and pinning each scallop in place. Open the windows so they will dry quickly. They will not need ironing.

A Wise Adviser.

"Mother," said Nettie Small, "I believe that Mrs. Grahame coming along the road. I expect she is coming here, and the floor isn't clean. I am sure I never dreamed of any visitor coming today, and just look at my dress! I am afraid Mrs. Grahame will talk."

"Dismiss your fears, Nettie," said her mother (who was busy hooking). "Mrs. Grahame never talks, at least not in the way you mean. No, Nettie, Mrs. Grahame is a good, conscientious woman, a wise counsellor and a faithful friend. There is no deceit about her. If more women were like her in this respect, there would be far less ill-feeling and unhappiness in the world."

Nettie ran upstairs to dress. The door-bell rang, and Mrs. Small warmly welcomed her visitor.

"Come into the dining-room, Mrs. Grahame, and take off your wraps. You can stay the afternoon, can't you?"

"No, Mrs. Small, only a little while, for Maud has gone to visit a friend. Oh, you are busy hooking. That is why we haven't seen you for so long a time. Nearly all the women in the settlement have caught the hooking fever. It is very prevalent during the months of February and March. I am glad that I am not susceptible to the disease."

"Why," said Mrs. Small, "don't you believe in hooking mats?"

"No, I don't. I used to, but I have grown wiser (though some people might term it lazier). But I learned a lesson when I hooked the last mat, which I shall never forget. I was hooking all alone, for Maud was kept quite busy doing the housework, attending the poultry, etc., and hadn't time to help me. It was a large mat, nicely stamped, and I was very proud of it. I was anxious to get it finished up early, so I worked very hard. Sometimes I was so tired that I could scarcely walk, but I kept on until one morning I couldn't get out of bed. The doctor was sent for, who pronounced the disease nervous prostration, caused by overwork and lack of outdoor exercise. I was laid up for several weeks, and I vowed that I would never hook another mat."

"Really, Mrs. Grahame, I am not surprised that you don't believe in hooking, after such a trying experience. It is certainly hard work, especially when one is hurrying up to finish. I feel very tired when night comes."

"Take care, Mrs. Small, remember my experience. I am certain that mat-hooking is not a healthful occupation for women. Yet many women still persist in breaking down their health, and starving their minds, merely for the sake of having some rag mats to put on the floor. They talk of economy, but I fail to see where the economy comes in. Half-worn garments are cut up, that with a little mending would last for months, and I have known women who actually bought new material to finish up their mats. Worn-out rags are almost useless, for they are hard to hook, and the mats won't last long if they are used. The way to make a strong, durable mat, is to buy cuttings from the tailors."

"But they are expensive, aren't they, Mrs. Grahame?"

"Yes, rather, but homemade mats are expensive articles anyway. Just figure up the worth of the material used, and so much precious time spent, which should be better employed. Farmers' wives and daughters have no time to hook mats. If they have, some more important work is neglected, or they suffer from the effects of overwork."

"Very true, Mrs. Grahame. Nettie does not believe in hooking, either. She would much rather read the papers and magazines."

"Nettie is wise, if she always reads only good practical literature. But where is she this afternoon?"

"She is upstairs, Mrs. Grahame, and I shouldn't wonder if she is reading the 'Advocate.' She often forgets all about her work when she is reading an interesting article. We just received the 'Advocate' this morning, and James and the boys all want to read it the minute it is brought from the office."

"Just like our folks, for all the world. There is a general rush for it. We subscribe for four other magazines, but it is the especial favorite. It contains so much profitable and instructive information, it is truly a credit to the publishers. My boys laugh when they see me reading the agricultural columns."

"Why, Mrs. Grahame, do you really read what I call the men's department? I always read the Home Department, and enjoy it very much, but I don't bother reading all about live stock, agriculture, etc. That is the men's business."

"It is the women's business, too, Mrs. Small. Farmers' wives and daughters do not read enough good practical literature. We should encourage the children to read agricultural magazines. Our boys take far more interest in the farm since we have taken the 'Farmer's Advocate.' We con-

sider it the best magazine published in Canada. Isn't the Christmas number something to be proud of and prize highly?"

"Yes, indeed. We were all delighted with it. Such a handsome cover, beautiful engravings, and so many instructive, well-written articles."

"Now, Mrs. Small, take a friend's advice. Hook less, and read more; provide the children with plenty of good literature, but don't allow them to read trash. Don't sit leaning over that mat all day long, but go out for an hour or two every day, to enjoy the fresh air and sunshine. I know that we should be industrious, but we should not work too hard. We should always arrange our work systematically, and take some time every day for rest, reading, and recreation. It never pays to violate the laws of nature. We should never forget that prevention is better than cure. But I must start for home at once; come and see us soon. Good-bye."

"Thank you for your advice; I am sorry you can't stay for tea. Good-bye, Mrs. Grahame."

(MRS.) ANNIE RODD.

On Economy.

If we look for the meaning of the word "economy" in an encyclopædia, we find that it is an equivalent of the Latin "alconomia," or Greek "oikonomia," from "oikos," a house, and "nomas," a law. Hence, we deduce that it meant in the very first place the "law of a house," or, in other words, the management of a household. This signification of the word, then, the one which touches us, the housekeepers of the Dominion, so closely, is the one to which we will hold in this article, or, rather, little series of articles; and, in consideration of the subject, we will borrow a leaf from the preachers, and treat of our text under three heads: (1) Economy of money; (2) economy of time; (3) economy of health.

First, then, economy of money: This is a subdivision which must needs prove interesting, surely, to the ninety-nine of us; let it be understood that it is not to mean the mere doing without things, nor the scrimping and pinching which usually follows, with so gruesome a face, in the train of the "chill-est penny," but simply economy, the judicious management of our money affairs; the spending of what we have in the very best way; the making use of what materials we have on hand, so that nothing may be wasted; the doing without things that do not count, and their substitution by things that do—this be our topic, and to it be all honor.

Economy is not stinginess. It may even be the foundation of liberality. It is no disgrace to "save," but rather a credit, so long as the motive for doing so is a right one; and its practice is certainly not a thing to be hid under a bushel, but rather a virtue to be set on a hill, that others may see, and do likewise; and so, perhaps, attain to comforts that might not otherwise be obtained, were it not for so good an example. And yet, how many women there are who are actually ashamed of having to "economize!" I venture to say that there are very few of us who have not seen at least one of her species. How many evasions she makes! How many excuses! How volubly she apologizes for having made down John's trousers to fit Jamie, and with what a consequential air she explains that, as she had an hour or so to spare, she "just ran them up;" they would do him a "turn or two," until she could get time to make up his new ones, which required such particular work. Of course Jamie always has a new pair lying in the drawer upstairs, or else is to have them immediately his mother can get to town. So she runs on, while we sit and listen with enforced patience, seeing through the thin veneer quite plainly, thinking all the while how very foolish and unnecessary this vain chatter really is, and how much more dignified and truly lovable this good soul would be if she were only content to throw aside all sham and pretence, and be on top just the true and sensible woman that she probably is at heart. If she could only understand that sincerity is one of the most beautiful things this beautiful earth can ever know, and that it can never inspire aught but respect and admiration, while sham, even a little bit of it, never deceives anybody, and, instead of serving its purpose, merely succeeds in awakening amusement or pity, or perhaps distrust, in the mind of the listener!

Then, there is another species of womankind. We have likely seen "one of her" too. She, also, is obliged by force of circumstances to economize in money matters. She makes no excuse about it either, but she does succeed, most valiantly, in making herself and everyone else as miserable as may be, because of it. She is continually comparing her own condition with that of Mrs. Wealthy. Does not she love beautiful clothes, and is not she counselled to wear plain and even shabby ones, while Mrs. Wealthy rolls along in silks and furs? Moreover, would not she delight in luxurious furniture and a spacious

mansion, and can she content herself with just sitting in her five-roomed house and looking across at Mrs. Wealthy's palatial one? Worse than all, does not she also care for books, and music, and art, and is she not obliged to forego all gratification in these things simply for want of a little of the money which enables Mrs. Wealthy to indulge in what she wishes to the uttermost? So she lashes herself into a state of mind which cannot but interfere with any true work or true thinking; and this state of mind becomes chronic. She gradually acquires a little frown that does not improve her beauty, and a little whine that does not add to her sweetness—of course she does not realize that this is so, but it is—and presently, because of the melancholy atmosphere she carries about with her, the husband and children become either impatient and irritable, or else resignedly tolerant of her, and the tragedy has come to the home life.

Now, my dear Mrs. Fretful, if you she be, this is all nonsense. There is nothing short of positive want for food and clothing which should afford even an excuse for any woman to fall into this condition. Of course it is not exceedingly pleasant to do without things, but there is no use in ruining the whole home atmosphere over it. There are worse things than just being moderately poor, and there are better things than the possession of extensive lands, and fine things, and a long bank account. Contentment is one of the very best things in this world, and it has often found a dwelling place in just "a cottage with a garden round," where luxuries, as the world knows them, were few and far between indeed. Was it Ruskin who described home as "a bit of the world roofed in, with a fire in it," or words to that effect? And he was not so far astray. Wherever there are four solid walls, enclosing a bit of space, clean, airy, with a bright fire, a sufficient table, and the voices of loved ones, there may be a home, and a happy one.

There is still another species of woman. Would she were more often met with. Have we not all seen her, also, and rejoiced in seeing her? She is the woman of whom everyone says, "What a nice woman she is!" or "What a fine person she is!" She has come through trouble, but it has not warped her. Her face is serene, her life is simple. Her household adores—no, respects her, wholly. She, too, is moderately poor, but she does not despise her condition, nor try to ape the doings of those "better off" in the things of this world. Instead, she spends her days in "making the best of things," and what profession in life could be better than that? She is not ashamed of making John's trousers fit Jamie, but, like the guidwife famed in poesy, who held it honor to "gar auld things link amais as weel's the new," is proud of her skill in being able to make them so. Neither does she think it any meanness to make a nourishing dinner out of odds and ends that a woman less thrifty and less sensible would have thrown away as useless. Perhaps she does not know, what is true, that the poorest of the poor, the denizens of the slums, are often the most extravagant among people, or, what is likewise true, that the wealthy and the noble quite as often do not despise the considering of economy in little things. Perhaps she does not know that many of the philosophers—men who extracted at least a portion of the very essence of life—exiled themselves to a voluntary poverty. Nevertheless, she has arrived at a philosophy of her own—that of finding a positive pleasure in the exercise of economy, and of reducing it to an art. By the practice of it, she finds that her home is more pleasant and interesting, her children better clad, her table better supplied, her house better furnished; and, above all, she realizes that the best things in life do not depend upon great wealth, but may be also secured in the humble home—honesty, sincerity, contentment, love.

And, now, this paper is quite long enough. In the next we shall try to present a few ideas, culled from many different sources, which may show some of the ways in which Mrs. Contentment has managed to economize in her money affairs.

I remain, dear sister farmer-women,
Very sincerely yours,
CLARESSY ANN.

Escalloped Rhubarb.

Before the season of rhubarb has passed, try a dish of the plant escalloped, as demonstrated at the Boston Cooking School. Stir one pint, solidly packed, of bread crumbs into one-fourth of a cupful of melted butter. Cut one pound of rhubarb into half-inch pieces. Butter a pudding dish, sprinkle in a layer of crumbs, add a layer of rhubarb, about a dozen raisins (stoned), a grating of lemon rind, a little juice, and a generous sprinkling of sugar. Continue the layers until the bread and rhubarb are used, having bread upon the top. Use nearly a cupful of sugar and the juice of half a large lemon. Cover and bake in a moderate oven about forty minutes, then remove the cover and brown the top. Serve hot with powdered sugar or with hard sauce.

Something About Devonshire.

