

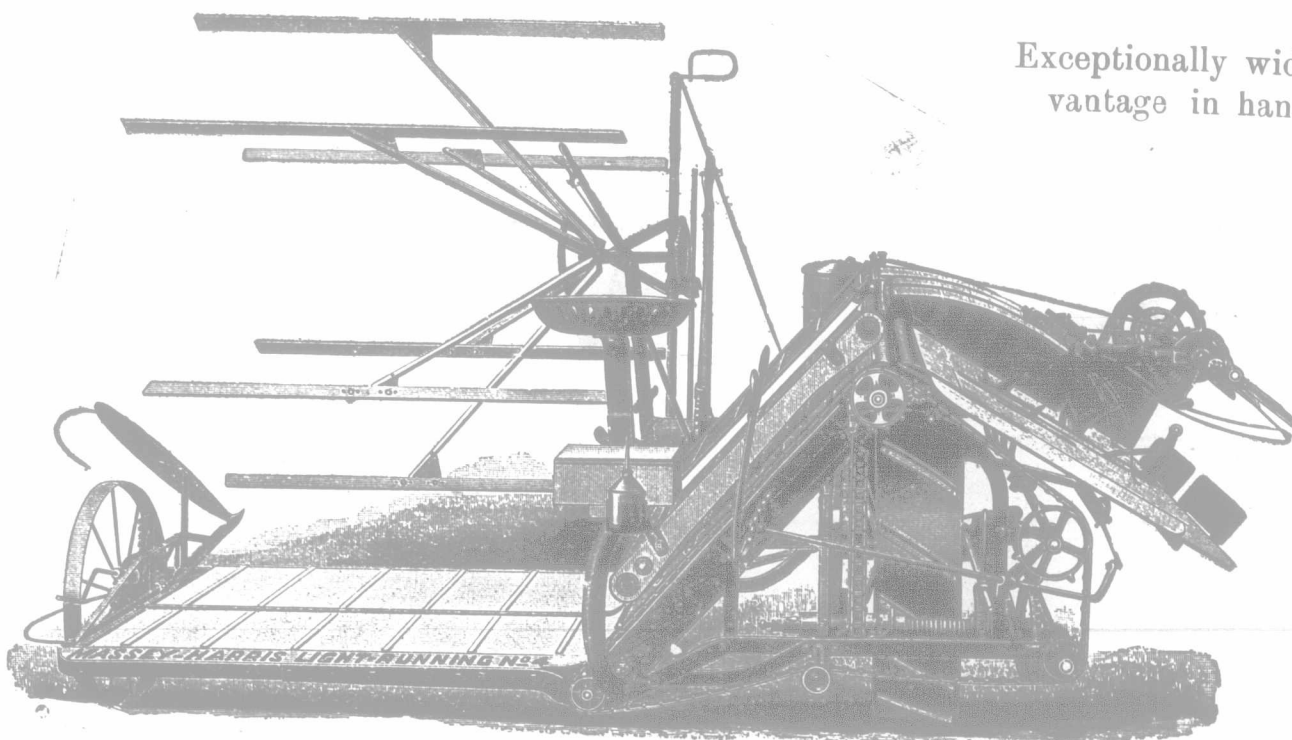
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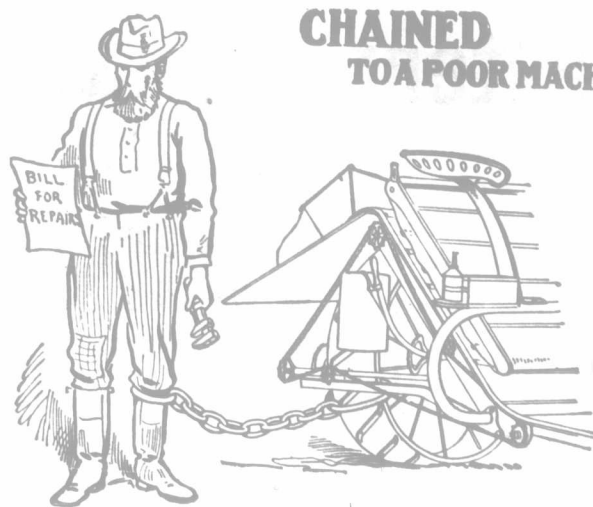
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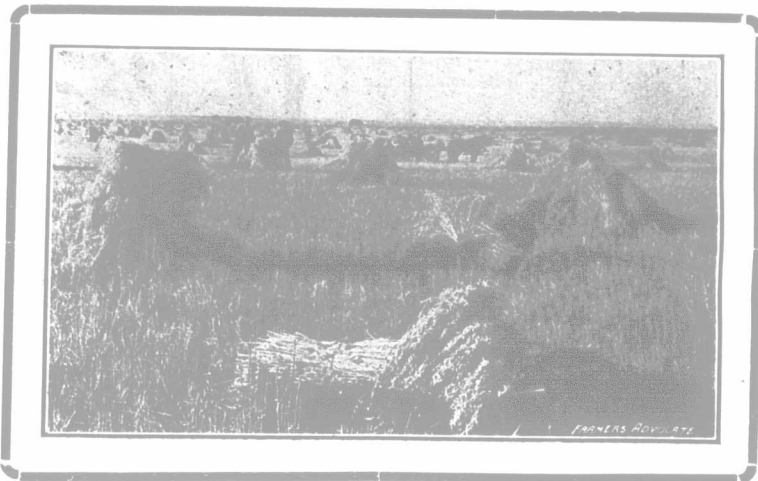
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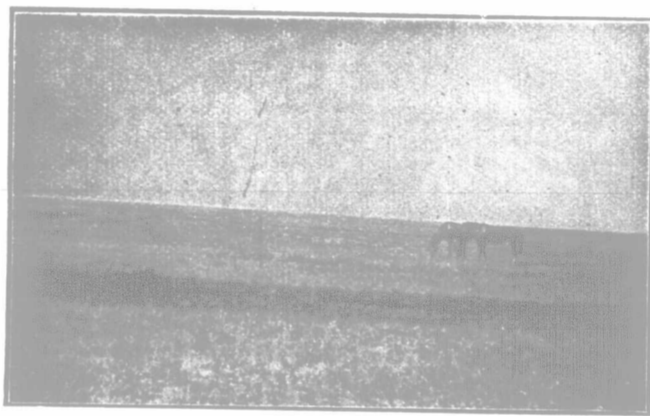
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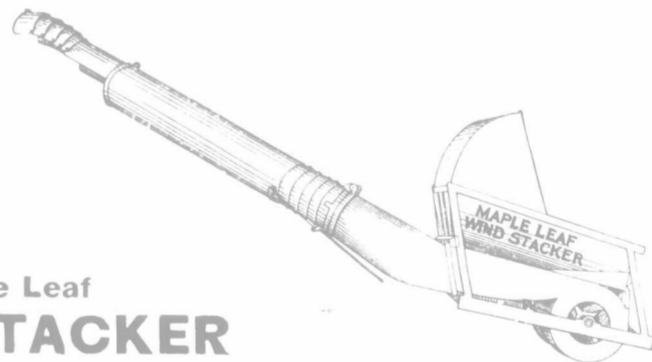
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FARMER'S ADVOCATE

AND HOME MAGAZINE

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

VOL. XL.

REGISTERED IN ACCORDANCE WITH THE COPYRIGHT ACT OF 1875.

NO. 665.

WINNIPEG, MAN. JUNE 21, 1905. LONDON, ONT.

Editorial.

Methods of Farming Revolutionizing.

The avidity with which farmers seized upon any idea that speakers at the farmers' institute campaign, just closed in Manitoba, advanced that even suggested a method of improvement upon present conditions, augurs well for the future of agriculture. The progress already made in the older-settled parts can hardly be realized unless seen. Higher land values and intimations of decreasing fertility have had the effect of stimulating an interest in newer systems, and, as a result, practices are now common which a few years ago were entirely scouted. For instance, large fields of tame hay are grown, summer-fallowing is being discontinued, the pursuit of the phantom of the general-purpose horse is being abandoned, and the recognized breeds and types are being adhered to. These advanced practices are spreading, and wherever they go their methods mean progress, as evidenced by clean fields, healthy crops, large yields, higher-priced stock, and all the general indications of prosperity about buildings and equipment.

The passing of the summer-fallow, and its substitution with grass crops, is one of the most significant changes. There the change is not general, but is bound to become more so. The advocates of the new system can demonstrate its advantages. It introduces the conditions of virgin fertility by adding vegetable matter to the soil, thus preventing drifting and the effects of excessive drought. It rids the land of weeds. It provides the stock with more and better feed, thus making possible the keeping of more stock on a given area. It insures a heavy crop, but not a too rank growth of straw, and it distributes the farm work more evenly. On the original prairie, it is estimated that from twenty to forty acres are required to keep one head of stock a year. With the use of brome grass, an acre of pasture has been known to sustain two steers during the whole summer.

Agriculture in the West, like every other successful enterprise in a new field, has partaken more of an extensive than of an intensive character, but in the very nature of things, the change which was inevitable is coming, and the fortunate man is the one who changes his methods with changing conditions of climate, fertility, markets, population, and every other condition or circumstance that affects values of farm produce.

The statement that grass cannot be grown in certain localities can no longer be taken seriously. In its natural state nearly every acre of the prairie produced grass, and cultivated varieties of sufficiently different characteristics are available, so that the failure to get a catch must be credited more to lack on the part of the farmer than to any peculiarity of soil or climate.

Probably the best evidence of the future success of agriculture is the interest that has been displayed in the study of animal form. Everywhere one goes there is the same earnest effort to become efficient, in the judging of horses particularly, and, in breeding, a decided discrimination against horses lacking in quality, off in type, under the size required in their class, faulty in action, or possessing any of the serious defects to which horseflesh is heir. Such an awakening has seldom been observed in the history of any country, and with the broadening mental scope which such study engenders, the prospects for raising exceptionally high-class stock are decidedly bright.

Seed selection is another subject that people show a keen interest in. The principles involved in this work and the possibilities arising from

a careful practice of them are so obvious that grain-growers at once make an effort to act upon the suggestions they receive. Tree-planting, dairying, soil cultivation, etc., are all subjects of which there is every evidence that people are anxious to learn, and such learning means greater success.

The Incoming Tide.

The great tide of immigration which has set in Canadawards of late years must be a source of genuine satisfaction to the majority of us. It promises much for the development of our country, and that there is boundless opportunity for development must be conceded even by those who would fain stem the tide. Millions of acres of rich virgin soil, countless areas of forest to be judiciously utilized, vast measures of coal, mines of gold, silver, copper and iron, as yet undreamed of—these are the assets which Canada holds for the coming legions and the coming race. And it is not a vain dream to look forward to the time when a vast people shall swarm from Labrador to the Pacific, and again north to the extremity of the great wheat belt and the remotest bounds of the timber line. To the romancer, the poet, the lover of stream, and wood and wild flower, the picture, in some aspects, is not a pleasant one. For these Canada must lose immeasurably. But to those who would see her develop into a great nation, the prospect is as satisfactory as it is certain of fulfilment. This is a commercial age, and in Canada, as in other progressive lands, chimneys must rear, whistles must blow, and the broad swards of crocus and flame-flower must give way to the upheaval of brown earth and the yellow glare of the wheat field. After all, to no small extent, commerce rules the world.

In connection with this influx there is an observation that may not be amiss. To a people in bulk it may not mean much; to the individual, immeasurably, and, when all is said, is not this a matter that counts? Is not the beat of a human heart worth more in the light of eternity than the boundless acres of an inanimate world? It concerns the reception which these incoming strangers meet at the hands of the Canadian people. Here they come—Scotch, Irish, English, German, Russian, French, Assyrian, and so on through the whole list—peoples as varied in character as in name, and occasionally as different, from the matter-of-fact, "to the manner born" Canadian, as may well be imagined. We look upon them curiously, and not seldom their little peculiarities strike us. They do not think as we do about a variety of matters; they have their own way of doing things, a way to us often clumsy and roundabout. Perhaps, too often we are inclined to be supercritical. We forget that in a foreign land we, too, should have our "peculiarities," and so we wrap ourselves up in a Pharisaic mantle as unlovable as all Pharisaism cannot but be. We do not give these people the warm heart grasp that our humanity should impel us to give. We are cold and standoffish; we know it and they know it. When they work for us we often get out of patience immediately, and instead of instructing gently and waiting a little, we are too much inclined to send the unintentional offender off about his business. His business? Alas, rather our business, for can we rid ourselves of the responsibility of being, each one of us, "his brother's keeper"?

Would it not be much more neighborly to consider these strangers who have come within our gates? Far from home they have come, and often the homesickness for the old faces and the "old familiar scenes" has its clutch upon the heart when the face tells it not. A strange land,

strange customs, strange faces, strange hearts, and more than likely a dearth of money when money too often means "friends," social recognition, comfort itself. Let us put ourselves in the place of such wanderers; imagine ourselves afar in a foreign land under just such conditions—longing for the old home, the neighbor plowing over the fence, the old beech at the gate, the lilacs up the lane, and the catbird gurgling its heart out among the apple blossoms. Let us see the cold faces, catch the half-hidden smile at our awkwardness, and know that nowhere is there the heart that will take us to itself. Let us realize all this and be kind. Let us not fail in the duty our humanity demands of us. Canada glories in her imperialism. May she also glory in a cosmopolitanism which will understand a whole world, and the human heart of a world which is, after all, in all lands, but one.

Farmers Retiring.

Throughout the country instances are not wanting of successful farmers who, having made a comfortable competence, either have retired to the neighboring towns, or are making arrangements to do so. Doubtless a respite from exacting work is well deserved by such men and their wives, and at first one and all are prepared to congratulate them on their prospects of comfort for years to come. But does retired life always afford the comfort and contentment expected? Alas, no. Men and women accustomed all their lives to steady work and life's responsibilities soon find a life of comparative indolence more or less of a burden, and, unless some useful work is secured to occupy their hands and minds, find themselves becoming physically weaker. The pity of the situation is that help cannot be secured to carry on the work of the farm so that the owner might continue in pursuit of the work he has all his life been engaged in, and might hand down to his own posterity as a family heritage the land upon which he has exerted his best efforts, and which in turn has sustained him and his through many years. There is something more than mere sentiment in the persistency with which such a practice is followed in older countries, but too great a lack of it in the easy manner in which Canadians part with the old homestead.

Fortunately, not all who leave their farms for the life in town sell out. Some are able to put good men in charge, so that should they desire they may return again to their old homes, and very often they do. Probably the most contented retired farmer, and the one who proves the greatest benefactor to his neighborhood and country is the man who, on retiring to town, applies himself to some branch of farming or gardening in his new surroundings. To a man who sets about the care of a large garden, testing and growing different varieties of fruits and vegetables, who experiments with clovers and grasses, growing seed acclimatized to his neighborhood, who grows small plots of grain from which to select the most prolific strains, or who in any other way leads the public mind to think upon and adopt improved methods, the approbation of the whole country is due. And there is an immense amount of work of this kind that should be done, the results of it to be brought out at the fairs; or, it may bear fruit more directly by the neighbors availing themselves at once of the experience gained by those who have conducted the work. In the new country, of all places under the sun, no man should think of ceasing from his work while strength lasts, and no one should rashly abandon work in which he has become proficient to engage in a business for which he may not prove adapted.

THE FARMER'S ADVOCATE AND HOME MAGAZINE.

THE LEADING AGRICULTURAL JOURNAL IN MANITOBA
AND N.-W. T.

PUBLISHED WEEKLY BY
THE WILLIAM WELD COMPANY (LIMITED).

WALTER E. GUNN, BUSINESS MANAGER.
A. G. HOPKINS, D. V. M., B. Agr., EDITOR.
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illustrated with original engravings, and furnishes the most
profitable, practical, reliable information for farmers, dairymen,
gardeners, and stockmen, of any publication in Western Canada.

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We are always pleased to receive practical articles. For such as
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Address—THE FARMER'S ADVOCATE, or
THE WILLIAM WELD COMPANY (LIMITED),
WINNIPEG, MANITOBA.

Horses.

Maladie-du-coit (Dourine).

(Continued.)

Tertiary or Nervous Stage.—General progressive
anæmia is now very rapid. The appetite
becomes capricious and the temperature slightly
raised. Co-ordinated locomotion is impossible,
and the animal is, in fact, hardly able to stand
without support. The symptoms of paraplegia
supervene.

The mucous membranes are of a pale rose
color; the urine is thick and passed with diffi-
culty. The animal becomes worse and worse,
with indolent abscesses on the sheath and scrotum.
It eventually dies if not mercifully killed.
Death may be more or less sudden during this
paralytic stage, and is due to syncope.

In mares the tertiary period is similar, but
de Blaise says that inability to walk is not so
pronounced as in horses.

The total duration of the disease is from 12
to 18 months. Nocard says one to two years,
but Buffard two to ten months. I think the
first is nearest to the mark, and the latter I
have not seen.

The parasites exist in the spinal fluid, and
they could no doubt be found here when not demon-
strable in the peripheral circulation, as
is the case in the trypanosomiasis, due to the
trypanosoma gambiense (human sleeping sick-
ness). This is a valuable means of diagnosis,
and it might be made so in the horse (Christy,
Liverpool Lectures).

The parasite is also found in the seminal
fluid, the vaginal discharges of the female, the
urethral discharges of the male, and the fluid ex-
tracted from oedematous swellings.

DIAGNOSIS.—The diagnosis of this disease
is extremely difficult in the early stages, as the
disease is very insidious in its onset. The im-
portance of an early diagnosis can be easily rec-
ognized, in view of the immense amount of harm
that a brood mare or stallion may occasion. In
neither are the symptoms at all noticeable in the
beginning. A mare may infect a stallion by one
act of coition, and he may infect a whole dis-

trict. It has been shown that the parasite may
live in the vaginal mucous membrane and dis-
charges of the female and the urethral and sem-
inal fluids of the male for an indefinite period.
The only really diagnostic test is the demon-
stration of the trypanosoma equiperdum.

In districts in which there is any history of
the disease, all cases which show the least sign
of irritation of the penis or vulva amongst stal-
lions or brood mares should be immediately ex-
amined by taking a scraping from the urethra or
vulva and submitting it to a microscopical exam-
ination. If freshly-contracted cases, the para-
site will, as a rule, be found, which will establish
a positive diagnosis. Though the result may at
first be negative, it cannot be accepted as such.
Further examinations must be made until such
period as the plaques should appear. If these
appear, then a positive diagnosis can be made;
if not, the case is not dourine.

In the ass there is more difficulty in diagnos-
is, the disease being considerably more chronic
at its onset and also in its course, so that there
is a greater danger in its not being recognized
in the earlier stages, which recognition is of so
much importance with a view to prophylaxis.
Pease says that it often happens in India that
the first notification one has of the jack being
affected is the fact that some of the mares which
he has served in the district in which he is used
for mule breeding begin to show signs of the
disease. There is, however, observable on first
examination, even in the early stage, the oedema-
tous condition of the extremity of the penis,
which is invariably present, and causes the folds
of the mucous membrane at the urethral orifice
to be obliterated, so that the urethra appears to
be turned inside out. Other symptoms are sim-
ilar to those in the horse, but there is not so much
tendency to ulceration of the external genitals.
The same authority says that paralysis sets in
comparatively early. As in the horse, a positive
diagnosis cannot be given unless the organism is
demonstrated.

MORTALITY AND LOSS.—Dourine is a most
fatal and incurable disease, except in the initial
stage. From statistics collected during various
outbreaks in Germany and Russia, the mortality
would appear to be at least 50 per cent. of
those attacked. In India I have never seen a
stallion recover that has passed the initial
stage.

Pease says that, of mares exposed to infection
in India, at least one-third, or possibly more,
become infected, and of these 70 to 80 per cent.
die. I have seen cases of recovery in stallions
which, at the first appearance of oedema and
genital lesions, I had promptly castrated; but in
some cases in which the operation was delayed
no recovery took place. I am not aware what
the beneficial effect of castration is, but it does,
in some cases, successfully check the disease.

If the disease has progressed to the second
stage such treatment will be of no avail. In
addition to castration, arsenic in full doses com-
bined with nux vomica, potassium iodide, and
general tonics, may be tried. The general health
is to be kept as perfect as possible, and occasion-
al salines ought to be exhibited. A liberal diet
and strictly hygienic conditions are important.
Local ulceration will yield to ordinary antiseptic
dressings. The chief effort, however, in connec-
tion with the disease should be directed to pre-
vention.

PROPHYLAXIS.—In Austria, where the dis-
ease has been existent for a long time, the fol-
lowing rules are adhered to, and I think they
sum up the necessary preventive measures. It
is understood that they apply to a country in
which the disease is prevalent:

(1) Even when there is nothing to lead to
the supposition that the disease exists, every
mare about to be put to the horse shall be carefully
inspected, and refused to old and weakly mares,
or to those which have a discharge from the
vulva, or have that organ enlarged or swollen,
or which do not present the ordinary manifesta-
tions of oestrus. It is also suggested that an
oedematous swelling, no matter where situated,
should negative covering.

(2) The stallion's penis to be carefully and
frequently examined, and on no account is the
animal to be used if there is the slightest lesion
upon it. He is to be kept secluded until all
doubt as to the nature of the lesion has passed
away.

(3) Give every information possible to breed-
ers as to character, etc., of the disease.

(4) Immediate information is to be given in
all cases of stallions in the least suspected, and
the necessary steps taken.

(5) To prevent extension, the sale of all
mares in the affected areas to be stopped during
the prevalence of the disease.

(6) If the malady has spread in a district,
all breeding stallions to be stopped employment,
whether Government or private property. Those
already diseased to be sequestered under police
supervision, whether private or Government prop-
erty.

(7) Affected animals to be separated from
healthy, to have their own attendants, and no
interchange of clothing, utensils, etc., to take

place. Those deemed curable to be treated;
those incurable to be destroyed.

(8) All horses attacked to be castrated, as
well as those which, notwithstanding their ap-
parent good health, have transmitted it to mares
they have served, and also those which have been
put to infected mares.

(9) Mares that have been in the least affected
and apparently cured not to be covered the fol-
lowing year, or until certified by a veterinary
surgeon as cured. It is even better to exclude
all such mares entirely, and brand them as hav-
ing had the disease.

The disease being conveyed solely by coitus,
it should not be a difficult matter to stamp it
out, especially in India, where all, or practically
all, the entire horses are Government property.
This can be effected by the employment of suffi-
cient veterinary surgeons to superintend the sys-
tematic examination of all stud horses and mares.
The only difficulty lies in the fact that many
stud horses are situated singly in isolated dis-
tricts, with no one having any expert knowledge
in charge except a native groom. They can only
be visited very occasionally by the veterinary
officer, and mares that are brought to the horse
to be covered would not be detected by the groom
as in any way diseased, unless they were very
bad. The difficulty, however, could be over-
come by concentrating horses in bigger depots,
with an expert subordinate in charge, and by
segregating infected districts and withdrawing
isolated stallions from such districts.

Special care is required in the periodic ex-
amination of jack donkeys used for mule breed-
ing.

The Colt Crop.

Everything indicates that the number of foals
being raised this year is the largest in the his-
tory of Western agriculture. Everywhere one
goes, from the Red River to the foothills, it is
the same; few foals dying, and a large number
coming healthy and strong. On nearly every
farm in the grain-growing districts from
one to six young colts are frisking about, and
on the ranges they are to be seen in hundreds.
This is only what was to be expected with the
high prices prevailing for horses and the excep-
tionally mild winter just passed, during which
the mares spent a good deal of their time in the
open.

Encouraged by the good results this year,
farmers are breeding all their available mares
again, and, as a consequence, many stallions
that are no credit to the country are being
pressed into service. This is no time for alarm-
ist talking, but a note of warning might be
sounded against an indiscriminate use of un-
sound and worthless sires. Large supplies of
horses will, of course, be necessary to meet the
market's demands, but it would be infinitely bet-
ter to raise fewer colts from many of the non-
descript and unsound horses that are standing
for service this spring. Raise horses, but do
not lower the average quality, for in the end the
inferior stock, while it may be able to do rough
work, will also tend to bring down prices.

Trotters with Style.

A writer in the Horse World says:

Never since the boom days in the breeding
industry, when the late Governor Stanford sold
Arion (2.07½) to Mr. J. Malcolm Forbes for
\$125,000, and when the famous three-year-old
champion Axtell (2.12) was purchased by a syndi-
cate, headed by Mr. W. J. Iams, of Terre Haute,
Ind., for \$105,000, has there been as strong and
healthy demand for high-class horses as at pres-
ent. This demand, however, is by no means
limited to America, as European buyers are
amongst the strongest competitors at all public
vendues. Since the early part of the summer of
1904, the representatives of the European Gov-
ernment studs, as well as private breeders of
Austria, Sweden and Germany in particular,
have scoured the country for stock horses as well
as brood mares, possessing the size, substance,
soundness and finish, combined with that fash-
ionable breeding which has made the American
trotter famous throughout the world. Aside from
the direct financial gain to American breeders,
the exacting demands of foreign officials as to
soundness, size and substance has had a most
beneficial influence upon the breeding of the
American trotter in this country. It has
brought the fact that it does not pay to breed
undersized, badly-shaped, poorly-gaited material
most forcibly to the attention of the breeders
who may have heretofore sacrificed everything in
breeding for extreme speed, no matter in what
size, shape, appearance or style it presented it-
self.

It has long been a demonstrated fact that in
any field whatever the public demands the pro-
ducer will provide. There was a time when the
demand in the light-harness market was for
speed, regardless of anything else excepting the
necessary soundness to make that speed service-
able. Gradually conditions changed, and speed

Stock.

Form in the Show-yard.

became more valuable when it was found in combination with fair size, good looks and pleasing action. It has been some time since these conditions became noticeable, and that the breeders have heeded them is evident to all who have given the matter any attention. Speed will, as in the old days, sell if it is unaccompanied by the other qualities and is on the extreme order, but it will sell for much more if it has those qualities. The average breeder of light-harness horses is no fool; he is breeding to make money, and no sooner did he find that the public wanted size, good looks and good action in combination with speed than he set about to fill the demand, and no one who is unprejudiced and who is cognizant of the facts will deny that he is succeeding in a remarkable degree in doing so.

The Runabout Horse.

When the high actor, Newsboy, was placed first in the runabout class at the Brooklyn show, there was a great deal of discussion over the question of: "Is a high actor a suitable horse for a runabout?"

Speaking ex-parte, we would say that, all other things being equal, the high-stepper should not be given precedence to a horse of lower action but of equal speed, conformation and manners in a runabout class. The greatest objection to a high goer in a runabout is that he is liable to cast road material into the vehicle, especially if the road is muddy. This is a strong point against the high-stepper as a runabout horse.

Then speed is a desideratum to the type. Speed and high acting are not always found in the same horse.

As a rule, the high actors present the best runabout conformation, as we have seen it. Still, it seems that to date we have been rather given to imagine that the gig horse is also the best type of runabout animal. Patient and prolonged cogitation leads us to the conclusion that we have been worshipping false gods in the runabout classes, and that instead of the chunky, heavily-conformed type which we have been calling runabout horses, when they are really more of the light brougham or gig type, the true runabout type should lean to that of the light roadster, with passable action, slighter conformation and a high turn of speed.

The objections made to the high goer in a runabout seem to be well taken. Judges and exhibitors will do well to take them into mature consideration.—[Horse-show Monthly.

General-purpose and Agricultural Horses.

A Manitoba reader asks what we consider the general-purpose and what the agricultural type of horse, and if these two types are identical? In answer, we reply that in our estimation, and we believe our judgment is vindicated by the best authorities, the general-purpose and the agricultural horse are two very distinct types, although there is a line of distinction to which both may approach, and consequently some individuals in each class may resemble each other quite closely. The draft horse is generally accepted to be a horse weighing over 1,600 pounds, and, of course, the more quality and substance he has, the more valuable he is. The agricultural horse is one very much resembling the drafter in type, but somewhat lighter in weight. In other words, he is a light-weight drafter, and being somewhat lighter in weight than the heavy draft, may also be less uniform in quality of bone, less drafty about the legs, and less massive in the body. His particular use is to draw farm implements—work less heavy than that required of the heavy drafter—and because it is done on softer footing, he does not require to have so much length and obliquity of pastern. We would not put any limitations to his weight, but would judge whether or not a horse belonged more properly in this or the general-purpose class solely on his type and action.

The general-purpose horse, as the name implies, is a horse required to do various classes of work, and consequently must be somewhat different in type to the agricultural horse. He is wanted to move fair-sized loads, do farm work, and to go on the road with a certain amount of ease. Of course, the agricultural horse is used for this work, but he does not handle a buggy with ease to himself nor any degree of style. The general-purpose type of horse is called in some markets an expresser or vanner, and his type may vary in degree from a heavy carriage horse type to light-draft type, but should never have so much draft blood that road work is oppressive to him. There are no recognized breeds of horses of the type and the required weight or substance of the general-purpose. The coach breeds are too fine and flashy in their action, although many good general-purpose horses have Coach stallions for sires, and the Suffolk, Percheron and light-weight Clydesdale are too drafty to impart easy action to a horse that is required to do much road work. The three breeds just enumerated are most generally the stock from which agricultural horses are got.

Show-yard form is a source of unexampled perplexity to the expert as well as to the tyro. The vagaries of show-yard judging are not all explicable by that indefinable word "form," but for the most part we may take it as an axiom that condition and appearance are the two most elusive things which the exhibitor and judge have to deal with. We know, for instance, that in the realm of sport, victory depends, not so much upon how the man or the animal is capable of acquitting himself at his or its best, but how they will disport themselves on the day of contest. So it is in the show-ring. One week we find a comparatively easy victory converted into a seemingly inexplicable defeat in the week following, and the reason generally adduced is summed up in the phrase "lack of form." We have already hinted that all inconsistencies of judging are not excusable on this basis. There are judges and judges—some have the intuitive faculty of spotting likely winners, while others have very shadowy qualifications in that they are extremely erratic. This to some extent explains what is termed the luck of the show-ring. In these days, when single judging is coming more into fashion, it is eminently desirable that strong men only should be chosen. Not infrequently it happens that the vexed question of type creates a distinct breach between exhibitors and a judge. It would be extremely regrettable were these predilections for type not occasionally manifested. It is the only safeguard we have against faddism in breeding, invariably affording the necessary corrective to the introduction of fancy points which will not stand the test of utility. We have at different times witnessed extreme aberrance of judgment, for which it is difficult to find any reasonable ex-

given for the seemingly perplexing variations exhibited in the show-ring into a catalogue of ingenious excuses, but in the main they are comprised in the following:

- (1) Variation in form, which includes condition.
- (2) Judicial predilection for a particular type.
- (3) Good or indifferent showing.
- (4) Indifferent skill in judging.—[Farmer and Stock-breeder (British).

Preventing Disease and Lice.

According to nature's arrangement, sunlight and fresh air are among the most potent agencies for the destruction of disease-producing organisms. Rooms and stables having plenty of light and fresh air are always the most healthful; conversely, the dark, damp rooms are always the abodes of disease. The facts have an important bearing upon the management of stables. The light in the stable should be, first, as abundant as possible; then should be intensified still further by the use of whitewash on the walls and ceilings. With stables where valuable horses and cattle are kept, it is of infinitely more importance to have the interior whitewashed than to have the walls frost-proof.

Besides intensifying the light in the stables, whitewash has the further advantage of being a direct disinfectant, and, while all stables should have a coat of it, those in which the horses have suffered from distemper, mange, lice, and many other of the common complaints, or those in which cattle having lice, mange, or contagious abortion, or suspected of having tuberculosis, should by all means receive one or two annual applications of the lime wash. Germs of diseases and vermin remain lodged about the dust, cobwebs and cracks of stables during summer, and to put stock back into their stalls in the fall is

simply to lock them up in a bed of infection, and court the diseases and pests mentioned above. Therefore, let every farmer take a broom and sweep down the ceilings and walls of his stables, and apply with a spray-pump or brush a wash made as follows: Half bushel of fresh lime, slacked and made into a liquid; strain through a fine sieve, add a peck of dissolved salt, three pounds of ground rice boiled to a paste, and stir in boiling hot; add half pound Spanish whiting and a pound of glue previously dissolved over a slow fire; then add five gallons of hot water to the mixture, stir well, and let stand for a few days; make the proper consistency, boil, and apply hot for best results.