No old Devonians, in whose faithful hearts and minds linger memories of the beloved country of their birth, will, I venture to hope, require an interpreter for my little pen-pictures. They will remember the big, high, but generally picturesque walls, covered with creepers over them, and the solid doors in them to admit the residents to their own houses at more points than one, and if they should return to visit the Old Country again, would probably accuse none, as some do, of an exclusiveness amounting almost to churlishness, for they would know that in conservative old England, what has been, may be; and anything so upsetting as demolishing the line of fence which separates one house from its neighbor would be considered the dream of a madman. I delight in saying, as if it were the most natural thing in the world, "There are whole streets in residential parts of the United States and Canada where there are neither fence, hedge nor railing of any description whatever, to separate one property from another." There is no musical crescendo sound equivalent to the tone of almost incredulous surprise with which my remark is greeted. "No fence; no hedge; not even a low railing? How do you manage? You may be sure I do not admit that our plan is not all gain; that what serves to make a beautiful whole for the growing city, of which as a good citizen you may be proud, is often a very real inconvenience to the householder. I, whose Canadian home has been for some years upon what the house agents advertise as "that most advantageous situation, a corner lot," can recall the trial to one's nerves, and, alas! to one's temper too, of seeing, day after day, the small boy of the neighborhood, the big boy with papers or parcels, and the dogs, big and small, beating pathways across my little plot of grass, because there was no fence to keep them out. My conscience reminds me of how often I have longed for a creeper-crowned brick wall, and a little green gate which would make a good resounding "click" upon being opened, but all the same I keep that fact to myself. Perhaps history could give us some clue to the fact that in this neighborhood, especially at old Bitton House, there remain such exception a lly high walls, some of them bulging ominously, thrust out, apparently, by the century-old tree roots, which, by and bye, must force themselves through, to their final collapse.

There are no less than three ways by which the Dawlish Road, from Teignmouth, can be reached. In number IV. of this my little Devonshire series, I told you of the walk around by the sea wall and Smugglers' Lane. There is, of course, the main thoroughfare itself, lined on either side with most comfortable residences, many of them with gardens and grounds of some pretensions, and quite a few with old-time thatched roofs and dormer diamond-paned windows, and these last are by no means amongst the most insignificant, and there is also what may or may not be "a short cut," for so tortuous are its windings that it is more probable than not that after all you find "the shortest way out is the longest way there," as is the case mostly with these dear delightful Devonshire lanes. This especial Devonshire lane winds over the top of the cliff, giving unexpected peeps through its hedges, and over its gates at the sea-wall below; at the white foam of the waves dashing upon the beach, and at the ill-fated parson and clerk "dreeing their weird" at the base of the Hole Head rocks. Just at a little turnstile you find a resting place, and as you sit and gaze at the natural beauties in front of you, your lips give almost involuntary expression to the thought to which your mind is attuned, "God's beautiful world! God's beautiful world!" Rested bodily and refreshed mentally, your next steps lead you over a stile and across a field, until at last you find yourself sandwiched, as it were, between two very high brick walls, which rear themselves almost menacingly on your left hand, and on your right, forming a most unromantic thoroughfare, with a most romantic name, "The Lovers' walk."

At first sight one can see no possible inducement even to the most prosaic of lovers, to take a stroll through this especial lovers' lane, but the enigma was solved for me by an old Devonshire woman who said, "Laws, ma'am, they'd have to be lovers to be able to squeeze through them

walls two abreast." But incongruities were not confined to the outside of these walls, which, if they told no tales about the billing and cooing to which they might occasionally have testified, but never did, were equally silent about the many and somewhat contradictory stories afloat as to the present ownership of the premises to which they acted as the grimmest of guardians. Wherever that property had abutted upon any public thoroughfare, I had observed that the most stringent notices were placed, warning trespassers of the extreme penalty of the law if they dared set foot within, and it was currently circulated that every here and there man-traps were set to catch the bold intruder. I believe nothing but those man-traps (which I conclude would testify to the equality of the sexes by catching a woman too) have kept me out of that place, for the spirit of Mother Eve has possessed me regarding it, and somehow I feel as if traps or no traps, I must yet find out all about it for myself. Looking through the big, handsome iron gates, jealously padlocked, you see overgrown walks and tangle bushes, where once was an imposing, well-kept carriage drive. Between the trees you see what has been a fine old residence, thatched and many-eaved, with chimneys from which no smoke has issued for years, probably twenty, and even from the road you can hear the soft patter of velvety paws, and the curious sounds which evidently emanate from some kind of inhabitants, which seem to have found a right of entry for themselves. "They be rabbits, just rabbits," I am told in answer to my enquiries. "There's thousands and thousands of them; there's lots of places they go in and out of; they swarm all over, not only over the grounds, but all over the house. The house, with all its once beautiful furniture, is naught but a big tumble-down rabbit hutch, and yet there's a many human critters this day without a roof to cover their heads. The owner



TEIGNMOUTH, DEVONSHIRE.

is naught but a dog in the manger; he don't live in it himself, and he won't let anyone else inside the doors. Everything goes to wrack and ruin; the roof is tumbling in, and the rain pours down in torrents, for that there tarpaulin which is put up in places don't count, as you may see for yourself." My informant being in complacent mood, I venture on a few more questions. "Ah! yes," he said, "there be some story about it, but I don't see that's any excuse, unless so be he's gone crazy. They do say as he bought the place, furnished it beautiful, everything of the best, for his bride, and at the last moment she jilted him. From that hour he has had the key turned upon the doors, and no one dares put a foot inside." "Does he ever go inside himself?" "Well, that no one can tell. He is known to live in a city not a hundred miles away, but can be seen prowling round sometimes, coming and going apparently by a private way across the railway and up the cliff, and woe betide anyone he may catch trespassing."

There are less romantic stories current about the eccentricities of the owner of what I will call Upperlands, not being venturesome enough to give its real name in print, and in most of these there may be grains of truth and grains of fiction to mix with the undeniable facts, which are not to be contravened. But I think I have told you enough to account for my longing to get inside those forbidden acres, from many points of which the scenery must be beautiful as a poet's dream.

H. A. B.

A bashful gentleman who visited a school kept by a young lady was asked by the teacher to say a few words to the pupils. This was his speech: "Scholars, I hope you will always love your school and your teacher as much as I do." A tableau of giggling pupils and a blushing teacher attested the effectiveness of his words.

Senator Vest's Tribute to the Dog.

One of the most eloquent tributes ever paid to the dog was delivered by Senator Vest, of Missouri, some years ago. He was attending court in a country town, and while waiting for the trial of a case in which he was interested, was urged by the attorneys in a dog case to help them. Voluminous evidence was introduced to show that the defendant had shot the dog in malice, while other evidence went to show that the dog had attacked defendant. Vest took no part in the trial and was not disposed to speak. The attorneys, however, urged him to speak. Being thus urged, he arose, scanned the face of each jurymen for a moment, and said:

"Gentlemen of the jury: The best friend a man has in the world may turn against him and become his enemy. His son or daughter that he has reared with loving care may prove ungrateful. Those who are nearest and dearest to us, those whom we trust with our happiness and good name, may become traitors to their faith. The money that a man has he may lose. It flies away from him, perhaps when he needs it most. A man's reputation may be sacrificed in a moment of ill-considered action. The people who are prone to fall on their knees to do us honor when success is with us may be the first to throw the stone of malice when failure settles its cloud upon our heads. The one absolutely unselfish friend that man can have in this selfish world, the one that never deserts him, the one that never proves ungrateful or treacherous, is his dog. A man's dog stands by him in prosperity and in poverty, in health and in sickness. He will sleep on the cold ground, where the wintry winds blow and the snow drives fiercely, if only he may be near his master's side. He will kiss the hand that has no food to offer; he will lick the sores and wounds that come in encounter with the roughness of the world. He guards the sleep of his pauper master as if he were a prince. When all other friends desert he remains. When riches take wings and reputation falls to pieces, he is as constant in his love as the sun in its journey through the heavens. If fortune drives the master forth an outcast in the world, friendless and homeless, the faithful dog asks no higher privilege than that of accompanying him, to guard against danger, to fight against his enemies. And when the last scene of all comes, and death takes the master in its embrace, and his body is laid away in the cold ground, no matter if all other friends pursue their way, there by the graveside will the noble dog be found, his head between his paws, his eyes sad, but open in alert watchfulness, faithful and true even in death."

Then Vest sat down. He had spoken in a low voice, without a gesture. He made no reference to the evidence or the merits of the case. When he finished, judge and jury were wiping their eyes. The jury filed out, but soon entered with a verdict of \$500 for the plaintiff, whose dog was shot; and it was said that some of the jurors wanted to hang the defendant.—[Nashville American.

Signs of the Times.

How dear to our purse is the sound new potato
Which opulent grocers present to our view
At five cents a pound, plus a penny for freight, oh,
To bring it to us from the land where it grew.
The tempting potato,
The tiny potato,
The costly potato of delicate hue.

How sweet to our taste is the lambkin's hind quarter
When roasted and served with a dressing of mint;
We're apt to consume really more than we'd order,
Then imagine that we possess wealth without stint;
The juicy hind quarter,
The tender hind quarter
Alluring hind quarter all flavored with mint.

How soft and seductive the first balmy breezes
So warmly, caressingly, fanning our cheek;
We discard winter flannels and coats—then it freezes,
And we are laid up with la grippe for a week;
The early spring breezes,
That sigh through the trees,
The treacherous breezes that make our eyes leak.

How sweet to our ear is the first bluebird's singing
That joyfully trembles upon the calm air;
Alas! that a blizzard should send him a-winging
To fool other folks in like manner elsewhere;
The premature bluebird,
The frostbitten bluebird,
The truth-scorning bluebird that says spring is here.
—Colorado Springs Gazette.

Ned's Mistake.

Ned goes to the circus with grandpa,
And sits on a nice cushioned seat,
While he beams upon the performers,
With a smile confiding and sweet;
But after a while he grows restless,
And then he softly observes,
"If these are preserved seats, grandpa,
Why don't they pass the preserves?"

Domestic Economy.**HEALTHFUL COOKING.**

Probably no ailment with which the human family is afflicted is more common than indigestion. The prime cause of indigestion is poorly cooked food. Fried foods should be avoided, as a large amount of grease penetrates through every particle of the food, if fried any length of time. Many people will take a piece of steak and fry it until it becomes thoroughly saturated with fat, and all the juices of the steak are entirely destroyed. When it is placed upon the table ready to serve, the steak is about as easy to digest as a piece of leather, and about as nutritious. If steak is fried at all, the skillet should be made very hot, a small piece of butter put in, then the steak placed in the skillet, and allowed to remain long enough to brown through one-fourth of the meat. Then turn it over on the other side, and do likewise. Steak to be nutritious should be red when cut open.

A great deal of the meat that is baked or roasted is cooked too much, which destroys the juices, making the meat indigestible. Meat in roasting loses about twenty-five per cent. of its weight, while if steamed it will not lose any of its weight or nutrition.

All cereals can be cooked by steam with one-fourth the labor that it takes to cook them in any other way, as they need no watching or stirring.

All vegetables cooked by steam are far more palatable, nutritious, and more easily digested than when cooked in any other way.

Puddings, fruit cake, brown bread, and a score of other things have much better flavor if cooked

by steam, and are much more easily digested than they are when cooked in a hot oven. Nothing should be boiled, as boiling takes the life out of any kind of food, with the exception of stews, when the liquid part as well as the solid part of the food is intended to be eaten. Potatoes should never be boiled. For most people baked potatoes are more palatable than any others, if eaten just as soon as cooked. They are worthless if allowed to stand any length of time. Steamed potatoes are very delicious, and much better to keep, if left over from one meal to another, than potatoes that are boiled or baked.—[C. M. Robinson, in Christian Advocate.

How to Tell Fortunes.**THE MANY SIGNS FOUND IN THE TEA GROUND.**

First, the one whose fortune is to be told should drink a little of the tea while it is hot, and then turn out the rest, being careful not to turn out the grounds in doing so, and also not to look at them, as it is bad luck.

Then she must turn the cup over so that no water remains, for drops of water in the tea grounds signify tears.

Next, she must turn the cup around, slowly, toward her, three times, wishing the wish of her heart as she turns it.

After this she must rest it a minute against the edge of a saucer—to court luck.

Then the fortune-teller takes it and reads the fortune.

Three small dots in a row stand for the wish. If near the top it will soon be realized. If at the bottom some time will elapse.

If the grounds are bunched together it signifies that all will be well with the fortune-seeker, but if they are scattered it means much the reverse.

A small speck near the top means a letter. A large speck, a photograph or present of some kind, what it is depending on the shape of the speck.

The sticks are people—light or dark, short or tall, according to their color and length. A small one means a child; a thick one a woman.

If they lie crosswise they are enemies; if straight up, intimate friends, or pleasant acquaintances to be made.

If a large speck is near them, it means they are coming for a visit, bringing a valise or trunk.

If there is a bottle shape near a stick it means a physician; if a book shape, a minister or lawyer; if many fine specks, a married man.

The sticks with a bunch of grounds on their backs are bearers of bad news, or they will "say things" about you.

A long line of grounds with no openings between, foretells a journey by water; if openings, by rail.