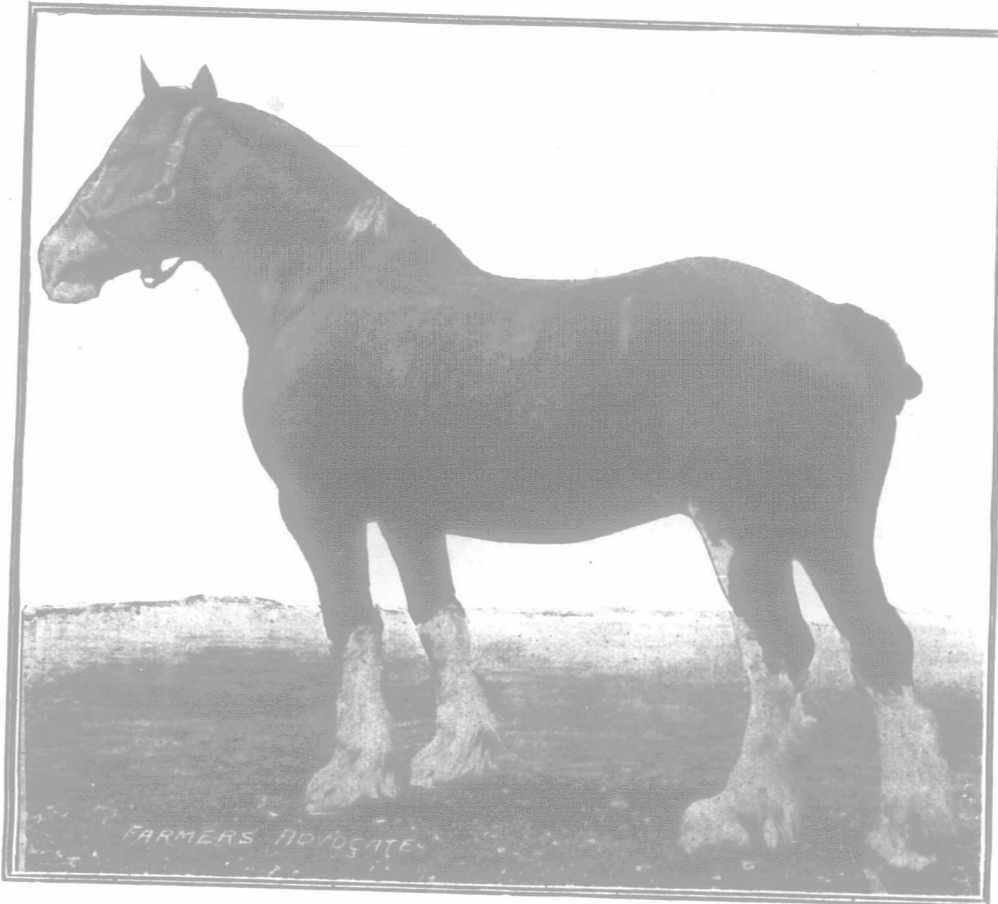
Whitewashing is not only a precaution against disease and lice, but it also adds much to the appearance of the stables. Has anyone ever remarked the incongruity of a well-painted barn on the outside, while it makes a fine appearance, with the dust-laden, dark and dingy interior of the stables below. The thorough man goes into every detail. The interior of his stables is as neat as the exterior, and we cannot too strongly urge all our readers to emulate him in this respect.

Dipping in Dakota.

The South Dakota Live-stock Commission has ordered all cattle within eighteen counties to be dipped twice this season within fourteen days, the second operation to be at least eight days after the first. The order is compulsory, and every attempt is being made to prevent owners cutting out parts of their herds, as was done last year, with the result that enough infected cattle went undipped to spread the disease again after the dipping.

We Can Sell that Farm for You.

A SMALL ADVERTISEMENT IN OUR "WANT AND FOR-SALE" COLUMN WILL DO THE TRICK. ADDRESS: THE FARMER'S ADVOCATE AND HOME MAGAZINE, WINNIPEG, MAN.



Champion Clydesdale Mare Used in the Judging School at Regina in April. The property of A. & G. Mutch, Lumsden, Assa.

case, but these cases are very exceptional, and invariably result in careful avoidance of that judge in future. It is necessary to remember that the judge has many things to bear in mind which the exhibitor all too readily forgets. It is not sufficient to point to a long list of victories, however convincing these may prove to the exhibitor. The question of form, which is almost as fatal as that of type, the conditions under which a judge acts, the manner in which an animal is brought out, and finally the exhibitor's art in showing, all tend to influence the result; and even the ring-sider, with opportunities of comparing notes, not to mention the various influences at work which sometimes are reflected in public opinion, is not always in the strongest position to condemn, however much he may utilize his undoubted opportunities.

These remarks are called forth, not by the accident of a particular case, but as a prelude to the summer show season. The peculiarities of form, added to the differentially critical character of the judicial functions, must inevitably produce many ups and downs in the career of an animal. The art of judging is not so easy to master as many assume it to be. A noted judge once remarked to us that "the difficulty of judging was that you could get so many different views of an animal," a truism which admits of no controversy, and yet it is this potent fact which robs judging of some of its most trying features. It is the sum and substance of the points of an animal which carry the day, not one singular aspect. We might collate the reasons

Selling Stock by Correspondence.

In a country of such magnificent distances as we can boast of, the expense incident to a personal visit for the selection of pure-bred stock, in many instances, hinders improvement indefinitely, unless farmers, having confidence in the honesty and integrity of breeders, take the risk of ordering stock by correspondence. As a matter of fact, a very large amount of business has been and is being done in the purchase and sale of pure-bred stock in this way, and, so far as we are aware, generally with fair satisfaction to the buyers. With few exceptions, the men who are breeding and who advertise such stock for sale are, we believe, honest and reliable, though there may be some who are not as good judges as they think good, but which a better judge would consider undesirable. To neglect to promptly acknowledge the receipt of money, or to continue to fill orders when the stock has been culled so that those remaining are not nearly up to the standard of the best the breeder has been sending out or to the description given the purchaser, is inexcusable, and is a mistake that no breeder who values his reputation as he ought can afford to make, and will not make if he puts a proper estimate on the golden rule of treating others as he would like to be treated under similar circumstances. If a breeder has been so fortunate as to receive more orders than he can fill with reasonably good stock, or such as compares fairly well with the description, common honesty and fair dealing requires that he acknowledge his inability to fill the bill creditably, and that he return the money with this explanation. The man who fails or refuses to do this or make a satisfactory compromise or settlement, deserves to be compelled to do so by legal process, or to be publicly exposed as unreliable and unjust. We firmly believe that, as a rule, breeders are more careful to do the fair thing when entrusted with an order by correspondence from a buyer who has not seen the stock than in the case of one who makes his selection in person, as then the buyer is his own judge and himself assumes the responsibility for his choice, and as the breeder is likely to be a better judge than the average buyer, the latter often fares better by purchasing by letter than he would were he to make his selection personally, to say nothing of the great saving in the matter of expense in travelling and time. At the same time, we would advise, when it is practicable, or the travelling expense not too great, that purchases be made in person.

While writing upon this subject, it may be opportune to impress upon breeders who sell by correspondence the importance of extreme care in shipping that the buyer receive timely notice of the day, and, if possible, the train on which the animals will be shipped, so that he may not make unnecessary trips to the station, or the stock lie there a day or more before being called for. Special care should be taken that the stock before being shipped is well cleaned of vermin, and is comfortably bedded and supplied with plenty of light food with which it cannot injure itself by overeating. Animals going a long distance should be provided with a water barrel, and a bucket should be included in the outfit, and in the case of cattle shipped in winter, they should be blanketed. In shipping sheep or pigs in crates, good taste and good business tact would suggest the making of neat, light, yet sufficiently roomy crates, with the address of the buyer plainly appearing, as well as the business card of the breeder, being attached, which serves as a travelling advertisement and an evidence that he takes a proper pride in his business, and is not ashamed of the stock he sends out. First impressions count for a good deal on the receipt of an animal, and if it arrives in a rickety old crate, in which it has been cramped and crippled, or the wool or hair is rubbed off in places and lice are seen crawling on it, the buyer is apt to be disappointed and to conclude that the shipper is a careless and indifferent breeder, hardly worthy of the name, and the latter need not wonder if he receives a letter expressing disappointment or dissatisfaction, although the animal, when cleaned, rested and recovered from the effects of the slovenly shipping, may later prove entirely satisfactory. On the other hand, the buyer should not be too hasty in condemning stock on arrival after a tiresome journey under uncomfortable conditions. Allowance should be made for the circumstances, and judgment suspended until the animal is rested, filled, and fully recovered from the effects of the shipping, when, if he is nearly right, he may grow on his new owner, and disappointment may give way to entire satisfaction.

Age Improves It.

Dear Sirs,—Your paper reaches me every week, and is much appreciated. It has come to my father's home for fifteen or twenty years, in Ontario, and, like wine, improves with age.

Content. W. A. FRASER.

Co-operation for the Beef Industry.

There is something wrong in the beef cattle trade. Every breeder and every feeder complains of it, though few have suggested a remedy. In Great Britain beef prices are high and fairly steady. In the Canadian and U. S. markets dressed beef brings prices much higher than seems demanded by the prices paid to the farmers on either side of the line. The Beef Trust accounts for the pernicious conditions existing in the United States. Have we not a beef trust in Canada, or some such unfair arrangement? Why, then, is the business of feeding beef so speculative? Why do so many complain of having lost money in it? Why are farmers so slow to improve their beef stock by breeding, and so poorly repaid for doing so? Why are so many unfinished animals thrown on the market at times? The answer to all these questions is, the system—or lack of system—of selling is at fault. Let us analyze the situation. The following individuals are engaged in the beef trade: The producers who breed, raise and finish beef; the farmers who raise stores only; the farmers who finish purchased stores; the buyers who buy and sell finished cattle at home and abroad; the men who slaughter them; and the retailers. The following are reasonable factors in the price of beef as retailed:

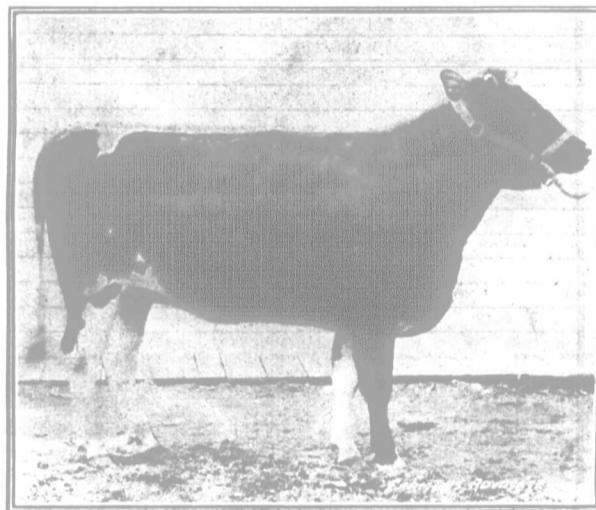
(1) Cost of production—breeding, care and feeding till finished, but not beyond finishing.

(2) Cost of sale and transportation—reasonable expenses only.

(3) Cost of slaughter and cold or other storage.

(4) Cost of retailing.

Add to this total a fair profit to each person engaged in the process, and you have the price of beef under ordinary circumstances. But the farmer complains sometimes that he sells at a loss instead of a profit, whereas the consumers' price is always high enough to have paid the fair profit allowed. Therefore, if expenses between producer and consumer have not increased, some person on the chain has absorbed the farmers' profits in such cases. Seeing that the farmer has done more than anyone else to give value



Champion Shorthorn Heifer.

In the herd of Geo. Kinnoa, Cottonwood, Assa.

to the retailed product, he is the one who should be sure of his returns, if at all possible. It is clear that two conditions exist that are against the interests of the farmer; one, a generally and permanently small payment to the farmers out of the consumers' price; the other, frequent fluctuations in the price, on every drop of which, it is safe to say, many farmers lose money. Both of these conditions are wrong. If any business should be absolutely safe and unspeculative, it is the business of producing such a staple food as beef.

A low price at the farm and a high price at the butchers' may be explained in two ways: First, an abnormally great expense of transportation, etc.; second, abnormally great profits absorbed by some of the middlemen between producer and consumer. In the home trade the second is the cause of the conditions complained of. In the export trade both are to blame. In both cases co-operative selling by the farmers would at once remedy both conditions, and pay the farmers the difference as profits.

A sudden depression in the market, and low prices paid to farmers is due simply to the fact that too many cattle have been sold at once. It must be remembered that the consumers' demand for beef is fairly steady from year to year and from month to month, and that the breeding and maturing of the beef supply is quite as steady. As fluctuations are very common, particularly at certain seasons of the year, something is needed to prevent them if possible. Organizing and co-operative sale is the only preventive, by central regulation, in accordance with a knowledge of the market demand and rules as to maturing and finishing of animals.

So much for conditions as they now exist. But the problem of the beef trade has not yet been fully stated. We have heard much of the cattle embargo, and something of an expert dead meat trade. Only those who, like the writer, have followed every stage of the journey of export cattle can realize the wastefulness of values under the present system of marketing in Britain. Deterioration of quality, and, therefore, of value, is inevitable in a railroad and steamer journey of two weeks

or longer, and there is no chance of recovery when the animals must be slaughtered so soon after landing. As the most perfectly-finished animals suffer the greatest deterioration, and as unfinished animals always bring an inferior price, our beef never brings a good price on the British market. Moreover, the necessity of killing and marketing at once, whatever be the going prices, makes the business speculative in the extreme, and the farmers are always the losers. From the prices received must be deducted large freight rates, insurance, costs of feed, handling, etc. The farmer at best can receive but a small fraction of the value of his animals.

For this wasteful condition of affairs a dead-meat trade is the only possible relief. With abattoirs at the stock-yards at, say, Winnipeg, Toronto, Montreal and St. John's, and cold-storage warehouses at home and in Britain for distribution of products, the risks of the cattle trade would be eliminated, the money now wasted would be turned to profits, and the farmers could safely increase and improve their herds. The by-products, that we now freight expensively to England only to throw away, would be kept in the country, and their manufacture and sale would pay a handsome profit on the whole enterprise. Thus we would not only eliminate the present waste and get higher prices for what we produce, but would develop the beef industry immensely. It has been hoped that capitalists would establish such abattoirs and other facilities of a dead-meat trade. If they should do so, it would, undoubtedly, benefit the farmers enormously, so long as they did not unite to monopolize the trade. But while private enterprise is waiting the producers are losing money, and, in any case, if capital is needed, why should not the farmers put it into what is peculiarly and vitally their own business? If a dead-meat trade would be profitable to the farmers, why should they pay profits to private enterprise? Since the abattoirs and warehouses are to be built, it would seem advisable that the producers, first organized as beef-selling co-operative associations and federated, should themselves build and operate them.

Let all farmers who want improved conditions and increased profits organize district associations, "for the sale of beef cattle and their products, on the hoof, or manufactured by the association, etc." Then let such district associations federate into provincial and national associations. The local associations could effect economies in sales for members from the moment of organization. When powerful enough by federation they could undertake the manufacture of dressed beef, etc. There is no reason why such an organization should fail, provided the following essentials are observed in organizing:

(1) Payment of all profits on ledger accounts and not on shares.

(2) Compulsory sale of all members' animals (with certain reasonable exceptions) through the association, to prevent desertion of members and consequent failure.

(3) Rules providing for proper finishing of animals.

Such an organization could not fail. It would pay profits from the beginning, on the simplest operations. And the federated associations could undertake construction and operation of abattoirs, etc., without any alteration of or addition to the charters of the associations whatever. It is earnestly to be hoped, in the interests of the beef-raisers, that they will do something in this direction.

AUSTIN L. MCCREDIE.

They Must Have Our Cattle.

Things have been again moving in regard to the embargo. On Thursday, May 17th, in London, England, a deputation, consisting of Canadian, Scotch and English representatives, wended their way to Whitehall, and interviewed Mr. Fellowes, President of the Board of Agriculture, in regard to having the incus removed. There existed no reason, so it was explained, why the embargo should remain, inasmuch as there is no contagious disease among Canadian herds; nor no sense, inasmuch as hides, which are infinitely more likely to carry in disease than live animals, are permitted to enter. It was pointed out by Mr. William Henderson, of Lawton, Coupar-Angus, that the only reason for maintaining the policy of 1896 is protection—"and protection of the most absurd kind, because it is an exclusion of the raw material, while there is an absolutely free importation of the finished article in tins, or chilled. The loss to farmers in Britain is, accordingly, a most serious matter." He estimated that from 1897 to 1902 they had failed to earn a sum exceeding £5,000,000—a sum which they would have earned if they had been permitted to purchase Canadian cattle and fatten them on their own farms.

[Note.—If the fattening of Canadian store cattle would have been such a good thing for the Old Countrymen, one would naturally think it might not be a bad thing for Canadians to do more of it.—Ed.]

Mr. J. B. Simpson, of Moose Jaw, N.-W. T., spoke strongly in favor of the removal of the embargo, a step which would, he contended, help most materially in establishing friendly relations between the West and Great Britain. He also stated that the Northwest farmers and ranchers had tried to feed and ship cattle direct to the British market, but found themselves crippled by the Eastern combines, who had secured the freight space at special rates, and, indeed, controlled the whole trade, so that the ranchers found themselves compelled to desist. The present policy

filled the pockets of the combine, and robbed the poor ranchers.

After other speakers had expressed their views, the President gave his reply, which was by no means in favor of the petition. So long as he held his position, he stated, he could give no hope that the restrictions would be removed. He was aware that there is at present no proof of disease in Canada, but he was not convinced that in so large a territory there might not be risk of it.

Undismayed, however, the deputation afterward met at the Westminster Palace Hotel, in a conference at which many members of Parliament were present. On the motion of the Earl of Aberdeen, Baillie Watson was called to the chair, and announced that, since the reply of the President of the Board of Agriculture had been unsatisfactory, the present conference had been called for the purpose of making an appeal to Parliament. Subsequently the following resolutions were adopted:

1. "That this conference, having regard to the admitted fact that the herds of Canada are the healthiest in the world, and free of contagious disease, is of opinion that the Diseases of Animals Act of 1896 should be so amended as to give power to the Board of Agriculture to permit of the entry into Great Britain of cattle and sheep without their being required to be slaughtered at the port of landing, and resolves that all necessary steps be taken to promote and attain this object."

2. "That this conference is of opinion that the laws regulating the importation and exportation of live animals to and from Great Britain, tend to cause and perpetuate disease and degeneracy in our herds; in respect that they prevent the introduction of fresh blood to our herds, while, at the same time, they permit the exportation of sound breeding animals and the retention for breeding purposes in this country of the weaklings and of the unsound cattle rejected by foreign buyers."

3. "That this conference is of opinion that the operation of the law requiring the slaughter of cattle at the ports of disembarkation in Great Britain is a grave injustice to our colonial interests, highly injurious to consumers, and disastrous to all branches of the agricultural interests."

In order to carry into effect the objects of the conference, it was decided to form a United Kingdom Association.

The conference then ended.

To Prevent Horns Growing.

A simple method to prevent the growth of horns in calves, which is practiced to some extent by stock-keepers in this country, is also being followed abroad. The English board of agriculture gives the following directions for the use of caustic potash: Clip the hair from the top of the horn when the calf is from two to five days old. Slightly moisten the end of a stick of caustic potash with water, or moisten the top of the horn bud, and rub the tip of each horn firmly with the potash for about a quarter of a minute, or until a slight impression has been made on the center of the horn. The horns should be treated in this way from two to four times, at intervals of five minutes. If, during the interval of five minutes, after one or more applications, a little blood appears in the center of the horn, it will then only be necessary to give another very slight rubbing with the potash.

The following directions should be carefully observed: The operation is best performed when the calf is under five days old, and should not be attempted after the ninth day. Caustic potash can be obtained from any druggist in the form of a white stick. When not in use it should be kept in a stoppered glass bottle in a dry place, as it rapidly deteriorates when exposed to the air. One man should hold the calf while an assistant uses the caustic.

Roll a piece of tinfoil or brown paper around the end of the stick of potash, which is held by the fingers so as not to injure the hand of the operator. Do not moisten the stick too much, or the caustic may spread to the skin around the horn and destroy the flesh. For the same reason keep the calf from getting wet for some days after the operation. Be careful to rub on the center of the horn and not around the side of it. Caustic potash is poisonous, and must therefore be kept in a safe place.

Aids in Raising Colts.

I wish to let you and the many people know that your paper is quite welcome in our home. I can say it is the best paper I have ever seen. People who read this paper and are not subscribers, should not lose any time in subscribing. I have taken your paper three years, and learn something from every issue. One lesson I got this spring, from your May 3rd number, about taking care of spring colts. I think was worth more than your paper costs for twenty years.

R. D. CLAYTON.

Saskatoon.

Fall Fair Judging Competition.

(Ottawa correspondence.)

A great deal of interest is being taken in the livestock judging competitions for farmers sons to be held at a number of the county exhibitions in the Ottawa Valley this fall. Mr. J. H. Grisdale, Agriculturist at the Central Experimental Farm, has drawn up the following rules to govern the competitions:

1. Competitors must be under 25 years of age; they must be farmers or sons of farmers, living in the county in which competition is held.

2. Anyone who has spent more than six months at an agricultural college shall not be eligible.

3. Competitors will be expected to judge classes of heavy horses, beef cattle, dairy cattle and bacon pigs.

4. In summing up, the following values will be assigned the respective classes:

Heavy Horses	100 points.
Beef Cattle	100 "
Dairy Cattle	200 "
Bacon Pigs	100 "

5. Competitors will be expected to place three animals in each class, and give reasons for placing the one they place first ahead of the ones they place second

Farm.

Wheat-growers' Problems.

Extracts from an address by Prof. Snider, of Minnesota, before a convention of Millers in Massachusetts:

It has been said that if wheat were not seeded and garnered by man, in a short time it would become extinct. Be this as it may, it is well known that wheat deteriorates when grown under adverse conditions. How can the quality and yield of wheat be prevented from deteriorating? This is a problem which confronts both the farmer and the miller.

There are a number of factors which influence the quality and yield of wheat, but among those under control of the cultivator, seed and soil exert, perhaps, the greatest influence, and in the short paper I present to you I will briefly state what can reasonably be expected from these two factors in the way of improving our wheat crop.

The importance of good seed wheat is, I believe, appreciated by our more progressive farmers and millers, but there are a great many who fail to put into practice the axiomatic principles of the subject. It is unreasonable to expect a good crop from poor seed. But too frequently immature, smutty, bin-burned, light-weight and "dead" wheats are sown. The results from the use of such seed are too well known to require comment.

There is too much poor wheat and not enough clean, heavy-weight, bright, glutinous wheat, with strong germinating power, used for seed purposes. With poor seed, consisting of a mixture of all kinds of kernels, some heavy and some light weight, a few glutinous and a larger number starchy, mixed with from one to three per cent. or more of foul weed seeds and foreign grains, the yield and quality of the wheat crop must necessarily suffer.

LOSS FROM POOR SEED.

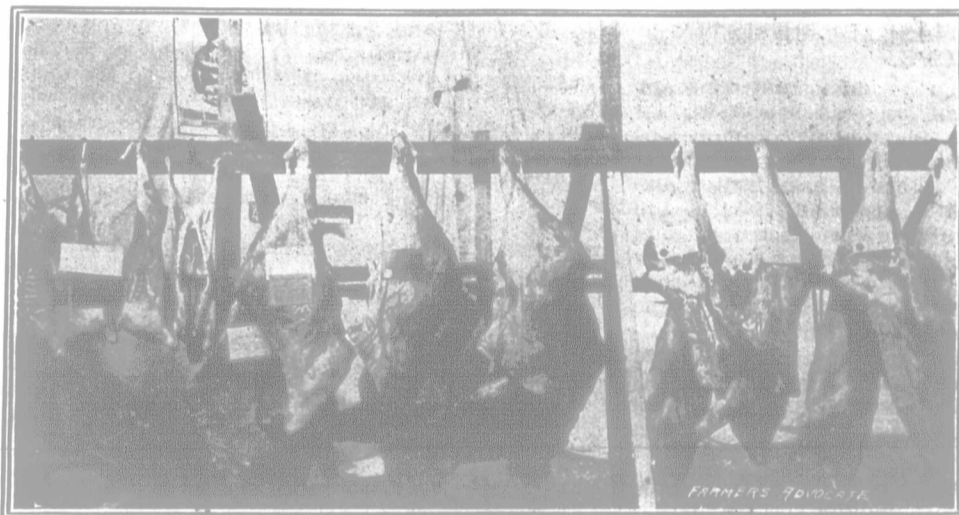
From all data at hand, I believe the average annual loss in wheat yield to the American farmer from the use of poor seed alone amounts to over 2½ bushels per acre. This, in the aggregate, is a heavy loss to both the farmer and the miller, and the loss is not alone to be measured in bush-

els, but also in a lower quality of grain. If the farmer would only make more general use of the fanning mill in cleaning his seed wheat, there would be less foul weed seed in his grain and he would have a better quality and more uniform lot of wheat.

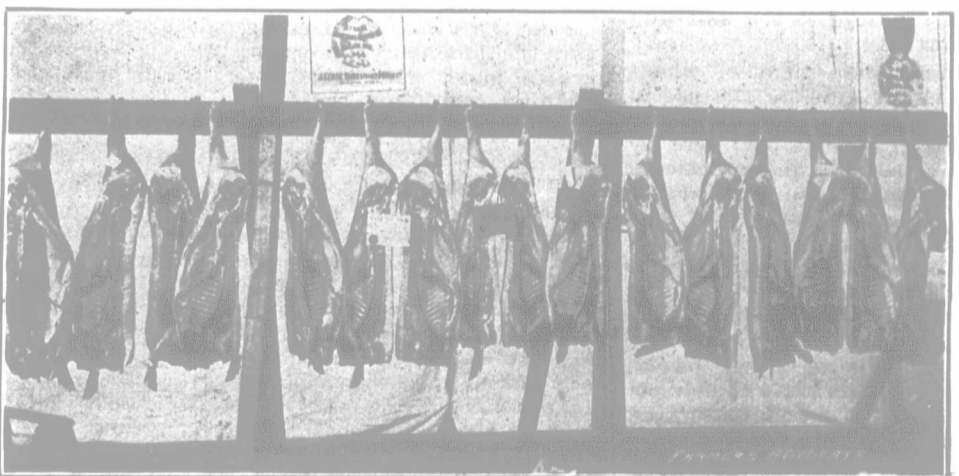
Not only the use of pure seed, but the marketing of clean grain is to be desired. If the farmer is encouraged to clean his wheat, he will gradually become interested in better seed. It is not necessary that his seed should come direct from some foreign country or have a fancy name. The sooner he realizes that the best seed he can use is that which is grown upon his own farm, the better it will be for both the farmer and the miller.

Every wheat farmer should grow a few acres of wheat solely for seed purposes. On these few acres he can bestow additional care in the way of cultivation, for the soil should be brought up to a high state of fertility, the weeds kept down and the grain cared for and harvested in the best possible way. Then the farmer will have sound, clean seed wheat.

It is not enough that the seed wheat should weigh 58 lbs. or more per bush, but the kernels should be reasonably uniform. When the seed contains a mixture of light and heavy weight, starchy and glutinous, and sound and unsound kernels, as it frequently does, wheat plants of all degrees of vigor are produced, and the crop fails



Beef Carcasses Judging Classes at Regina.



Swine and Mutton Carcasses at the Stock-Judging School Held at Regina in April.

and third, and for placing the second ahead of the rest of the animals in the class.

6. Competitors will be expected to write their answers upon cards furnished for the purpose.

7. Animals for the judging work will be selected from stock on exhibition.

8. As far as possible the judging competition will be held before the regular expert judges pass upon the stock. In case any classes to be used in the contest have been already passed upon by the regular expert judges, then animals that have not shown against each other or that have not been placed will be selected.

9. Competitors will be expected to come to the Secretary's office, where they will give their names to R. B. Faith, Editor of the Ottawa Valley Journal, and receive instructions as to exact hour and place of contest.

10. The judges in charge will examine the cards immediately after the close of the contest, and report at as early an hour as possible.

11. No appeal against the decisions of the experts in charge will be considered.

THE "WANT AND FOR SALE" COLUMN OF THE "FARMER'S ADVOCATE AND HOME MAGAZINE" IS THE PLACE FOR YOUR ADVERTISEMENT. SEE RATES UNDER THAT HEADING IN THIS PAPER. ADDRESS: FARMER'S ADVOCATE AND HOME MAGAZINE, WINNIPEG, MAN.

to ripen evenly and to produce a uniform type of wheat.

Where shall the farmer secure his initial stock of seed wheat? In most cases it is only necessary to carefully select the best grain from his own stock and raise this for seed under the best possible conditions.

Seed-growers' Associations should be encouraged among farmers, with the object of securing better grain. A number of plans have been proposed for improving the quality of seed wheat. The best strains have been secured by the selection of mother plants which have shown unusual vigor, high productive capacity, and yielded a good quality of wheat. By sowing the seed from such mother plants, and growing them separately in a rich, fertile bed, enough seed will be secured for a larger plot the second year; by weeding out any of the progeny which fails to come up to the standard, the seed is farther selected, until enough is secured the third year for growing a large-sized plot.

The fourth year there will be enough improved, sound, selected wheat to seed the entire farm, if desired. It is a simple method, and can be practiced by any intelligent farmer, and in three years it results in securing wheat of the highest quality for commercial purposes. This is, perhaps, one of the best ways in which the individual farmer can secure his stock of seed wheat.

GOOD SEED MAKES DISEASE-RESISTING CROPS.

While the attempts to produce rust-resistant strains of wheat have not been as successful as could be desired, it is a matter of common observation that crops suffer less from diseases when they are thrifty, vigorous and well nourished than when sickly and underfed. With the use of better seed, unfavorable climatic conditions do not cut down the yield and grade to such an extent as when poor seed is used, and in other ways, too, the crop from selected seed has the advantage. The sound, well-matured and well-filled seeds contain a larger amount of reserve plant food, which, with a stronger germ, forces the crop in the early stages of growth, and, as a result, the crop is more vigorous and produces a larger yield of grain.

In order to produce permanent results, the soil, as well as the seed, should receive attention. Important as good seed is, and I do not wish to belittle its importance in the least, it is only one factor in the problem of better wheat. Seed must not be neglected, but more attention must be given to the cultivation of the soil and the maintenance of its fertility.

While you can increase the yield of wheat from two to three bushels per acre by the use of better seed, you can, in addition to this, increase the yield from five to fifteen bushels per acre by increasing the fertility of the soil and practicing more suitable methods of cultivation. Improved varieties of wheat take larger amounts of food from the soil to produce an increase in yield, and unless the soil responds, the possible gains from the use of better seeds are nullified.

Occasionally the fear is expressed that the older wheat soils of the middle West have become exhausted, and large yields can no longer be expected from the soils. It is true that yields per acre on the older soils have declined materially in recent years, but this is not due so much to permanent exhaustion as it is to the soil temporarily getting out of condition because of poor methods of cultivation and a one-crop system being followed too long.

Where a soil has produced wheat exceptionally well, there has been an inclination to continue producing that crop, year after year. In a new country such a system is often necessary for a while, because less capital is required, but after the soil has produced the initial capital from the choicest stores of its fertility, this practice should be discontinued before the crop-producing power has been impaired.

ROTATION OF CROPS.

No matter how rich the soil, the production of wheat alone, if long continued, will ultimately reduce the fertility, but when wheat is grown in a rotation with other crops, particularly grasses, and live stock is kept and manures are used, the fertility of the soil is maintained, and the yield and quality of the grain do not deteriorate. Such a system fattens the land. There should be some live stock kept on every farm, if for no other reason than to necessitate a systematic rotation of crops, production of manure, and the utilizing of the wheat offals and farm crops to the best advantage.

The farmer who keeps cattle and hogs can raise more wheat than the one who keeps no live stock, but attempts to run an "all grain farm." Manure and the vegetable matter from the decay of grass crops are absolutely necessary to conserve the fertility of the soil and to render the latent mineral food more active for crop production.

Wheat, corn, cattle, hogs, and clover or alfalfa, make a combination which, as a wealth-producer and soil-conservator, is not surpassed. The

one-crop system should pass with the pioneering days and give way to the rotation of crops and better systems of cultivation.

In our experiments at the Minnesota Experiment Station it has been shown that when wheat, corn or oats are grown continuously for twelve years, there is a loss from the soil of about a quarter of a pound of vegetable matter per cubic foot of soil; this is about ten per cent of the original stock of vegetable mould.

The loss of vegetable matter has been one of the main reasons why the soils have changed in character during the past thirty or forty years of cultivation. Nature does not intend that a soil shall be continuously under the plow. Lessened yields, weeds and insect pests are all nature's protests against a one-crop system.

When rotation of crops is practiced, the soil has an opportunity to acquire new stores of vegetable matter, containing nitrogen, to replace that lost through decay. An increase in vegetable matter gives to soils greater power for resisting drouth, and reduces "drifting," and the vegetable matter in its decay combines with and makes the latent mineral plant food of the soil more available for crop purposes, and in other ways the soil is better because of the presence of the humus or vegetable mould.

INCREASED CROPS AS A RESULT.

In some of our experiments, where wheat, corn, clover, oats and barley were grown in a rotation, and farm manures were applied to the corn, there was an increase of from seven to ten bushels per acre of wheat over the plots where wheat was grown continually, and an increase of over 20 bushels per acre of corn. It certainly pays to rotate when an increase of twelve bushels per acre of wheat and twenty bushels per acre of corn can be secured. The soils of the plots which were rotated slightly increased their content of vegetable matter, while the soils of the continuously grain-cultivated plots lost large amounts. Manure and better cultivation is what most of our soils need to-day.

When judiciously grown, wheat is not an exhausting crop; it takes less fertility from the soil than any of the grains or grasses or many of the farm crops.

Corn removes from the soil more mineral plant food and over twice as many pounds of nitrogen as wheat; and an acre of potatoes removes more fertility than an acre of wheat. In fact, wheat can be grown with less loss of fertility from the soil than nearly any other crop. But to accomplish this requires the keeping of some live stock, the rotation of crops, the use of manures, and the judicious cultivation of the soil. When grown under such conditions, wheat is a large-yielding crop, and the least-exhausting one that can be grown.

SYSTEM OF ROTATION.

The system of rotation most suitable for wheat production is largely a local problem. Wheat, corn (manured), wheat seeded with clover and a suitable grass mixture, followed by meadow or pasture and then any small grain, has proved a satisfactory combination of crops for many localities of the central West. A five or six-year rotation can be planned, suitable for any farm, and wheat can be grown on the same land twice during the rotation. With such a system the farmer has for market each year two fields of wheat.

If a 160-acre farm is under rotation, ten acres can be reserved for the farmstead and miscellaneous crops, leaving six fields of 25 acres each for farm crops. If two of these fields are in wheat each year, the farmer will receive a larger return from his fifty acres of wheat than if 100 acres were devoted exclusively to this crop.

A large majority of our farmers have not yet learned the importance and value of crop rotation, although it is a fundamental principle, and is as old as the art of agriculture. In some European countries the importance of maintaining the fertility of the soil is recognized to such an extent that in the leasing of the lands the landlords stipulate the crops that shall be grown, the manure that shall be applied, and the general method of farming to be followed by the tenants. This is done to prevent exhaustion of the soil.

COMMERCIAL FERTILIZERS.

As to the part that commercial fertilizers will ultimately take in the production of the wheat crop of the middle West, that remains to be determined. For every farmer to keep enough live stock to produce manure for fertilizing his land would result in the production of an enormous amount of live stock. Would this be over-production? While this would be desirable as far as soil fertility is concerned, will trade conditions adapt themselves to such a system?

In some sections the farmers already complain that there is but little money in live stock. If this be true, a farther and larger extension of the live-stock industry, such as would be required for the maintenance of fertility of all farms, would be out of harmony with economic conditions, and commercial forms of plant food will have to be resorted to, particularly on the older wheat lands.

Crop Rotations.

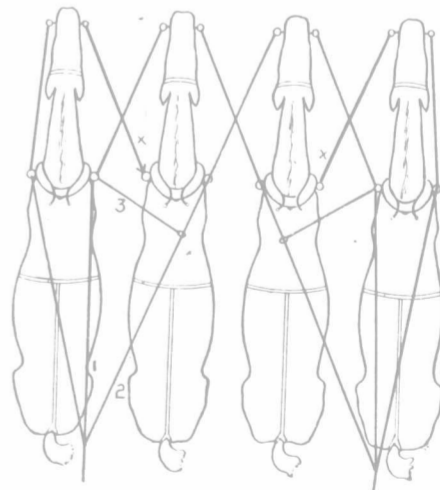
A few weeks ago a reader of the "Farmer's Advocate" asked what rotation of crops he could follow to maintain and if possible increase the fertility of his soil. He raised the question whether or not some of the legumes could be grown in this rotation, and if so, in what order. Since then we have been investigating many of the modern systems of rotations on the best-conducted farms, and find that the theories of rotations that have been most generally advanced by scientists have very little application in Western agriculture, the difficulty being to get a legume to grow, and the fact that when grown in any quantity stock must be kept to eat up this crop. So far we have found but one farmer who grows a legume, although there may be many others. On this farm field peas are sown and used for hog pasture. Clover, however, is becoming more general, many farmers growing small plots to test its suitability to their soils. Almost invariably success attends such efforts, so that in future it is safe to predict red clover will be quite generally grown, especially as inoculation will spread from the small plots.

Under the present state of agriculture, where wheat is the prevailing crop, our best farmers find that their yields are kept up and even increased by frequent crops of grass—timothy on the rich black soils, brome on the drier, more loamy lands, and Western rye grass where timothy and brome will not grow. With ordinarily favorable weather these grasses can be grown with a nurse crop and ensure a crop off the land every year. Very few of those who keep up the condition of their land by growing grass profess to follow an arbitrary rule, but an effort is made to cut or pasture two crops of grass, then follow it with three or four crops of wheat, barley or oats before seeding again. By this system the soil is kept supplied with vegetable matter, weeds are kept in check, the fertility is largely maintained—at any rate, not dissipated—and the growth of grain is not so rank and sappy as where summer-fallowing is practiced. Most of the advocates scout the idea of summer-fallowing to conserve moisture, claiming that the increased supply of vegetable matter from the grass roots and sod answers the same purpose, and also prevents drifting.

Doubtless, when our agriculture becomes older, when more crops have become adapted to our conditions, when farm labor is less expensive, and when markets for farm produce are more extensively developed, the products of the farm will be more various, hence more elaborate systems of crop rotation will be not only more practicable, but also more essential, in order that the most may be made out of the land. The rotation we have outlined is not intended to be followed indefinitely, and already, where farms are situated near towns or where a large number of cows are kept, a more variegated system is followed, by introducing a corn crop or roots. Such practices illustrate the ultimate trend of our farming operations. But for the present, where farms are some distance from good markets and wheat-growing is so popular, grass-growing for the purpose of maintaining fertility, retaining moisture and keeping down weeds, should be followed by all.

Four-horse Lines.

The sections marked x indicate extra tie-straps to hames; section No. 2 indicates extra cross lines, with common pair 12 inches longer.



than section 1; No. 3 indicates spread straps 12 inches long. W. G. BARNES.

If You Want Anything.

AND DON'T KNOW WHERE TO GET IT, AN ADVERTISEMENT IN THE "WANT AND FOR SALE" COLUMN OF THE "FARMER'S ADVOCATE AND HOME MAGAZINE" WILL GET IT FOR YOU. THE FARMER'S ADVOCATE AND HOME MAGAZINE, WINNIPEG, MAN.

What Has the Moon to do with the Weather?

To the Editor "Farmer's Advocate":

Sir,—In reply to your letter, I would say that Meteorologists in almost every country of Europe, in Canada and the United States, have tabulated records for the special purpose of determining a connection between lunar changes and the weather, and I believe that I may safely affirm that not one of them have been able to trace any connection whatever. It has been proved that there are lunar tides of the atmosphere, but they are so exceedingly small that any influence they may exert on the weather seems to be totally masked.

That the moon's phases, etc., can have any effect on the sowing of grain, is quite inconceivable, and is, I am sure, a complete fallacy, and not worth being considered for a moment.

R. F. STUPART, Director, Meteorological Office, Toronto, Ont.

The Moon and Weather Forecasts.

Whether it be the indefiniteness and mystery of the moonlit night, or the weird, suggestive pallor of

"That orb'd maiden with white fire laden, Which mortals call the moon,"

which has kept clustered about the "orb of night" a bundle of superstitions that should long ago have been relegated to the past with the kelpies and witches, banshees and hobgoblins of the Dark Ages, it would be hard to say. The fact remains, that even yet, among people otherwise of fair education and good common sense, there are cherished a number of "beliefs" in regard to the moon which are so strong in some cases as to provide veritable rules for the carrying out of business. For instance, there are men who will not sow peas or kill hogs unless in a certain quarter of the moon; there are others, again, who are quite certain that if the new moon lies on its back, so as to hold water, or for the Indian to hang his powder-horn on without slipping off, there will be a season of dry weather, wet weather being expected if the converse is observed.

Now, with the object of being able to present our readers with the decision of real authorities on the subject, we have gone to some trouble to find out the opinions of the most eminent scientists of the day. As a result, we find, from exhaustive matter furnished by the Weather Bureau at Washington, that these men are undivided in stating that the moon has so slight an effect on our atmospheric conditions as to be practically of little importance. The sun it is, and neither the moon nor the stars, which determines our weather. The influence of the moon in potato-planting, weed-killing, soap-making, etc., is, of course, absurd.

In regard to long-range weather forecasts, also, these scientists as are one in declaring that, as Prof. Penner, Vienna, has said, "We have at present, unfortunately, no method by which such forecasts of the weather can, with absolute certainty, be made." There are, of course, certain phenomena which accompany, and for some hours, perhaps, precede changes in the weather, and by observation of these, local weather may often be fairly well predicted for short periods, say from one day to the next. Among these "signs" may be mentioned the following: The covering of a mountain summit with a "cap," in some localities, almost invariably signifies storm or rain; a watery halo about the moon often indicates bad weather; if, when clouds break, a second light covering of clouds is seen above them, the chances are that the weather will remain bad; a slow breaking up of the clouds usually indicates fine weather, etc. These rules often hold good, but are not infallible. As to gauging what a winter will be like by the actions of birds, animals, plants, etc., these are looked upon as absurdities.

In conclusion, we may say that exhaustive scientific investigations are being made, with a view to arriving at some definite clue by which weather conditions may be foretold for longer periods. In all probability no reliable method may ever be discovered.

The daily "probabilities," issued from the meteorological office and published in the newspapers, or posted up at telegraph offices, are based on accurate observations, taken throughout the country, as to temperature, barometer velocity of wind, rainfall, etc., and are usually reliable.

Do You Want a Situation?

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Forecasting the Weather.

By R. F. Stupart, Director, Dominion Meteorological Service.

Frequently in the press and also in conversation it is apparent how very fallacious are the conceptions of the public of the work performed and the methods employed in the Meteorological Service of Canada, and also in Weather Bureaus of other countries. Some people seem to be of the opinion that meteorological forecasts—"probabilities"—are made from a study of the stars, and others again assume that the forecasts are simply guesses, based on a knowledge, we will say, that there is a storm somewhere on the continent, and that it is travelling towards a certain district at a certain rate of travel, and will, therefore, if nothing unexpected occurs, arrive at that district in an easily calculated time. Both of these conceptions are far wide of the truth, but as such fallacies are so prevalent, I shall endeavor to indicate clearly how meteorological forecasts are arrived at, and also point out some of the many difficulties there are to be overcome.

The Meteorological Office, familiarly known as the Observatory in Toronto, is under the Dominion Department of Marine and Fisheries, and is the central office for the whole of Canada. Records from every station in Canada are forwarded to this office; forecasts for every portion of the country, exclusive of British Columbia, are issued therefrom, and all observers are under the control of the Director at Toronto, who is in turn directly responsible to the Honorable the Minister of Marine and his Deputy at Ottawa.

There are 360 stations where meteorological observations are taken. In the majority of instances the observing is performed gratuitously, by persons who take an interest in such work, and who have been supplied with the necessary instruments by the Government, but at some outlying stations where voluntary observations cannot be obtained, small gratuities are allowed. Then at some 36 stations scattered at about equal intervals across the Dominion small salaries are paid; the observers are obliged to conform to certain regulations, to observe at regular hours, never omit an observation, and twice each day telegraph a report to the central office.

The telegraphic reports contain the following information: The height of the barometer (reduced to sea level in order that all stations shall be comparable), the temperature of the air, the weather, the direction and velocity of the wind, clouds, and rainfall, if any. These reports are forwarded from Toronto to the United States Weather Bureau at Washington, which bureau, in exchange (there is complete reciprocity in the weather reports), supplies the Canadian service with some 50 or 60 reports from various parts of the United States.

A very comprehensive meteorological chart is thus provided twice each day on which to base forecasts. The observations are everywhere taken at about 20 minutes before 8 o'clock, morning and evening, 75th meridian time, the instructions being that reports shall be filed at the telegraph office at the exact hour. At 9.45

the weather map is usually ready for the forecast official to issue bulletins.

As an example of his method, we will suppose that there is an area of low pressure over the State of Nebraska at 8 a.m. on a certain day; the previous morning—24 hours earlier—it was over Utah, and has since increased in energy. Now, it is obvious that if this area continues to move in the same course and with the same velocity it will pass across the Great Lakes, but the forecast official assumes no such thing; its previous course and rate of travel are simply two important factors to be considered in his diagnosis of the case; he does not assume either that it will continue in the same course or that it will continue to increase in energy; the relative position of other low areas and their probable effect on that over Nebraska must be duly considered; also the position of high areas and their probable effect on the various low areas; also the temperature prevailing over different portions of the continent must not be neglected, and due allowance must be made for its influence in producing rainy or dry conditions, as the case may be.

The official at Toronto endeavors to give the proper weight to each of the apparent facts, and then he judges as to what various movements and changes there will be during the coming 36 or 48 hours. Certainty is not possible in weather forecasts based on imperfect information, and in which the introduction of a single unknown factor in regions beyond observation, e.g., the upper or middle atmosphere, may completely alter the course of events.

The problems to be solved in meteorology, considering the subject in a general sense, as well as with regard to the improvement of the daily forecasts, are numerous and intricate; unknown quantities abound; we are living at the bottom of the atmosphere; not all this bottom has been explored, and its ever-changing conditions as regards temperature are kaleidoscopic. Meteorologists all feel that the science of meteorology has not made an altogether satisfactory progress during the past twenty years, but observations have increased and multiplied, and good data now exist for testing theories. What hopes are there for the future?

In the Meteorological Office at Toronto, every cyclonic area which has passed across either Canada or the United States since 1871 has been carefully charted and studied, and it has been discovered that there is a very evident periodical shifting of the mean monthly tracks of cyclonic areas, and also a periodicity in numbers of storms, and the study of these facts and figures is pursued with a very cheerful hope that in the not distant future we may be able to connect the observed variations with solar phenomena. In a paper read before the Royal Astronomical Society of Canada four years ago, it was shown that there are strong evidences of the rainfall of Southern Ontario varying with the increase and decrease of sunspots; that the rainfall for two or three years immediately succeeding sunspot minimum is excessive, and that dry seasons then follow. The rainfall of the past three years has tended to corroborate this suggestion.

In Europe for the past few years much has been



The Agricultural Department Officials and Staff of Lecturers at Regina Fat-Stock Show and Stock-Judging School.

done in exploring the upper atmosphere by means of instruments carried to high altitudes by kites and balloons, and from these observations some very valuable knowledge of the upper currents and temperatures has been obtained. Then, again, there is ground for hope that the Solar physicist may render assistance in solving meteorological problems, but my hope in this direction is somewhat tempered by a belief that changes in solar radiation probably affect the earth's surface and atmosphere almost instantaneously, and that while it may ere long be possible to show with almost absolute certainty that changes in terrestrial weather follow solar changes, it is less probable that the solar physicist will be able to forecast changes in the output of energy from the sun with sufficient accuracy to assist the meteorological forecasts very materially.

The earth as viewed from the sun only subtends an angle of less than one-third of a minute of arc, a mere speck in the universe, and it is almost inconceivable that at any particular time different portions of the earth's surface can receive radiations from the sun of different kind and intensity, except as modified by latitude and atmospheric conditions, and yet nearly every year the weather of some portions of our globe varies greatly from the normal, while in other portions it is just average, or varies in the opposite direction. These facts indicate the complexity of the problems to be faced, and the writer is in accord with Sir John Eliot, the president of the sub-section of cosmical physics in the British Association meeting of 1904, who spoke in favor of a more systematic co-operation among the meteorologists of the world, and a central meteorological office for the Empire.

Sir Norman Lockyer and Dr. W. S. J. Lockyer, at South Kensington, have for some years been devoting much time and energy to solar research, with the distinct object of tracing the connection between solar changes and terrestrial climatic changes, and we in Canada hope that the Director of the new Observatory in Ottawa will also conduct some such research and assist in the good work already being carried on.

In every country of Europe, in Japan, in the United States, and in the colonies of our British Empire, men of the highest ability and of untiring energy are now, and have been for years, devoting themselves to meteorological research work, but as yet the main problem is unsolved, and without doubt it will only be by a generous co-operation between the physicist and meteorologist, that by slow degrees, little by little, our knowledge of weather changes will be increased.

The synchronous weather chart is recognized in all civilized countries as affording the best system for weather forecasting, and in the writer's opinion, for short-range forecasts it will never be wholly superseded by any other.

Dairying.

Payment for Cream.

It is a source of satisfaction to us to note that our article in the May 17th issue on "Are you getting all your cream is worth?" has set patrons and owners of creameries thinking seriously on the subject, with the result, we believe, that the producer will in the future profit to some extent from the more intelligent understanding of such matters. Dairying is an industry that should receive every encouragement, and probably the most effective inducement that could be offered a man to follow dairying is to give him good value for his product and straightforward treatment in the matter of his tests. That farmers who patronize private creameries feel satisfied they are not getting prices for cream commensurate with the retail price of butter there is abundant evidence, and there is also evidence that, because of the small supplies furnished co-operative and Government-owned creameries, the percentage required to meet the expense of running the plant is rather large, which leaves a wide margin between the selling price of butter and the price allowed for cream. The following is a specimen of several letters we have recently received:

"In your paper dated May 17th, I read an article under the title 'Are you getting all your cream is worth?' It seems to me that this piece of information throws more light on the farmer's cream business than anything I have read, for the reason that the hints you have thrown out affect the farmer's pocketbook. But, Mr. Editor, there is something lacking in your article yet. You give a splendid diagnosis of the disease, but you offer no prescription for the cure. For instance, I am selling my cream to a private creamery which uses the Babcock test. I will get paid for the butter-fat contained in my cream, which, your article goes on to say, will churn out from 16 to 18 per cent. more. Then, I presume we are to understand that if this private concern is not honest enough to pay us pro rata for the overrun we are the losers of 16 or 18 pounds of our butter to the 100. This is where we need the remedy. Now, then, let us use the same illustration with a so-called Government creamery. I should like to ask you are our chances any better by selling to a Gov-

ernment creamery for a fair and honest adjustment for all cream sold and tested by Babcock test or oil test, or any other test, than we are in selling to a private creamery? If so, please explain: (1) Does the Government appoint the management of their creameries? (2) By whom are all the accounts inspected? (3) Are the books open for the inspection of the patrons? (4) Could the bank used by the creamery be of any service in giving information to the patrons? (5) If our overrun is found such as you state in your article at a Government creamery, and no account made of it to the patron, to whom is this overrun paid or divided? Now, Mr. Editor, if you will give these questions your consideration and answer them in detail, I, for one, will be much wiser. J. L. "Alta."

In answer to these questions, we would say that the Government appoints buttermakers in the creameries conducted by them, and, we presume, these buttermakers, among other duties, test the cream and keep each patron's account, but we should suppose each creamery has its books audited periodically by some competent persons. A patron at any time is entitled to examine his accounts, provided he is not so insistent and frequent in his requests as to interfere with the work about the creamery. The local bank officials could only be of service as auditors of the accounts and to suggest improvements in the system of keeping books if they saw they were required. As we understand the management of a Government creamery, the patron gets credit for his overrun this way: The maker is hired on a salary or commission to make the butter, the proceeds from which, after running expenses and maker's salary are deducted, are divided among the patrons on the basis of the amount of butter-fat provided. By this arrangement the patrons get the benefit of the overrun, whatever it may be. On the other hand, where cream is bought outright at so much per pound of butter-fat it contains, the creamery owner not only has the difference in price between the cost of butter-fat and the selling price of butter to compensate him for making, but also has the overrun, amounting to about sixteen pounds of butter to the hundred pounds of cream. The Government creameries are not run to pay dividends to anyone except the patrons, but, of course, the enterprise should return some dividend to the capital invested in buildings and equipment, in order to induce a person to engage in the business of buying cream to make into butter. Where the scheme can be worked out thoroughly, and where there is a good number of constant patrons, the co-operative plan of building a creamery and engaging a maker is the most economical, as there is no dividend to pay to an individual for the capital invested and for his executive services in managing the creamery. Under similar circumstances, where a large supply of cream can be had, it is often quite as satisfactory to sell direct to a creamery owner, for then the percentage of the business required to compensate the owner is not very great, and the patrons have no other responsibility than to provide plenty of good clean cream.

Manitoba or Alberta for Dairying.

A young man in Alberta asks this question: "In which place would you recommend a person with three thousand dollars to start a dairy and grain farm, Alberta or Manitoba?" Success in a case of this kind does not depend so much upon location as upon the man, his equipment and methods of conducting his business. In either Manitoba or Alberta, we believe, an energetic and capable man could make good money in dairying and grain farming. In this particular case we think the country to which the man has become accustomed should be his choice of location. He is more familiar with methods of cropping, cultivation, etc., and, besides, there is every prospect that Alberta will be producing large crops of clover before that crop is generally grown in Manitoba. Dairy cattle require a variety of feeds, with a considerable amount of nitrogenous roughage, such as clovers supply, and also a succulent food, such as ensilage or roots, and while these can be grown well in Manitoba, they may also be grown in Alberta.

Probably the question uppermost in this young man's mind is that of markets. He probably thinks Winnipeg would be an excellent place in which to sell butter, cream and milk; and so it is, but, as a matter of fact, the local creameries throughout Manitoba sell most of their goods to British Columbia or the New Ontario towns, very little of it being marketed in Winnipeg, not because the price in Winnipeg is low, but the market in this city is in a most unsatisfactory condition. Throughout the country, however, there are many farmers who ship their cream to large creameries in Winnipeg, but this would not be done by a dairy farmer. In view of the fact that our questioner resides in Alberta, and that British Columbia is the market for most of the Manitoba-manufactured butter, we would not advise him to move farther east to engage in dairy farming.

A Cheese Experiment.

In order to obtain two cheeses to illustrate the difference in the cheese value of milks for the benefit of June excursionists, all the cans of milk delivered at the Dairy Department of the College on the morning of June 3rd were tested for fat. The cans testing the lowest were put in one group, and those testing the highest in the other. From these were selected sufficient milk to make up one vat of 300 pounds testing 3.3 per cent. fat, and in another vat was put 300 lbs. milk testing 4.6—a difference of 1.3 per cent. fat in the two vats of milk. The two vats were made into cheese in the usual way. Vat "A," containing the rich milk, produced 33.5 lbs. green cheese, and vat "B," 27.63 lbs., or a difference of nearly 6 lbs. of cheese. Yet we find people who will argue that rich milk will make no more cheese than will average or poor milk.

In the case of the rich milk it required 8.95 lbs. milk for one pound of cheese. The other vat took 10.85 lbs. milk for a pound of cheese. Valuing cheese at 9 cents per pound, the rich milk was worth 100.5 cents per 100 pounds, and the poorer milk 82.89 cents, a difference of about 17½c. per 100 lbs. milk in favor of the richer milk. If the milk were mixed together and the money from the cheese were "pooled" or divided according to the weight of milk, such as is done in the majority of factories, each patron would receive \$2.75 for the 300 lbs. delivered. If the value of the milk were pooled or divided according to the fat in the milk, then A would receive \$3.20 and B \$2.30. If divided according to the per cent. fat, plus 2, A would receive \$3.05 and B \$2.45. The actual cheese values of the two lots of milk were \$3.01 and \$2.49. Dividing according to the weight of milk, A loses 26 cents and B gains 26 cents, or about 8½c. per 100 pounds. According to the fat basis, A gains 19 cents and B loses 19 cents, or 6 1-3 cents per 100 pounds. According to the per cent. fat, plus 2, A gains 4 cents and B loses 4 cents, or this system gives the actual cheese value of the milk within 1 1-3 cents per 100 pounds, still giving a slight premium to the richer milk.

After the larger problem of securing an improved physical and bacteriological quality of milk for our cheese factories is settled, and we are in a fair way to secure this in the near future, we look for a revival of interest in the question of a proper division of proceeds among patrons of Canadian cheeseries. We feel confident that the system of adding two to the percentage of fat comes nearest to justice of any simple system yet devised.

The following table gives the main points of the experiment in concise form, and is worth considering by patrons and managers of factories. The cheese may be seen at the dairy of the College by all visitors in June.

	A.	B.
Pounds milk used	300	300
Percentage of fat in milk	4.6	3.3
Percentage of fat in whey25	.23
Pounds green cheese	33.50	27.63
Pounds cheese per 100 lbs. milk	11.16	9.21
Pounds milk for 1 lb. cheese	8.95	10.85
Pounds cheese per lb. fat in milk	2.42	2.79
Value of 100 lbs. milk (cheese 9c. per pound)	100.5c.	82.89c.
Amount received, dividing according to weight milk	\$2.75	\$2.75
Amount received, dividing according to fat	\$3.20	\$2.30
Amount received, dividing according to per cent. fat, plus 2	\$3.05	\$2.45
Actual value of cheese, at 9 cents per lb.	\$3.01	\$2.49

Ottawa Agricultural College. H. H. DEAN.

Dairy Cows for Japan.

(Ottawa correspondence.)

K. M. Koyu, and his secretary, W. Iijima, two Japanese gentlemen, were in Ottawa a few days ago conferring with Dairy Commissioner Ruddick in connection with their visit to Canada to purchase about forty Canadian dairy cows for experimental purposes on Mr. Koyu's dairy farm in Japan. Mr. Koyu conducts a modern dairy farm in the land of the Mikado, and wishes to give Canadian cattle a trial. In his search for suitable animals, Mr. Koyu has been aided greatly by Mr. Ruddick, who says that the foreigner has an excellent idea of what constitutes a good dairy cow. Ayrshires and Jerseys are being purchased principally.

By an order-in-council recently passed, the importation of the straight spring scales into Canada is no longer prohibited, provided they are not used for trade purposes. The straight spring scale is used extensively by dairymen, who keep an individual record of the milk production of their cows, but in the past they have been very difficult to obtain, owing to the fact that they were prohibited from being imported into the country. The circular spring scales is also very convenient for weighing milk, but their cost puts them beyond the reach of the ordinary farmer. The order-in-council recently passed was the result of vigorous agitation by Dairy Commissioner Ruddick, whose work in this connection will be duly appreciated by the dairymen of Canada.

Ice-cream Making at Creameries.

According to the Dairy World, a new line for money-making in the creamery business is being proved lucrative by the growing demand for ice cream during the hot weather. Already, it appears, several extensive creameries in the United States have taken up the business as a side line, and are well satisfied with results. As a rule, a ready market has been found, in some cases in the towns and villages in the immediate neighborhood of the creameries; in others—by using a first-class packing system—as far as 200 miles away. In the vicinity of some of the largest cities, however, it has been found necessary to work up a trade by distribution of samples as, in such places even the ice-cream trade has come under the domination of "trusts." That it has been possible to work up a demand in the face of such competition has been due to the superior quality of the creamery article, as, with all of the necessary "goods" at hand, and opportunities for keeping them in the best possible condition, the creameries have been easily able to turn out an article second to none. Only pure cream has been used, not mixtures of milk and cornstarch, such as is too often found on the tables of ice-cream parlors in our towns and villages.

The method of making ice cream, given by Mr. F. W. Culberston, of Mt. Pleasant, Mich., winner of the prize offered by the Produce Review for the best article on ice-cream making, is as follows:

"The first thing we do is to scald and rinse the mixing and packing cans, freezer and utensils in pure, clean water. We use good pasteurized cream, of about 25 per cent. butter-fat. Good cream makes that smooth, good body, and gummy kind, so much desired by the connoisseurs, and it increases our trade. 'The memory of quality lasts long after the price is forgotten,' is true of luxuries. Cream that is over one day old will freeze up fluffy, and not grainy, and hence will give a larger yield. Gelatin and cornstarch will not compensate for the absence of pure cream, although they can be used in thin cream with good results.

"I cannot give any definite rule, as different flavorings vary, but to each gallon of cream 1 1/2 pounds of granulated sugar is about the proportion used, making it rather sweet, as the freezing deadens the sense of taste to some extent. We use the best flavoring extracts obtainable.

"Strawberry cream is the popular favorite. We use fresh, ripe, clean berries; we mash them up and put the sugar over them and let them stand for an hour or two for the sugar to dissolve, then we squeeze them through a cheese cloth, which takes out the seeds and gives a rich, smooth body to the cream. We use a gallon of berries to one of cream. A few choice whole berries are generally put into the cream. We always strain the mixtures into the freezing can, allowing about one-half of the space for the "swell" of the cream.

"Good results are obtained by having the ice crushed uniformly fine, mixing the salt evenly and using one part of rock salt to about three parts of ice. The mixture should be thoroughly chilled before starting the freezer, or it may become churned enough to spoil the body of the cream. When chilled we run the freezer at a medium speed, increasing it rather fast toward the last of the freezing, and the cream will be light, feathery and swell in bulk. It is best to stop the freezer as soon as the ice cream begins to roll up on the stirrer, for if the freezing is carried too far it becomes granular and the cream is spoiled. Never stop the freezer under any circumstances after it is once started until the cream is frozen. A little cold water thrown around the freezer can allow it to empty without waste into the packing cans, as it is warmer than the cream and will not injure the gloss as when hot water is used.

"Ice cream that has stood an hour or two will harden, ripen and blend into a perfect whole, and is more desirable, but it should not be kept long before use or it will not have that light, fluffy appearance of the freshly-frozen cream preferred by the connoisseur, or the large yield.

"Steel cans, porcelain lined, are used for packing, these having a tight cover fitting over the outside of the can. We set them inside of the cedar packing tubs with enough salt mixed with the ice so that the ice cream will not get too firm, or melt and be ruined. Blankets and burlaps are used to cover the packing tubs of cream.

"When the freezer, mixing and packing cans are empty we thoroughly wash and steam them.

"Often before closing the creamery in the evening, or after opening up in the morning, it is necessary to put more ice and salt in the packers to keep the cream in perfect condition."

In closing, it must be said that in ice-cream making, as in all other manufactures, some practice is necessary for the production of a choice article. In most cases it has been found most advantageous to hire an expert to teach the business rather than to trust wholly to the result of one's own experiments.

IF YOU HAVE A FARM FOR SALE OR WANT A SITUATION, PUT AN ADVERTISEMENT UNDER THE HEADING OF "WANT AND FOR SALE" IN THE "FARMER'S ADVOCATE."

Co-operation in British Dairying.

The great drawback to success in dairy co-operation is the lack of cohesion among farmers. They will not stand in and help one another. The big drop in milk prices, both north and south, this year, has made some listen who formerly were deaf to the cry of the co-operator. It is calculated that the drop of one penny per barn gallon in Staffordshire this season means a loss of something like £24,000 to the members of the Farmers' Association in that county. This drop could, in the opinion of those who have studied the question, have been prevented, had the Association had central factories to fall back upon. It is suggested that such factories could be established at a cost of £1,500 each, and were such in constant operation the price of milk would be sustained at a uniform level. During seasons of scarcity, following on a big demand, the factories would distribute the milk whole; during seasons like the present, the milk supply would be restricted and cheese made with the overplus, so that prices would be equalized. All this looks well on paper, and some are sanguinary enough to suppose that, in addition to getting a steadily uniform price for their milk, those who were members of such factory companies would be getting five per cent. interest on capital. These things have been said before, but the results have not come up to expectations. The principal thing to be aimed at in the factory system is the equalizing of prices through making the producer more or less independent of market fluctuations. Without such a back-door it is impossible for any farmer's agent to conserve the interests of his clients as they ought to be conserved, and a Dairy Farmers' Federation is not of much use unless it helps the producer in a

also regarding the cooking value of milk that has been pasteurized. We wrote Prof. Dean on the subject, and his reply is as follows:

"I would say that heating milk to 140 degrees F., and afterwards cooling to 40 degrees, gives practically no 'taste' or objectionable flavor to the milk. At 160 degrees there is a slight 'cooked' flavor. Personally, I like this, and all the milk that is used in the college and Macdonald Hall is treated in this way. At 180 to 185 degrees the 'cooked taste' is more pronounced, and is usually objected to by most persons. This high temperature, however, is very much more effective from a bacteriological standpoint.

"Regarding the value of pasteurized milk for cooking purposes, would say that I have never heard any objections made to it at the College, and I presume it is used there for all purposes to which milk is usually put for baking and table purposes.

"You will see by the last number of the Creamery Journal, London, Eng., that extensive experiments made by a French doctor go to disprove the theory which has so long been held, that pasteurized and sterilized milk is not so nutritive as the unpasteurized. While we have not experimented on human subjects, we have found that calves thrive better on the pasteurized skim milk than they do on the unpasteurized."

Ontario Agricultural College. H. H. DEAN.

Improvements Needed in Cheesemaking.