A large ring closed means an offer of marriage to an unmarried woman; to a married one it means a fortunate undertaking; to a man, success in business.

A small ring is an invitation. Dust-like grounds bunched together at the bottom or side, is a sum of money.

A triangle signifies good luck, so does an anchor or a horseshoe.

A half-moon or star to married people means a paying investment; to unmarried, a new lover or sweetheart.

A pyramid is extremely lucky.

A square or oblong, new lands. Flowers, a present, what it is depending on the shape, or the present may be flowers.

Leaves, sickness and death.

Fruit of any kind, health.

"Only the actions of the just
Smell sweet and blossom in the dust."



150,000 Healthy, well-rooted, Manitoba-grown young trees, plants, seedlings, roots, vines and cuttings, Russian poplars, and willows, maples, alms, spruce, flowering shrubs, Virginian creepers, rhubarb roots, small fruits of all kinds, and a few apples and crab. Prices away down. Send for price list.

CALDWELL & CO., Virden Nurseries, VIRDEN, MAN.

GOSSIP.

Judging from the time made at the recent Columbus and Windsor meetings, there is really little excuse for keeping up the compilation of a 2:30 list any longer. One of the prominent Grand Circuit drivers asserted at Columbus that unless a man had a trotter that could step in 2:10, or a pacer capable of 2:05, he would better stay at home. This is, perhaps, placing the speed rate at which harness horses must be able to race in order to be profitable, a little low, but not so much too low as might at first appear. A 2:30 trotter or pacer is no longer regarded as a fast horse in any sense of the term, and as a race horse, one of that calibre is of no more use than was a three-minute horse 10 years ago. Time brings great changes, but in no field has it brought more striking ones than in that of harness racing. There was a time when a table of 2:30 performers was a valuable one, but that time has gone by, and to-day such a compilation carries a lot of deadwood of interest to no one.

FIRST WHEAT DEAL.

A considerable quantity of Manitoba No. 1 hard wheat was contracted for at 77 cents, at Winnipeg, last week. This contract, which will, of course, be filled by wheat of the new crop, is the first transaction in wheat for September delivery this season. The present price of wheat at Winnipeg is 83 1/2 cents.

**FOR MEN ONLY.**

See here, with you I've a
crow to pick;
Now to me do you hark;
Your good wife has
worried until she is
sick,
With that stove that
came out of the Ark.
Go, open your heart
and your pocket-book,
And be sure that you
get
a "GOOD CHEER" Cook.

**The Ideal Good Cheer Steel Cook**

**FINEST IN THE LAND.
SOLD BY ALL LEADING DEALERS.**

**The JAMES STEWART MFG. CO., Ltd. Woodstock, Ont.
WESTERN WAREHOUSE: WINNIPEG, MAN.**

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

GOSSIP.

The racing at Columbus and Windsor, last week, showed that the three great stables this year are those of Scott Hudson, W. L. Snow and Ed. Geers. Each one of these trainers won several races in the extremely fast time, and to the credit of each is now a substantial amount of money as a starter towards a record-breaking winning list.

SPECIAL PRIZES A FEATURE.

There were never so many specials given at Toronto Exhibition as there will be this year. Because it will be a Dominion Fair it almost looks as if people have been tumbling over each other for the honor of getting their names in the prize list as donors of special prizes. The Harness, Hunter and Saddle Horse Society of Canada (H. J. P. Good, Toronto, Secretary) will give a gold medal for the best harness horse, mare or gelding; Mr. T. A. Crow, second vice-president of the Harness, Hunter and Saddle Horse Society, will give a silver cup for the best saddle horse; Alderman O. B. Sheppard, first vice-president of the Harness, Hunter and Saddle Horse Society, will give a silver cup for the best roadster; Mr. W. E. Wellington, first vice-president of the Industrial Exhibition, and director of the Harness, Hunter and Saddle Horse Society, will give a silver cup for the best heavy draft gelding or mare, of any breed; Dr. Andrew Smith, Hon.-Pres. Industrial Exhibition, and Principal Ontario Veterinary College, will give a prize for the best pair of horses suitable for a Victoria; The Canadian Horse Breeders' Association give \$250 towards the prize list. The Shire Horse Association of England give two fifty-dollar gold medals, one for the best Shire stallion, and the other for the best Shire mare. The Canadian Pony Society (H. M. Robinson, secretary) gives a silver cup for the best pony. The English Hackney Society gives one gold medal and two silver medals for the best Hackney gelding, the best Hackney stallion and the best Hackney mare. The Toronto Hunt Club gives various pieces of plate for polo ponies and Hunt events. The Dominion Shorthorn Breeders' Association gives \$1,500 toward the Shorthorn prizes. Several sheep associations give specials. The same is the case as regards swine, while poultry and dogs, the latter especially, will receive many specials.

GRAND DISPERSION SALE

OF

Hillhurst Shorthorns

AT

HAMILTON, ONT., TUESDAY, AUG. 11, 1903



JOY OF MORNING.

Bred by W. S. Marr, Uppermill, Aberdeenshire.

Sire Pride of Morning; dam Jessica, by Scottish Archer.

50 FEMALES

Thirty-three of which are imported Scotch, among them several show heifers. Thirteen cows will have calves at foot.

8 BULLS

Including the celebrated sire, Imp. Joy of Morning; the red two-year-old Missie show bull, Imp. Lord Mountstephen; and three imported Scotch yearlings

All the best cattle are listed for this dispersion sale of the herd which has taken the highest place as the Home of Herd Headers.

FOR CATALOGUES ADDRESS:

CAPT. T. E. ROBSON,
THOS. INGRAM,
GEO. JACKSON,

} Auctioneers.

JAS. A. COCHRANE,

HILLHURST STATION, P. Q.

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THE
Canadian Bank of Commerce

Paid-up Capital, \$8,700,000. Rest, \$3,000,000

One hundred and four Branches throughout Canada
and the United States.

SAVINGS BANK DEPARTMENT AT EVERY BRANCH.

Deposits of One Dollar and upwards received,
and interest allowed at current rates.

BRANCHES IN THE CANADIAN NORTHWEST:

CALGARY, Alta. C. W. Rowley, Mgr. CARMAN, Manitoba. C. E. Complin, Mgr. DAUPHIN, Manitoba. J. S. Munro, Mgr. EDMONTON, Alta. T. M. Turnbull, Mgr. ELGIN, Manitoba. G. H. Horne, Mgr. ELKHORN, Man. E. M. Saunders, Mgr. GILBERT PLAINS, Manitoba. *H. E. P. Jemmett, Mgr. GRANDVIEW, Manitoba. H. E. P. Jemmett, Mgr. INNISFAIL, N.-W. T. R. A. Rumsey, Mgr.	MEDICINE HAT, Assa. F. L. Crawford, Mgr. MOOSSMIN, Assa. E. M. Saunders, Mgr. NEEPAWA, Manitoba. G. M. Gibbs, Mgr. PONOKA, N.-W. T. R. H. Brotherhood, Mgr. PORTAGE LA PRAIRIE, Man. A. L. Hamilton, Mgr. REGINA, Assa. H. F. Mytton, Mgr. SWAN RIVER, Manitoba. F. J. Macoun, Mgr. TREHERNE, Manitoba. H. B. Haines, Mgr. WINNIPEG, Manitoba. John Aird, Mgr.
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Address any of the above Managers for Maps and Reliable Information concerning his locality.

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Drafts issued payable at all points in Europe, Asia,
Australia and America.

FARMERS' NOTES DISCOUNTED, SALES NOTES COLLECTED
AND A GENERAL BANKING BUSINESS TRANSACTED.

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Deposits may be made and withdrawn by mail.
Out-of-town accounts receive every attention.

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HEAD OFFICE: TORONTO, CAN.



**Harvesters
and
Threshers'
Supplies!**

We make a point to carry
the Largest and Best Assorted Stock of . . .

Harvesters and Threshers' Sundries in the West.

ENDLESS BELTS, BELTING,
LACE LEATHER,
LUBRICATING OILS,
CUP GREASE and HARD OIL,
BELT DRESSING,
PACKING (All Kinds),
ENGINEERS' SUNDRIES,
TANK PUMPS.

BRASS and IRON FITTINGS,
PENBERTHY INJECTORS,
OIL and GREASE CUPS,
LUBRICATORS,
SAFETY VALVES,
STEAM WHISTLES,
SPEED INDICATORS,
LIFTING JACKS.

SUCTION HOSE. TRACTION HEADLIGHTS.

Harvest Tools, Binder Twine, Haying Tools,
including Hay Cars, Slings, Pulleys, Forks and Complete Outfits for the Barn.

Builders' Hardware, Cement, Plaster, Paints, Oils, Glass, etc.

WE ARE AFTER YOUR TRADE

Cor. Rosser Avenue
and Seventh Street.

Brandon Hardware Co., BRANDON.
LIMITED.

GOSSIP.

The steamship, "W. A. Hionda," lately arrived in Port Arthur, Ont., with a freight cargo comprising 1,200 tons of merchandise and 1,200 tons of rail for shipment by way of the Canadian Northern. This is one of the largest cargoes ever brought to the head of the lakes for shipment west.

The gross earnings of the Canadian Northern Railway Company for the fiscal year ending June 30 amounted to \$2,448,000, or nearly \$1,000,000 over those of 1902. The working expenses amounted to \$1,588,000, and fixed charges \$637,000, leaving a surplus over working expenses and fixed charges of \$223,000.

Ex-Senator Ransom, of North Carolina, asserts that he is a farmer and not an agriculturist, and yet he is said to have realized \$68,000 from his last year's crop. This item is said to have been originally written by a newspaper man and not a journalist.

AMERICAN HOGS PROHIBITED.

A new order of the Board of Agriculture, London, England, was gazetted, revising previous orders, and prohibiting the landing in Great Britain of any hogs from the United States, besides prohibiting the importation of cattle from New England. The order goes into effect August 1.

CHEAP LAND.

The western people are incensed at the recent action of the Dominion Government in disposing of a tract of 250,000 acres of land to the Saskatchewan Land Company at one dollar an acre. These lands, says The Calgary Herald, are now selling for \$8 an acre. The loss must be at least a million and a quarter. "Never was there a more glaring illustration of the necessity of Provincial Government, and that we should manage and control the sale of our own lands," says the Herald.

BIG TIMBER DEAL.

The biggest deal in timber lands that has ever taken place on Vancouver Island or in the Northwest has just been completed between Mr. James Dunsmuir, of Vancouver; C. H. Cobb, James Campbell and Rufus Smith, of Seattle, and Frank Brownell, of Everett, who have paid in the neighborhood of one million dollars for 50,000 acres of timber lands on Vancouver Island, in the vicinity of Campbell River. The cruisers who visited the timber lands estimate that there are 2,500,000,000 feet of lumber in the 50,000 acres that will be selected by the Seattle men. Just what the plans of the syndicate are has not yet developed. They may build a mill and manufacture the lumber for market.

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.

Protect the Roof

And save your pocket
by using only

**EASTLAKE
STEEL SHINGLES**

They are the easiest of all to apply, and once on, give a more durable, tight, perfect protection from weather, fire and lightning than any other shingles. Think it over. By using Eastlakes you avoid spending money on repairs.

MADE BY

Metallic Roofing Co., of Toronto

SOLD BY

Merrick, Anderson & Co.

Bannatyne Ave., Winnipeg, Man.

CLYDESDALES FOR SALE

New importation just arrived:

25

STALLIONS

OF

Choice Breeding,
Excellent Quality and
Extra Large Size.

Stock has been personally selected. Inspection is solicited and prices will be found right.

O. SORBY, GUELPH, ONT.

FOR PURE-BRED

O. I. C. and YORKSHIRE SWINE

Write Jas. Austin, Hannah, N. Dakota,
Canadian shipping point, Snowflake, Manitoba.

HOME BANK FARM

OF
LARGE ENGLISH BERKSHIRES

Are still at the front. Two young boars fit for service and early spring pigs from choice sows for sale. Now booking orders. Call or write for prices.
JOS. LAIDLIE, Neepawa, Man.

ELKHORN STOCK FARM.



O. I. C. swine, Hereford cattle, B. F. Rocks and L. Brahmas. No cattle for sale. 25 April pigs for sale; quality unsurpassed. B. P. Rock eggs for sale, \$1.50 setting, 2 for \$2.50.
A. K. THOMPSON, Wakarusa, Man.
Nings, C. P. R., shipping station.

MOUNT FARM BERKSHIRES

CHOICE-BRED STOCK

now for sale;

PAIRS SUPPLIED NOT AKIN.

Inspection requested, and correspondence invited and promptly answered.

C. G. BULSTRODE,
Mount Farm, SOUTH QU'APPELLE, A.S.A.

M-T-T. Published monthly, 32 pages. Tells all about Hunting, Trapping and Raw Furs. Sample copy 10c. Hunter-Trapper, Box G, Gallipolis, Ohio.

Catalogue Auction Sale

OF 30 HEAD

Pure-bred Shorthorn Cattle

and 50 Pure-bred Yorkshire, Berkshire and Tamworth Pigs,

THE PROPERTY OF THE LATE MR. H. L. McDIARMID.

HEADINGLY, 12 MILES FROM WINNIPEG, ON JULY 27th,

At 2 o'clock. Also the entire lot of first class grade cattle; all the implements, binders, mowers, rakes, wagons, harness, etc.

M. CONWAY, WINNIPEG, AUCTIONEER.

Write the Auctioneer for Catalogues.

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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, '03

\$50,000

IN PREMIUMS.



\$40,000

IN ATTRACTIONS.

By Order of the King the Jubilee Presents Will be on View Free

"A CARNIVAL IN VENICE"

\$15,000

DIRECTION OF BOLOSSI KIRALFY

TREASURES loaned by the Countess of Aberdeen in Women's Building.

INDUSTRIES, LIVE STOCK, FINE ARTS, DAIRY PRODUCTS, DOGS, CATS, POULTRY, MINERALS, CEREALS, FLOWERS, FRUITS. SPECIAL ATTRACTIONS all on a Grand and Great National Scale. EXCURSION RATES on all Lines of Travel.

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A. F. KEMPTON, Secy. and Mgr. G. R. COLDWELL, K.C., Solicitor, Brandon.

Authorized Capital, \$500,000.00.

The Occidental Fire Insurance Co.

Full Government Deposit.

Head Office: WAWANESA, MAN. Agents Wanted in Unrepresented Districts

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 lire 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 27 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 36 rows of stitches, other makes have but 31 rows. Count the rows of stitches when you go to buy a belt, and insist on getting a Veteran. Our price 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.

FRANK O. FOWLER, President.
ANGUS McDONALD, Vice-President.
JOS. CORNELL, Secy. and Manager.

Full Deposit with
Manitoba Government.

Licensed to Transact Business in Northwest Territories.

The Central Canada Insurance Co.

Authorized Capital, \$500,000.

Fire Insurance. Hail Insurance. Pure-bred Registered Live-stock Insurance.

HEAD OFFICE: BRANDON, MANITOBA.

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

GOSSIP.

Mr. J. J. Hemingway, secretary of the American Jersey Cattle Club, writes us that all the amendments to the by-laws which were recommended by the board of directors, at the annual meeting of the Club, on May 6th last, have been carried by membership ballot, except the one making the fee for transfers 25 cents.

At a sale of horses in training at Sheepshead Bay, N. Y., last month, prices were poor, except for three animals—Prince of Melbourne, \$7,500; Destiny, \$1,800; bay gelding, \$1,000. At a sale of yearlings in Chicago, the same week, the bidding was spirited—the best prices being \$2,000, \$1,800, \$1,500, \$1,000, \$750, \$700, \$650, \$600, \$550, \$500.

Mr. M. A. Judy, Williamsport, Ind., has gone to Scotland to judge the Angus cattle at the Highland Show, and in the party was Mr. W. C. McGavock and his bride, and Mr. B. R. Pierce and his wife three of our most distinguished Angus men; Mr. Judy, the leading Angus importer, who has bought the T. L. Miller farm near Chicago; Mr. McGavock, the Angus sale manager, and Mr. Pierce, the owner of the \$9,100 Prince Ito, who sells more \$1,000 bulls to head herds than any other cattle-breeder in America, of any breed. We know they will have a royal time among the genial Scotch breeders and attending the shows.

We have received the following news item from Messrs C. & J. Carruthers, of Cobourg, Ont.: "We have had quite a few inquiries for Yorkshires lately, and we are now offering the boar, Cotgrave King 11649, whose sire is Summer Hill R. G., imported in dam, bred by P. L. Mills, Nottingham, Eng., dam Cotgrave Lassie 7th (imp.) (9058) (10252), bred in England. We are also offering young stock as good as ever we bred (Holywell strain), at reasonable prices. We have bought another stock boar at D. C. Flatt's sale, Summer Hill Dalmeny Royal (12444) (imp.), bred by the Earl of Rosebery, Edinburgh, a hog of great size, length, depth and evenness throughout, with great bone. Have also a few sows, in pig, for sale. Parties wishing to buy should look up advertisement."

MAPLE GROVE STOCK FARM.

We are now offering a choice lot of young YORKSHIRE boars and sows, to be delivered at six weeks to two months old. Some snaps for those looking for bargains in registered Yorkshires. Write at once to
WALTER JAMES & SONS,
ROSSER, MAN.

T. E. M. BANTING, Banting, Manitoba, Breeder of prize Tamworths. Both sexes, young and old, for sale. On Glenboro branch of C. P. R.

YORKSHIRES!

The Best Bacon Breed.

If in need of any, write us (stamps accepted). We will send full particulars re breeding, price, etc. Pigs ready to ship now. Address:

KING BROS., Wawanesa, Manitoba.



Clip Your Sheep and Ship Your Wool direct to us.

We pay the top price for consignments, whether large or small. Shipping tags and sacks furnished on application. Write for quotations.

CARRUTHERS & CO.,

Tanners and Dealers in Hides, Wool, Sheepskins, Etc.,

Brandon, Man.

D. FRASER & SONS,

EMERSON, MAN.,

Breeders and importers of Durham Cattle, Shropshire and Southdown Sheep; Berkshire, Tamworth and Poland-China Pigs.

GALLOWAYS:

Bulls and heifers for sale.

APPLY TO

T. M. CAMPBELL,

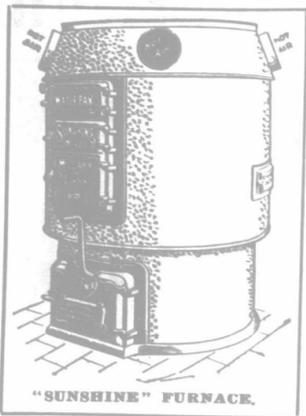
"HOPE FARM,"

St. Jean Baptiste, Manitoba.

ABERDEEN - ANGUS AND BERKSHIRES.

One deep, blocky April calf for sale. Orders booked for spring pigs, sired by Nora's Duke—7999—, bred by J. A. McGill and King Edward—10852—, F. J. COLLYER, Houghton Farm, Welwyn, Assa.

HEATING and COOKING SPECIALTIES.



**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.



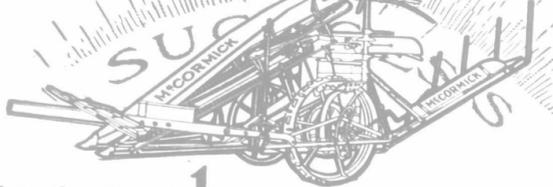
BOOKLETS FREE
TO ANY ADDRESS.

McCLARY'S.

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

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.

Further particulars are to hand regarding the Canadian Northern Railway's elevator plans for Port Arthur, Ont. These include a tile tank house, with a capacity of 5,000,000 bushels, which will, it is claimed, surpass anything of its kind previously existing.

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.

HIGHLAND STOCK FARM.

Pure-bred Aberdeen-Angus Cattle, Clydesdale Horses.



SIRE IN SERVICE.—Beauty's Eclipser 26474, sire of the steer Advance, that sold for \$2,145; Allenhurst King 2nd 35420, a son of Valiant Knight 2nd, that won three first prizes at the Chicago Internationals; and Eric M 50989, a son of Gay Lad and half-brother to the undefeated Rosegay.

12 YOUNG BULLS from this fashionable blood, at farmers' prices. Come and see or WRITE

JOHN A. CAMPBELL,
UTICA, MINNESOTA.

Everything Guaranteed.

The Olive Branch Flocks and Herds.

Galloway Cattle, Shropshire Sheep and Angora Goats.

200 head cattle. Special price on bulls in carload lots. 200 rams for fall trade. 100 Angora goats for sale.
E. Cooper, Adrian, Minn.

GLYDE Stallions, Fillies and Mares



SHORTHORN Heifers and Bulls.

All for sale; no reserve. Prices and terms to suit. Improved farms for sale.

J. E. SMITH,
SMITHFIELD AVE.,

Brandon, Manitoba.

CLAREMONT STOCK FARM.

Shorthorns and Clydesdales.
For sale, stock bull, President, a Winnipeg winner; a thick, low-set, smooth animal. Also young stock of both sexes, mostly of the Isabella family. Some sired by the well-known Calthness, balance by President.
MRS. C. H. BROWN, Prop., Manitou, Man.
F. A. Brown, Manager. Box 1.

SHORTHORN BULLS FOR SALE.

Stock bull, Manitoba Duke (3138), 4 years old, bred by Jas. A. Crerar, Shakespear, Ont. A thick-fleshed, level bull; price, \$150. Also several younger ones, well bred and individually strong.
A. E. HOLE, Minnedosa, Man.

**SHORTHORNS
PERCHERONS, FRENCH COACHERS.**

Cattle all ages, both sexes, good quality, choice breeding stock, at prices you can afford to pay. Write for our prices, they'll interest you.
D. HYSOP & SON
Landszar Stock Farm. Box 103, Killarney.

STRONZA STOCK FARM

SHORTHORNS AND BERKS. FOR SALE: Young bulls of blocky, thick-fleshed type, sired by Riverside Stamp 2nd, one of Thos. Russell's Exeter, Ont.) best. Berks of various ages and both sexes on hand. DAVID ALLISON, Roland.

Shorthorns and Tamworths

Cows, Heifers, Bulls

FOR SALE.

Mostly sired by Aberdeen 2nd and Banks o' Don (imp.). Young Tamworth sows and 2 spring litters.
Brome grass seed.
WM. CHALMERS,
Hayfield, Man.

The

**Bowness herd
of Shorthorns**

Thirty-eight head from this herd sold at the recent pure-bred sale held at Calgary at a splendid average. I have only twenty head of cows and heifers left for sale. They are all Scotch or Scotch topped, and are the pick of those I am offering. Write at once for particulars, as they are undoubtedly the choicest of the hundred head I am selling this year.
W. BERESFORD, Calgary, Alta.

Music

Musical Instruments, Sheet Music, Music Books

And everything known in music. We have the largest and best selected stock of these lines in Canada to select from. If interested, write for Catalogues. Mention Goods required.

Whaley, Royce & Co. LIMITED.

356 Main Street, Winnipeg, Man.

LAKE VIEW STOCK FARM. Shorthorns FOR SALE.

I am offering my whole herd for sale. In this offering there is that grand stock bull, *Clan McKay* (imp.); *Empress of India* (imp.) and her heifer calf, about 12 months; this is a show calf in any country; also some good cows and heifers; some of them have calves at foot by *Clan McKay* (imp.) and served again. There is no reserve. All cheap if sold now. It will pay any one wanting good cattle to see these before buying, and get some show and good breeding stock. No reserve.

THOMAS SPEERS, Proprietor, OAK LAKE, MAN.

FAIRVIEW STOCK FARM. Ayrshires, Yorkshires and B. Minorcas. For sale: Stock bull, *Craigielea of Auchinbrain* (imp.) (3302)=1661=, 1st at Toronto, and 3 choice young bulls of his get. Fall pigs on hand and spring orders booked.

WELLINGTON HARDY, Roland, Man.

SCOTTISH SHORTHORNS.

FOR SALE.—16 bulls, from one to two years old; 16 year old heifers; a few two-year-olds, bred to *Sir Colin Campbell* (imp.); also cows and calves. General = 30399=, Lord Stanley 43rd = 35731=, and *Sir Colin Campbell* (in p.) 28878, our present stock bulls.

GEO. RANKIN & SONS HAMIOTA, MAN.

GLENROSS FARM.

SHORTHORNS for sale: Stock bull, *Golden Flame*, 2nd at Toronto in class under a year. Also 5 choice young bulls, from 6 to 16 months old, sired by him.



A. & J. MORRISON, Carman P. O. and C. P. R. sta. Homewood sta. (C.N.R.) on farm.

THORNDALE STOCK FARM

138 Shorthorns in Herd. FOR SALE: *Royal Judge* = 29260=, one of the stock bulls, winner of 1st at Winnipeg and Brandon, and 19 young bulls; also, females of all ages.