Mr. W. J. Carson, B.S.A., formerly on the Eastern Ontario Dairy Instruction staff, in reviewing the needs of the Wisconsin cheese industry, pointed out the following among the worst conditions prevailing:

- Water impure, and unfit for use.
- Gutters, waste spouts and tanks leaking and filthy.
- Floors rotten, leaking and dirty.
- Dirty water bottles, from which the water is used.
- Walls and ceilings dingy, dirty, and hanging with cobwebs.
- Leaking vats and unclean utensils.
- Surroundings untidy and the building without any provisions for the exclusion of flies.
- Untidy makers and dirty clothes.
- Lack of modern machinery.
- Poorly built and ventilated curing rooms.
- Wisconsin has too many such factories operating in direct opposition to one another, and as a result the profits are so small that one-half of them cannot afford to pay a good decent wage. It would be a good thing for the



Photo by G. H. Parsons. **Bapton Favorite (76080).**
Shorthorn bull. Bred by Mr. J. D. Willis, Bapton Manor, Wiltshire. Sold for \$6,800 at the dispersion of the Uppermill herd of the late Mr. W. S. Marr, of Aberdeenshire, in October, 1904. Purchased by Mr. G. Rodger for export to South America.

cheese industry if one-half of these small unsanitary factories were destroyed. The factories then remaining would be sufficiently patronized to enable them to provide proper machinery, curing-rooms, etc., and employ a maker who could turn out goods that would be a credit to himself and the State.

Flavor of Pasteurized Milk.

In a recent report issued by the Ontario Agricultural College Dairy School, we noted the following statement:

"During the milk-dealers' course two experiments were carried out, of special value to the milk trade. The first was a comparison of the effects of cooling milk to 40, 50 and 60 degrees, and also a comparison with pasteurizing at 140, 150 and 180 degrees, then cooling to 40, 50 and 60 degrees. The milk cooled to 40 degrees on April 18th and maintained at that temperature, was still sweet and good on April 25th—one week later. The samples pasteurized and cooled to 40 degrees were sweeter, containing about .08 per cent. less acid at the end of the week. The samples cooled to 60 degrees—both pasteurized and unpasteurized—were sour in two to three days. At 50 degrees they kept sweet for the week, though showing slightly more acid than did those cooled to 40 degrees. The higher the temperature of pasteurization, the less the cream on the bottle. As this is an important point in selling milk to most customers, heating to a temperature of 140 to 160 degrees, and afterwards cooling to 40 to 50 degrees, is to be recommended, although good results are got by milking in a cleanly manner and cooling as rapidly as possible to 40 to 50 degrees F."

In connection with town and city milk trade, objections have been raised as to the flavor, and

cheese industry if one-half of these small unsanitary factories were destroyed. The factories then remaining would be sufficiently patronized to enable them to provide proper machinery, curing-rooms, etc., and employ a maker who could turn out goods that would be a credit to himself and the State.

In discussing licensing and the fixing of a standard for factory owners and operators, Mr. Carson said: This would have a tendency to bring about a marked improvement in the condition of our factories and creameries, but when we undertake to drive people by force of law we do not induce co-operation, and this is something we must not lose sight of. In my opinion, the law should be the last resort, and only when everything else has failed. To bring about any marked improvement, we must begin farther back than at the factory or maker; the producer of the milk is the man we must reach. I believe that two-thirds of our cheese is spoiled before it ever reaches the factory. Teach the patron how to produce first-class raw material and our cheese will soon show a marked improvement. Most of our makers can make good cheese out of good milk, but there are few of them who can make good cheese out of milk in bad condition. How often we see the poorest goods coming from the cleanest factories, simply because the raw material was not right. If we have to license the factory and operator, why not license the patron as well? We would not be establishing a precedent in this respect, for it is not long since that I read of a patron in one of the foreign dairy countries having paid a fine for allowing his milk to stand too close to the barnyard.

He recommended Wisconsin to adopt syndication factory, and adopting the Ontario system of travelling instructors, which, he asserted, had done more for the improvement of Ontario cheese during the past two years than had been accomplished in any fifteen years before.

Horticulture and Forestry.

Strawberries in Northern Manitoba.

To many it will come as a surprise to know that strawberries are cultivated successfully on a large scale three hundred miles north of the International boundary. J. A. Monsees, of Bowsman, Man., is a pioneer in this work, and has clearly shown that it can be successfully done. This year he has six acres of plants that will produce, and has set out six acres more. Next year he will have ten acres under cultivation, two acres passing out of cultivation. Last season he shipped 150 crates; this season he expects to ship 500, and next he wishes to reach four times the latter amount. His ambition is to ship by the car lot. Winnipeg is his chief market, but Swan River, Dauphin, Gladstone and Portage la Prairie also receive a share. There is no limit to the market. The fruit first ripens about July 10th, and the season lasts about seven weeks.

The district is an ideal one for fruit culture. Mountains shelter it almost on all sides; the country is wooded, affording additional protection; the soil is sandy loam with a clay subsoil. Last winter the plants had no covering but the snow, and came through in splendid shape.

Mr. Monsees has passed his life in fruit-growing, having followed that occupation at Sedalia, Mo. This is his third crop in Manitoba. He intends to go in for currants, apples, and, in fact, all fruits capable of being produced here, and devote his entire time to this calling.

Fruit Prospects at Brandon.

The following is a letter from Mr. S. A. Bedford, Experimental Farm, Brandon, to the "Farmer's Advocate":

"As usual, a few of the crab apples were killed by blight; otherwise they have wintered well. The bloom was very abundant, and I notice a large quantity of fruit has already set. We have on this farm now a large number of hardy crabs, and crosses between crabs and standard apples, nearly all of which are perfectly hardy and fruit well nearly every year. Several bushels of crab-apple seed was sown last fall, and the little plants are showing up already by the thousand. The roots of these will be grafted next spring with the best crabs and standard apples that we have.

"All the plums have wintered well, and already an abundance of fruit has set. Nearly all of the trees we have are selected from the native plum, which we find the most suitable for this district. Even the earliest variety of plums from other countries do not mature in time to escape the fall frosts.

"Most varieties of raspberries have wintered well, but the blackberries and blackcaps are badly winter-killed.

"Currants of all kinds have, as usual, passed through the winter safely.

"All kinds of shrubs have wintered well, and the bloom is usually abundant. About fifteen varieties of lilacs are in bloom at this date, June 7th, and new ones will come out each week for some time. It is one of the most satisfactory shrubs for Manitoba and the Northwest. I notice

that many of the lilacs throughout the Province are very shy bloomers. This may be accounted for by one of three causes: Either the variety is no good, the plant has been clipped, or the wood has been badly broken in removing blooms during the previous year. Charles X. is one of the best lilacs for bloom. Lilacs bear on one-year-old wood; for that reason they should never be trimmed, and in removing the bloom great care should be exercised not to destroy any of the new growth. Several thousand Charles X. lilacs were distributed from this farm last spring.

"The different varieties of Caragana are also now in full bloom. The weeping variety is certainly the best. Being a native of Northern Siberia and perfectly hardy, they are well adapted for Manitoba, and they are propagated from seed.

"Another very satisfactory shrub is the Bush Honeysuckle. It is just now starting to bloom. It is also propagated from the seed, and has proved a very ornamental shrub and perfectly hardy wherever grown. Many thousands of this shrub were sent out to applicants during this spring's distribution. The other forestry and ornamental trees have made rapid growth since the abundant rains, and there is every prospect of a successful year in both horticulture and forestry. During a recent trip through the Province, I noticed an increased interest taken in tree-planting, and bluffs of timber are appearing in sections of country at one time entirely destitute of trees. For instance, I noticed the one-time open prairie around Hartney is now becoming dotted with bluffs of timber, and the farm buildings are surrounded with fine trees. Thousands of overgreens are also being set out, giving the surroundings a homelike appearance, even in the winter time."

Amputating Limbs of Trees.

Trees, like animals, have their lives shortened because their vitality becomes impaired. As a result of wounds or injudicious pruning, rot is set up in a young tree, which before the tree has scarcely matured has undermined its whole constitution. In a paper prepared for the Canadian Forestry Association, Mr. Roland Craig, Dominion Forester in Western Canada, says:

Pruning is a necessary evil in the care of trees. Trees in an unnatural environment, and with an abundance of light and air, tend to develop too much crown for the usually scant plant food supply. The liability of these more or less isolated trees to injury from snow and ice pressure and from wind, also makes it advisable to so guide the growth of the crown that there will be as little danger from these sources as possible. With this in view, it is wise to preserve well-defined central axes in trees like the birch, maple and ash, which naturally possess such, and in the elms, which normally assume a vase form, large horizontal branches should be prevented from developing, and the crown should be supported by three or four main branches, grown as nearly vertical as possible. Pruning should be commenced when the tree is young and the branches small, so that the necessary amputations will be small. Heavy pruning seldom results in anything but a brush heap of a top, or a stunted and weakened tree.

LEAVING STUBS.

The most pernicious practice in pruning, as it is usually done, is the leaving of short stubs of branches,

which, deprived of communication with the leaves, die and remain as decaying plugs of wood in the trunk, from which rot soon spreads to the heart of the tree, and not infrequently results in its death. All amputations should be made flush with the wood of the stem, so that the wound can be readily grown over with new wood, and the surface should be perfectly smooth to prevent water carrying disease germs from lodging in the irregularities and starting decay. The danger from decay may be almost entirely eliminated by applying a coat of coal tar on the wound immediately after the cutting. This disinfects the surface and prevents water from soaking into the wood. Other substances such as white lead or ordinary paint may be used, but coal tar is much the best.

When heavy pruning is necessary, and it is desirable to mould the form by leaving short branches, small leaf-bearing branches, called sap lifters, should be left at the end of the stub to keep up the circulation of sap, and thereby prevent the death of the stub.

TIME FOR PRUNING.

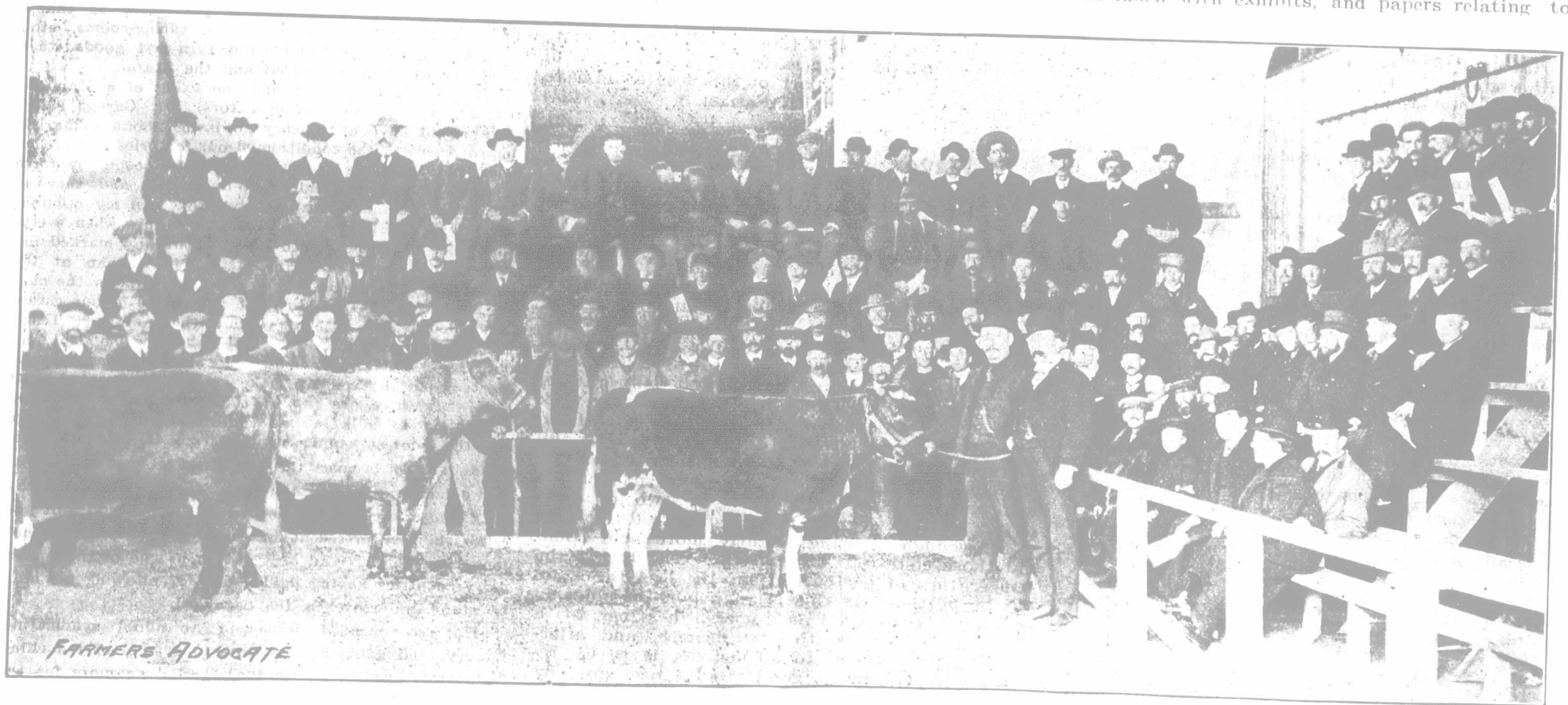
Pruning, if carefully conducted, may be done at any time of the year, but in the fall after the leaves have fallen is the best time as a rule. At that time it is easier to see the arrangement of the branches. You secure also the full season's work of the leaves in storing up food material, and all the benefit of the rapid spring growth in healing over the wounds, and in the production of desirable branches.

TREATMENT OF DECAYED SPOTS IN THE TRUNK.

The life of a tree may often be saved, even when decay is quite well advanced, by first removing carefully all decayed wood, then painting the surface with coal tar to disinfect it, and if there is a cavity it should be filled up with cement, much as a dentist would fill a tooth. The wound will, as a rule, heal over, enclosing the filling, and the tree will be practically as healthy as ever. This practice is followed in treating the live oaks in California with great success. All dead branches should be removed without delay, for, if left on the tree, they act as centers from which decay will spread.

Potato Night.

In the majority of people there is an instinct which calls for a certain amount of amusement, and which should, to a judicious extent, be catered to. "All work and no play makes Jack a dull boy," is an old maxim, as true of the farmer or the grown man in any other walk of life, as of the schoolboy. Moreover, keeping too much to one's self almost invariably has a tendency to make one "queer," "crochety," irritable, morbid, even conceited. One seldom finds an open-hearted, whole-souled, "good-all-round" individual who does not have a reasonable amount of intercourse with his neighbors, or hers, as the case may be. It takes association with others to rub off the angles and develop the sympathies. Granted that this is true, then picnics, social gatherings, etc., are not a waste of time, but an absolute necessity to a balanced development, and should be encouraged in every rural community. Apropos of this question, the Farmer's Review tells of a rather unique sort of entertainment which was "invented" in Massachusetts last year. In the spring a lecturer of the grange presented to many of the members a seed potato, to be planted and the increase exhibited in the fall. Then they observed "potato night." A long table in the center of the hall was laden with exhibits, and papers relating to



Stock Judging at Regina Fat-Stock Show, April, 1905.

potato-raising were read, followed by a discussion of the subject. A prize was given to the one having the best exhibit. Potato races added amusement to the occasion, and potato chips made a dainty lunch.

Possibly the Massachusetts experiment may suggest an idea for somewhat similar reunions along "potato" or some other, line for the coming summer, and reunions in which profit and pleasure may be advantageously combined.

Poultry.

Give the Chicks Attention.

Careful attention should be given now, during warm weather, in order to obtain all the growth possible before the short days and cool nights of autumn are here. If we would have heavy producers next winter we must be on the alert and faithful to our trust now. We cannot expect prolific layers if the pullets are only half grown. Not only ample feed is necessary, but it should be given in such a manner as to induce as much exercise as possible, which gives strength of frame, adequate digestive capacity, and begets that activity so essential to good laying qualities.

Neither should we neglect the roosting quarters and coops. If the fumes of these compel holding one's nose, good results cannot come. Supposing the fowl to be free from vermin, they cannot remain so long under these conditions. Clean out often, sprinkle with lime, and supply fresh litter or remove to fresh ground. Do anything and everything necessary to keep their homes fresh, sweet and comfortable. We cannot have profits at any given time if the essentials are neglected during other portions of the year. We must supply the daily wants of the little chicks, and in return they will supply our tables with the best quality of poultry and eggs in abundance. J. R. H.

Importance of Detail.

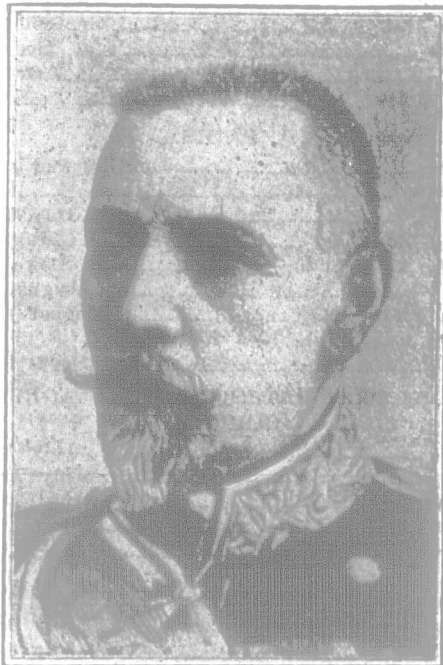
Frequently the lack of success with poultry is due to the failure, on the part of the owner, to observe some detail which is apparently a trifle. For example, this interesting case came to my notice: A stone mason, who got the chicken fever at a poultry show, decided to start with a few nicely-laced Silver Wyandottes. As he intended to build his own henhouse, and understood stone better than wood, he built it with 18-inch stone wall, putting up 2x2 strips on the inside, and lathing and plastering it so as to furnish a dead-air space. When winter set in the walls were covered with frost, and his blooded chickens began to have bad colds and roup. His friends told him that the stone wall was the cause of his trouble, and that nothing but wooden houses would do for chickens. It chanced that the house had a gable roof, and in order to have a dead-air space above he had put in a pine-board ceiling, on a level with the top of the stone wall. An old poultryman, to whom he told his troubles, advised him to cut a hole through this ceiling and establish an upward current of air, as the moisture, he said, came from the breath of the fowls, which, as everyone has noticed, rises upward, the faster the colder the air is. He cut a hole through the ceiling and placed a stovepipe over it, which he passed through the roof. He has had no colds nor roup since, and the henhouse has proved the most satisfactory in his neighborhood, as the heavy stone wall makes it, to a considerable degree, independent of the outside temperature. It is not easily influenced by a sudden drop in the temperature in winter, and in summer when other fowls roost with wings spread and panting for breath, his are spending a cool, agreeable night. For three years there has not been a day when he has failed to get eggs, and he gets the smallest number in the summer, when part of his hens are sitting and raising chicks. The hole in the ceiling has made all the difference between a failure and a phenomenal success.

In a poultry journal recently, I read a letter, received by the editor, from a farmer who had purchased stock from an established breeder of pure-bred Barred Plymouth Rocks. He had provided a good house for them, and kept them in it during the cold weather. He had fed them well and given them every chance, he thought, and yet his neighbor, with a flock of scrubs, got three eggs to his one. He stated that the scrubs ran about the barnyards and had to hustle for their own living, while his were carefully provided for. If his Barred Rocks had had to do the hustling which he so kindly saved them from, the egg record would have been in their favor.

In making their calculations, some people leave out the most important detail, while others pass judgment because of an unimportant one. An American, in commenting on the laying contest recently ended, in London, England, observes that the first six pens, in order of their egg records, were white birds, and the seventh Buff. He comes to the conclusion that birds of one color are likely to be better layers than parti-colored varieties. He fails to observe that the contest was arranged by members of the Utility Club, an organization which is endeavoring to counteract the English tendency to become so much interested in the struggle for supremacy in the show-room as to care nothing about utility qualities, especially as many of the most prominent fanciers are men of wealth, who go into the fancy for sport, and often spend more money on it than they get out of it. The varieties which happen to be in favor with the English Utility Club are the White Lechorn, the White Wyandotte and Buff Orpington, and, of course,

they led in the contest, as the parti-colored birds matched against them were bred by parties who had given less attention to the laying qualities of their fowls. A pen of 13 Barred Rocks, of one of the most famous show strains, whose laying I have watched this summer, are keeping abreast of the best. At one time, for several days in succession, the 13 hens laid 13 eggs a day. On a poultry farm, laying record of which I know, the Silver Wyandottes are leading. The varieties raised are Silver Wyandottes, White Wyandottes, Black Wyandottes and Buff Orpingtons. The parti-colored birds are leading the three solid-colored varieties, while on another farm, which raises White Wyandottes, Buff Wyandottes, Silver Wyandottes and Golden Wyandottes, the laying records stand in the order which the varieties are named. The two solid-colored varieties are ahead of the parti-colored varieties. In handling poultry, or in making judgments with reference to it, the omission of a small detail may lead to a big blunder. For this reason it will probably take a long while to convince people that so far as eggs are concerned, the breeding is more than the breed, though the latter is not to be ignored. W. I. T.

Events of the World.



Admiral Brilleff.

Appointed to command of the defences at Vladivok.

Canadian.

The Ontario Bureau of Mines is sending out several parties who will make a systematic exploration of New Ontario, with a view to finding out its wealth in minerals.

Mr. C. C. Castle, Warehouse Commissioner at Winnipeg, estimates the total acreage under all crops in the Canadian West at 5,800,000. Last year's acreage approximated 4,500,000, so that this year will show an increase of over 1,000,000 acres.

The Government has again won in the recent elections in London, Ont., and North Oxford, Ont. In the former Hon. Chas. S. Hyman, Minister of Public Works, was re-elected with a majority of 329, and in the latter Mr. George Smith was elected to the seat rendered vacant by the death of Hon. James Sutherland, with a majority of 349.



Crown Prince Frederick William of Germany and His Bride.

British and Foreign.

Owing to his disagreement with the rest of the Cabinet over the Moroccan question, M. Delcasse has resigned as French Minister of Foreign Affairs.

A bomb factory has been discovered at the Phoenix foundry in St. Petersburg, and many people were imprisoned in consequence.

Submarine boat "A-8" was lost off the breakwater at Plymouth, England, on June 8th, and fourteen of her crew were drowned. An explosion on board was the cause of the accident.

In the bringing about of a possible peace between Japan and Russia, which seems to be assuming definite form at last, the United States of America is taking a creditable part. A note from President Roosevelt bearing upon the subject was despatched on June 8th to the Japanese and Russian Governments, with the suggestion that peace negotiations be carried on directly between the two nations without the mediation of any other nation. Upon receiving it Japan and Russia both signified their willingness to appoint representatives to confer as to the matter, Russia choosing Paris as the place at which the negotiations might be conducted. Whether the war will close or not will depend on whether the conditions offered by Japan will be such as Russia can accept. For the present it is understood that a formal truce will be proclaimed as soon as the place of meeting of the plenipotentiaries has been decided upon. In the meantime the warlike operations in Manchuria, which were suspended on the approach of Admiral Rojstovnsky's fleet, have been resumed all along the line, and, although no decisive battle has taken place, Linevitch is said to be almost surrounded by the Japanese troops.

The strained relations which have so long existed between Norway and Sweden have at last come to a head, in the withdrawal of Norway from the union, and her declaration that King Oscar is no longer King of Norway, but of Sweden alone. Ever since the consummation of the Union in 1814, differences have arisen as to the interpretation of its character, and Norway has continually felt that her constitutional rights and independence were being interfered with. The fact that Sweden is protectionist, while Norway is for free trade, has still further tended to widen the breach. The immediate cause of the present quarrel, however, is a disagreement over the consular system, Norway having asked for a separate consular service, which would, of course, entail a Norwegian Minister for Foreign Affairs, and leave the person of King Oscar the only remaining bond of union. King Oscar refused to grant the demand, and the Storting immediately passed a resolution deposing him as King of the Norwegians. For the present a State Council is conducting the Government, but the probabilities are that the throne will be offered to Prince Waldemar, third son of King Christian of Denmark. In case he refuses to accept it a Republic may be set up.

Wedding of the German Crown Prince.

All Europe has been set a flutter by the recent marriage of Frederick William, Crown Prince of Germany, with Cecilia, Duchess of Mecklenburg-Schwerin, which was consummated with all the splendor that characterizes a European royal wedding, and all the quaintness that clings to the especially German ceremony. The wedding took place June 6th, but the Duchess entered Berlin on June 3rd, arriving in the morning. In the afternoon the elaborate procession which always characterizes the advent of a future Empress paraded the streets of the city. An hour before it set out the Crown Prince, according to traditional custom, led his company of foot-guards over the route, acknowledging the continuous cheering by saluting with his sword at every second step. The procession was formed in the following order: First, forty mounted postmen; following these (according to precedent established since 1666), one hundred master butchers in evening suits and opera hats; next, squadron of First Dragoons of the Guard, in blue tunics and black helmets; twenty mounted trumpeters; three six-horse carriages, driven by postillions and occupied by the Gentlemen-in-waiting of the Empress and future Crown Princess; half a squadron of the Body Guard in white tunics and golden helmets topped with eagles; the eight-horse court carriage (made in 1793), surrounded by grooms in scarlet and gold, and occupied by the Empress, the Duchess Cecilia and the two first ladies of the Court; the rest of the Body Guard; two other six-horse carriages, containing the

Ladies-in-waiting of the Court, and last of all a squad-

ron of Uhlans and a mounted band. Through streets gaily decorated with ropes of ever-

The Prince, who is only twenty-three years of age, is said to be clever, courteous, modest, and of a sunny disposition, though displaying a little of his father's stubbornness at times.

Field Notes.

The Canadian Trade Review has no doubt but that success will be the final result of the establishment of the beet-sugar industry in Canada.

A correspondent in an exchange recently stated that the beet-sugar works at Rome, N. Y., were being dismantled, the machinery going to a new plant in California.

The total immigration to Canada last year was 186,881, and for the year ending June 30th is estimated at 148,267.

The Fruit Division, Ottawa, has just received word of a serious frost in Great Britain, May 23rd, which is likely to have a marked effect upon the fruit crop.

As showing the continued popularity of the Ontario Agricultural College as an objective excursion point, no less than 48 Farmers' Institutes visit Guelph during the month of June.

At a meeting of the Iowa Agricultural College Board of Trustees, June 7th, during commencement at Ames, it was voted to confer the degree of Bachelor of Agricultural Engineering to students who complete a prescribed course in this subject.

Dry-land Farming.

The Northern Pacific Railway has made arrangements with the United States Department of Agriculture and the State Experiment Station of Montana for conducting a number of experiments in dry-land farming this year in Eastern Montana.

Things to Remember.

TERRITORIAL FAIRS.

Table listing territorial fairs with dates: Edmonton June 29, 30 and July 1; Lacombe June 30 and July 1; Wetaskiwin July 4; Calgary July 5, 6, 7; Innisfail July 7; Okotoks July 11; Churchbridge July 19; Yorkton July 26, 21; Wolseley August 3 and 4; Carlyle August 4; Gainsborough August 8; Moosomin August 8; Indian Head August 8 and 9; Carnduff August 9; Regina August 9, 10, 11; Wapella August 10; Alameda August 10; Grenfell August 10, 11; Prince Albert August 14, 15; Fairmeade August 15; Lethbridge August 15, 16; Raymond August 17, 18; Moose Jaw August 17, 18; Red Deer August 30, 31; Olds September 19, 20; Strathcona September 21, 22; Maple Creek September 26, 27; Medicine Hat September 28, 29; Saltcoats September 29; Macleod October 3, 4; Pincher Creek October 5.

FAIRS.

Table listing fairs with dates: Neepawa June 29 and 30, July 1; Swan Lake July 18; Minnedosa July 18 and 19; Winnipeg Industrial July 20 to 28; W. A. A., Brandon July 31 to August 5; Killarney August 8, 9, 10; Manitou Show August 11 and 12; Dominion Exhibition, New Westminster, B. C. Sept. 27, Oct. 1.

MANITOBA FAIR DATES (DEPT. OF AGRICULTURE CIRCUITS).

Table listing Manitoba fair dates: Elkhorn July 17 and 18; Virden July 18 and 19; Carberry July 19 and 20; Westbourne July 21; Hartney July 18 and 19; Melita July 19 and 20; Deloraine July 20 and 21; Cartwright July 18 and 19; Pilot Mound July 19 and 20; Morden July 20 and 21; Shoal Lake August 8; Strathclair August 9; Oak River August 10; Hamiota August 11; Carman July 6 and 7; Morris July 10 and 11; Crystal City July 13 and 14; Portage la Prairie July 18 and 19; Wawanesa July 20; Cypress River July 21; Dauphin August 8; Swan River August 10.

FALL FAIRS.

Table listing fall fairs with dates: Woodlands September 27; Stonewall September 27 and 28; Gilbert Plains October 3; St. Jean October 3; St. Pierre October 4; Brokenhead October 4 and 5; Russell October 5; Macgregor October 6; Austin October 6; Headingly October 11; Meadow Lea October 12; Grenfell Grain Show December 7.

Secretaries of fairs and agricultural societies are requested to send in their dates, so that their fixtures may be made known to our readers.

Rubber Investment.

About a year ago an enquirer asked us for our opinion on the advisability of investing in shares in a rubber plantation somewhere in the torrid zone. Glowing promises of large revenues were flashed before prospective purchasers, based on the fact that supplies of rubber are becoming exhausted, but it's a very poor proposition that cannot be made to look well on paper.

"If many of the companies conduct their plantations as recklessly as they make advertising promises the plantations and the promises must alike fail. The appeal is to the cupidity rather than to the common sense of the investor.

available for anything that can assure returns at five per cent. No large and well-advised interests have invested in rubber culture."

Our Scottish Letter.

In spite of the heading, I cannot pretend that there is much in this letter about Scotland. Here things are quiet. The season has so far been favorable, and seed-time work is well advanced. We have a big upheaval regarding the efforts of the Board of Agriculture to stamp out sheep scab. The disease is not widely prevalent, and in most of the flock-masters areas in Great Britain it is practically unknown.

Recently evidence has come under my notice of great advances in stock-breeding in Ireland. At the shows held at Dublin and Belfast, in April and May, very large classes of Shorthorns and Aberdeen-Angus cattle appeared, showing the rapid extension of these breeds in the Emerald Isle.

CONDITIONS IN DENMARK AND THE CHANNEL ISLANDS.

Reflections such as these occur in connection with what I have lately seen in the Channel Islands, and what has been reported to us by a Commission of Scottish Agriculturists who visited Denmark a year ago. Alike in the Channel Islands and in Denmark, there prevails a condition of things quite the reverse of that seen in this country.

to Great Britain's open ports. In them agriculture is the primary industry, and all trade is subordinated to its success. The market for their produce is Great Britain, and they prosper because the fiscal policy of this country is not theirs. That is true only in part of Denmark, which has open ports for foodstuffs, otherwise she could never feed the enormous head of cattle carried. In Denmark the dairy cow reigns supreme. She controls and dominates the whole business fabric. "Nothing," say the Danes, in respect of education, "is too good for the children," and they might almost say the same of the cow. Here it is far otherwise. Agriculture is pressed into the background. Its votaries can affect few elections. The Parliament man treats the farmer and his complaints with enough regard to ensure his vote should he care to cast it, but he does not exert himself much on the farmer's account in the matter of legislation. Were it otherwise the farmer's lot would be improved and his interests better protected than they are.

"SCOTLAND YET."

Leeds Tramways.

The Leeds, Eng., tramways are owned and run by the city authorities; the service is excellent. The fare for one mile stage is one cent, and for two miles, two cents. Travelling on the tram cars in Leeds is much cheaper than in Canada for short distances, and rather more expensive for long distances.

Total revenue for the year ending April 30th, 1905, \$1,491,165. The mileage run was 7,044,888 miles.

Total traffic expenditure\$415,025
 Expenditure upon permanent way 40,000
 The total working expenses amounted to 806,485
 Leaving a gross profit of 684,680
 From which had to be deducted the following:
 Fixed charges\$168,455
 Interest on capital 142,505
 Redemption fund and income tax 108,715
 This left \$275,000 to be handed over to the City Finance Committee.

More Data on Cattle Feeding.

The Iowa Experiment Station has concluded another series of experiments in cattle-feeding. One of the first objects of this last series was to gather data on the relative values of light, medium and heavy grain rations. The feeding trial extended over 189 days, there being fifty head on each ration. The conclusions reached correspond with those of Prof. Day, at the Ontario Station, namely, that cattle on light rations make the most economical gains in weight, but at Iowa it was found impossible to properly finish cattle in 189 days on light or medium rations, so as to sell as well as similar cattle fed on the heavy allowance of grain.

Though the light-fed steers made the most economical gains, they sold for 10 cents less per cwt. than the medium fed, and 30 cents less than the heavy fed. The difference in selling price placed those fed on a heavy grain ration first, those fed on a medium grain ration second, and those fed on a light grain ration third.

Incidental to the test an experiment was conducted to determine the relative merits of Northern, Western and Southern bred cattle for feed-lot purposes, and the conclusion in this instance was, if anything, slightly in favor of those from the warmer climate, as they seemed to mature more rapidly.

Greenway as a Prophet.