JOHN S. ROBSON, MANITOU, MAN.

Scotch Shorthorns.

Young Bulls of choicest Scotch breeding and extra quality for sale at moderate prices. Winnipeg, 6 miles. Bergen Station, 1 1/2 miles. Visitors welcome and met by appointment.



H. O. AYERST, Mount Royal, Man.

PURVES THOMSON PILOT MOUND, MAN.

FOR SALE.—40 Shorthorns, young heifers and bulls, from Caithness. Good show animals. Some exceedingly good Clydesdale fillies and mares. All at reasonable prices.

Oak Grove Farm.

SHORTHORNS AND YORKSHIRES

One choice young bull by *Masterpiece*, he by *Grand Sweep* (imp.); a few heifers by the same bull; also some by *Village Hero* and *Knuckle Duster* (imp.). Some young sows of spring litters, and an extra choice lot of W. P. Rock cockerels. One pure-bred Billy goat (Angora). I am offering bargains in heifers. Correspondence solicited.

JAS. BRAY, LONGBURN, MAN.

GOSSIP.

The Canadian Transit Company, Limited, Ottawa, with a share capital of \$1,000,000, has been granted a charter by the Ontario Government. It will convey grain from the Upper Lakes to Montreal, and will work in connection with the New Canadian Company, Limited, of London, England, as wharfingers, etc. It is composed largely of British and Canadian capitalists, of whom Mr. Robert Bickerdike, of Montreal, is one.

Mr. William Martin, of Hope Farm, St. Jean, Man., has just received from quarantine the yearling Galloway bull, *Grandmaster*, bred by Mr. James Biggar, Grange Farm, Dalbeattie, Scotland. *Grandmaster* is a son of the famous bull, *McDougal 4th of Tarbreoch*, one of the best individual Galloway bulls ever imported. *Grandmaster* is a deep, lengthy bull, with plenty of bone, excellent quality, and is a strong addition to the already strong herd at Hope Farm. There being now three imported bulls in this herd, Mr. Martin is open to dispose of one of the older ones, *McKenzie of Lockenkit*, or *Eustace*, one of last year's importations.

ANGUS BREEDERS DECLINE TO ACT.

At an extraordinary general meeting of the English Aberdeen-Angus Cattle Association, held on the 23rd of June, at the Royal Agricultural Society's Showyard, called to consider matters connected with the spring show and sale held under the auspices of the Association, a letter from the Shorthorn Society was read, containing a copy of the council's resolution, "That in view of the unreliable and misleading results often obtained from the application of the tuberculin test, this council is of the opinion that the time has come for Shorthorn breeders to see their cattle under the unnecessary, harassing and vexatious restrictions imposed by foreign countries with regard to this so-called test," and expressing a hope that the Association would see its way to take a similar course of proceeding. It was resolved that no action should be taken. —[Live Stock Journal.]

CANADIAN CATTLE IN OREGON.

N. C. Maris, who is now on the Pacific coast, sends us the following interesting item: "I am now in charge of the Shorthorn and Hereford herds of banker C. B. Wade, of Pendleton, Ore., who certainly has the best lot of breeding cattle, taken all through, on the coast. Our Shorthorn show herd will be headed by *Hilcrest Hero*, second-prize two-year-old at Toronto last year, and recently purchased from W. D. Flatt. Our cow is *Elgitha 25*, bred by Jas. Douglas, of Caledonia, and champion of the coast in the C. E. Ladd herd last year. Our two-year-old is *Crimson Pearl*, bred by Israel Groff, and our yearling is a *Secret Heifer*, by 'The Lad for Me,' bred by the Robbins.

"We will not show a full herd of Herefords—only a few good young things raised on the farm.

"Crops are light in eastern Oregon this year. Hay not more than a half crop."

"Let the GOLD DUST twins do your work."



As a cleaner, soap doesn't begin to compare with **GOLD DUST.**

GOLD DUST does more work, better work and does it cheaper. It saves backs as well as pocketbooks.

Made only by THE N. K. FAIRBANK COMPANY, Montreal, Chicago, New York, Boston, St. Louis—Makers of COPCO SOAP (oval cake).

THE BLOOD OF TOPSMAN Breeds on. JNO. G. BARRON is offering for sale 10 SHORTHORN BULLS

Aged 12 months to 14 months, sired by *Nobleman* (imp.) = 28871=. Also for sale, three following noted Shorthorns:—
1. *Topsman's Duke* = 29045=—First prize and sweepstakes bull at Winnipeg Industrial, 1901, and 1st prize in aged bull class, 1902.
2. *Sir Arthur Grant* = 30503=—Two years old, and out of *Jenny Lind IV.*; got by *Nobleman* (imp.) = 28871=.
3. *Nobleman* (imp.) = 28871=.

Stock is all open for inspection. No "culls" in them. You will always be made welcome at

FAIRVIEW STOCK FARM, JNO. G. BARRON, PROPRIETOR, CARBERRY, MANITOBA.

Three miles from town of Carberry. Also call at Western Stables, Carberry.

PRAIRIE HOME STOCK FARM

CLYDESDALES, SHORTHORNS, Ayrshires, SHROPSHIRE, BERKSHIRES and YORKSHIRES.

Shorthorn herd headed by *Judge, imp. Sittytou Hero 7th* and *Mosey fuffel Banner*. Ayrshires of the best quality; herd headed by *Surprise of Burnside* and *Paul Kroger*. Shropshires of all ages for sale. *Summer Hill Monarch* and a large number of high-class sows represent the approved bacon type of Yorkshires. The *Berkshire boar*, *Victor* (Teasdale), sweepstakes at Brandon and Winnipeg, 1900, and 30 sows of faultless conformation and superior breeding, make up the *Berkshire* herd. Farm 1 mile from the station. Visitors welcome. Prices and quality right.



THOMAS GREENWAY, PROPRIETOR. Address all communications Crystal City, Man. on farm business to Waldo Greenway, Crystal City, Man.

DISPERSION SALE OF CLYDESDALES

AT MOOSE JAW, Wednesday, AUG. 5, 1903, AT 2 P. M. SHARP.

Best breeding quality and large size. 1 (imp.) stallion, 3 yearling stallions, 11 mares and fillies, 5 mares in foal to (imp.) *Fortune Finder*, one of the largest horses of the breed. Opportunity to secure high class, acclimatized breeding stock at your own prices. Mares of breeding age will be carefully bred this season.

TERMS.—20 cash; balance, five months, on approved joint or lien notes, with interest at the rate of 8% off for cash.

B. FLETCHER, V. S., Auctioneer.

Write for catalogue to

J. M. MACFARLANE, Box 138, MOOSE JAW, Assa.



Only Regular Award,
Chicago, 1893.

Grand Prize,
Paris, 1900.

Only Gold Medal,
Buffalo, 1901.

98%

Of the Creameries of America

Now Use

De Laval Cream Separators

After Twenty Years of Experience, and
Trying Twenty Makes of Machines.

That is a record which speaks for itself, and also
means something to the Inexperienced Buyers of

FARM CREAM SEPARATORS

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MAY BE HAD FOR THE ASKING!

THE DE LAVAL SEPARATOR CO.

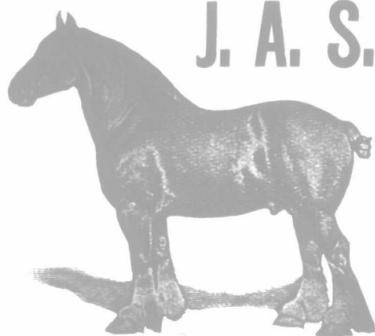
WESTERN CANADIAN OFFICES, STORES AND SHOPS,
248 McDERMOT AVE., WINNIPEG, MAN.

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J. A. S. MACMILLAN

IMPORTER AND BREEDER OF

High-Class Stallions.

The new importation for the coming
season comprises many winners.

Mares and Fillies Always for Sale.

Terms easy. Prices right.
For full particulars apply

BOX 483, BRANDON, MAN.

Stallions may be seen at Macmillan's stable
(late Douglas), 12th Street, Brandon.

2,000 HORSES

FOR SALE:

All weights, with prices to suit customers. Special rates on car-load
lots. You will find it worth your while to write at once for prices to

J. H. SPENCER, Medicine Hat, Northwest Territory.

Ranch only 15 miles from Medicine Hat, and 8 miles from point of ship-
ment, Stair, Assn. Our entire bunch can be seen between
15th May and 15th June.

SALESMEN WANTED in every town in Manitoba and North-
west Territories. Say that you saw it in the "Advocate."

FOR SALE

DRAFT HORSES

OF ALL AGES.

OWING to lack of range, we have decided to cut our herd of draft horses down to one-half
and sell 2,000 head at greatly reduced prices. This great selection of mares, geldings
and growthy youngsters of all ages represents the results of seventeen years of judicious
mating to strictly high-class Percheron, English Shire, Clydesdale and Hackney sires. We
can furnish high-grade brood mares and fillies with foal to imported and home-bred
registered stallions, and have always on hand a large and first-class selection of registered and
high-grade Percheron and English Shire stallions, also registered mares and fillies of same
breeds. Correspondence solicited. Inspection invited.

LITTLE MISSOURI HORSE COMPANY,
W. G. CLARK, SUPT. GLADSTONE, NORTH DAKOTA.

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

GOSSIP.

LAST CALL FOR HILLHURST SHORT- HORN SALE.

The catalogue of Hon. Mr. Cochrane's grand herd of imported and home-bred Shorthorns to be dispersed by auction, at Hamilton, on Aug. 11th, is out, and is being called for largely from many parts of Canada and the States. It presents a very tempting bill-a-fare in the list of choice young cows and heifers, of approved Scotch breeding, in whose pedigrees is found the blood of a long line of noted bulls, bred by the most advanced breeders, while a considerable number have promising calves at foot, sired by the grand imported bulls in service in the herd, or are in calf to these splendid sires, some having calves to be sold with them and being again in calf, offering the purchaser a three-fold bargain. It is rarely indeed that so many high-class bulls are included in one sale, and the scarcity of first-class bulls has been the weakness of most of the public sales, held in this country in the last few years. This sale will be a pleasing exception in that regard, as the four imported service bulls, three of which were bred by Mr. Duthie, of Collynie, and the fourth by Mr. Reid, of Cromleybank, will satisfy those who see them that they are of the right stamp, individually, as well as being royally well bred. Joy of Morning is a rich, dark roan, of the Cruickshank tribe, with the Highland Society champion, Pride of Morning, for his sire, and his dam by the noted Scottish Archer. These are among the most impressive sires used in the Collynie herd, while Star of Morning, the sire of Pride of Morning, was a Royal and Highland Society winner, and a remarkably prepotent sire, leaving his stamp unmistakably on all his progeny. Joy of Morning is wonderfully covered with the best of flesh all over, and especially on his back, where the most valuable cuts are found, and he is low-down, smooth and well filled in all his parts, and has the appearance of an impressive sire, which he has proved himself to be. Scottish Hero, a son of Scottish Archer, and his dam a Marr Missie, by the great William of Orange, is of the same breeding as the Royal champion, Marengo, and is a bull of grand character, smooth, level and well proportioned throughout, and has proved an exceptionally good breeder. Lord Mounstephen, a red Missie bull, in his two-year-old form, is a show bull from the ground up, full of style and quality and substance, and will take well wherever he goes, as he is practically without a fault. Royal Champion, of the Uppermill Roan Lady tribe, and by a son of Pride of Morning, though in only fair breeding condition, has all the good qualities of an acceptable sire, being richly bred, well proportioned, level in his lines, and having a fine masculine appearance. Royal Kitchener, a red yearling Augusta bull, is another capital youngster, good enough to head a first-class herd, as is also Rose Noble, a roan yearling of the Shethin Rosemary family.

With such a splendid list of bulls, and the excellent young cows and heifers referred to in our last issue, the public may confidently reckon on finding in this offering animals that measure well up to the standard of the approved type of present-day Shorthorns, and a healthier and sounder lot of cattle has never been brought to the hammer in this country. Confidence in the continued growth and prosperity of this grand country of ours, and in the pre-eminent place and part that Shorthorn cattle are bound to fill in the improvement and upbuilding of the character of our beef cattle, may well be adopted as the keynote in our calculations for the future. Our own people feel the need of improving our cattle all along the line, and are waking to the importance of taking early steps to effect such improvement as will give us the best standing in the British market for our cattle, while the great corn-growing States to the south will always look to Canada for seed stock to replenish their herds. The partial failure of the corn crop in some sections for a year or two will be only a temporary check to their ability to buy freely, and one good crop will revive their ambition to secure the best they can buy. They are not out of

(Continued on page 793.)