Hon. Thos. Greenway, M. P., recently forecasted that in ten years Winnipeg would overtake Toronto, which has a population of some 225,000, and now he goes still further, after taking a look over Montreal, and predicts that in twenty-five years the Capital of Manitoba will be the largest city in Canada. Business is going to boom in Canada, because within the next five years the Grand Trunk Pacific Railway Co. will spend \$150,000,000, the Canadian Pacific well on \$100,000,000, and Canadian Northern in the West alone about \$50,000,000. Mr. Greenway said he knew of no other country in the world with a population of 6,000,000, the latent resources of which would warrant the expenditure of the enormous sum of \$300,000,000 in so short a period.

American Wheat.

Harvest is now in full swing in some of the Southern States, and wheat has reached all stages of development between Canada and Texas. Naturally, estimates of the yield for 1905 are being made, and invariably they are much larger than for the past two or three years. Only in a few cases do unfavorable conditions exist, so far there being no report of rust, but in Kansas the yields will be somewhat affected by the Hessian fly, high winds and dry weather.

The wheat yield of New Zealand is estimated by the Government to be 27 bushels per acre, as against 34.3 last year. A surplus of 2,179,000 bushels is expected for export.

The final report of the government statistician upon the wheat harvest of 1904 in New South Wales is that 16,463,890 bushels were gathered. This was a return of 9.3 bushels per acre, and with a surplus carried over from the previous year will give about eight million bushels for export.

Have You a Camera?

In view of the popularity attending those in previous years, we have decided to have another camera competition, or rather six competitions, as follows:

A—Photographs of farm homes, showing house, grounds, trees, etc.

B—Photographs of buildings and live stock, or any farming operations, such as seeding, plowing, harvesting, threshing, etc., in which people or animals are at work. (Last year's photographs accepted.)

C—Photographs of interior views of rooms in houses, showing arrangement of furniture, kitchen appliances, etc.

D—Rural school and grounds, with group of pupils. In this section we particularly desire photos of schools where grounds and surroundings are well kept.

E—Photographs of cheese factories or creameries, with surroundings.

F—Photographs of gardens or orchards.

The prizes will be, in each section:
 First prize \$3.00
 Second prize \$2.00

RULES FOR COMPETITORS.

All photographs must be mounted, and preference will be given to those not smaller than 4x5 inches in size.

THEY MUST BE CLEAR AND DISTINCT. In making the awards consideration will be given to the judgment displayed in the choice of subjects, and to the suitability of the photographs for illustration purposes.

They must reach the office of the "Farmer's Advocate and Home Magazine," Winnipeg, Man., not later than July 31st, 1905.

The name of the competitor, with P. O. address, must be marked on the back of each photo, as well as the name and location of the view depicted.

Any competitor may send in more than one photo, but may not receive prizes in more than two sections, nor more than one prize in any one section.

All photographs entered for competition shall become the property of the "Farmer's Advocate and Home Magazine."

No photograph from which any engraving has been made is eligible for competition.

June and July is the season par excellence for obtaining beautiful views of the various kinds for which our prizes are offered. Every Province in Canada and the adjoining States should be represented in this friendly competition.

THE "WANT AND FOR SALE" COLUMN OF THE "FARMER'S ADVOCATE AND HOME MAGAZINE" IS THE PLACE FOR YOUR ADVERTISEMENT. SEE RATES UNDER THAT HEADING IN THIS PAPER. ADDRESS: FARMER'S ADVOCATE AND HOME MAGAZINE, WINNIPEG, MAN.

Markets.

Winnipeg.

Thompson, Sons & Co.'s market letter on June 8th reads: Wheat—The wheat trade of the world has during the past week continued to show the same feverish and nervous conditions which have obtained now for several months. During the first five days of the month the markets were strong and advancing, but in the last two days the feeling is easier and prices have receded. There is, however, no doubt that there will be plenty of wheat for flour making until new crop is ready. The harvesting of wheat is just beginning far south in Texas and Southern California, and it won't be long before new wheat appears on southern markets. In the meantime, Europe continues to receive large supplies from other countries, the world's shipments last week being almost 13,000,000 bushels, a very large quantity for the time of year. Europe, however, needs a large quantity of foreign wheat this summer, and any large falling off in shipments would result in higher prices, but so long as no actual scarcity is seen ahead she will not advance prices, because in the south of Europe harvest is beginning, and under favorable weather it will soon creep northward, and generally the crops are showing well in every country. Argentine and Australia are having a very favorable seedtime, and the acreage for the new crop is expected to show substantial increase. The visible supply de-

creased last week 1,092,000 bushels, against a decrease of 1,303,000 bushels the previous week, and a decrease of 972,000 bushels same week last year. The world's shipments were 12,648,000 bushels, against 9,152,000 bushels the previous week, and 10,056,000 bushels last year. The world's visible supply, according to Bradstreet's, decreased 3,422,000 bushels, against a decrease of 5,005,000 bushels last year week.

Manitoba wheat in the Winnipeg market has, during the past week, been running a show of its own, at least so far as June and July wheat on the option market is concerned. On the last day of May our July wheat closed at 91½c., by the 5th inst. it was up to 96c., and yesterday it closed at the dollar, an advance of 8½c. in a week. To-day the feeling is rather easier, and it has closed at 99½c. The advance also applies to cash 1 and 2 northern, but not to the lower grades. No. 3 northern, which was 82c. on May 31st, is only 84c. to-day, and the highest price in the interval has been 85c., and other lower grades are in same position. It is not possible to give adequate reasons for the advance in our July wheat. There is no milling or export demand affecting the price, and it seems a pure speculative movement. It looks as if July wheat has been sold short in a large way, and that shorts had become afraid of getting the wheat to fill their sales. At any rate there has been a movement on the part of large buyers to secure a large quantity of July wheat, and in endeavoring to do so they have gradually advanced the price. In face of this there is no demand for the lower grades, and cash trade, except for No. 1 and No. 2 northern, is dull and slow. The crop situation over the country is very favorable at this date, and present prospects are for a large crop. Prices are: No. 1 northern, 99½c.; No. 2 northern, 96½c.; No. 3 northern, 83½c.; No. 4 extra, 75½c.; No. 4 wheat, 74½c.; No. 5 wheat, 64c.

LIVE STOCK AND PRODUCE.

Cattle—Market firm. Best butchers' cattle, 2½c. to 4½c. per pound; medium grades, 3c. to 3½c. or less.

Sheep—Choice mutton sheep, 6c.; lower grades, 4c. to 5c. There is but very little doing.

Hogs—Receipts are fairly liberal. Live hogs, weighing 150 to 250 pounds, are bringing 5½c., and 250 to 300 lb. hogs, 5½c., off cars, Winnipeg.

Dressed Meats—Demand for fresh meats is good. Beef, 8c. for city dressed; mutton, fresh, 14c.; veal, 8½c.

Butter—Creamery—Local jobbers will pay 21c. to 22c. for bricks delivered here, and 19c. for boxes. Dairy—The market is much easier, and prices have dropped. This is due, of course, to the fact that new stock is arriving. Dealers here will pay now 17c. to 18c. for separator bricks, 16c. to 17c. for rolls, and 14c. to 15c. for round lots of tubs, delivered at Winnipeg.

Eggs—The market is firmer. Jobbers are paying 14c. for fresh eggs in cases here.

Poultry—The market is supplied with imported frozen stock. Fowl, 13c.; spring chickens, 13c.; turkeys, 12c. to 19c.; ducks, 15½c.; geese, 14c.

Hides—There is no change in the market—6½c. to 7c. flat at country points for butchers' hides. Full wool sheepskins, 60c. to 75c., at country points.

Wool—There is nothing doing. Manitoba wool, if it were obtainable in quantity, would bring 10½c. per lb.

Seneca Root—Digging has commenced. Much depends upon the opening price. If it is good digging will be active; if not, the labor will be attracted to other lines.

Toronto Horse Market.

The following is Burns & Sheppard's weekly report of prevailing prices:

Single roadsters, 15 to 16 hands\$150 to \$185
 Single cobs and carriage horses, 15 to
 16.1 hands 160 to 190
 Matched pairs and carriage horses, 15 to
 16.1 hands 300 to 450
 Delivery horses, 1,100 to 1,200 pounds, 165 to 200
 General-purpose and express horses, 1,200
 to 1,350 pounds 150 to 175
 Draft horses, 1,350 to 1,750 pounds 200 to 250
 Serviceable second-hand workers 75 to 100
 Serviceable second-hand drivers 60 to 90

Foreign Crop Conditions.

J. R. Heintz & Co. (R. B. Holden) furnish the following Broomhall weekly foreign crop summary: Liverpool, June 13.—United Kingdom and France—Further beneficial rains have fallen; prospects now good. Germany—Some rains have fallen; more wanted. Hungary—Prospects generally satisfactory for the crop. Roumania—Frequent storms have caused some lodging of grain; otherwise crop conditions favorable. Russia—The situation is still uncertain; fair rains have fallen, but complaints continue, some claiming rains too late. Italy—Outlook is now favorable. Spain—Prospects fair, except in southern provinces.

Chicago.

Cattle—Good to prime steers, \$5.50 to \$6.30; poor to medium, \$4 to \$5.40; stockers and feeders, \$2.75 to \$4.80. Hogs—Mixed and butchers', \$5.20 to \$5.40; good to choice, heavy, \$5.30 to \$5.37½; rough, heavy, \$4.60 to \$5.70; light, \$5.20 to \$5.37½; bulk of sales, \$5.30 to \$5.35. Sheep—Good to choice wethers, shorn, \$4.60 to \$5.20; fair to choice, mixed, shorn, \$3.50 to \$4.40; native lambs, shorn, \$4.50 to \$6.75.



Life, Literature and Education.

Thomas D'Arcy M'Gee.



Although Thomas D'Arcy M'Gee did not come to Canada until he was thirty-two years of age, he may yet be included among Canadian writers, as the greater part of his literary work was done in Canada. Although he was pre-eminently a statesman and an orator, his articles and poems show great merit, and the latter have been collected into an interesting volume, entitled, "Canadian Ballads and Occasional Verses." He was foully assassinated in Ottawa, April 7th, 1868. That his memory is still affectionately remembered by Canada, may be judged from the fact that two of the townships in New Ontario have recently been named after him, one D'Arcy and another M'Gee.

Russia's Day of Hope.

The fall of Port Arthur, the overthrow of mighty armies at Mukden, and the destruction of the Baltic Armada at the Sea of Japan, constitutes a series of unparalleled disasters which the world regards as Russia's tragedy of defeat and humiliation. There was a day at Moscow, nearly a century ago, when nature's forces of fire and frost with irresistible power saved Russia from the rapacious ambition of Napoleon Bonaparte, but Russia heeded not the lessons of history, nor hearkened to the Divine voice invoking her to a policy of enlightenment, to civil and religious liberty. Instead of emphasizing manhood in her scheme of national life, she chose rather for her people ignorance, tyranny, national greed, duplicity, and a crushing terrorism that subdued all aspirations to the stolid silence of her myriad moujik, broken only by the volcanic outbursts of a Tolstoy, the bomb-throwing nihilist and the impassioned student. A military oligarchy, enthroned in barbaric splendor, reached out into Asia, eastward and ever eastward, until the twentieth century curtain rolled up upon a scene of blood, in which perish the aspirations of the autocrat. Had Russia triumphed over Japan in this war there would have been no hope for the Russian people, until time brought on a more terrible conflict and a still greater disaster. The heart of her people, if it could be felt by the civilized world, is not in this war; it revolts against it, and as the truth of overwhelming defeat filters down to the masses, then will begin the

slow birth-throes of a new national life. It will be gall and worm-wood to give up the ambitions of a century, but Russia must die before she can be born again. Her hope now lies in a policy of internal reform, of education, of preparation for representative institutions, of industrial rather than military and naval progress, and of religious freedom. Soon the great clock of human events will strike the hour of her destiny. Will she open the school, unshackle the press, put aside the knout, and unlock the Siberian dungeon? If so, the heart of the Russian peasant may yet beat high with hope and his eyes be lifted to the sun.

The "Derby" of Life.

By Dr. Oliver Wendell Holmes, in "Autocrat of the Breakfast Table."

I find that the great thing in this world is not so much where we stand as in what direction we are moving. . . . "Commencement day" always reminds me of the start for the "Derby," when the beautiful high-bred three-year-olds of the season are brought up for trial. That day is the start, and life is the race. Here we are at Cambridge, and a class is just "graduating." Poor Harry! He was to have been there, too, but he has paid forfeit; step out there into the grass back of the church. Ah! There it is:

"Hunc lapidem posuerunt
Soch moerentes."

But this is the start, and here they are—coats bright as silk and manes as smooth as eau lustrale can make them. Some of the best of the colts are pranced round—a few minutes each—to show their paces. What is that old gentleman crying about, and the old lady by him, and the three girls, all covering their eyes? Oh, that is their colt that has just been trotted up on the stage. Do they really think those little thin legs can do anything in such a slashing sweepstakes as is coming off in the next forty years? Oh, this terrible gift of second-sight that comes to some of us when we begin to look through the silvered rings of the arcus senilis!

Ten years gone. First turn in the race. A few broken down; two or three bolted. Several show in advance of the ruck. "Cassock," a black colt, seems to be ahead of the rest; those black colts commonly get the start. I have noticed, of the others in the first quarter, "Meteor" has pulled up.

Twenty years. Second corner turned. "Cassock" has dropped from the front, and "Judex," an iron-gray has the lead. But look!—how they have thinned out! Down fat—five—six—how many? They lie still enough! They will not get up again in this race, be very sure! And the rest of them, what a "tailing off"! Anybody can see who is going to win—perhaps.

Thirty years. Third corner turned. "Dives," bright sorrel, ridden by the fellow in the yellow jacket, begins to make play fast; is getting to be the favorite with many. But who is that other one that has been lengthening his stride from the first, and now shows up close to the

front? Don't you remember the quiet brown colt "Asteroid," with the star in his forehead? That is he; he is one of the sort that lasts; look out for him! The black "colt," as we used to call him, is in the background, taking it easy in a gentle trot. There is one they used to call the "Filly," on account of a certain feminine air he had; well up, you see; the filly is not to be despised, my boy!

Forty years. More dropping off—but places much as before.

Fifty years. Race over. All that are on the course are coming in at a walk; no more running. Who is ahead? Ahead? What! And the winning-post a slab of white or gray stone, standing out from that turf where there is no more jockeying or straining for victory! Well, the world marks their places in its betting-book; but be sure that these matter very little, if they have run as well as they knew how.

The Spirit of Liberty.

Eternal spirit of the changeless mind!
Brightest in dungeons, Liberty! thou art,
For there thy habitation is the Heart—
The Heart which love of thee alone can bind;
And where thy sons to fetters are con-
signed—
To fetters and the damp vault's dayless
gloom,
Their country conquers with their martyr-
dom,
And Freedom's fame finds wings on every
wind.

—Byron.

"The liberty of a people consists in being governed by laws which they have made themselves, under whatsoever form it may be of government; the liberty of a private man in being master of his own time and actions, as far as may consist with the laws of God and of his country."—[Cowley.

"If the spark of religious and civil liberty be kindled it will burn. Human agency cannot extinguish it. Like the earth's central fire, it may be smothered for a time; the ocean may overwhelm it; mountains may press it down; but its inherent and unconquerable force will heave both the ocean and the land, and at some time or other, in some place or other, the volcano will break out and flame up to heaven."—[Daniel Webster.

Writing "The Simple Life."

In the feverish rush of modern life, with its affectation, social rivalries and extravagance, it will do people good to read that rare little book, "The Simple Life," by Rev. Chas. Wagner, the French clergyman who recently visited Canada and the United States. He gives the following account of how he came to write the book which has had such a wonderful sale all over the world. It is a sensible plea for simplicity in our thinking, in our speech, and in our acts and ways of living.

"The way I came to write 'The Simple Life' was an accident. At a wedding we were seven. There were the groom and the bride and the witnesses, six, and the pastor,

seven. I talked to them about the home, the fireside, and their manner of life; just to the six. One of the six was a daughter of a public man—a politician. After a few days she came to me and said:

"I wish you would talk at my wedding just as you did at the wedding of those working people."

"I said, 'I cannot talk at your wedding like that. There will be two thousand people at your wedding.'"

"Well," she said, "you just talk like that."

"So I did; and in the audience there was a publisher. There is always a publisher in every audience. And he wrote me that he would like to publish my talk. That came like an inspiration to me. I had never thought of writing a book on the simple life, but so the book was written, and it has spread all through France and Europe and this country."

Rural School Libraries.

The annual report of the Ontario Department of Education refers to the fact that the establishment of libraries in rural schools has been a marked feature of work in recent years. A carefully-prepared catalogue, giving books recommended, has been distributed among trustees of various school sections. The list embraces most of the latest and best works in nature study, agriculture, history, biography, travel, poetry and citizenship. Up to a maximum of \$20 the Government gives one half the amount expended each year for books. Any further sum expended need not be confined to books in the recommended list if approved by the Inspector. By starting with from \$20 to \$50 worth of books, and adding \$5 or \$10 worth each year, an exceedingly valuable and helpful library can soon be built up, which will prove of incalculable value, not only to the school, but to the people of the section generally. From the beginning of the third year at school, pupils should be encouraged to supplement their regular text-book work with other reading of an instructive and elevating character. In conversation with an intelligent public school principal, recently, he testified that he had found the library which the trustees had aided in introducing, of the very greatest benefit. Among other things it solved the problem of how to employ the time of the bright, diligent scholar who completes her or his tasks at the desk before the others, and as an encouragement they obtain the reading of some interesting book, related directly or indirectly to some of the regular subjects taught. When taken home, these books prove a boon, by encouraging good reading in homes not well supplied with literature. He considered the library a most attractive feature in the school.

We have examined the lists of books recommended by the Education Department, and find them admirable (particularly those relating to the study of nature), in a way that should delight every country boy and girl. It seems to us that the Department has done wisely in giving substantial encouragement to trustees, who, in conjunction with

their teachers and the inspector, aid in promoting the establishment of the library and in the selection of the books. In some cases the needs of a community are fairly well supplied by good Sunday-school and other libraries, but in the majority of cases the need for a good assortment of books of the character described will be apparent. The education report before us indicates that the formation of these libraries rests largely with the teachers, and also points out that, without a supply of such books in the school, the teacher is seriously handicapped in promoting the best interests of the school. We would certainly advise teachers and trustees who are not familiar with this subject to write the Department of Education, Toronto, Ont., from which, no doubt, copies of the catalogue of books, with instructions, can be obtained.

Domestic Economy.

To remove old wall paper, set a boiler two-thirds full of boiling water in the room and drop in several hissing hot bricks. Close the room at once and leave until the steam has thoroughly penetrated the paper, when it can be scraped off with a knife, or still better, a hoe. Repeat, if necessary.

Chop pork or beef cracklings while fresh, mix with equal parts of chopped stale bread and a very little finely-chopped cold boiled potato. Season with salt, pepper and sage, and moisten with milk. Make into flat cake, dip in flour and fry, and you will think you are eating some very good sausage.

Tainted butter or lard, if put into a cloth and buried several days, will be very much improved if not rendered perfectly sweet by the process. Tainted fruit cans or earthen jars left a week or more buried in dry earth will be as sweet as new ones.

Never set butter firkins or crocks on the cellar bottom, whether of earth or cement, but on bricks or blocks of wood, so air can freely circulate underneath. A little borax added to brine in which roll butter is kept will help preserve it.

Wisdom's Goal.

By Mutschito, His Majesty the Emperor of Japan.

The following poem was written for the students at the Peeresses' School at Tokio:

The water placed in goblet, bowl or cup
Changes its form to its receptacle;
And so our plastic souls take various shapes
And characters of good or ill, to fit
The good or evil in the friends we choose.
Therefore be ever careful in your choice
of friends,
And let your special love be given to those
Whose strength of character may prove
the whip
That drives you ever to fair Wisdom's
goal.
Tokio, Japan.

When the Boats Are Away.

Our picture, which has attracted much attention at the Royal Academy, and added greatly to the already established fame of the artist, is by Mr. Walter Langley, R. I., one of the earlier members of what has been called the Newlyn School of Painters. It is a typical Cornish scene. The boats are away, and there is a lull in the day's work. The old woman's attitude of deep attention shows that the item of news the old fisherman is reading concerns her very nearly, whilst to the younger it is but of passing interest. One can almost hear the swish of the waves as they beat leisurely upon the shore, and it is easy to judge by the watchful gaze of the man in the background, that it will not be long before the dark sails of the fishing smacks will appear upon the horizon, and the harvest of the ocean be ready for transportation to the inland markets of England.

H. A. B.



Children's Fresh-air Mission.

Whoso shall receive one such little child in My Name receiveth Me.—St. Matt. xviii. : 5.

"That vast throng,
The multitude of peoples, nations, tongues,
Shall stand before His Throne, and every act
Of human kindness He will own as His,
And crown, as service rendered unto Him."

The yearly report of the Toronto "Children's Fresh-air Mission" reached me to-day, and I have been asked to tell you something about the work as soon as possible, so that there may be no delay in finding homes for the children. The secretary says that homes for twenty children and about \$25.00 for railway fares resulted from the appeal made through the "Farmer's Advocate" last year. The workers send their thanks to all who helped last year, and hope that their farmer friends will again prove themselves friendly; at least, I should say that I hope you will help the work again—it is against the rules of the Mission to ask any help from anyone but God. I am only a well-wisher, so may make an appeal if I choose. If every "Farmer's Advocate" reader would send a small contribution—10 cents or a quarter—the total would astonish us all. When sending money or the offer of a home for two weeks, please mention the "Farmer's Advocate," so that next year we may be able to see how many children have been benefited. About fifty received a holiday through your help last summer. Those who are willing to take two

children for a fortnight are particularly requested to send in their names to the secretary before July 1st, as the work is increasing each year, and the children are all sent out as early in July as possible. The secretary is Miss Florence Roberts, 21 Scarth Road, Toronto. The treasurer is Martin Love, 506 Church St., Toronto. Send all offers of homes to the secretary, and money contributions to the treasurer. HOPE.

Selections from the Report for this Year.

"A Scotchman living in the Highlands was once asked how he had such a fine flock of sheep. His answer was, 'I always take care of the lambs.'" It is very easy to write the story of the Fresh-air Mission, for it is one of continuous blessing year after year. Never in the history of this Mission has our Father's wonderful provision been more generous. We, indeed, are very grateful, and do praise Him for it all.

Each year brings the same pleadings, "Please can I go to the country?" And each year the number of pleaders increases. God has not disappointed us, for while sending increased numbers He has also provided both homes and money.

Through the generosity of kind friends we had the joy of sending out 350 children last year, each contributor sharing in the blessing.

One cannot feel too grateful to our friends living in the country for their part in the work; surely their share is very great.

HOW IS THE WORK SUPPORTED?

First of all let us make plain that the work is out and out a work of faith. We are solely dependent upon our heavenly Father for every need. Perhaps one little incident will make plain.

It was a Wednesday night, and gathered

round a table heaped up with work, was our little company of half a dozen workers, each one so busy and yet so full of joy. The tickets for Thursday's children had been purchased from the railways, and as it neared midnight we were counting up the number and cost for Friday—108 was the required number. When figuring up the cost we were \$4.90 short. This made our hearts sink, for a work of faith must never go into debt. Thursday morning the tickets were ordered, to be called for at four o'clock in the afternoon. Opening our morning mail of forty-two correspondents there was no help. Eleven o'clock mail brought no money, and before another mail would reach us the tickets had to be called for. What was to be done? Had God forsaken us, and He knowing best the need of the work? Between 12 and 1 a friend called with a letter addressed to the treasurer, saying it had been sent to his office in mistake (although the sender had never misdirected a letter to the treasurer before). It enclosed \$10, and, oh, what a joy! It was more than we needed. The tickets were called for, and on the 4 o'clock mail \$5 more came. This surely was God's abundant answer.

Midnight was nearly upon us as we sat at the same table that night, and in our final check we found that ten children who were to go out on the 7 o'clock train the next morning had been overlooked. It just took the \$10 extra, leaving the good balance of 10 cents on hand. Do you think we had a right to lift our hearts in praise to God?

This is only one incident of the many that have been our blessed experience. Once, after sending out seventy-three children, we had a balance of three cents. Never have we been a cent short, and never have we had to refuse a child for lack of funds. We just keep laying the needs before God, and never do we ask anyone, directly or indirectly, for money.

The following letter illustrates one of the difficulties connected with the work:

July 8th, 1904.

Mrs. F. likes the girls very much. They are nice little girls, but she thinks they are not charity subjects. They are well dressed and well cared for, and talk about taking music lessons and going trips to the Falls, etc. She was expecting some poor, uncared-for children, and is disappointed. She does not feel like working for children who are apparently as well-to-do as her own.

She is going to send them home on Monday.

I hope the others will stay, as this is the first year anyone has taken any children, and we want them to continue next year. Yours sincerely, etc.

Our secretary sent the following reply:

Here are the facts of the above case: The people are very respectable; home neat and clean. The father was out of work nearly all winter, and the mother was sick in bed for two months. Nellie did all the housekeeping—washing, ironing, cooking, etc. They never once asked for assistance, although our nurses had to take, many a time, the nourishment the mother needed.

The "piano" story is this: As many of these people do, they took in two people to board, who brought with them an old tin pan that I would not pay the cartage on. The "boarders" failed to pay up, and Mrs. F. had to take over the piano (?)

The Niagara trip came by a promise of the father's, that if he got work, and the mother was better, they would go over some Saturday to a friend's home who was living there.

Last year we sent the same two girls out, and some one complained then that it was too bad they were sent out so poorly clothed. This hurt their mother very much, and when we promised to send them out again this year she began early in the spring, and by hard work had them nicely dressed, I believe all the work of her own hands. Of course the children are to blame for their exaggeration, but can one wonder, they are so delighted at getting out. I always tell the friends to take a handful of salt with many of the children's stories. There is a danger of placing too implicit confidence in the stories of children, for many of them exaggerate almost unconsciously,



When the Boats are Away.

especially when they find their tale acceptable and interesting to listeners.

WHAT WE ASK OF OUR FRIENDS WHO TAKE THE BOYS AND GIRLS.

To take them for two weeks' holiday.
To be strict, and not withhold correction when it is necessary.
To notify children's parents of their home-coming.

To kindly write secretary as to children's conduct (good or otherwise).
We desire to send them all out the first week in July, commencing Tuesday, July 4th.

Friends to meet the children at the railway station, and see them safely on the train on their homeward journey.

We send the children two by two, so as to prevent homesickness.

We pay their railway fare both ways.
We ask only for Christian homes, where the children will be received for the Master's sake.

We try and send our best-behaved and most-deserving boys and girls.

Kindly say whether boys or girls are preferred.

We cannot send their names before going out.

If the same children are desired again, kindly let the secretary know.

In your correspondence, please say whether Miss, Mrs., or Mr.

State post office address and nearest railway station.

We wish to have by June 20th the names of friends who desire to take our children.

Please join us in earnest prayer that above all our boys and girls may learn to know and trust Jesus as their personal Saviour.

Recipes.

Cake Without Eggs: One cup sugar, 1 cup milk, 2 cups flour into which has been sifted 2 teaspoonfuls baking powder, 1 teaspoonful lemon or vanilla; beat all well, and add 5 tablespoonfuls melted butter.

Cream Puffs: Put $\frac{1}{2}$ cup butter into 1 cup water (boiling hard on the stove), while still boiling stir in 1 cup flour. When thoroughly mixed take off and let cool; then break in three eggs, one at a time, mixing thoroughly after each one is added. Drop in small, rough heaps, and bake in hot oven. When cold open at the side and fill with whipped cream or custard.



At Aunt Hittie's.

Ev'ry year w'en hayin's did,
Fore taterin' begins,
Pa takes marn, Joshua and Lyd,
Mc, Thomas, and the twins,
He piles us on the wagon high
As deep ez he can pile us,
Till marn begins to fuss and cry,
Declarin' he will spill us.
He jams one here an' crams one there,
He's not at all particular!
An' some is criss-cross, some is curved,
An' some is perpendic'lar.

An' then we start upon our ja'nt,
Dressed in our frills and flummery,
To visit our dear, good ol' a'nt
Mehitable Montgomery.
We wobble here, we wobble there,
Bimeby there comes a shout:
"We've spilt the twins! we've spilt the
twins!
Say, dad, hol' on, you've spilt the
twins!
The twins hez tumbled out!"

We gather up the scattered twins,
(An' it is squally weather.)
Then marn she takes two safety-pins
An' fastens 'em together.
An' w'en we reach Aunt Hittie's door
We raise a general din,
An' she comes out, surrounds us all,
An' gathers us all in.
An' she hugs pa, kisses ma,
An' cackles, cries, an' grins,
An' squeezes all permiscuously,
Especially the twins.

See Him Wiggle!

These children are having the best time they ever enjoyed in their lives. They have been sent out by the Toronto Fresh-Air Mission for a glorious country holiday—or, at least, they might have been. If you want to hear all about it ask your mother to read aloud to you this week's "Quiet Hour," you will find full particulars there. Perhaps she may be able and willing to invite two poor little city children for a fortnight's holiday; but, if that is impossible, at least you

can send a little money and help in that way.

How would you like to play always in the hot streets, with no woods to picnic in, no creek in which you can paddle with bare feet or catch wriggling fish, no old farm horse to ride to water in the cool evenings? I once read about a little Japanese baby that was suffering from a want of fresh air, so its mother invented the idea of sending it up on a kite for a change of air. Here is the story:

"A mother lived in Ho-Cho-Le, She had a son so pale and wee,
His life she did despair of—
The Doctor came and took his fee—
'He must have change of air,' said he,
'Close streets you must beware of.'
The mother hushed her baby's cries,
While tears dropped slowly from her eyes—
Alas! she had no money—
Her sad gaze wandered to the skies—
She cried aloud with glad surprise:
'You've saved, my dearest sonny!
She fetched her husband's strongest kite,
She tied her baby to it tight,
And up she sent him flying.
And there the air was pure and bright,
So happy looked the little mite,
The mother ceased her sighing.
O wondrous, wondrous change of air!
That Baby grew so plump and fair
That people scarcely knew him,
Li-Ti could sit without a care—
Above her crowed her son and heir—
And that's just how I drew him."

Of course that is on'ly a fancy story, but it is only too sadly true that hundreds of babies and little children die every summer who would have been rosy and well if they could have had a few weeks of country air, real country milk, fresh eggs and—happiness. The Toronto children do not suffer like the little ones in New York, but there are plenty of forlorn little ones even there. A little more than a year ago I read in the paper about a mother and eight children who lived in a cellar on Bay Street. All the furniture they had was

a small stove, and their table was an old door laid across two trestles. It was the end of February—you may remember how terribly cold the winter of 1904 was—and, when the Relief Officer discovered them, there was neither food nor fuel in the place. And two of the children were dying of consumption!

I know things very seldom get as bad as that in our dear, prosperous Canada, but still there are plenty of children who don't have half as good a time as you do. What chance have they to "see him wiggle!" when, like Simple Simon, all the water they have to fish in is in their mother's pail?

I had the great pleasure of taking two of these "Fresh-Air" children, and half a dozen other little ones, to the woods one day last summer. You should have heard the shouts of delight when a tiny fish was hauled out of the creek. Worms were more scarce than fish, and we had to dig for them with a big granite spoon and a table knife, but the difficulty in finding them only made things more exciting. After a jolly picnic tea, we played Wild Indian: making wigwams with the buggy duster and waterproofs, scalping our enemies with fierce delight, and making the woods ring with terrible warwhoops. That was only one bright afternoon out of many, and I hope we shall have just as good a time this summer—why not? Just think of it! About fifty children had an extra good time last year because people read about them in the "Farmer's Advocate!" If you make a special effort perhaps a hundred might be reached this July. And remember one thing: "If 'twere well done when 'tis done, 'twere well 'twere done quickly!" If you put off attending to this matter for even a week or two it will be too late. If there is one land where it is a great mistake to settle, it is the "Land of Pretty Soon."

"I know of a land where the streets are paved

With the things which we meant to achieve.

It is walled with the money we meant to have saved,

And the pleasures for which we grieve. The kind words unspoken, the promises broken,

And many a coveted boon, Are stowed away there in that land somewhere—

The land of 'Pretty Soon.'

There are uncut jewels of possible fame

Lying about in the dust,

And many a noble and lofty aim

Covered with mould and rust:

And oh! this place, while it seems so near,

Is farther away than the moon,

Though our purpose is fair, yet we never get there—

The land of 'Pretty Soon.'

The road that leads to that mystic land

Is strewn with pitiful wrecks,

And ships that have sailed for its shining strand

Bear skeletons on their decks.

It is farther at noon than it is at dawn,

Farther at night than at noon;

Oh! let us beware of that land down there—

The land of 'Pretty Soon.'

COUSIN DOROTHY.

Humorous.

WHAT WE NEED.

The primary class in Sunday-school was listening to a lesson on patience. This, according to the Boston Herald, was what came of it, at least in the minds of the more liberal-minded children:

The topic had been carefully explained, and as an aid to understanding, the teacher had given each pupil a card, bearing the picture of a boy fishing.

"Even pleasure," said she, "requires the exercise of patience. See the boy fishing! He must sit and wait and wait. He must be patient."

Having treated the subject very fully, she began with the simplest, most practical question:

"And now can any little boy tell me what we need most when we go fishing?" The answer was shouted with one voice: "Bait!"

Camera Competition.

We wish to call the attention of our Home Department readers to our "Camera Competition," which is now in progress. If you have a camera, this is the time to use it. For further particulars, see page 921 of this issue.



See Him Wiggle!

The Tea of the West

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Tea, and there's almost as much improvement in it the last few years as in the West itself. If you wish to enjoy the richness and strength of the best tea ever sold in any country, try a package of Blue Ribbon Tea. Ask for the Red Label.

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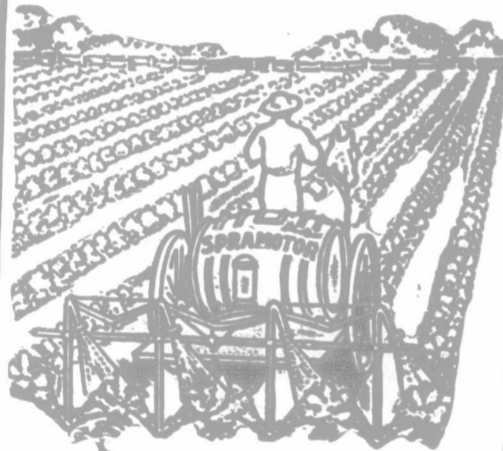
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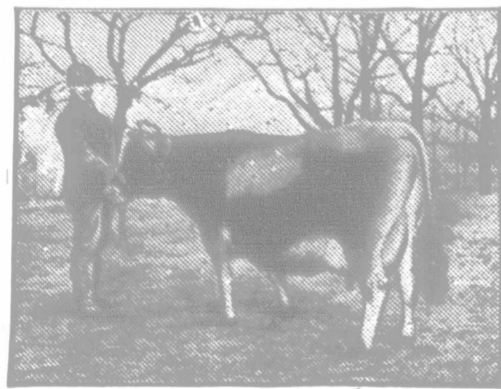
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The machine illustrated will spray 20 acres a day, 4 rows at a time, above and below, by driving the horse between the rows. All the work is done by the horse.

The machine can be worked by hand for stationary work, such as large trees, whitewashing, etc., kill the wild mustard plant, and greatly increase the yield of grain. Write for Booklet "B," it's free.

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"LORETTA D"
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This beautiful Jersey Cow was owned and entered by F. H. Scribner, Rosendale, Wis., at the St. Louis Exhibition in the Dairy Cow demonstration for the "Most Economic Production of Butter," and also for the "Most Economic Production of Milk," and won the **Championship of the World** in both points over all breeds competing.

Read what her owner says about Cream Separators:

"ROSENDALE, Wis., March 8, 1905.
"I am pleased to be able to say to you that I have used the United States Cream Separator for more than ten years. I used the first one for several years, and later exchanged it for a larger one of the latest styles. I am satisfied that the U. S. Separator is the best separator for farm purposes, and that its wearing qualities are of the best, and cheerfully recommend the U. S. Cream Separator to anyone intending to purchase a Separator for its durability, simplicity and construction. It is a clean skimmer and easily cared for. We have used our separator twice a day and skimmed the milk from 30 cows, and it never failed to do the work which it was required to do. To all appearances it will last a good many years to come."
"F. H. SCRIBNER."

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402A ADDRESS ALL LETTERS TO BELLOWS FALLS, VT.



From One of Our Teachers

Dear Dame Durden,—I have just been reading Edith's letter. I, too, am a school teacher, but am tired teaching. I am fortunate in having my home on a farm, so when I give up teaching I intend to spend the summer months in raising poultry and fruit. I think there would be fewer nervous, broken-down women if they only spent more time out in the fresh air and pure sunshine. I was at a loss to find employment at home for the winter months, but now I am hoping to get some hints from Octavia's reply to Edith's letter.

My mother has always been very fond of house plants, so perhaps I may be allowed to add a few simple hints. The soil for plants should be taken from a bluff or bush where there is plenty of leaf mold. Before putting in the pots, heat it in the oven to kill any grubs, etc. Turn the plants in the windows every day, to prevent them bushing on one side. Water your plants every day, or every other day, according to the plant and according to the weather. Once a week they should be given manure water. As plants grow and the roots begin to fill the pot, change to larger ones. Be careful not to crowd your plants or allow their leaves to touch the window glass, as that causes the leaves to turn yellow and die off. Set your plants out in a gentle rain occasionally; it will freshen them. Every few days, to keep them free from dust, they should be dipped in a pail of water. Cut a slit in a piece of cardboard or paper, and slide it around the bottom of the plant to keep the earth from falling out of the pot while you dip the plant. Don't allow very young plants (slips) to blossom, as it weakens them. Pinching off the top of a plant will cause it to send out fresh sprouts and become more bushy.

We have had great success with the hanging asparagus, and also with the asparagus fern. I have a fern now in my school, and it grows very quickly. The hanging asparagus does not bloom until after the third year, when it has hundreds of sprays of small white blossoms. Ours grew six or seven feet long. Its root consists of a mass of small tubers or bulbs. It cannot be grown from slips, and it is almost impossible to successfully divide the root.

I would like if any of our readers could suggest some way by which I could add to my income (at home) during the winter months. Hoping that my letter will not prove too long, I remain an old and ever-interested reader of the Ingle Nook Chats.

VIM.

A Request.

Dear Dame Durden,—I am always an interested reader of the "Ingle Nook Chats," but have never written to you before. Looking over the article written by C. D., I was much interested in her systematic way of housekeeping. I have been looking for a good way to preserve summer eggs for winter use, but never got a satisfactory way yet. Would C. D. mind giving me her way of doing it, and also a plan for keeping June butter for using about the New Year? Our cellar is not very good, and I am not sure if I could keep it or not, but would like very much to try.

L. H.

Gathering Butter.

Dear Dame Durden,—I have long been an earnest reader of the Ingle Nook, and have often thought of writing. As this is my first venture, perhaps it may find its way to the W. B. In your last issue I notice you wish all the readers to save the "Farmer's Advocate," so I will give my plan of saving them. I just take a strong cord and run it through the top corner, leaving it long enough to hold twelve. This divides the year into four parts, and renders the papers easy to

handle. In the end I have a fine volume, and it only takes a few minutes to hunt up any receipt or information one may need.

A member was asking some time ago what to do with butter not coming. Try this: If the churn is a barrel, after the butter has failed to gather let stand five minutes, then draw off all the cream but about one gallon; now turn a few minutes, when it will be gathered. Next add two or three quarts at a time, churning as before, and in ten minutes it will be done.

How many of the readers know the value of the square tin biscuit box for bread? I make two small loaves in each one, and they are as nice as any baker's. By placing a piece of oiled paper in the bottom the box cannot be beaten for a small fruit or one-egg cake, which may be cut in sixteen square pieces. I will send a recipe for jelly-roll cake, which I copied some years ago from the "Farmer's Advocate": One cup white sugar, three eggs (whites and yolks beaten separately), a pinch of salt, one tablespoon of cold water, one level teaspoon of baking powder, one cup flour. Pour into a dripping pan lined with oiled paper, and when cooked spread quickly with jelly and roll.

Packing Eggs, and Other Hints.

The problem of packing eggs when eggs are cheap in such a way as to have them fresh and well flavored when prices are high is a problem that is ever with us. Let me state our experience. Usually we packed our eggs in salt, and, to guard against frost, placed the box in which they were packed in the cellar. The eggs kept fairly well. Indeed, none of them were spoiled altogether, though some of the yolks became quite hard. We noticed that the salt became very damp, almost wet, and this led us to try an experiment. This time the eggs were packed in salt as heretofore, about eight or ten dozen being put in each box, and this box was placed in another, the bottom of which was covered with lime to a depth of about two inches. The result was entirely satisfactory. The yolks remained quite natural, and the salt continued just as it was when the eggs were put in it.

Dear Dame Durden,—Let me suggest a few things for our friends in the Ingle Nook. An ounce of do-it-in-time is worth several pounds of being sorry. Have on hand and placed in the most convenient corner available a bottle containing a weak mixture of water and carbolic acid. About one part of carbolic acid to thirty or forty parts of water will be about right. Apply this to any slight cuts or scratches sustained by yourself or any of your friends. The little sting the mixture gives lasts for the merest second, and the application may prevent blood poisoning.

An experienced surgeon has his household provided with a wide-necked bottle, in which there is an ounce of collodion in which there is mixed one dram of aristol. Through the cork is passed the handle of a camel's-hair brush. This mixture is the best of good dressings for small injuries, as it keeps the cut perfectly clean, and makes it easy for mother nature to heal the wound.

Tear up an old cotton sheet or pillow cover into bandages, ranging in width from half an inch to an inch and a half. These will, sooner or later, be found to be the very thing needed. Be careful to use the narrowest bandage practicable. Apply it evenly, but not so tightly as to interfere with circulation. The best place to practice bandaging is in an uninjured member.

Chloroform, laudanum and arnica, equal parts of each. Have a bottle of this mixture to apply to sprains or bruises. You will be surprised at the way in which it will extract soreness.

J. M.

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HEALTH IN THE HOME.

By a Trained Nurse

In the Sick Room.

"Do not fuss." This is a golden rule which ought to be brought before the eyes of the nurse in a sick-room twenty times a day. If there is one thing more irritating than any other to a weak, helpless, bedridden person, it is to have someone continually bustling about the room, fussing with the bed, talking energetically to other people, and keeping up a never-ending fire of questions, such as "How are you now?" "Shall I lift you up a little?" "Is the bed quite comfortable?" "What would you like for your breakfast?" "Don't you want a little broth?" etc., etc. The very best among the trained nurses are invariably quiet, yet cheerful in a sick-room; that is, when the patient is really very, very sick, and the example of these may be well followed by the many who, without training, are obliged to assume the role of nurse.

The successful trained nurse steps lightly. She moves about easily, without any abrupt or startling movement. She seldom questions the patient, and she seems to know by intuition when the bed needs smoothing, or the shoulders raising. She knows that too much talking and questioning uses up the energy of the sick one, which is already at too low an ebb, and she conserves this energy all she can.

It is a good thing that the doctors, nowadays are insisting so strongly that visitors shall not be brought into the sick-room. This order of the doctor's should never be disregarded. He knows what he is talking about, and if he says no one is to be admitted to the bedside, then do not let anyone go there—not even the most intimate friend, unless the sick one has expressed an especial wish to see that person. One of the most exasperating sights imaginable is to go into a sick-room in which the bed is surrounded by a dozen or more people, usually women, sitting with doleful faces gazing upon the poor martyr in the bed, or else chatting cheerfully about all the neighborhood gossip, breathing up the air which the sick one needs for his laboring lungs, and working endless mischief generally. This sight is not as rare, perhaps, as might be imagined.

Occasionally, too, one may go into a sick-room in which the window is never opened, unless the doctor happens to notice the fact and gives express orders to the contrary. Such a course as this is only owing to an almost criminal ignorance of the simplest laws of ventilation and the necessity for pure air. "What! Open the windows! But the draft!" one exclaims. Yes, open the windows, or, better, keep them a little open at both top and bottom all the time, even in winter. If you haven't a screen, hang up a quilt so that the current of air cannot strike directly on the patient. Fresh air just now is more necessary to him than food. If you can put a little stove, which draws well, right in the room, and screen the intense heat off from striking on the bed, all the better. The stove is a good ventilator. And, remember, do keep people out of the room. Don't you know that they will only use up the air your sick one should have, and that every breath which they exhale is laden with a poison (carbon dioxide) so strong that, if it existed in sufficient quantities, a strong, well person would immediately die in it? Above all things, then, keep plenty of fresh air in your sick-room.

Do not keep the medicine bottles in sight. They are not pleasant things to look upon, and they keep the patient continually thinking about the taste of the medicines contained in them. Do not depend upon the size of your tea spoons and dessert spoons in administering the doses. Get a little glass measuring cup at the drug store and then you will be sure you can make no mistake. When you are alone, it may seem a little feeding cup at the same time, one with a spout on it, you know. It is so much harder than an ordinary cup for

giving drinks in, almost doing away with the necessity of the patient raising his head, and it is almost impossible to spill anything out of it. It is also nice for feeding beaten egg or soup out of.

See to it that all the food given to the patient is brought up in the daintiest possible form. If ever pretty dishes, and snowy linen and tiny bouquets were needed it is for the sick person. Don't ask him what he would like to have; just get a few things ready as daintily as possible and bring them up. The chances are he will choose something. But don't bring too many kinds. Too great a variety might turn him against everything. See to it also that you never once yield to the temptation to give him anything that the doctor has not sanctioned. Get the doctor to give you a list of things that will be perfectly safe, and write them down; any varying from this list may, possibly, do irreparable harm. At this time the doctor is king, and you must obey his mandates to the smallest particular, if you are considering at all the safety of your patient.

Yearnings.

Jest a little cradle in a wagon passin' by,
But it sort o' hurts me in my feelin's;
wonder why?
We ain't had no children, Mandý Jane
an' me, that's sure.
Tho' we've often wished the stork
would linger at our door;
Kind o' looked an' waited till the years
had passed away,
An' her brown locks an' my black ones
both had turned to gray,
Went on jest believin' that our dreams
'ud all come true,
Kep' so busy hopin' th' warn't time fur
feelin' blue.

'Tain't no doubt, it's lonesome settin'
roun' a grim ol' house,
Jest us two ol' people, evenin's, quiet as
a mouse;
Seems like that a feller'd like to have a
couple of boys
Stopin' rou'n' the kitchen, an' a-makin'
lots o' noise;
With a pair o' girls a-chatterin' in their
foolish way,
Gigglin', waitin' fur their comp'ny,
prinkin' up; an' say—
Some folks worry at it, but it kind o'
seems to me
That's the sort o' life our Maker meant
this life to be.

When your courtin's done an' over,
where's your youth to go,
When there ain't no children rou'n' you
keepin' life aglow?
Though the fires o' love have smoldered,
embers heat the ash
When you catch your boy's eyes dartin'
love's first lightnin' flash,
Say you're old an' gettin' doty, why,
the sight'll start
Jest a reg'lar dancin' measure in your
dim ol' heart,
An' you feel that life is sweeter when
you see love's fire
Puttin' fears an' keers an' doubt'n's on
a fun'ral pyre.

Jest a little cradle in a wagon passin'
by,
Yet it brings the tear-drops an' a long
regrettin' sigh;
Jest a little cradle my. I wonder who
it's fur?
Mighty happy father, him, an' happy
mother, her,
Wish 'em all the blessin's that I'd ask
fur fur myself,
Though the Lord had laid me kind o'
useless on the shelf;
Hope they'll live the dotted time o'
heartily o' threescore,
Hope they'll fill that cradle up a dozen
times, or more!
— Paul Laurence Dunbar.

"Johnny Pa, what is a diplomat?" Pa—
Well, so, it's a man who can stretch
hands across the sea without putting his
foot on it, too.

The LEAVENWORTH CASE.

By A. K. Green.

CHAPTER XXXII.—Continued.

"No," I said, taking her by an irresistible impulse of admiring affection into my arms; "but if I had, it would have made no difference."

"Then you do not think me such a wretch?"

What could I say? I thought her the winsomest being in the world, and frankly told her so. Instantly she brightened into her very gayest self.

"And you will still let me come and tell you how bad I am?"

"I will never turn you off."

"Not if I should do a dreadful thing? Not if I should run away with my lover some fine night, and leave uncle to discover how ill his partiality had been requited?"

It was lightly meant, for she did not even wait for my reply. And for two days I spent my time in planning how I should manage, if it should ever fall to my lot to conduct so enthralling a piece of business as an elopement. You may imagine, then, how delighted I was, when one evening Hannah, who was occupying the position of lady's maid to Miss Leavenworth at that time, came to my door with a note from her mistress, running thus:

"Have the loveliest story of the season ready for me to-morrow; and let the prince be as handsome as—as some one you have heard of, and the princess as foolish as your little yielding pet, Mary."

Which short note could only mean that she was engaged. But morning light did not bring my Mary, nor noontide, nor evening. The next day came and went, but beyond hearing that Mr. Leavenworth had returned—he had been away travelling—I received no word. Two more days dragged by, when, just as twilight set in, she came. It had been a week since I had seen her, but it might have been a year by the change I observed in her countenance.

"You are disappointed, are you not?" said she. "You expected revelations and all manner of sweet confidences, and you see instead a cold, bitter woman, who for the first time in your presence feels inclined to be reserved."

"That is because you have had more to trouble than encourage you in your love," I returned.

She did not reply to this, but rose and paced the floor; coldly at first, but afterward with a certain degree of excitement that proved to be the prelude to a change in her manner, for suddenly pausing she turned to me and said: "Mr. Clavering has left R—, Mrs. Belden."

"Left!"

"Yes, my uncle commanded me to dismiss him, and I obeyed."

"Ah! then he knows of your engagement to Mr. Clavering?"

"Yes; he had not been in the house five minutes before Eleanore told him."

"Then she knew?"

"Yes"; with a half sigh.

"I was foolish enough to give her the cue in my first moment of joy and weakness. I did not think of the consequences; but I might have known. She is so conscientious."

"I do not call it conscientiousness to tell another's secrets."

"That is because you are not Eleanore."

"Then you have decided not to marry Mr. Clavering?"

"Is it not my manifest duty to be governed by uncle's wishes?" she asked.

"Has he not brought me up from childhood lavished every luxury upon me? made me all I am, even to the love of riches which he has instilled into my soul with every gift he has thrown into my lap? Is it for me now to turn my back upon fostering care so wise, beneficent, and free, just because a man whom I have known some two weeks chances to offer me in exchange what he pleases to call his love?"

"But," I feebly essayed, convinced perhaps by the tone of sarcasm in which this was uttered that she was not far from my way of thinking, after all, "if in two weeks you have learned to love this man more than everything else, even the riches which make your uncle's favor a thing of such moment—"

"Well?" said she, "what then?"

"Why, then I would say secure your

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happiness with the man of your choice if you have to marry him in secret, trusting to your influence over your uncle to win his forgiveness."

"You should have seen the arch expression which stole across her face at that. "Would it not be better," she asked, creeping to my arms and laying her head on my shoulder—"would it not be better for me to make sure of that uncle's favor first, before undertaking the hazardous experiment of running away with a too-ardent lover?"

"Struck by her manner, I lifted her face and looked at it. It was one amused smile.

"Oh, my darling," said I, "you have not, then, dismissed Mr. Clavering?"

"I have sent him away," she whispered, demurely.

"But not without hope?"

She burst into a ringing laugh. In a moment her serious mood returned. He will wait for me," said she.

The next day I submitted to her the plan I had formed for her clandestine intercourse with Mr. Clavering. It was for them both to assume names, she taking mine as one less liable to provoke conjecture than a strange name, and he that of Le Roy Robbins. The plan pleased her, and with the slight modification of a secret sign being used on the envelope to distinguish her letters from mine, was at once adopted.

And so it was I took the fatal step that has involved me in all this trouble. Henceforth I was only her scheming, planning, devoted slave. Now copying the letters which she brought me and enclosing them to the false name we had agreed upon, and now busying myself in devising ways to forward to her those which I received from him. Hannah was usually the medium we employed for this, as Mary felt that it would not be wise in her to come too often to my house. To this girl's charge, then, I gave such notes as I could not forward in any other way, secure in the reticence of her nature as well as her inability to read, that these letters addressed to Miss Amy Belden would arrive at their proper destination without mishap.

But a change was at hand. Mr. Clavering, who had left an invalid mother in England, suddenly received notice that she was very ill, and requested his immediate return. He prepared to obey the summons, but flushed with love, distracted by doubts, he wrote to her, asking her to marry him before he went.

"Make me once your husband and I will follow your wishes in all things," he wrote. "The certainty that you are mine will make parting possible; without it, I cannot go."

She was in my house when I brought this letter from the post office, and I shall never forget how she started when she read it. But from looking as if she had received an insult, she speedily settled down into a calm consideration of the subject, writing, and delivering into my charge for copying, a few lines in which she promised to accede to his request if he would agree to leave the public declaration of marriage to her discretion and consent to bid her farewell at the door of the church, never to come into her presence again until such declaration had been made. Of course this brought in a couple of days the sure response. "Anything, so you will be mine." And Amy Belden's wits and powers of planning were all summoned into requisition for the second time, to devise how this matter could be arranged without subjecting the parties to the chance of detection. In the first place it was essential that the marriage should come off within three days. And it was desirable that the time occupied in effecting the journey to and from the place of ceremony would not necessitate an absence from the Hotel on the part of Miss Leavenworth long enough to arouse the suspicions of Eleanor; something which Mary felt it wiser to avoid.

Her uncle, I have forgotten to say, was not here—having gone off travelling again. F—, then, was the only town I could think of, which was suitable. Although upon the railroad it was an insignificant place, and had, what was better yet, a very obscure man for its clergyman, living, which was best of all, not ten rods from the depot.

And now I am coming to what might have caused the overthrow of the whole scheme: I allude to the detection on the part of Eleanor of the correspondence between Mary and Mr. Clavering. It happened thus: Hannah had

come in to sit with me for awhile one evening. She had not been in the house, however, more than ten minutes, before there came a knock at the front door, and going to it I saw, as I supposed, Mary, from the long cloak she wore, standing before me. Thinking she had come with a letter for Mr. Clavering, I grasped her arm and drew her into the hall, saying: "Have you got it? I must post it to-night or he will not receive it in time." There I paused, for I saw it was a stranger.

"You have made a mistake," she cried. "I am Eleanore Leavenworth, and I have come for my girl Hannah. Is she here?"

I could only raise my hand in apprehension, and point to the girl sitting in the corner of the room. Miss Leavenworth turned back.

"Hannah, I want you," said she. And with a glance to see if Hannah were following her, she went out.

I did not sleep a wink that night. You can imagine, then, my wonder, when, with the first glow of the early morning light, Mary, looking more beautiful than ever, came running up the steps and into the room where I was, with the letter for Mr. Clavering in her hand.

"Oh!" I cried, "didn't she understand me, then?"

The gay look of Mary's face turned to one of reckless scorn. "If you mean Eleanore, yes. She is duly initiated, Mamma Hubbard; knows that I love Mr. Clavering and write to him. I couldn't keep it secret after the mistake you made last evening, so I did the next best thing, told her the truth."

"Not that you were about to be married?"

"Certainly not. I don't believe in unnecessary communications."

"And will she not tell your uncle?" I gasped.

"No," said she.

"And can we still go on?"

She held out the letter for reply.

The plan agreed upon between us for the carrying out of our intentions was this: At the time appointed, Mary was to excuse herself to her cousin upon the plea that she had promised to take me to see a friend in the next town. She was then to drive here, where I was to join her. We were then to proceed to the minister's house in F—. But in this plan, simple as it was, one thing was forgotten, and that was the character of Eleanore's love for her cousin. That she would suspect something was wrong, we did not doubt, but that she would actually follow her up and demand an explanation of her conduct, was what neither she who knew her so well, nor I who knew her so little, ever imagined possible. And yet that was just what occurred. Mary had come to my house and was just taking off her long cloak to show me her dress, when there came a commanding knock at the front door. Hastily pulling her cloak about her, I ran to open it, when I heard a voice behind me say: "Good heavens, it is Eleanore!" and glancing back, saw Mary looking through the window blind upon the porch below.

"What shall I do?" cried I, shrinking back.

"Do? why, open the door and let her in; I am not afraid of Eleanore."

I immediately did so, and Eleanore's Leavenworth, very pale but resolute, walked into the house and into this room. "I have come," said she, lifting a face whose expression of mingled sweetness and power I could not but admire, "to ask you if you will allow me to accompany you upon your drive this morning?"

Mary turned carelessly away to the glass. "I am very sorry," she said, "but the buggy holds only two, and I shall be obliged to refuse."

"I will order a carriage."

"But I do not wish your company, Eleanore. We are off on a pleasure trip, and desire to go as we have planned by ourselves."

"And you will not allow me to accompany you?"

"I cannot prevent you going in another carriage."

Eleanore's face grew yet more earnest in its expression. "Mary," said she, "I cannot see you start upon this adventure with no other companion than this woman. Neither conscience, love, nor the gratitude I feel for our absent uncle will allow me. If you go where you propose I must accompany you. (Continued on next page.)

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Then tell me, shall it be at your side as a sister, or on the road behind you as the enforced guardian of your honor?"

"My honor?"

"You are going to meet Mr. Clavering."

"Well?"

"Now, is it discreet or honorable for you to do this?"

Mary's countenance flushed. All the antagonism of her nature was aroused.

"Eleanore," cried she, "I am going to F—, to marry Mr. Clavering. Now do you wish to accompany me?"

"I do."

"Why?" said Mary. "What do you intend to do?"

"To witness the marriage if it be a true one, to step between you and shame if any element of falsehood should come in to affect its legality."

"I do not understand you," said Mary; "I thought you never gave countenance to what you considered wrong?"

"Nor do I."

"Then why go?"

"Because I value your honor above my own peace. Because I love our common benefactor, and know that he would never pardon me if I let his darling be married without lending the support of my presence to make the transaction at least a respectable one."

"Mr. Clavering does not return with me, Eleanore."

"No, I supposed not."

"He goes to Europe."

A pause.

"And I return home."

"There to wait for what, Mary?"

Mary's face crimsoned, and she turned slowly away.

"What every other girl does under such circumstances, I suppose. The development of more reasonable feelings in an obdurate parent's heart."

Eleanore sighed, and a short silence ensued, broken by Eleanore's suddenly falling upon her knees and clasping her cousin's hand.

"Oh, Mary," she sobbed, her haughtiness all disappearing in wild entreaty, "consider what you are doing! Marriage founded upon deception can never lead to happiness. Love—but it is not that. Love would have led you either to have dismissed Mr. Clavering at once, or to have openly accepted the fate which a union with him would bring. Only passion stoops to subterfuge like this. Any you," continued she, turning towards me, "tell me, mother of children, dead and buried, what excuse you will have for your own part in this day's work, when she, with her face marred by the sorrows which must follow this deception, comes to you—"

"The same excuse probably," Mary's voice broke in, "which you will have when uncle inquires how you came to allow such a very wicked piece of business to be accomplished in his absence; that she could not help herself, that Mary would gang her ain gait, and every one around must accommodate themselves to it."

Eleanore stiffened immediately.

"Then nothing can move you?"

The curling of Mary's lip was her only reply.

"You have shown yourself more interested in my fate than I have ever thought possible," she said, addressing Eleanore. "Will you continue to display that concern all the way to F—, or may I hope that I shall be allowed to dream in peace upon the step which is about to hurl upon me such dreadful consequences?"

"If I go with you to F—," Eleanore returned, "it is as a witness, no more."

"Very well, then," Mary said, dimpling with sudden gaiety, "I shall have to accept the situation. Mamma Hubbard, I am so sorry to disappoint you, but the buggy won't hold three. If you are good you shall be the first to congratulate me when I come home to-night." And almost before I knew it, the two had taken their seats in the buggy.

Of that day and its long hours of alternate remorse and anxiety, I cannot trust myself to speak. I waited and watched for the token of their return which Mary had promised me. It came in the shape of Mary herself, who came stealing into the house just as I was beginning to despair.

"Oh, Mary!" cried I, bursting into tears, "you are then—"

"Mrs. Henry Clavering, at your service. I'm a bride, auntie."

"Without a bridal," I murmured, taking her passionately into my embrace.

(To be continued.)

The Purest and Sweetest

NATURE CAN YIELD

"SALADA"

Ceylon Tea, Black, Mixed or Green, the tea that received the Highest Award at St. Louis, 1904.

SOLD ONLY IN SEALED LEAD PACKETS.
25c., 30c., 40c., 50c., 60c. per lb. By all Grocers.

Kill the Vermin on Your Stock

FREE

I want every stock owner to know for himself the wonderful properties of my stock vermicide, insecticide and disinfectant, and will send you *absolutely free*

A GALLON CAN OF
CHLORO-NAPHTHOLEUM DIP
ALL CHARGES PREPAID

if you will simply ask me for it and tell me the number and kind of stock you own. It is *Absolutely Harmless* to Man or Beast, yet its action in ridding stock of all pests and in curing Parasitic and germ diseases (mange, etc.) is simply marvelous.

Use the large sample freely and thoroughly for 30 days—note how *like magic* it works and how quickly your stock improves in health, spirits and appearance. Then if you are pleased send me \$1.50 for the gallon. If it doesn't please you in *every way*—doesn't do *more* than you expect—just tell me—your word is sufficient—and I will write you where to send what is left at *my expense*.

You Can't Afford to Delay—every moment you wait is costing you money—for if your animals are continually uneasy or in agony from insects, parasitic or from germ diseases, their feed does them little or no good, and that *costs money*—and besides, your stock is never in condition.

Write me *today*, before it slips your mind.

One of Many
Wheatland, Wyo., April 14, '05.
West Disinfecting Co.,
New York City.
Gentlemen—I send you herewith \$1.50, as per agreement, for the Chloro-Naphtholeum Dip. I have only used part of it, and in every instance where I have applied it its effect was absolutely instantaneous in the destruction of lice and mange on horses and cattle, and leaves them in a very different condition than before it was applied. The hair brushes out smooth and silky, and if it could not be duplicated it would be worth any kind of a price to stockmen anywhere.
(Signed) L. E. ULTER.

E. TAUSSIG, Pres. West Disinfecting Co., 14 E. 59th St. NEW YORK, N.Y.

HIT THE TRAIL



TO
Centennial Exposition

PORTLAND, OREGON.

JUNE 1st to OCTOBER 15th, 1905

EXCURSION RATES, via

YELLOWSTONE PARK

Nature's Wonderland.

LOW RATES TO ALL POINTS. OCEAN TICKETS.

For full information apply to

R. CREELMAN, Ticket Agent. H. SWINFORD, General Agent.
341 Main Street, Winnipeg.

**ALBERTA
LAND CO.**

HEAD OFFICE
818. CENTRE ST.
CALGARY, ALTA

OUR LANDS ARE IN THE
WINTER WHEAT BELT
OF ALBERTA—WHERE GOOD
HOMESTEADS ARE STILL AVAILABLE

PRICES \$5 TO \$12 PER ACRE

WRITE US
FOR SAMPLES OF GRAINS
AND INFORMATION PROMPT REPLIES

If You Have a Farm for Sale

Or Want a Situation, put an Advertisement in our WANT AND FOR SALE COLUMN. Our Want Ads. Always Bring the Best Results.

The William Weld Co., Limited, Winnipeg, Man.

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

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CHEAP EXCURSIONS

FOR MANITOBA FARMERS

To the FAMOUS CARROT RIVER VALLEY

ONLY \$10 FOR ROUND-TRIP TICKETS

To Melfort and return from any point in Manitoba on Canadian Northern Railway. Excursions from Winnipeg every Monday and Wednesday during June and July. Tickets may be secured at any Canadian Northern Station.

THE CARROT RIVER VALLEY country, which now has railway facilities for the first time in its history, is, without doubt, one of the most fertile sections of Western Canada. Fully two-thirds of the country is open prairie. The abundance of water and fuel, its rich soil and the exceptionally luxuriant growth of rich grasses offer all the advantages necessary for diversified farming. All these conditions have long been known to the early settlers, and now with the splendid railway facilities afforded by the building of the Canadian Northern Railway through this marvelously rich district, this section of Western Canada will be settled quickly and prices will advance rapidly.

FOUR NEW TOWN-SITES JUST PUT ON THE MARKET:

TISDALE, STAR CITY, RIVERSIDE KINISTINO and MELFORT

These new towns offer to the business and professional man exceptional opportunities to secure wealth, prosperity and position. Western Canada is now being settled very rapidly, and new towns in first-class sections will soon be a thing of the past.

Free Homesteads

Good Free Homesteads of 160 acres each can still be had near railway stations. This will certainly be the last chance to get good free lands within fifty miles of the railway. Act now! Write for maps, printed matter, price lists, etc.

Saskatchewan Valley & Manitoba Land Co., Limited
Canadian Northern Building, Winnipeg, Man.

QUESTIONS AND ANSWERS.

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

2nd.—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.

3rd.—In veterinary questions, the symptoms especially must be fully and clearly stated, otherwise satisfactory replies cannot be given.

Legal.

HERDING OR FENCING.

I have a quarter-section of waste land adjoining three other farms. I use my land for pasture. Am I obliged to keep my pasture fenced? M. D. Man.

Ans.—If there is a herd law in your municipality, which is quite probable, you must either fence or herd your stock.

RIGHT TO MAKE GATE.