PLAIN VIEW STOCK FARM.



COTSWOLD. SHORTHORN. BERKSHIRE.
For Sale: Bulls, heifers and cows of good quality; also a nice lot of boars and sows, all ages. A few Cotswolds at reasonable prices. Write or come and see them.
F. W. BEDWIN, Proprietor,
Portage la Prairie, Man.

FORESTHOME FARM

Shorthorns, Yorkshires, and Barred P. Rocks



FOR SALE: A number of choice young bulls. A fine lot of boars fit for service. Sows of different ages, bred and ready for breeding. Young pigs, both sexes. An exceptionally fine lot of cockerels—large, healthy, well-bred fellows. All at reasonable prices.

Carman, C. P. R.; Roland, C. N. R.

ANDREW GRAHAM, Pomeroy P. O.

MARCHMONT HERD

Scotch-bred Shorthorns

The 2 imported bulls, Prince Alpine and Barriester, head a herd of 90 imported and Canadian-bred, Scotch topped cattle. A catalogue showing their breeding is now printed, and will be forwarded on application. 25 young bulls for sale, of modern breeding and good conformation, and at moderate prices.
W. F. LISTER,
(7 miles n. of Winnipeg.) Middlechurch P. O.
Tel. 10046.

CLYDESDALES

I purpose leaving for Scotland by the 1st of September, to bring out another shipment of Clyde horses, and will be pleased to receive orders for either males or females before leaving.

JOHN TURNER,
BALGREGGAN STUD FARM,
CALGARY, ALTA.

CLYDESDALES



Young Stallions and Mares and home-bred stock for sale. Also well-bred draft teams.

Trayner Bros.
REGINA.

Clydesdales, Standard-breds, Shorthorns,
Yorkshires, and P. R. Fowls.

A number of young stock constantly for sale. Three young bulls ready for service. Several spring sitters of pigs.

S. BENSON, - NEEPAWA, MAN.

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.

Agricultural College.

- (1) Two Years' Course—Associate Diploma—Sept. 14, '03.
- (2) Three Years' Course—Associate Diploma and Specialist Certificate in Agriculture or Horticulture—Sept. 14, '03.
- (3) Four Years' Course—B. S. A. Degree—Sept. 14, '03.
- (4) Courses in Nature Study and Domestic Science—Sept. 14, '03.
- (5) Three Weeks' Creamery Course—Dec. 1st, '03.
- (6) Three Months' Dairy Course—Jan. 4, '04.

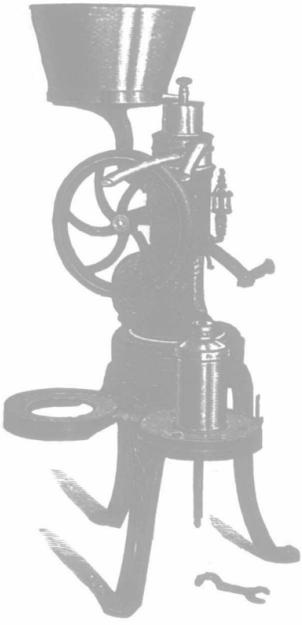
LADIES ADMITTED TO DOMESTIC SCIENCE AND DAIRY COURSES.

Send for General or Special Circulars.

Guelph, July, 1903.

JAMES MILLS, M.A., PRESIDENT.

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 Separator. 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.
- FIFTH—Its close skimming.
- 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—450 to 500 lbs. per hour.
- No. 1 B—330 to 350 lbs. per hour.
- 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.
 Mr. H. E. Nunn, Truro, Nova Scotia, for Maritime Provinces. Or to

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

SEND FOR Illustrated PRICE LIST.



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

BICYCLES ONLY \$10

We are again handling second-hand wheels this year. During last year we sold more second-hand wheels than ever before. We sent them to all parts of the Dominion. They are nearly as good as new; with a little touching up it would be a difficult matter to tell them from new ones. The fact of the matter, they are actually worth \$20, but as we do only a cash business and make a great many sales, we sell at a very low figure. With each wheel we send a tool bag and a full kit of tools. And remember, every wheel is fully guaranteed. Order early and you will get a better choice. Only **\$10**

WILKINS & CO., 166-168 King St. East, TORONTO, ONT.

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.

GOSSIP.

(Continued from page 792.)

the market now, by any means; some important purchases having recently been made in Canada by private treaty, and from the applications for the catalogue of the Hillhurst sale, the probability is that buyers will be present in considerable numbers. Shorthorn breeders throughout this country are personally interested in the success of this sale. Steady-going Canadian breeders will do well to show their confidence in this class of stock, and supply the needed balance to prevent extreme fluctuations in prices. Very few of them are so well stocked that they cannot do well with a few more, but we hope to see farmers and young men who are ambitious to found a good herd taking a fair share of the cattle, as there is room and a bright future for many more good herds than we have, and the whole country will benefit by a wide distribution of such desirable cattle. We confidently anticipate a large gathering of farmers and breeders at Hamilton on Aug. 11th, to witness the dispersion of one of the best herds in the Dominion.

Mr. Waldo Greenway returned from the East on the 14th. He had purchased a considerable number of pure-bred stock, consisting of three Clydesdale stallions, one and two years old; three yearling Shorthorn bulls, and six yearling Shorthorn heifers; twenty-six Yorkshire pigs and twelve Berkshires. The stock is the best that could be procured in the County of Wellington.

The old reliable horse importers, Bawden & McDonell, of Exeter, Ont., announce to the trade that they are now making a selection of Clydesdales, Shires and Hackneys for their annual importation. They expect to land the consignment about the first of September, and horse-men may feel assured that this year's importation will maintain the reputation of this reliable firm.

Mr. Jas. Rennie, of Wick, Ont., has, it is reported, entered an action against the Toronto Industrial Exhibition Association, asking for a declaration that he is entitled to the first prize of \$25 for a two-year-old steer which he exhibited last year, and he claims also \$2,000 damages for fraudulently depriving him of the first prize and for wrongful expulsion from the association.

CLYDESDALE FILLIES FOR CANADA.

The Scottish Farmer says: Mr. Wm. Taylor, Park Mains, Renfrew, recently shipped, to the order of a Canadian buyer, seven well-bred Clydesdale fillies. These were got by the Lower Renfrewshire premium horse, Ascot; the Lanark premium horse, Coroner; the noted Prince of Wales horse, Handsome Prince; the well-known William the Conqueror, also got by Prince of Wales; Mr. Riddell's big Kintyre premium horse, Canongate, and the well-bred horse, Monarch of Craigie. These fillies are from good dams in Renfrewshire, Kintyre, and Ayrshire, and are likely to prove successful as brood mares. Ascot and Coroner were both prizewinners at the H. & A. S. shows.

TRADE NOTE.

IMPERIAL BREEZES.—Just now when Imperial politics tend towards amalgamating the British Empire into one solid, compact commercial bond, it is interesting to know that Canada is benefited by being under the folds of the British flag. The Ontario Wind Engine & Pump Co., Toronto, advise us that in their foreign mail, which has just come to hand, they have received an order from Australia for three Canadian Airmotors of three sizes, and they anticipate that their trade with this far-off continent will rapidly increase. They also received from the Imperial Government an order for two 16-foot Airmotors and four large pumps. The product of this firm must be of standard quality to enable them to merit Imperial favor for windmills destined for the Levant.

HORSEMEN! THE ONLY GENUINE IS

GOMBAULT'S CAUSTIC BALSAM.

The Safest, Best BLISTER ever used. Takes the place of all liniments for mild or severe action. Removes all Bunches or Blemishes from Horses and Cattle. SUPERSEDES ALL CAUTERY or FIRMING. Impossible to produce scurf or bluish. 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.

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.



To Cure a Wind Puff of 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, 1/2 pint vinegar and 1/2 pint water; cover with a layer of cotton, and bandage over. Repeat as above until cured.

ABSORBINE is 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.

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.

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, Mai of Airies, Danley and Prince of Wales, combining size, style, quality and action. The best lot I ever imported. Write quick.

GEO. STEWART, Howick, Quebec.

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

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.

Mr. S. Carter, of Manitou, with a crop of five hundred acres, summer-fallows about one hundred and thirty acres every year, the summer-fallow following a timothy sod. By this system of cultivation and a careful selection of seed, the spreading of weeds is almost impossible, and a good crop of No. 1 hard is assured.

Mr. J. E. Marples, of Deleau, Man., has recently purchased a yearling Hereford bull from the celebrated Weaver-grace breeding establishment, Chillicothe, Missouri. This grand young bull, King Improver 137748, was sired by Improver (imp.), one of the greatest bulls ever imported into America, and the young chip promises to be not far behind his noted sire in quality. The price paid was a long one.

SOUTH AMERICA BUYS HEAVILY.

At Mr. Henry Dudding's (England) recent Shorthorn sale several buyers were present from Argentine, and one from Uruguay. The southerners were particularly active bidders for the best, and succeeded in carrying off many plums, twenty-two out of sixty-two head going their way. Uruguay getting nine out of the number. Argentine is determined to improve her cattle with stock from Great Britain, and all importations must trace back to before 1850, thus no short-pedigreed cattle are likely to reach that country.

SHORTHORN BULLS FOR THE ARGENTINE.

Mr. F. Miller, the well-known live-stock exporter to South America, is evidently determined to do all in his power to push Shorthorns in the Argentine, for amongst his many purchases of late we note he has bought the following notable bulls:—The premier place must be given to Baron Abbotsford 76087, placed second at Park Royal, for which Mr. Miller had to pay £1,500. This bull was bred by Mr. Bell, of Ratclough, and owns as his sire that successful getter, Baron Alwick 69918, from Lady Clara 3rd, by Abbotsford 66588, his granddam being Clara 42nd, by William of Orange 50694. Mr. Miller was also fortunate to be able to secure the Scotch-bred bull, First Choice 78877, a roan, selected by Mr. R. Garden for his Irish herd, and successfully shown by him on several occasions. This bull was sired by Abbotsford 2nd 69838, dam Merry Girl, by roan Prince 64670, and then going back through a long line to the very earliest records of the herdbook. Mr. D. Abbot Green also sold Mr. Miller a very valuable sire in Royalty, by Mr. Deane Willis' Bapton Emigrant 71970, from Royal Nun 2nd, by Bright Stephen 63722, and thence in a direct line to a cow purchased at Hexham as far back as 1834. These three bulls call for special notice, but Mr. Miller's recent purchases, about thirty in all, are all of the highest order of merit.

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., 4 1/2 miles.

Regular \$15 Field Glasses for \$3.95

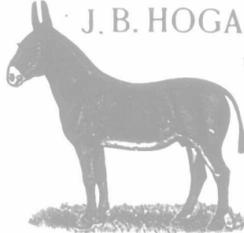


POWERFUL ACHROMATIC LENSES,
FULL 50-MILE RANGE.

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 satisfied that they are all we claim them to be, 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. 3325, Toronto.

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-winner 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

ALEX. GALBRAITH & SON,
JANESVILLE, 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.

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 87 yearling rams being \$128.26.

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 a form 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.

Earlville, 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. These 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. PORT.

Price \$1.50 for 15. 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.

BAWDEN & McDONELL

Exeter, Ont.

IMPORTERS OF

Clydesdale,
Shire and
Hackney Horses

have left for the Old Country to select their annual importation of high-class horses. The consignment will arrive about September 1st. Be ready to inspect them.

THE SUNNYSIDE HEREFORDS.

Onward 120463 at head of herd; sire Imp. March On 76035. For sale, 4 bulls, ranging in age from 15 mos. to 3 years old; 3 choice young cows and 4 heifers, from 10 mos. to 2 yrs. old. Visitors welcome. O'Neill Bros., Southgate, Ont. Lucan Station, G. T. R. Ilderton Station, L., H. & B.

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 3 and 4 bred Hereford cows and heifers. H. D. SMITH, Compton, Que.

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 294, 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.

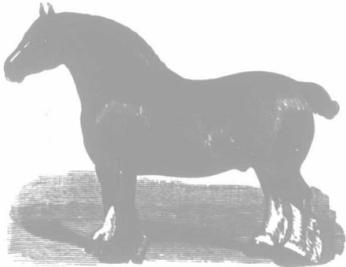
TROUT CREEK SHORTHORNS



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

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

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.

Newham 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 Misses, 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, immense rumps, pony-built body. Not a shaggy lump of fat. A Klondyke in your stable. Honest value for honest money. Write, or, better, come to

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IMPORTED CLYDESDALES

Another consignment of first-class imported Clydesdale stallions just arrived from Scotland. Personally selected. All in good health and splendid condition. These horses are all from noted sires, and range in age from two to six years. Our motto: "Superior quality with sufficient size." Intending purchasers should call on or write to

WM. COLQUHOUN, MITCHELL P. O. AND STATION (G. T. R.), ONT.

BOOK REVIEW.

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

"HORSE BREEDING."

Through the courtesy of the author, the third edition of J. H. Sanders' book on "Horse Breeding" has recently been placed on our shelves. The subject is an ever popular one, and the success of the former editions of Mr. Sanders' work proves his treatment of the subject to be also popular. The book is a highly comprehensive treatment of the history of the horse, the origins of the different breeds, as far as authentic data can be produced on the subject; the different results of his development in different countries and under different conditions, and the influence of heredity, dealing very fully in this connection with the diseases of the horse. In the description of breeds, Mr. Sanders states in the preface that he has endeavored to be judicially candid and fair; to "nothing extenuate, nor set down aught in malice"; and where controverted points have been touched upon, he has tried to use arguments which to his mind are conclusive, while at the same time he has tried to do so in a manner that would not prove offensive to those whose opinions and conclusions may differ from his own. Eighteen years have passed since these remarks were written, and in these years many theories have been exploded, and many controverted points have been finally settled, while on the other hand many new theories have been advanced and points controverted. Ten years ago, the work was revised and the book placed on the market. The present issue is still farther revised, and brought up to date, and much new matter has been added.

To the casual student, the book will be found interesting; to every farmer and dealer in horseflesh it contains a mine of useful information, and to the horse-breeder the knowledge conveyed in it is indispensable.

The book is published by the J. H. Sanders Publishing Co., Chicago, and can be procured through the "Farmer's Advocate." Price, \$1.50.

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.

SHORTHORNS. Dark red bull calf, Blue Ribbon 2nd, 16 months old, sired by Blue Ribbon (imp.) 17085 (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.

SHORTHORNS. Importer and breeder of choice Shorthorns. Scottish Hero 156726 at the head of herd.

JAS. A. CREEAR, Shakespeare, Ont.

The Books Are Free

If you have a horse that is lamed or blemished by any kind of a growth or enlargement, that is Knee Sprung or has Fistula, Poll Evil or Sweeney, or if there is a case of Lump 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.

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

FOUR BULLS (red), Ury and Stamford dams, bred here and British Columbia; now owned by Mr. Lader, Lader's Landing, on **ROBERT HATTY, Glenbourne Farm, Menford P. O. and Sta.**

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

SHORTHORNS. Imp. Christopher - 28850 - heads herd. A few choice young cows, heifers and bulls for sale, of milking strain. Also Summerhill Yorkshire pigs.

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.

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Lakeview Shorthorns. Herd registered by such noted families as Stamfords, Minns, Marr Flocks, Crimeth Flowers, Village Girl, Euan Lanes, and Lavinia. Some yearling and two-year-old heifers for sale.

James Bowen, Strathcona P. O., Menford 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 5 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 cows fit for breeding, and young pigs.

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. Claremont Station, C. P. R.

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.

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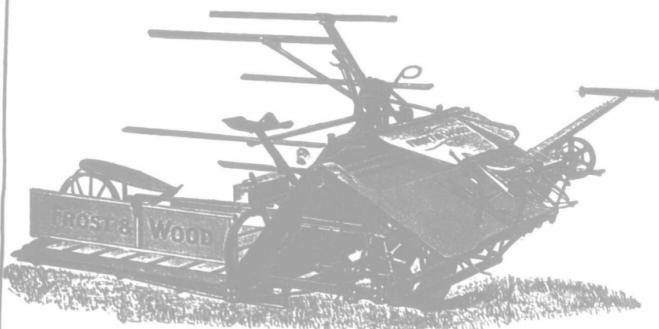
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IT IS NOT A HORSE-KILLER!

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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

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

SHORTHORNS

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

Herd Numbers 150 Head.
Send for New Catalogue.

VISITORS WELCOME, AND CORRESPONDENCE PROMPTLY ATTENDED TO.
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H. CARGILL & SON,

Also have a choice lot of Oxford Down Sheep, either sex, at reasonable prices. om Cargill, Ontario, Canada.

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

Crystal City Fair Prize List. HORSES.

HEAVY DRAFT.—Teams in harness—1, E. Cudmore; 2, Thos. Gosnell; 3, F. Collins; Brood mares—1, A. E. Cudmore; 2, F. Collins; 3, John Armstrong. Filly or gelding, 2 years old—1, R. Ring; 2, F. Collins; 3, John Mackinnon. Filly or gelding, 1 year old—1, R. Ring; 2, R. S. Preston. Foals—1, S. B. Lynes; 2, A. E. Cudmore; 3, J. Armstrong.

GENERAL PURPOSE.—Teams in harness—1, Thos. Sanson; 2, Wellington Heron; 3, A. Hunter. Brood mares—1, A. Gudson; 2, A. Cudmore; 3, P. Maclaren. Filly or gelding, 2 years old—1, R. Gorrell; 2, W. J. Ingram; 3, R. Ring. Filly or gelding, 1 year old—1, W. J. Ingram; 2, W. Greenway; 3, B. Preston. Foals—1, G. Hudson; 2, P. Maclaren.

CARRIAGE HORSES.—Teams in harness—1, John Mackinnon; 2, Frank Collins. Brood mares—1, S. B. Lynes; 2, R. King. Best walking team—1, A. Hunter; 2, R. Cudmore.

CATTLE.

The judge in all classes of cattle was Mr. Joseph Washington, Ninga. The following are the awards:—

SHORTHORNS.—Aged bulls—1, R. S. Preston; 2, Thos. Smallcombe. Bull, 2 years old—1, James Laidlaw; 2, W. J. Ingram. Bull, 1 year old—1, J. J. Ring. Bull calf, under 1 year—1 and 2, F. Collins, Clearwater. Cows—1, J. J. Ring; 2, R. S. Preston. Heifers, 2 years old—1, J. J. Ring. Heifers, 1 year old—1, J. J. Ring. Heifer calf—1, J. J. Ring. Best bull, any age—Diploma by Pure-bred Cattle Breeders' Association, J. J. Ring. Best herd of three females and one bull—J. J. Ring. **HEREFORDS.**—Cows—1 and 2, W. Tait; 3, A. Hunter. Heifer, 2 years old—1, W. Tait; 2, A. Hunter. Heifer, 1 year old—1, W. Tait; 2, A. Hunter. Heifer calf—1, A. Hunter.

MILK GRADES.—Cows—1, W. G. Duff; 2, J. S. Cochrane.

BEEF GRADES.—Cows—1, W. H. Greenway; 2, J. S. Cochrane. Steers, 2 years old—1 and 2, F. Collins. Steers, 1 year old—1 and 2, F. Collins. Heifers, 2 years old—1, O. H. Ring; 2, W. G. Duff. Heifers, 1 year old—1, R. S. Preston; 2, F. Collins. Calves—W. G. Duff.

SHEEP.

These were judged by Mr. Wm. Waldie, of Hazeldale Farm, Cartwright. Three classes entered. In Cotswolds, A. W. Fleming, Pilot Mound, carried away five red tickets. In Grades, Peter Maclaren took three firsts, one second, and the diploma of the Sheep Breeders' Association; and in Short-wool (Oxford Downs), R. B. Preston, Pilot Mound, took three firsts. Mr. Preston had a splendid exhibit of poultry, consisting of nine varieties. He was closely followed, and beaten in one or two sections, by young Mr. Greenway.

SWINE.

This class was scarcely represented. Mr. T. T. Baird, Crystal City, acted as judge, whose duties were exceedingly light.

Dairy produce and field roots were a good show. Grain was excellent, and one sample of oats of the 20th Century variety, shown by R. Gorrell, was particularly choice in color and plumpness. The quality and finish of the exhibits in the industrial sections were particularly good. The duties of the secretary were performed energetically and courteously by Mr. W. G. Duff.

GOSSIP.

On July 14th, Mr. Waldo Greenway, son of the Hon. Thomas Greenway, Crystal City, Manitoba, shipped by the C. P. R. from Guelph, Ont., a carload of pure-bred stock, consisting of three Clydesdale stallions one and two years old, three yearling Shorthorn bulls and six yearling Shorthorn heifers, twenty-six Yorkshire pigs, and twelve Berkshires. Mr. Clayton Peterson, Prince Albert, N. W. T., has made a number of shipments from Guelph. He reports business in the stock and every other line good.

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 om **H. J. DAVIS, Woodstock, Ont.**

Greengrove Shorthorns Number 35 head families. For sale: Several young bulls, by Wanderer's Last, Imp. Fitz Stephen and Freebooter. Females of all ages. **W. G. MILLSON, om Goring P. O., Markdale Station.**

R. & S. NICHOLSON
Sylvan P. O. Parkhill Station, Ont.

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, Cruickshank Lovelys, Shethin Rosemarys, A. M. Gordon's Estelles, Miss Symes, etc. om

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. om**

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. om

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. om

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. McKILLOP & SONS, om West Lorne, Ont.**

T. DOUGLAS & SONS,

STRATHROY STATION & P. O.,

BREEDERS OF Shorthorns and Clydesdales

88 Shorthorns to select from. Herd bulls (Imp) Diamond Jubilee = 28851 = and Double Gold = 37854 =. Young bulls, cows and heifers for sale at all times. Also one (imp.) stallion and two brood mares. om

ROSEVALE SHORTHORNS.

Herd comprises Augustas, 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. om **W. J. Shean & Co., Owen Sound P. O. & Sta.**

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. om **L. F. Selleck, Druggist, Morrisburg, 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.
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ROSS & ROSS, General Agents, WINNIPEG, MAN.

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.

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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



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, sweepstakes and diplomas, with one exception. 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.**

FLIES ON CATTLE.

HORN FLY OIL

Quart Can, 25c. Gallon Can, 60c.

KEEPS FLIES OFF ANIMALS. SOLD BY LEADING DEALERS. OR DIRECT FROM

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.

GOSSIP.

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 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.

On another page of this issue may be seen a photograph of a prizewinning herd of Herefords, owned by Jos. Tough, Edmonton, Alta. The herd bull is "The General" 1438, sire Valentine, and dam Constance Wilton. He is an animal of rare good quality, as may be seen by the photograph, being smooth and well-quartered, with an even coating of firm flesh. One of the noteworthy females is Maple Sugar =915=, bred by Sir D. A. Smith, sire Wilton Hillhurst, dam Phillus. Another good one is Miss Glenwood 2nd =2044=, sire Ingleside 2nd, dam Lucy May, by Senator. A two-year-old, of almost ideal Hereford conformation, is Gertrude =2039=, by Spotless of Ingleside, dam Danson of Poplar Grove. Mr. Tough had also on exhibition a beautiful ten-month-old calf, bred by himself, sired by Dunmoor Ingleside, dam Mermaid. Two grand cows have recently been added to the herd from the Smith herd, Compton, Que. It was intended that these would have been on hand in time for the show, but unfortunately the car from the east only arrived as the exhibition was closing.

The photograph of Mr. P. Talbot and Son's cattle, to be found on another page of this issue, shows a number of one of the very best herds of Shorthorns to be found in Western Canada. At its head stands Royal Macgregor, an animal of rare good quality, and one that would stand a lot of beating in any show-ring. He was bred by Cargill & Sons, Cargill, Ont., sire Royal Member (Imp.), dam Rosa Lee. Among the females is Coulee Blossom 2nd, the first-prize cow over four years at Edmonton. She is a typical Shorthorn in general conformation, and received her honors at the Northern Show amid very strong competition. Her sire was Goldsmith and dam Coulee Blossom. The first-prize two-year-old at the same show was Coulee Blossom 4th, a full sister to the last one, and one that gives promise of developing into a cow of rare good quality. A yearling of more than ordinary merit was Pearl, by David, dam Flora, by Royal Sailor. This splendid herd from the rich grazing lands of Lacombe, Alta., was represented by seven head at Edmonton exhibition, and any one of them would be a credit to any show-ring in this country.

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
RE-ESTABLISHED 1854.