If a person has a patent on a farm gate or a hay unloader, has another person the right to build one like it, or must he pay the price of the patentee charges? It is only for the second person's own use? O. N. Alta.

Ans.—Yes.

Miscellaneous.

ROSE RUST.

What is the matter with my roses (enclosed find diseased leaf), and what shall I do to prevent their total destruction?

Ans.—The roses referred to have an attack of rust, very similar to that which appears on wheat and oats. In early summer, reddish-yellow spots appear and gradually increase in size as the season advances. About August, the color of spots becomes darker, and in the fall, dark brown or black. These spots contain spores, which preserve the rust over winter. In spring, the soil and the plants should be sprayed with copper sulphate solution: one pound to two or three gallons of water. After the buds have burst, the Bordeaux mixture (one pound of copper sulphate, half a pound of lime to four or five gallons of water) should be used at intervals of about two or three weeks until midsummer. In the fall, burn the leaves to destroy the spores of the fungus.

MR. UP-TO-DATE FARMER



Now that you are about through seeding, you will have time to decide on the kind of POWER you will buy for your fall and winter work.

If you want a WINDMILL, the CANADIAN WINDMILL is the one for you. Or a Gasoline Engine, then buy the RTIOKNEY. Or a Sweep or Tread Power, the BELL is just what will suit you.

Nothing better made than the above. Write us for prices to-day.

Ontario Wind Engine & Pump Co., Limited,
Winnipeg.

veterinary.

EXCESSIVE SALIVATION.

Cow out on prairie during the day and in stable at night slavers profusely when chewing her cud. She was all right before she was turned on grass. She gives little milk in the morning.

Assa. W. C. T.
Ans.—It is possible her teeth need dressing, and I would advise you to have them examined; but I am of the opinion the salivation is due to the nature of the grass and will probably soon cease. V.

OBSTRUCTION IN MILK DUCT, AND LAME COLT

1. Cow had small lump in teat last year. This year the lump is larger, and I cannot get any milk.

2. Colt, three weeks old, has soft lump on each side of hock, and is very lame.

SUBSCRIBER.
Ans.—1. This is a little tumor, and the only successful mode of treatment is an operation by a veterinarian with an instrument especially designed for the purpose, and even this is not always successful. Bungling operations cause serious complications. It is probable the quarter will be nearly inactive by the time you see this, and if so, or if there is no inflammatory action, I would advise you to leave it alone.

2. Keep as quiet as possible, bathe frequently with hot water, and after bathing rub well with camphorated liniment, which you can get from any druggist. V.

GOSSEP.

CALGARY'S BIG FAIR.

Calgary's Agricultural and Industrial Fair opens its gates to the public on Wednesday, the 5th of July next. Since the last exhibition very extensive improvements have been made in the grounds, particularly in the accommodation of live stock. The management of the Calgary Fair is apparently sparing no expense in bringing out the best exhibit of live stock possible. Breeders would do well to send for the prize list, and study its contents carefully. The attractions this year promise to outshine all previous efforts to amuse the public during Fair week. A splendid race programme has been arranged for, musical rides, exciting high-jumping contests, and a magnificent fireworks display will close each day's programme. Calgary expects to entertain half the population of Alberta during the Fair, and the hotel proprietors are making arrangements accordingly.

During the period from May 16th to June 8th, 1905, records of seventy-one Holstein-Friesian cows have been confirmed. All made seven-day records. The averages by ages were as follows: Sixteen full-age cows averaged: age, 7 years 3 months 15 days; days from calving, 20; milk, 432.5 lbs., quality 3.51 per cent.; fat, 15.136 lbs. Twelve four-year-olds averaged: age, 4 years 5 months; days from calving, 18; milk, 389 lbs., quality 3.42 per cent.; fat, 13.247 lbs. Thirteen three-year-olds averaged: age, 3 years 5 months; days from calving, 23; milk, 387 lbs., quality 3.25 per cent.; fat, 12.640 lbs. Thirty two-year-olds averaged: age, 2 years 3 months 1 day; days from calving, 29; milk, 297.6 lbs., quality 3.31 per cent.; fat, 9.848 lbs. Several fourteen-day records were confirmed; three thirty-day records were also confirmed. The thirty-day records were as follows: A full-age cow in thirty days produced 1,744.5 lbs. milk, quality 3.69 per cent.; total fat, 64.385 lbs. Another full-age in thirty days produced 1,754 lbs. milk, quality 3.56 per cent.; total fat, 62.385 lbs. A heifer 2 years 10 months 9 days old produced in thirty days 1,380.7 lbs. milk, quality 3.81 per cent.; total fat, 52.588 lbs. Malcolm H. Gardner, Darien, Wis., is now Superintendent of Holstein-Friesian Advanced Registry. All communications relating to this system must be addressed to him. The address of the former Superintendent is S. Hoxie, Ithaca, N. Y., 108 Hazen St.

An interesting story of a nobleman's dying wish is told of the late Earl of Southesk, whose death was recently recorded. The Earl was a noted breeder of Highland cattle, and he requested that there should be a parade of the finest heads in the herd in front of Kinnaird Castle, as he wished to see them before he passed away. The request was carried out, the sick Earl being removed on a couch to a window where he could see the fine animals he loved so well.

TRADE NOTE.

THE FARM CREAM SEPARATOR.—The cream separator for farm use is here to stay. It has proven its utility, and its advantages are indisputable. In many cases it would be more profitable to sell one of your cows to pay for a separator, rather than do without one. For we know of instances where farmers with five to ten cows have found that a cream separator actually added to the profits as much as another cow would, and remember that this profit kept right along with the use of the separator. You would have to pay for the keep of the extra cow, but the separator makes the profit and "keeps" itself. A separator keeps the valuable skim milk right at home in its best condition, ready to feed to young stock when warm and fresh. Many farmers are now losing the profit from this by-product of their herd, and may be contracting much trouble in the cold, sour lot of mixed skim milk brought home from the creamery. We certainly advise the purchase of a cream separator. In looking at a separator, pay careful attention to the construction of its operating parts. A well-made machine will wear for years, soon saving its cost over the old skimming methods by the increase it makes in product, and the profit continues after the machine has already paid for itself. Be sure the separator you buy is a clean skimmer. It is prudent to consider the reliability of the makers back of the machine. The Vermont Farm Machine Co., Bellows Falls, Vt., manufacturers of the famous United States cream separators, that claim the world's record for closest skimming, have applied to the separator problem a successful manufacturing experience of over thirty years. Any one of our readers may obtain from them, free of charge, a handsome little book, entitled "The Dairy," which contains highly profitable information for every farmer milking cows. Drop them a postal card for one.

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

BREEDERS' DIRECTORY.

Breeder's name, post-office address, class of stock kept, will be inserted under this heading at \$3.00 per line per year. No card to be less than two lines or exceed three lines.

- A. D. McDONALD**, Napinka, Man.—Breeder of Shorthorns, Yorkshires and Berkshires. Young pigs for sale.
- A. D. GAMLEY**, Brandon, Man.—Breeder of Leicester sheep and Roadster horses. Stock for sale.
- A. B. POTTER**, Maple Leaf Farm, Montgomery, Assa., Holsteins, Yorkshires and Berkshires.
- BRYAN BROS.**, Craik, Assa. Breeders of White Rocks and White Wyandottes. Eggs from winners, \$3 per setting of 15.
- C. W. TAYLOR**, Dominion City.—Barr'd Plymouth Rocks, Buff Cochins, Black-headed Red Game, White Cochins.
- C. O'BRIEN**, Dominion City. Buff Orpingtons, Scotch Deer Hounds, Russian Wolf Hounds.
- D. H. BOND & SON**, Killarney, Man., Landaser Farms, Shorthorns and Percherons.
- F. L. WATSON & WATT**, breeders of pure blood Hereford and Shorthorn cattle. Choice young bulls now for sale. Cleverdale Farm, 3 miles northeast of Birds' Hill, Springfield Township, Man.
- E. T. GRIFFITHS**, Meigs-Jaw, Assa.—Breeder of Clydesdales and Shorthorns. Stock for sale.
- GORRELL BROS.**, Pilot Mound, Man.—Shorthorns. Stock of both sexes for sale.
- H. W. HODKINSON**, Neepawa, Man. Barr'd Rocks. Winners.
- HENRY NICHOL**, Fairview Farm, Brandon, Man.—Breeder of Clydesdale horses and Shorthorns etc.
- J. W. MARTEN**, Gotham, Wis., U. S. A.—Importer and breeder of Red Fokled cattle.
- J. G. WASHINGTON**, Nings, Shorthorns and Clydesdales. Four choice young bulls. One million two years. Good one.
- JOHN GIBSON**, Underhill, Man.—Breeder of Shorthorns and Tamworths. Stock for sale.
- J. HANSFIELD**, Rosebank Farm, Brandon, Man.—Breeder of Shorthorns. Young stock for sale, both sexes.
- JOHN WISHART**, Portage la Prairie, Man.—Breeder of Clydesdales and Hackney horses. Young and breeding stock of both sexes for sale.
- J. H. REID**, Moosomin, Assa.—Breeder of Herefords. Young bulls for sale.
- J. M. MACFARLANE**, Moosa Jaw, Assa.—Breeder of Clydesdale horses.
- J. CHILDREN & SONS**, Okotoks, Alta.—Duroc Jersey swine, either sex, for sale.
- JAS. TOUGH**, Lake View Farm, Edmonton, breeder of Hereford cattle.
- L. LAKE & BELSON**, Grenfell, Assa.—Breeders of Polled-Angus cattle. Young bulls for sale.
- L. E. THOMPSON**, Delorsaine, Man.—Breeder of Clydesdales, Shorthorns, Jacks and Jennets, O. I. C. swine and P. B. Rocks.
- PLUM CREEK STOCK FARM.**—J. H. Kinnear & Son, Souris, Man. Breeders of Shorthorns. Stock for sale.
- R. A. COX**, breeder and importer.—Shorthorns, Berkshires and B. P. Rocks. Beresford, Man. Stock for sale.
- R. A. & J. A. WATT**, Salem P.O., Ont., and telephone office.—Breeders of Shorthorns and Clydesdales. Imported and Canadian-bred females; also a pair of bull calves.
- RIVEREDGE FARM.**—Shorthorn cattle, Deer-hounds, B. Rocks, B. B. R. Games. A. A. Fitz, Napinka, Man.
- REGINA STOCK FARM.**—Avrshires and Yorkshires for sale. J. C. Pope, Regina, Assa.
- ROBT. SINTON**, Regina, Assa.—Breeder and importer of Herefords. Stock, both sexes, for sale.
- R. P. STANLEY**, Moosomin, Assa.—Breeder of both breeds for sale.
- S. HORTHORNS** and Clydesdales. Wm. Chalmers, Smithfield Stock Farm, Brandon. Phone at residence.
- S. HORTHORNS** of the fashionable families. John Kennedy, Swan River, Man. (C. N. R.), 1 1/2 miles from town.
- THE "GOULD FARM,"** Buxton, North Dakota, U. S. A., breeders of Red Polled cattle, the dual-purpose breed of America.
- TRAYNOR BROS.**, Regina, Assa.—Clydesdales. Stallions for sale.
- THOS. ELLIOTT**, Regina, Assa.—Breeder of Herefords.
- THOS. DALE**, Portage la Prairie, Man.—Breeder of Shorthorns and Berkshires. Young and breeding stock of both sexes for sale.
- W. M. LAUGHLAND**, Hartney, Man.—Breeder of Shorthorns, Berkshires and B. P. Rocks.
- W. M. DAVIDSON**, Lyonshall, breeder of pure-bred Shorthorns. Young stock of good quality for sale.
- W. S. LISTER**, Middle Church (Nr. Winnipeg), Marchmont Herd Scotch Shorthorns. Bulls all ages from imported stock. Telephone 1004B.
- YOUNG** Shorthorns for sale. Prices reasonable. Apply to Stewart Bros. & Co., Pilot Mound, Man.

POULTRY AND EGGS

Condensed advertisements will be inserted under this heading at one cent per word each insertion. Each initial counts for one word, and figures for two words. Names and addresses are counted. Cash must always accompany the order for any advertisement under this heading. Parties having good pure-bred poultry and eggs for sale will find plenty of customers by using our advertising columns.

FOR SALE—One breeding pair of Golden Wyandottes, one trio of Indian Games, one pair of Pekin Ducks. Eggs from above for balance of season, \$1. S. Ling, 123 River Ave., Winnipeg.

THE TINLING POULTRY CO.
To the Farmers' Wives and Daughters Especially:

What efforts are you making towards supplying us with poultry this fall? We are able and willing to buy all you can raise of this year's turkeys and chickens (the latter from 4 to 5 months old) and pay you the highest market price. Our agents calling at your door, giving you the cash and taking them away alive, so you have no trouble. Who would like to earn \$25, or even \$50? It is easily done. Set all the eggs you can when the price for them is low. You ought to raise four chicks surely from each dozen, which, in four months' time, will bring you in \$1, and with the abundance of waste grain you have will cost you nothing but your time to look after. Ascertain who is our agent for your territory, and let him know how many he may expect to get. We want at least a half a million birds. Who will help supply them? We bring you all good luck in your efforts. Yours sincerely,
E. C. TINLING, Manager.



Advertisements will be inserted under this heading, such as Farm Properties, Help and Situations Wanted, and miscellaneous advertising.

TERMS—One cent per word each insertion. Each initial counts for one word and figures for two words. Names and addresses are counted. Cash must always accompany the order. No advertisement inserted for less than 25 cents.

BEE-SWAX WANTED—Will pay 30 cents a pound for good clean beeswax here. James Durcan, Emerson, Man.

CABBAGE Plants for Sale—Early and late cabbage plants at 50c. per 100; tomato, 1c. each, or 90c. per 100; cauliflower, 1c. each, \$1 per 100; all carefully packed. Menlove & Thickers, Virden, Man.

FOR SALE—One second-hand threshing outfit, all complete, 32x58 cylinder separator, 20-horse-power traction engine (J. I. Case). Has run about 6 months. Apply R. Ganby, Swan Lake, Man.

FOR SALE—Two of the best ranches located in the Chinook Belt, in Southern Alberta. One with improvements and one without. Good grass, plenty of shelter and water. Large leases in connection. Range for several thousand head. W. M. Loch, Lethbridge, Alta.

FOR SALE—533 acres rich black loam in the celebrated Pincher Creek district, Southern Alberta. Price, \$12 per acre. Four miles from O. P. R. Apply E. Blaquier, box 683, Brandon, Man.

FARM hand seeks situation on first-class farm. Has had two years' experience mixed-farming in Manitoba. State wages. H. N., Rosebank, Man.

FOR information about the rich Dauphin country write the Dauphin Land Co., Dauphin, Man., for list of improved and unimproved farms. H. P. Nicholson, manager.

IMPROVED AND UNIMPROVED FARMS for sale in Grand View district, Man. Lists upon application to Benj. O. Nevill, Real Estate Agent, m

LAND for sale in the noted Wolseley District, containing some of the best wheat land in the Territories. Address, J. F. Middlemiss, Wolseley, Assa.

ONE HUNDRED AND SIXTY ACRES, five miles from Swan River. Black sandy loam, sixty acres broken, log buildings. Price nineteen hundred. E. J. Darroch, Swan River, m

WANTED at once—Salesman in Manitoba and the N.-W. T. to represent "Canada's Greatest Nurseries." Biggest assortment of hardy fruits, ornamental and shade trees. Recommended by Experimental Stations at Brandon and Indian Head. Big inducements to energetic men. Pay weekly. Special new outfit, designed for Western men, free. Spring canvases now starting. Write now for terms. Stone & Wellington, Toronto.

THRASHING OUTFITS FOR SALE

A number of rebuilt portable and traction engines; also separators, all in first-class running order. We have practically all around and can supply complete outfits, or separate machines, as desired. Low prices and terms to suit.

The John Abell Engine & Machine Works Co.
P.O. Box 481. (Limited) Winnipeg, Man.

About fifty per cent. of the pure-bred cattle ought to be used not for breeding but to make high-grade baby beef. That's the way to keep up the pure-bred business.

Lost, Strayed or Stolen.

Below is to be found a list of impounded, lost and stray stock in Western Canada. In addition to notices otherwise received, it includes the official list of such animals reported to the Manitoba and N.-W. T. Governments.

This department is for the benefit of paid-up subscribers to the Farmer's Advocate, each of whom is entitled to one free insertion of a notice not exceeding five lines. Notices exceeding five lines will be charged two cents per word for each additional word, payable in advance.

LYNDON, Alta.—Will pay good reward to any one giving information that will lead to the recovery of horses branded VI left shoulder and cattle DJ on right side. W. A. Lyndon.

LANG, Assa.—\$10 reward. A team of work mares, one white with brown leather halter, and one brown with black leather halter and foretop cut, grown out about two inches. Address any information to John Mackay.

ESTRAY.
Strayed, black mare, aged 3 years, medium size, branded Z T on right shoulder, few white hairs on forehead, thickened left hind hock; bay mare, aged four, medium size, square built, branded Z T on right shoulder, L on right hip, narrow scar on left fore leg above knee. \$5 reward. P. C. Anderson, Qu'Appelle, Assa.

TRADE NOTES.

A SPLENDID INVESTMENT.—In another column of this paper appears an advertisement over the name of Alexander Bell & Co., New Westminster, B. C. It contains an opportunity for safe investment that should not be overlooked. We would suggest that our readers investigate this offer at once, as it merits the most careful consideration.

A FIRST-RATE PROPERTY.—Just at the present time public interest is greatly aroused over the prospects for land investments in British Columbia. The Fraser Valley holds out unexampled inducements for the proper purchase of property, the district having good land and a fine climate, as well as excellent commercial facilities. In this respect, it might be well to state that in another part of this paper, Alexander Bell & Co., New Westminster, B. C., are offering a property that combines a maximum number of advantages with a minimum price. Any purchaser of this property can never regret his bargain, as it will not only produce an immediate prorate, but a constant one as well. A letter addressed to the firm will bring all information.

GOSSIP.

Which would you rather have, a bull and twenty cows that will produce 15 \$200 calves a year, or two bulls and forty cows that will produce 80 \$75 calves? First cost would be about the same, but as St Shiftless figures it, "you could get rid of a good deal more feed right on your own place with the larger number."

This is a very busy season out on the ranges of the Western States. It is the time of the year when sheep are being relieved of their wool, and just now great stacks of the snowy fleeces are being piled up on every ranch. It is said that the wool is better in quality than usual, on account of the good weather last winter and the general upgrading of the sheep. The high price of wool has made every sheepman jubilant. The demand never was so great, and in spite of the fact that the crop will be very large values have broken all records. So urgent has been the demand for wool that the great bulk of it was contracted months ago. Most of it sold at 20c. to 22c., but the more recent sales have been at 24c. to 25c., and a few exceptional clips brought 26c. The question naturally arises, has the end been reached? There are some who expect the market to go to 30c., and are hanging onto their wool with that prospect in view. Even if the market should remain at the present level, prices are good enough to be very satisfactory, and sheepmen will score the greatest profits in the history of the western range business.



CHATHAM Incubators

can be depended upon. If the eggs that go into them are fertile they will hatch as surely as the sun rises. Simplicity of working parts makes the Chatham so easy of operation that the women folks and children can run it as well as anybody.

There is no danger of overheating. The regulator is so perfect that it can't "go wrong." No sad experience with roasted chicks if you use a Chatham. There's good money in poultry if you get started right. Buy the time-tried and well-known Chatham and be sure of results. We are so sure of results that we give you two years to pay for the Incubator. **No Cash until November, 1905.** Our superb **FREE BOOK** entitled "How to make Money out of Chicks," gives you the whole story of successful poultry raising by incubators. Send for it. 19

The Manson Campbell Co., Limited
Dept. 2 Chatham, Ontario.

If the fellow who stole a hen and a setting of eggs from the city editor's home on Caldwell street Saturday night will come back, he can get the nest.—[Chillicothe, Ohio, News.]

Barney Oldfield, the automobilist, was talking about a trip that he had once made through Manitoba.

The most dangerous town in Manitoba, he said, is Brandon. Hargrave is near Brandon, and on the outskirts of Hargrave, in front of a little inn, I dismounted. I found in the inn the landlord and another man. They sat side by side on a bench. They were both very old.

"Excuse me, landlord," I said, "but can you tell me how far it is to Brandon?" The old man jumped up and hobbled behind the bar.

"Brandy," he said, in a thin quaver. "Yes, indeed, sir, and a very fine brandy it is." He put a bottle and a glass before me.

"I asked you," I said more loudly, "how far it is to Brandon."

"The best brandy, of course, sir," he answered. "I don't keep nothing but the best."

In despair, I turned from this deaf veteran to the other old man on the bench.

"Look here," I said, "can you tell me how far it is to Brandon?" The old man, with a grateful look, rose and limped hastily up to the bar.

"Thanks, sir," he said; "I don't care if I do."

EVERY PLACE ON THE PRAIRIES

Has Its Cure Credited to Dodd's Kidney Pills.

John White Could Get No hing to Help His Rheumatism Till He Tried the Great Canadian Kidney Remedy.
Yellow Grass, Assa., N.-W. T., June 26th.—(Special).—No place on the prairies but can furnish some proof of the splendid work Dodd's Kidney Pills are doing in wiping out the kidney ailments of the West. It was near here that little Edith Harris was so wonderfully cured of Dropsy by them, and now Mr. John White is giving an experience almost as remarkable.

"I think," Mr. White says, "I should let the public know of the benefit I got from Dodd's Kidney Pills. I had Rheumatism for years, and neither doctors nor medicines did me a bit of good till last spring I tried Dodd's Kidney Pills. They did me a great deal of good. I feel like recommending Dodd's Kidney Pills even stronger than I talk."
Dodd's Kidney Pills cure the Kidneys. Sound Kidneys strain all seeds of disease out of the blood. They tone up the body to its highest standard of health and energy.

QUESTIONS AND ANSWERS
Legal.

SALE OF WOLF HOUNDS.

I lent two wolf hounds to a man to run for the winter, he keeping them for the sport he had, but he sold them without my consent, under their value, because they killed some fowls and turkeys whilst he had them out. The man has died recently. I have received no proceeds of the sale. How am I to regain possession of dogs? I. M. V.

Assa.

Ans.—You cannot take hounds, but you should send in your account for the value of them to the administrator of the estate of the deceased, with the regular statutory declaration.

RECEIPT FOR MORTGAGE.

1. In making a payment due on a mortgage, what should the payer receive to show that it is paid? Is a receipt sufficient?

2. If a person gets a homestead by cancellation, who should pay arrears of taxes on said homestead? J. E. B.

Assa.

Ans.—1. You should receive a receipt on payment, and the person holding the mortgage should also endorse the payment on the duplicate mortgage held by him.

2. The person getting the homestead on cancellation would be entitled to pay the taxes due on such homestead.

Miscellaneous.

CUTWORM—POTATO BEETLE.

This spring I planted some fine samples of forest and shade tree seed. I took great care to put them in right, and by watering and hoeing got the plants up and looking fine, but for two or three days I find a worm has been at work and taken two rows out of three, and not a plant can be seen. On investigation I find this worm to be about two inches long and a brown (dirty) color, about the size of a pencil. The same thing is also cutting my peas and beans, also some sugar beets. What can be done to stop this destruction? I also find that the farmers have scattered poisoned grain to kill the squirrel, and the farmers' best friends, the wild birds, are to be found the victims of the poison. Is this not a mistake in placing the poison above the ground? Could you give any other remedy for the destruction of the potato bug than the spraying with Paris green? J. K. Alta.

Ans.—No doubt this pest is the cutworm, which feeds on the juicy roots of plants at night. The natural habitat of these worms is in sod land, and when this is broken up they attack any crop planted therein. In this case they appear to be working in colonies, and probably the best means of protection would be to plow a deep furrow ahead of their line of march, and place along the bottom a mixture of bran and Paris green sweetened with sugar. Use at the rate of a pound of the poison to fifty pounds of bran made sweet and moist, but not sloppy. About a tablespoonful of this mixture might be placed just below the surface at the base of the young trees, if birds and squirrels take it when put in the furrow. By fall plowing and cropping, of course, the worms will eventually be destroyed, but in the meantime the above is about the only remedy for their ravages. Certainly the birds should be protected, and by placing the poison in holes perhaps the difficulty could be overcome.

We know no better remedy for potato bugs than Paris green.

The well-known champion Hackney stallion, Administrator, was sold at Peterborough, England, recently to Mr. W. Burnell Tubbs at the big price of 975 guineas (\$5,120). The champion brood mare, Rosadora, and her foal at foot, by Administrator, went to the same gentleman at 710 gs. Mr. C. E. Galbraith, who sold these animals along with about 17 others of various ages, and realized an average of over £136 a head, has no reason to complain of any slackness in the demand for high-class Hackneys.

FOR SALE: 300 ACRES
of splendid land in the
FRASER RIVER VALLEY, BRITISH COLUMBIA,

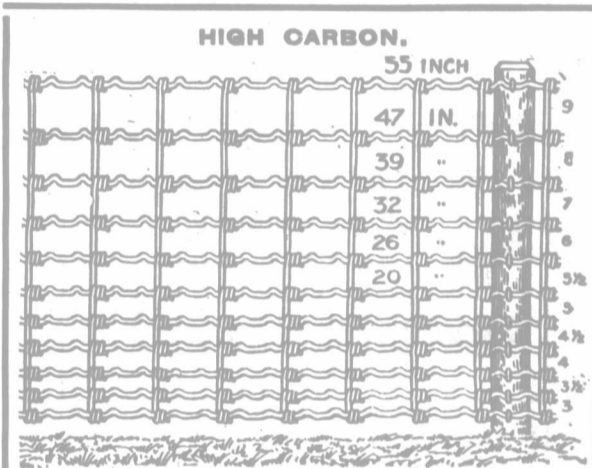
Having good roads, plenty of water for stock, and a rich black soil; no part of the land liable to flood, and 170 acres ready for the plow. This property can be sold as a whole or sold in three parts, to suit a purchaser. Namely: (1) 90 acres of prairie land (with 10 acres of high land for residence), (2) 150 acres of land, of which 100 acres is prairie and 50 acres for residence and timber; this includes 3 acres of orchard of 150 trees, all bearing. From the high land a grand view of prairie and river can be obtained. The prairie would pasture 100 head of stock. (3) 60 acres of prairie. All this property is well drained by two ditches and a dyke. The taxes are light, and the property is well worth \$50 per acre. Post office, school, store and railways 4 miles distant. Daily shipments can be made to Vancouver. This is the best offer in British Columbia to-day. Price, 90 acres at \$25 per acre and the balance at \$30 per acre. As so low a price is being asked, the terms are cash, or a large proportion cash. Address:

ALEXANDER BELL, Ellard Block, Columbia Street, New Westminster, B. C.

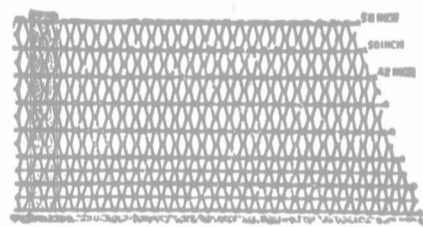
GALVANIZED STEEL WOVEN WIRE FENCE



After all is said and done, more of Our Fences are in use than all other makes of Wire Fences combined. Our Sales double every year.



American Field and Hog Fence.



Ellwood Field and Lawn Fence.

IF YOUR DEALERS DO NOT HANDLE OUR FENCES, WRITE TO US.

The Canadian Steel & Wire Co., Ltd.
WINNIPEG, Man. HAMILTON, Ont.

We call your special attention to our Extra Heavy Fence, all Horizontal Wires No. 9 Gauge, Weighs more per rod, has greater tensile strength than any other Fence on the market



LASTS A LIFE TIME

Applicable to Dwelling Houses, Stores, Factories, Warehouses—in fact, every kind of building. There is no limit to its use as an outside covering. It very materially enhances the appearance of any structure at the minimum of cost.

Greater protection is afforded against the ravages of fire, hence less money need be squandered in fire risk premiums.

The Classic Kids will gladly furnish details.

GALT ART METAL CO., Limited, GALT, ONT.



THOMAS HOG TROUGH
Built to last a life time

Impossible for hogs to spill food from this trough or to interfere with each other when feeding.

Much more sanitary than wooden troughs, which also leak and wear out quickly.

Made in five-foot lengths and up to any size required—light enough to be readily moved as desired.

If your dealer doesn't sell it, write

Thomas Brothers, Limited
ST. THOMAS, ONT.

DON'T BUY GASOLINE ENGINES

UNTIL YOU INVESTIGATE "THE MASTER WORKMAN," a two-cylinder gasoline engine superior to all one cylinder engines; revolutionizing gas power. Costs Less to Buy and Less to Run. Quickly, easily started. No vibration. Can be mounted on any wagon at small cost—portable, stationary or traction. Mention this paper. SEND FOR CATALOGUE. THE TEMPLE PUMP CO., Mrs. Meagher & 15th St., Chicago, THIS IS OUR FIFTY-FIRST YEAR.

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

Galloway cattle, young bulls and heifers, are advertised for sale in this paper by Mr. Robert Shaw, Brantford, Ontario. This herd has been very successful in winning prizes at the leading exhibitions in the East, and is up-to-date in breeding, type and quality.

On one of the old turnpikes yet remaining in the south a big automobile car had twice rushed through the gate without paying toll. The third time they made the attempt the negro toll-man shut his gate and brought them to a stand. With indignation the half-dozen occupants of the car declared they were entitled to ride free.

"Look at your own board," said the spokesman. "It says, 'Every carriage, cart or wagon drawn by one beast, two cents; every additional beast, two cents.' We're not drawn by any beast at all."

"No; but here's where ye come in, sah," replied the darky, pointing to another clause, as follows: 'Every half-dozen hogs, four cents.' An' three times four is twelve," he added.

The twelve cents was paid.

The following anecdote of early mining days in California was told by Bret Harte when lecturing in Canada on "The Argonauts of '49." A family which numbered among its members several young ladies, had moved into one of the California mining towns. These were Christian girls, and they established a Sunday school and gathered together as many children as possible. One Sunday morning one of the young ladies on her way to her Sunday school overtook a mule team, consisting of six mules attached to a heavy freight waggon, the wheels of which were stuck fast in a quagmire. The driver was lashing his mules and swearing passionately. The young lady felt impelled to stop and reprove him.

"My friend," said she, "you shock me." The driver paused and asked how.

"Why," said she, "you are violating two of God's commandments. You are breaking the Sabbath, and you are swearing dreadfully."

With innate politeness, the mule driver lifted his hat, and said: "Miss, d, you call that swearing. Why, you ought to hear Bill Sykes exhort the impenitent mule."

"Russell Sage has a perspicuous mind," said a New York broker. "He can see through nearly everything. I doubt if he was ever duped on an investment yet."

"They say that two promoters once called on Mr. Sage, to try to interest him in a certain scheme of theirs. They talked to the great financier about an hour. Then they took their leave, having been told that Mr. Sage's decision would be mailed to them in a few days."

"I believe we've got him," said the first promoter, hopefully, on the way up-town.

"I don't know," rejoined the other. "He seemed suspicious."

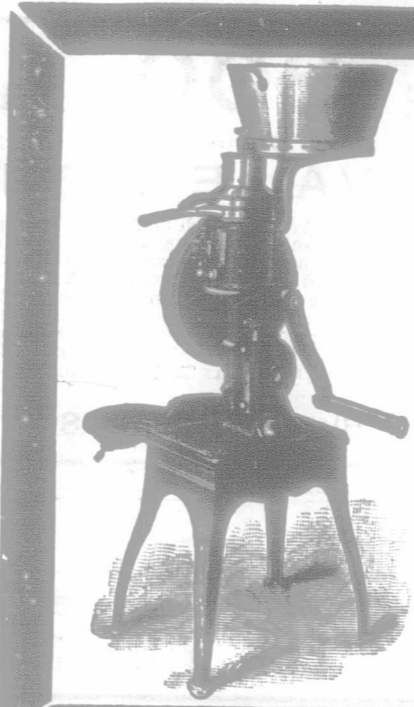
"Suspicious?" said the first. "What makes you think he was suspicious?"

"Didn't you notice," was the reply, "how he counted his fingers after I had shaken hands with him?"

TRADE NOTES.

BARGAINS IN THRESHERS.—The Brandon Machine Works announces that they intend to hold a sale during the week of the fair in the Wheat City of rebuilt threshing outfits. Almost every make of engines and threshers will be offered and special terms granted to purchasers. The machines may be seen at the works any time from now until the fair.

A BRITISH COLUMBIA FARM of apparently very desirable type is advertised for sale in this issue, consisting of 300 acres in the Fraser River Valley, and which will be sold as a whole or in parts to suit the purchaser. Parts of this land are prairie, suitable for pasture, and other portions well adapted to fruit and general farm crops. Parties contemplating a look into the Pacific Province should note this advertisement and write for fuller information.