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, 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, Viceroy 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.
Salmon P.O. and Telegraph Office. Elm St., C.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 Fagh, 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, C. P. R.

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, RE-ESTABLISHED 27 YEARS.

Imp. Royal Member and Sailer 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 sweepstake at Toronto Industrial Exhibition, three years in succession. Head headed by the Bruce Mayflower bull, Prince Sunbeam, imp. Present crop of calves sired by Imp. Wanderer's Last, sold for \$2,000. High-class Shorthorns of all ages for sale. Also prizewinning Lincolns. Apply

T. E. ROBSON, ILDERTON, ONT.

BONNIE BURN STOCK FARM
40 rods north of Stouffville station, offers Scotch Shorthorns, 40 Shropshire sheep, cheap, good breeding; also Berkshire pigs.
D. H. KURNELL, 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
JOHN DRYDEN & SON, Brockton, Ont.

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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



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.

For Sale: 4 bulls, sired by Imp. British Statesman (53729) = 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. om

Present offering in Shorthorns: Our stock bull, fering in Heir-at-law = 31563 =, a grand stock-getter and sire, 3 years old. Also 1 bull, 13 months; heifers and cows. Shropshires, all ages and sex. **BELL BROS.**, Bradford, Ont. om

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 Caspary 33049. om
James Caskey, Tiverton P. O., Kincairdine 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 stock at the Pan-American; International, Chicago, 1901 and 1902.

J. T. GIBSON, om DENFIELD, ONT.

ROSE COTTAGE SHORTHORNS.

Royal Prince = 31241 =, 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. FAIRBAIN,
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 Missie 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.

GOSSIP.

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 2,852 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 awarded to animals bred by the breeders represented in that class. The premier award to the exhibitor in each class will be made on the same basis.

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. For prices, etc., write

B. H. BULL & SON, Brampton, Ont.

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, Box 552, om Chatham, Ont.

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. O. FLATT & SON, MILLGROVE, ONT.** om Telephone: Millgrove, Ont.

HILLOREST 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.**

4 HOLSTEIN BULLS
FOR SALE: From 4 to 7 months old, having sires in their pedigrees from such strains as Luka, Netherland, Royal Argie, and Tritonia Prince, and out of imported females that have proven their worth at the fair. **THOS. B. CARLAW & SON, Warkworth.**

Maple Park Farm Holsteins.
Home of all the leading sires. Nothing for sale. **SIDNEY MACKLIN, Streetsville P. O. and Station, G. T. R. om**

Ridgdale Farm Holstein-Friesians for Sale.
3 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 Perry, G. T. R.; Myrtle, G. T. R. om**

AYRSHIRE CATTLE
SHROPSHIRE SHEEP
B. P. ROCK FOWL and 20 YOUNG LARGE ENGLISH BERKSHIRES FOR SALE.
J. YUILL & SONS, om Carleton Place, Ont.

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Swine, 7, Stock Marker and Calf Dehorner. Stops swine from rooting. Makes 60 different ear marks. Extracts Horns. Price \$1.50. Send \$1 for trial. If 15 suits, send balance. Pat'd May 4, 1902. Hog and Calf Holder only 75c. **FARMER BRIGHTON, FAIRFIELD, IOWA.**

A CARLOAD of young Dorset ewes, a few good Chester White hogs, and an eight-months old Shorthorn bull for sale reasonable. om
R. H. HARDING, Thorndale, Ont.

American Leicester Breeders' ASSOCIATION.

A. W. Smith, Pres., Maple Lodge, Ont.
Pedigrees now being received for Vol. 4. For information, blanks, etc., address:
A. J. TEMPLE, Sec., CAMERON, ILL., U. S. A.

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Imported and home-bred stock, prizewinners at all the leading fairs. **ELGIN F. PARK, om Box 21, Burgessville, Ontario, Canada.**

FOR SALE, AT MAPLE AVENUE STOCK FARM, CHOICE

Lincoln Sheep and Shorthorn Cattle
Bred from best English stock. Bred from Scotch bulls of fashionable families. CAN SUPPLY EITHER IN CARLOAD LOTS. Write us before buying elsewhere. Address:
F. H. NEIL, Proprietor, LUCAN, ONT., Box 35, Telegraph and Railway Station. om

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 McDOUGALL, om Tiverton, Ont.**

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.

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.

BERKSHIRES AND YORKSHIRES.
For Sale—Boars fit for service; sows in farrow and ready to breed, and younger stock, all of the ideal bacon type. Pairs not akin. **JOHN BOYES, Jr., Rossbank Farm, om Churchill, Ont.**

"BROAD LEA OXFORDS."
Am 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.**

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 silver medals for best Tamworth boar and best Tamworth sow, besides many other prizes in the various classes. Our present offerings are: A few choice young sows, 4 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 prizewinner, 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.

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
G. & J. CARRUTHERS, Cobourg, Ont.

FOR SALE: Yorkshires and Holsteins

Best type and quality. Young stock constantly on hand. Prices right. om
R. HONEY, Brinkley F. O., Instead of Warkworth.

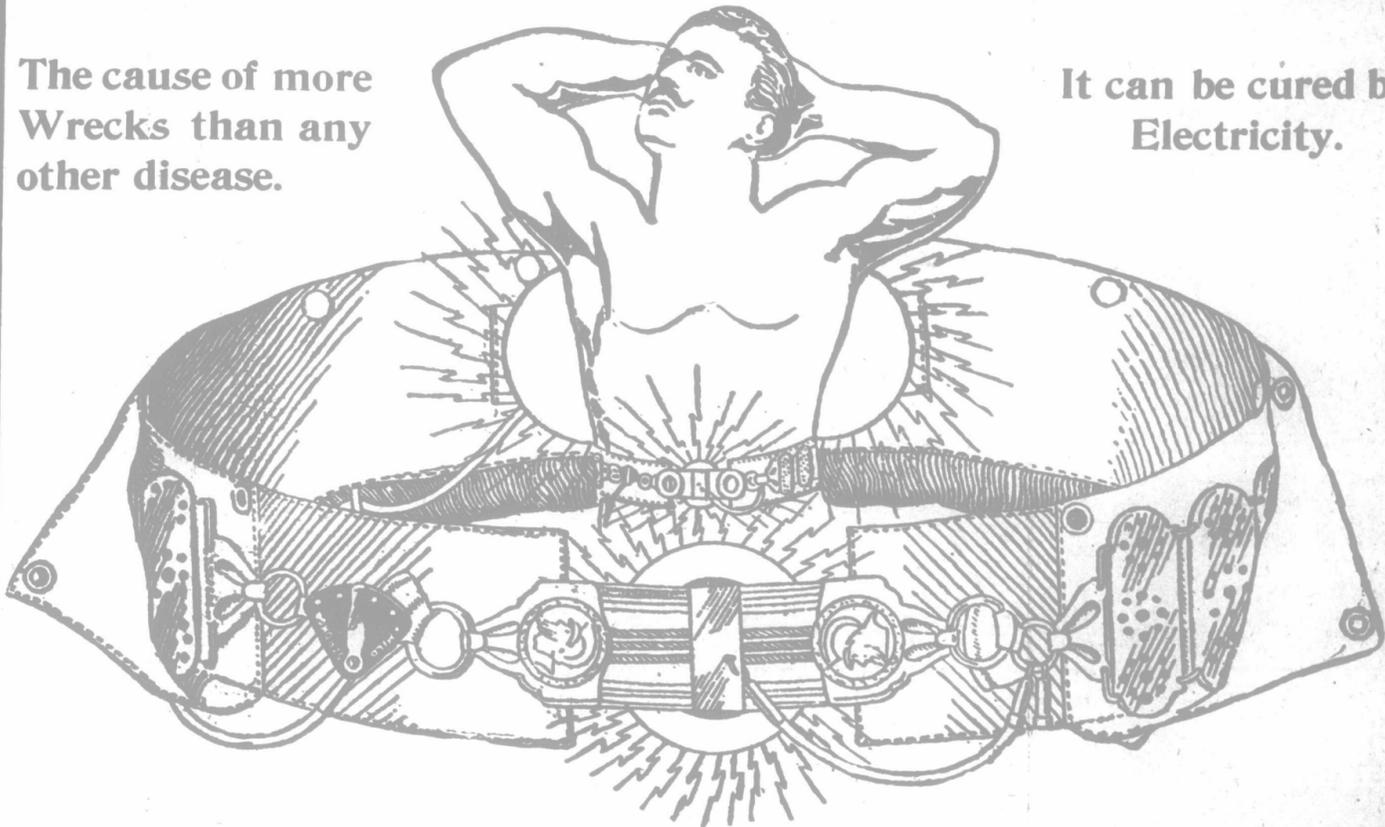
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Choice young stock for sale, from imported and home-bred stock of highest breeding and quality. Prices low. Satisfaction guaranteed. My motto: "Not how cheap, but how good." Telephone, Telegraph and Stations: C. P. R. and G. T. R., Weston, Ont. (electric cars from Toronto). Address: om
L. ROGERS, EMERY, ONT.

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 **C. 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 Falls!

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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And what people say of it:

"I used Appi-Tone Stock Food with my stallion this spring. I never saw him look so well."
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Ask your dealer to procure it for you.
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By Canadians and for Canadians.

NOT A CENT. OF CUSTOM DUTY TO PAY ON IT.

CARNEFAC has no known equal as a food for calves and young pigs, a tonic for weak or sickly animals, and a never-failing preparation in the proper fitting-out of exhibition stock. It enables animals to get full benefit from the food they consume, thus guaranteeing increased flesh and a glossy coat.
The experience and testimony of successful exhibitors at leading fairs in recent years amply confirm this statement, while the observation of experts attests that condition and quality of flesh and hair and handling counts for much in the show-ring. Dry hair and harsh handling has condemned many an otherwise promising candidate for first-class honors.

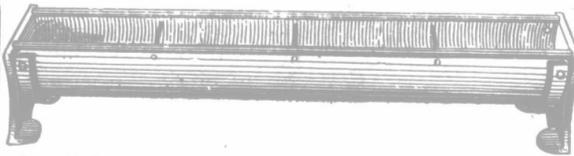
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softening the hair and imparting freshness and bloom. For particulars, write:

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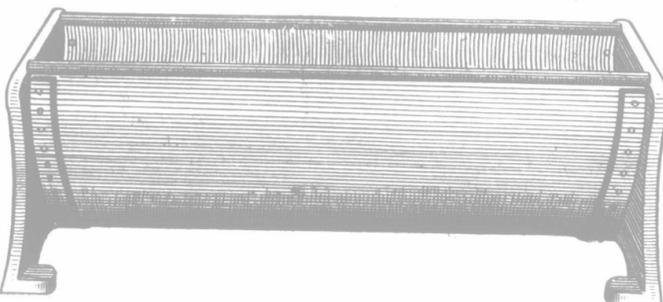
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Hog-proof
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I am placing on the market the Steel Hog Trough, made of 14-gauge sheet-steel boiler plate; a trough that it is impossible for the hogs to chew or destroy. Edges finished with 3/8 pipe, 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.

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Blacklegole Tapes,

As prepared by The STANTON HOLME CO., are the latest, safest and best preventive for Blackleg. They are the only guaranteed prevention known or yet offered to stockmen. Now is the time to commence inoculating, it being most convenient when branding.

When all other remedies have failed to check the death rate once the disease has broken out in a herd, and the Blacklegole Tapes have been used, all traces of the malady have at once disappeared, and in thousands of cases no single loss has been sustained, thus proving its efficiency. Each Tape is specially prepared, there being no trouble in regulating the dose, the accurate quantity of the preparation being on each when sent from the factory. One inoculation will stand good for 6 or 8 months, providing that the seton remains in position. The needle for fixing the Tapes, and full instructions, will be supplied with each order. Price, 50 cents. This preventive was discovered several years ago, and the discoverers have such confidence in their infallible preparation that they guarantee for 6 months every head of stock which is inoculated by a member of the firm personally, having already done so to their advantage in thousands of cases, not losing a single head.

Blacklegole Tapes will be supplied at the following rates: \$2.00 for 10, \$4.50 for 25, \$8.50 for 50, and \$16.00 for 100. Carriage paid to any part of America.

Application should be made direct to the Stanton Holme Co., as it is advisable that Tapes should be newly prepared, and no old package will be placed on the market. All orders will be sent direct or through your druggist. Cheques and money orders must accompany all applications for Tapes, and be made payable to the Stanton Holme Co. All orders promptly attended to. Address

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