DE LAVAL SEPARATORS

Awarded the Grand Prize, St. Louis, 1904, and at every World's Exposition for twenty-five years.

"Just as good as the DE LAVAL" would set the seal of approval upon any separator, and is the verdict each "would-be" competitor endeavors to secure for his machine. But every World's Exposition and practical test has been a demonstration of the fact that no separator is in the same class with the De Laval.

DE LAVAL CATALOGUE FREE FOR THE ASKING.

The De Laval Separator Co., 248 MODERNOT AVE., WINNIPEG, MAN.
Montreal Toronto New York Chicago Philadelphia San Francisco

STEPHENS SHINGLE STAINS

More and more every year this mode of Roof Treatment is coming into popular favor. Partly because they are cheaper than paint, but chiefly that they are a scientific combination of Creosote (the best wood preservative known), Manitoba Linseed Oil, coloring pigments and the requisite drying agents.

For soft, velvety coloring effects for roofs and all rough woodwork, they are infinitely more artistic than paint.

We make these Stains in all the popular Greens, Reds, Browns, etc., in all thirteen beautiful tints.

Write for sample Shingles.

Manufactured by **G. F. STEPHENS & CO., Ltd.**

Paint and Color Makers,
Winnipeg and Calgary.

WHEN WRITING TO ADVERTISERS Please Mention "Advocate"

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

QUESTIONS AND ANSWERS. Veterinary.

INDIGESTION.

Mare foaled all right. I put her to work in a week. One afternoon, while working, she became sick. She threw herself down, rolled about, got up, threw herself down again, etc. She got all right again. In a couple of weeks she acted the same. I gave her ginger and nitre, and she got all right. Is she liable to further attacks, and what is the trouble?

W. A. K.

Ans.—The mare had attacks of indigestion. If possible, allow her to go idle and raise her foal. If you are forced to work her, be very careful to not feed very large quantities of grain. Feed grain four times daily, water before feeding, and do not work for at least an hour after meals. Feed a tablespoonful of ginger in her food once or twice daily. If she has another attack, give 1½ ounces laudanum, 4 drams fluid extract of belladonna, and 2 ounces nitrous ether in a pint of cold water as a drench. Repeat the dose in two hours, if necessary.

Legal.

TAXES ON SCHOOL LANDS.

Will you kindly let me know through the medium of your valuable paper whether local improvement taxes can be collected on school lands leased from the Government—this is to apply to Northwest Territories?

G. B.

Assa. Ans.—Yes; the tenant being assessed as the occupant.

SHEEP IN ALBERTA.

Will you kindly inform me through your "Legal" column whether a man is at liberty to have sheep at large in Alberta, as we are threatened with an invasion of sheep that will spoil the range for our cattle, also whether a man can herd sheep on vacant land adjoining a cattle ranch?

A. R. W. A.

Alta. Ans.—1. Yes, certainly, unless there is a municipal herd by-law.

2. Yes; the law cannot state what class of domesticated animals any particular man shall keep. True, sheep ranching is depriving cattle of a lot of grass, but the control of such matter is beyond the law.

AS A VALUABLE DISINFECTANT, the Chloro-naphtholeum dip advertised in our columns by the West Disinfectant Co., New York, has many advocates, as the testimonials received by this company from the very best authorities, go to prove. From many of the large cattle and sheep owners throughout the States and Canada the very best recommendations have been received for this dip. It is particularly useful in controlling sheep ticks and lice on cattle. As a disinfectant about stables and pens it is most valuable, and in many cases used to eradicate mange. An application of this dip in henhouses, stables and pigeries is one of the most certain methods of keeping stock in good health, and should be used quite frequently for animals subject to skin diseases.

Sharples Tubular SEPARATORS

Tubulars Find Gold In Milk

Good butter is worth 20 to 30 cents a pound. Butter is worth only one cent a pound as stock food, yet farmers using gravity skimmers—pans and cans that leave half the cream in the milk—feed that half the cream to stock, then wonder why dairying don't pay. Can't find gold without digging. Can't make dairying pay big profits without getting all the cream.



TUBULARS

Dig Right Down

to the paying level—squeeze the last drop of cream out of milk—make dairying pay. Tubulars are the only modern separators. The picture shows them. Write for catalogue G-186.

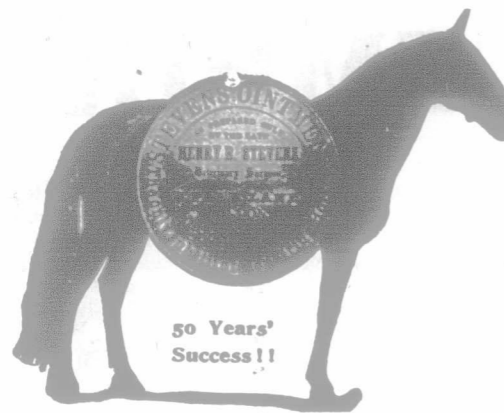
Canadian Transfer Points: Winnipeg, Toronto, Quebec, St. John, N. B., Calgary, Alberta. Address: The Sharples Co., Chicago, Ill. P. M. Sharples, West Chester, Pa.

it's an **H&R** it's an honest well made **Revolver** that's Safe to use and Simple in construction. Write for Catalogue 46. **HARRINGTON & RICHARDSON ARMS CO.** WORCESTER MASS

\$3 a Day Sure Send us your address and we will show you how to make \$3 a day absolutely sure; we explain the business fully; remember we guarantee a clear profit of \$1 for every day's work, absolutely sure, write at once **IMPERIAL SILVERWARE CO., Box 706, WINDSOR, ONT.**

BRITAIN'S BEST BLISTER

It takes time, trouble, knowledge and special chemical apparatus to produce



STEVENS' OINTMENT

as used in the Royal Stables. It is the result of a lifetime's knowledge among lame horses saved up and given to you in concentrated form for use on your lame or disfigured horse. It will surely cure Splint, Spavin, Gorb, Kingbone, and all enlargements in horses and cattle.

Price 75c. small, \$1.50 large box. A little goes a long way. Get a box now. If your local chemist cannot supply you, write direct to

Martin, Bole & Wynne, Winnipeg, Man.
Western Agents.

50 Years' Success!!

ALEX. GALBRAITH & SON
Brandon, Manitoba.

After a most successful season of sales we still have on hand a selection of strictly high-class

PERCHERON SUFFOLK COLTS

And to close out will sacrifice on price. If in need of a stallion, write at once.

JAMES SMITH, MANAGER. BRANDON, MAN.

JOHN CHAMBERS & SONS
Holdenby, Northampton, Eng.

Farm over 2,000 acres of land just in the centre of the Shires, and breed the very best and soundest of the

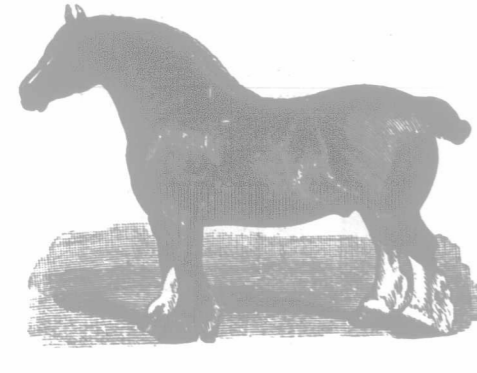
SHIRE HORSE

which from birth are kept in their natural condition, neither forcing nor overfeeding for showing purposes.

Canadian buyers visiting England are invited to call and see what we have to show them and obtain their stallions and mares direct from the men that breed them.

No fancy prices, and all delivered free Liverpool landing stage. Correspondence invited.

Station—Althorp Park, L. & N.-W. Ry



America's Leading Horse Importers



At the Great St. Louis World's Fair, won in the Percheron Stallion Classes:

- 4 years and over—1st, 2nd, 3rd, 4th, 5th, 7th, 12th.
- 3 years and under 4—1st, 2nd, 3rd, 4th, 5th, 6th.
- 2 years and under 3—1st, 2nd, 3rd, 4th, 5th, 6th, 8th, 11th.
- 1 year and under 2—1st with only one entry.

McLAUGHLIN BROS.,
St. Paul, Minn. Columbus, Ohio. Kansas City, Mo.

Indigestion of Horses

This is a very prevalent ailment and soon pulls the animal down. When this condition exists, you should give

ST. JOHN'S CONDITION POWDERS

night and morning for a few weeks and it will make a cure.
Price 25c. a package. Sold everywhere by all dealers.

THE MARTIN, BOLE & WYNNE CO., Sole Proprietors, Winnipeg, Man.

MAKE MONEY AT HOME

by taking subscriptions for the FARMER'S ADVOCATE. For terms, etc., apply at once to

THE WILLIAM WELD CO., LTD., WINNIPEG, MAN.

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

QUESTIONS AND ANSWERS.
Veterinary.

PUFFS ON KNEES.

Foal born May 14th has a puff half the size of a hen's egg on the outer and lower part of each knee. It is not lame or apparently inconvenienced by the puffs.

T. W. P.

Ans.—Puffs of this kind are not uncommon in foals, and usually disappear before or about weaning time. Leave them alone, and if they have not disappeared before winter, blister them.

V.

SORE SHOULDER AND TUMOR

1. Mare has a sore shoulder. It will not heal. I have applied butter of antimony, but when the scab comes off there is matter under it every time.

J. E. R.

Ans.—1. Butter of antimony is a caustic and should not be used on sores unless proud flesh be present. Take 1 ounce each sulphate of zinc and acetate of lead; add a pint of water, and dress the sore with this lotion three times daily.

2. This is a tumor and must be carefully dissected out; the wound stitched up, except a small opening at the bottom for the escape of pus. Dress three times daily with a five-per-cent. solution of carbolic acid until healed. External applications will not remove this tumor; the operation is necessary.

V.

TONGUE LOLLER—AGALACTIA.

1. Suckling colt lolls its tongue. It always hangs out of the same side of mouth.

2. Mare foaled and had no milk. What is the remedy, and should I breed her again?

G. L. S.

Ans.—1. This is a habit, and it is probable its practice will gradually cease. Nothing can be done to prevent it until the colt is old enough to wear a bit especially designed for the purpose.

2. This lack of milk is called "agalactia," and it occasionally occurs without appreciable cause. All that can be done is to feed the mare on soft, milk-producing food, as bran, boiled oats, grass, etc., both before and after foaling. While some mares appear predisposed to the condition, it is probable yours will be all right next time. At all events, if she is valuable for breeding purposes, I would give her another chance.

V.

SIDEBONES, ETC.

1. Over a year ago I wrote you about sidebones on my stallion. You sent me a prescription, which I applied, but it did not remove them. The horse went lame this spring and I consulted my veterinarian. He advised firing and blistering. He fired with an instrument that is kept hot by forcing benzine through a tube with a rubber bulb, and then applied a blister, a sample of which I send you under separate cover. He told me to give six weeks rest in box stall and to grease the parts regularly in the meantime, and he said I might breed him to a few mares in the meantime.

2. How much meal, composed of oats, barley and buckwheat, should a three-year-old stallion, serving three mares a week and getting no exercise, be fed?

3. Are artichokes good feed for a stallion?

T. W. W.

Ans.—1. The sample of blister is all right. Your veterinarian has treated the case in the most approved manner. You must not expect a removal of the sidebones, as they cannot be removed, and the most we can expect is the removal of the lameness. Leave the case in the hands of your veterinarian, as he evidently understands his business. I think it would be wise to castrate this horse, as it is a great mistake to breed a stallion with sidebone, ringbone, spavin, or any of these bone diseases, as there is such a probability of them transmitting the predisposition to their progeny. Of course, you think the trouble was caused in your horse by him getting the foot stuck in the manger, but accidents of this kind will not cause either sidebones or ringbones.

2. About 12 to 14 lbs., divided into three meals. It would be much better if you would give him regular exercise, both he and his progeny would be better.

3. I have had no experience with these for horses.

V.

HORSE OWNERS! USE

CAUSTIC BALSAM.

A safe, speedy and positive cure. The safest, Best BLISTER ever used. Removes all bunches from Horses. Impossible to produce scar or blemish. Send for descriptive circulars.

THE LAWRENCE-WILLIAMS CO., Toronto, Can.



Fistula and Poll Evil

Do yourself what horse doctors charge big prices for trying to do. Cure Fistula or Poll Evil in 10 to 30 days.

Fleming's Fistula and Poll Evil Cure is a wonder—guaranteed to cure any case—money back if it fails. No cutting—no scar. Leaves the horse sound and smooth. Free Book tells all about it—a good book for any horse owner to have. Write for it.

FLEMING BROS., Chemists.
46 Front Street, West, Toronto, Can.



ABSORBINE

REMOVES

RURAL ENLARGEMENTS, THICKENED TISSUES, INFILTRATED PARTS, and any PUFF OR SWELLING. CURES LAMENESS, ALLAYS PAIN without laying the horse up. Does not blister, stain or remove the hair. \$2.00 a bottle, delivered. Pamphlet 1-B free.

ABSORBINE, JR., for manking. \$1.00 bottle. Cures Synovitis, Weeping Sinew, Strains, Gouty or Rheumatic Deposits. Allays Pain. Book free. Manufactured only by **W. F. Young, P.D.F., 46 Monmouth St., Springfield, Mass.**

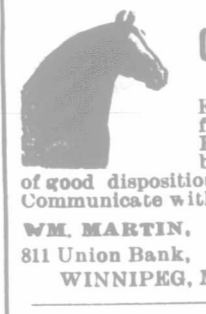
Canadian Agents, **Lyman, Sons & Co., Montreal.**



FOR SALE: The Clydesdale Stallion FITZPATRICK 3951.

Four years old bay; face, one fore and both hind feet white. He is a sure foal-getter, beautifully put up, showy, of good disposition and broken to harness. Communicate with

WM. MARTIN, or J. W. IRWIN.
Box 15,
WINNIPEG, MAN. EMERSON, MAN.



KELWOOD STUD FARM

Importers and breeders of Thoroughbreds. Also Buff Orpingtons and Game fowls.

THE STALLIONS:

"Kelston," Imp. "Abbeywood" at stud. Fee, Thoroughbred, mares, \$25 to insure. Mares from a distance kept at \$2 per month.

DALE & PULFORD, South Qu'Appelle, Assa.

WINDMILLS

Grain Grinders,
Gas & Gasoline Engines,
Tanks,
Bee Supplies,
Etc.

WRITE FOR CATALOGUES.

Goold, Shapley & Muir Co., Ltd.
BRANTFORD, CANADA.



Special to Farmers

HALF-TONE ENGRAVING

Have a nice half-tone engraving made of some of your pet stock. Write for samples and information. Mail orders is our specialty.

WM. A. MARTEL & SONS,
Half-tone Engravers, Line Etchers, Photographers,
326 Smith St., WINNIPEG, MAN.

EDMONTON & ATHABASCA STAGE

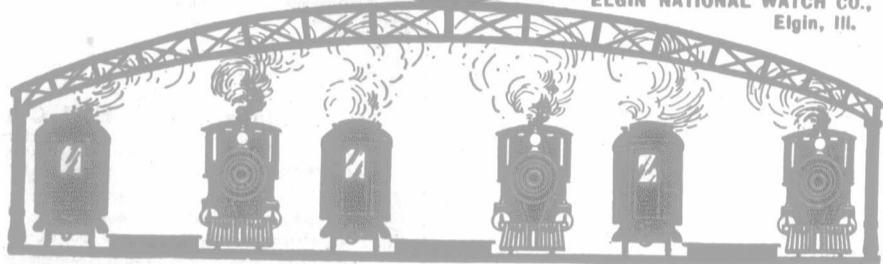
Stage leaves Edmonton every Tuesday morning for the Athabasca Landing, carrying mail, express and passengers, arriving at Athabasca Landing Wednesday evening. Leave Athabasca Landing Friday morning, arriving in Edmonton Saturday evening. Good stock and conveyance. Good meals along the way. Stage connects with boats for the Lesser Slave Lake and all points north.

RATES, \$7. EXPRESS, 3c. POUND.
GEO. E. MACLEOD, P. O. Box 222, Edmonton

Trains
arrive and
leave by
ELGIN
TIME



The Elgin Watch is as indispensable to the traveler as it is to the great railroad systems. Every Elgin Watch is fully guaranteed. All jewelers have Elgin Watches. "Timemakers and Timekeepers," an illustrated history of the watch, sent free upon request to
ELGIN NATIONAL WATCH CO.,
Elgin, Ill.



"There is nothing new under the sun." The Egyptians, we are told, from time immemorial, hatched eggs in ovens of a peculiar and comparatively simple construction. In 1777 Bonnemain supplied the Parisian markets with poultry hatched by an apparatus devised by himself, and in 1825 D'Arcet obtained chickens from artificial incubation. But artificial incubation has recently reached a stage of perfection which inclines us to regard the process as new, and it seems fraught with possibilities hitherto unthought of.—[Scottish Farmer.

A crowd blocked a Chicago street, and the horse doctor joined it to see what was up. "Ah, a balky horse," he murmured. Then he worked his way through the crowd, saying in an authoritative voice, "Let me pass, friends, I am a veterinary surgeon." Reaching the horse, he said to the master of the animal: "Put up your whip. It will do no good. I am a veterinarian. I'll cure your horse of the balks. Watch me." He took hold of the horse's front leg at the fetlock, bent it at the knee joint and held it in that position for three minutes. Then he put the leg down again and chirruped to the animal. It started off as though it had never balked in its life. "An old remedy for the balks, but an infallible one," said the doctor. "It has never failed me. Any balky horse, if you hold one of its fore legs up for three minutes, will be over its balkiness by the time the leg is lowered to the ground again."—[Live-stock World.

The Winnipeg Industrial Exhibition starts this year on Thursday, July 20th, and will continue open until the Friday of the following week. It is anticipated that the entries in all classes will be as heavy as was the case at the Dominion Exhibition held last year. Already many applications have been received for space and the chairmen of the various committees are using their best endeavors to secure a most successful fair. The accommodation offered in the live-stock classes will again be ample, being as large and extensive as was the case with the Dominion exhibition of last year. There is a total floor space of 283,660 square feet, of which 135,000 is devoted to industrial displays, and 148,650 to live stock and poultry. There is accommodation for 300 pigs, 400 sheep, 400 horses and 600 cattle, and in addition there is the great speed stable, 600 feet long.

The prize list will be ready for mailing in a few days. A post card sent to the offices of the Association will secure a copy as soon as the lists are ready. The prizes are again on a very liberal basis. The Canadian Pacific Railway has informed the fair board regarding exhibits from Eastern Canada intended for the Dominion Exhibition at New Westminster. They state that if these are billed on Winnipeg charges prepaid, they will, on their being returned to the railway company, accompanied by a certificate that they were on exhibition at the Winnipeg Fair and that ownership has not changed, forward them to New Westminster at the balance of the through rate, charging on carload lots \$5 per car for the switching service to and from the fair grounds. On less than carload shipments no stop-off charge will be made.

T. H. MAXWELL

Manufacturer of



All-wood Pumps, Wood Head, fitted for 1 1/2 and 1 3/4 inch iron pipe. Our Own Patent Force Pump, Deep-well Steam Pumps, Well-drilling Machinery and Wells Drilled.

Our Force Pump is especially adapted to this northern country. We guarantee it to be frost-proof, and will go into a five-inch pipe and let drainage of your yard get into your well. Our pumps are made in this country—you cannot expect a pump made in a southern climate to stand the cold as ours will. We sell the famous JOHN CURREY PUMP. Mail orders promptly attended to. We want your custom, and we guarantee our pumps.
178 Rupert Street, WINNIPEG, MAN.

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HEAD OFFICE: TORONTO.
Capital (Paid-up) - \$3,000,000
Reserve Fund, - - \$3,000,000
T. R. MERRITT, President.
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Can be made profitable if the right kind of machinery is used. WE MAKE THE RIGHT KIND. Send for catalogue.
BOOMER & BOSCHERT Press Co.,
362 West Water St., Syracuse, N. Y.



We carry a stock of **SUPPLIES FOR BEE-KEEPERS**. The best hives for a cold climate. Write Apilary Dept., Buchanan Nursery Co., St. Charles, Man. Our Catalogue of hardy apples, crabs, small fruits, trees, shrubs, flowers, etc. sent free. Write for it.

TOWN OF NANTON

Southern Alberta, in the Line of C. P. R. Daily service. Fifty-seven miles south of Calgary. If you want to buy Beautiful Town Site Lots, Choice Farming Lands, and get in on the ground floor in the very best section, write to us promptly, as the opportunities to get some of those choice lands are daily growing less. It will pay you to come and select for yourself. We will give you a square and honest deal, and place you on the road to success.
McPHAIL & McINTYRE.

For information pertaining to **REAL ESTATE**

in CENTRAL ALBERTA, address **E. J. COLLISON,** Didsbury, Alberta, Canada.
FARM, RANCH and TOWN PROPERTY.

GOSSIP.

"It is often difficult," complained a certain pompous county politician, "to express my thoughts in language comprehensible to the ordinary person." "The darkest sometimes experience that difficulty," quietly remarked an "ordinary" neighbor.

The popularity of the Aberdeen-Angus cattle in America is well indicated by the size of the handsome 14th volume of the herdbook, which we have received through the courtesy of the Secretary, Mr. Thomas McFarlane, Chicago. Besides the large amount of descriptive matter, constitution, rules and regulations of the Association, the 14th volume registers animals numbering from 64,501 to 76,500, and the method of publishing the name of the animal with the name of breeder, sire and dam, is a model of conciseness.

POT-BELLIED CALVES.

Cattle over one year old never show much tendency to be pot-bellied. It is a weakness of the younger, particularly of calves that are being reared on a good deal of liquid food, and those a little older that are coming on as yearlings, and have been wintered in. Pot-bellies rarely occur with cattle of any age on the grass, or with nature's treatment. It is a result of artificial feeding, and is often associated with indigestion. A beast with a pot-belly is never a beauty, for its irregular form is not attractive. The fore and hind quarters are usually of an every-day form, but the belly is bulged out to an inordinate extent. The back appears hollow, and it droops much beyond the usual. No one looks on these cattle as suffering from a serious disease that will spoil them wholly for all time, or carry them off, but pot-bellies are an undoubted hindrance, and wherever there are beasts of the same stamp and age, some in correct form and others extremely potty, the former will invariably progress most rapidly, give the greatest amount of satisfaction, and pay best. It is at this time that the greatest number of pot-bellied specimens are to be met with, and when put on the grass the extension will gradually shrink to the usual form. I never yet saw a pot-bellied beast in tip-top condition. The belly is generally the only well-developed part about them, and the association is not a happy one, as the contentment of a thriving state is always absent. Few try to cure a pot-belly. Its development is not thought much of at first; then when it is extensive it is known little can be done to reduce it, and the conclusion come to is that it will be rectified in the summer time. It will, but the animal will undoubtedly be reduced in value and capability of pushing on for a considerable time, and surely this ought to be enough to induce all to attempt to guard against the pot-belly. Calves being fed with liquid food gulp it down in a great hurry. This upsets their digestion. After feeding, the belly is blown out, and when this is repeated, time after time, they assume a pot-belly. Medicines may be given to stop the indigestion with more or less success, but greater moderation in consuming their food is the natural preventive, and it should be regulated. With a little extra attention this can be managed, and it is not every calf that requires it, as the majority have some idea of drinking discreetly, and do so. Half-starved calves, too, are apt to assume the form. They receive some drink, but not enough to keep them going, or to satisfy them, then they eat a lot of hay, too much to digest, and the result is an undue extension, and all can be modified by regularity in feeding. In the case of those beyond bucket feeding, it is often thought any kind of food will do to keep them on till the summer with its genial food comes. They are compelled to eat inferior hay and straw. These are bad to digest. They have a craving for food, and will eat, but their excesses are more than they can manage, and a pot-belly is developed. I have rarely known any beast that was receiving a little cake or laxative food suffer from the complaint, as such foods have a rectifying tendency in the interior. Beasts that receive good foods in moderation hardly ever develop a pot-belly. Intelligent attention is a sure preventive, and this is in the hands of every feeder. **CAMBRIAN.**

If you could only see the Easy Running
EMPIRE
Cream Separator

and note how few parts it has, how perfectly simple it is, how easily it turns, how perfectly it skims, how easily it is kept clean, how strong and durable it is, you would at once decide that it is the separator for you. No separator ever made such rapid strides in popularity as has the Empire. The reason is because it satisfies every purchaser. Everyone who has it speaks a good word for it. We ask the privilege of showing it to you, and letting you prove for yourself what it will do. Don't buy a separator until you investigate the Empire.



Free For Asking. Write your name and address on a postal card and send for our Catalogue No. 12.

Empire Cream Separator Co.
of Canada, Ltd. Toronto, Ontario.
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FOR SALE: THOROUGHbred SCOTCH COLLIES, "Holyrood Production" at stud. Young pups at any age with pedigree. Address: **E. E. CLARKE,** Glenora Kennels, West Lorne, Ontario.

HIGH PARK GALLOWAYS
At present I am offering for sale several bulls from 6 to 20 months old, and a few heifers from 1 to 3 years old, prizewinners and bred from prizewinning stock. Will sell at right prices, and satisfaction guaranteed. **Robt. Shaw,** Brantford, Ont. Sta. & P. O. Box 294.

TERRA NOVA STOCK FARM
HERD OF
ABERDEEN-ANGUS CATTLE.

All the best families represented. See fine young bulls for sale from both imported and home-bred cows. Prices reasonable. **S. Martin,** Routhwaite, Man.

Farmers, why not improve your stock by buying a

RED POLLED BULL?

The best for beef and butter. We have some good ones for sale, and the price is right.

H. V. CLENDENNING, Bradwardine, Man.

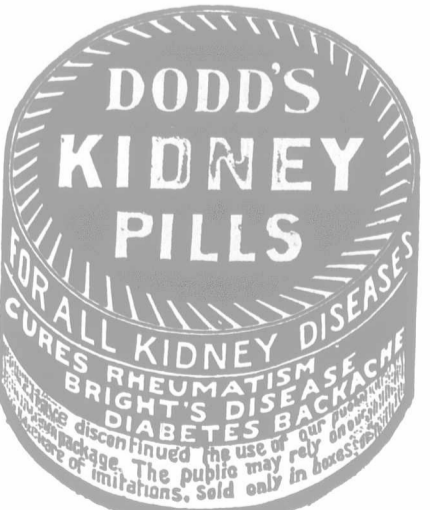
JOHN T. PARKER, Box 11, Lethbridge, Alta.

BREEDER OF

Alberta Herefords
PRICES RIGHT. TERMS EASY.

Probably the climax of ambitious imagination may be credited to the originator of the following wish, expressed years ago by a native of Lincoln Co., Ont., who, with his friend, was hauling wheat to town, and on the "stump" of his comrade told this one "for the drinks."

"I wish," said he, "that the Great Eastern were loaded with a cargo of needles, loaded so heavily that one more needle would sink the ship, that every needle were worn to the eye sewing shut bags of gold, and that the gold were all mine."



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

McKillop Veterinary College, CHICAGO, ILL.

(Chartered 1892.)

LARGEST PRACTICE IN THE WORLD.
Affording unlimited clinical advantages.

The College building has been recently enlarged and modernized by the addition of new laboratories, dissecting room, amphitheatre, contagious ward, hospital ward and a canine hospital. All the furnishings are of the latest improvement.

There has been added to the curriculum two important courses, Hygiene & Breeding and Veterinary Jurisprudence, making the curriculum most complete.

The College is to-day the most complete and best-equipped institution of its kind in this country, and offers to the student a scientific and practical course which cannot be obtained elsewhere.

Regular Graduate Course, acquiring the Degree of Doctor of Veterinary Medicine.

Post-graduate Course, acquiring the Degree of Doctor of Veterinary Medicine.

Meat Inspection Course, preparatory to the Civil Service Examination for Government inspectors. Special attention is given this course, in order to prepare the student for the Civil Service Examination.

Practitioners' Course—Five weeks' advanced work in Medicine, Surgery and Lameness.

SESSION BEGINS OCT. 3rd, 1905.

Write for catalogue and other information.

G. A. SCOTT, V. S., Secretary,
1639 Wabash Avenue. CHICAGO, ILL.

Hawthorn Bank Stock Farm

A new importation, just out of quarantine, are on the way west, and will reach home about May 1st.

SHORTHORNS

A select number are included, mostly heifers.

GALLOWAYS

There are 3 bulls, all yearlings and toppers; one of them won 1st at Newton Stewart Show in a large class.

Anyone in want of Shorthorns or Galloways, don't forget to write or call before buying.

JOHN GRAHAM, - - - CARBERRY, MAN.

BARGAINS IN SHORTHORNS

Nobleman (Imp.), a Winnipeg winner, of Nonpareil breeding, and **Pilgrim (Imp.)**, a massive, smooth, red bull; also **Nonpareil Prince**, a straight Nonpareil two-year-old, winner of first at Winnipeg, 1904, and **Fairview Prince**, same age, another winner this year, along with

FIFTEEN YOUNGER BULLS

fit for service, is **JOHN G. BARRON'S** present offering for sale. Mr. Barron is crowded for room, so will dispose of heifers and cows at rock-bottom prices.

JOHN G. BARRON, CARBERRY, O. P. R., FAIRVIEW SIDING, C. N. R.

PATLY STOCK FARM

KILDONAN, MANITOBA.

Having sold my farm, must sell at once all my prize stock, consisting of **CLYDESDALES, THOROUGHBREDS and HACKNEYS, SHORTHORNS, GOLDEN WYANDOTTES, INDIAN RUNNER DUCKS, etc.**

Among the Clydesdales is the imported 3-year-old stallion **Cadet**, one of the best ever imported; six young brood mares are prizewinners and two champions, the pick of Colonel Holloway's great stud, two of them in foal to last year's Winnipeg champion, **Baron William (Imp.)**.

Thoroughbred stallion **Experience**, brood mare **Nora Howard** and two fillies out of her. A 4-year-old in training, by **Davidson**, and a 2-year-old, by **Hard Lines**.

HACKNEYS—4 choice young mares with foals at side, matched pairs and single drivers.

SHORTHORNS—16, headed by **August Archer**, brother to the great **Ceremonious Archer**, champion of America; 6 yearling heifers and two bulls.

End of St. By., ST. JOHN'S, WINNIPEG.

J. A. MITCHELL.

Manitoba Hard Wall Plaster Wood Fibre Plaster

The Manitoba Gypsum Company are now prepared to fill orders for the above grades of Plaster. Satisfaction guaranteed.

This is the best plaster on the market, and intending builders are solicited to use it in preference to any other.

The only Hard Wall Plaster made in Western Canada.

PATRONIZE HOME INDUSTRIES.

The Manitoba Gypsum Co., Ltd., Union Bank Bldg.,
Winnipeg, Man.

ADVERTISE IN THE ADVOCATE.

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

GOSSIP.

It costs more to winter a good share of the pure-bred scrubs than they can be sold for in the auction ring.

It isn't the high-priced animal that is always the dear one, nor the low-priced one that is cheap.

Did you ever notice that the few men who make the largest success of the pure-bred business are buyers when prices are low and free sellers when values are booming?

A well-known Episcopal Bishop, of high church tendencies, was giving a dinner to a number of his clergy not long ago. In arranging for it with his English butler he was surprised to have the man ask, "Is they 'igh church or low church, sir?"

"Why, what possible difference does that make?" the Bishop inquired.

"A great deal of difference, sir," the man replied. "The low church they eats the most, and the 'igh church they drinks the most, sir!"

During his recent journey to Washington to attend the opening of the Fifty-eighth Congress, Representative "Tim" Sullivan, of New York, desired the dusky attendant in the buffet car to fetch him some soft-boiled eggs. When they were brought the New York man at once perceived that the eggs were very much underdone. "What time are we making on this train?" asked he of the attendant.

"About fifty miles and hour, sir," was the reply.

"Then," quietly observed Sullivan, "if you will boil these eggs another mile they'll be all right."

Good old Deacon Andrews, having occasion to spend a night in a hotel, was assigned a room in which there were three single beds, two of which already contained occupants. Soon after the light was extinguished, a man in one of the other beds began to snore so loudly as to prevent the deacon from falling asleep. The tumult increased, as the night wore away, until it became absolutely unbearable. Some two or three hours after midnight the snorer turned himself in bed, gave a hideous groan, and became silent. The deacon had supposed the third gentleman asleep, until at this juncture he heard him exclaim: "He's dead! Thank God! He's head!"

The following is an instance of giving an answer to a question very fully, and at the same time of satisfying an inquisitive Yankee as it is possible to do: "Look here, squire, where were you born?" said a persistent Yankee to a five minutes' acquaintance.

"I was born," said the interrogated, "in Boston, Tremont Street, No. 44, left hand side, on the first day of August, 1820, at 5 o'clock in the afternoon. Physician, Dr. Warren; nurse, Sally Benjamin."

The Yankee was completely answered. For a moment he was struck. Soon, however, his face brightened, and he said: "Yaas, waal I calculate you don't recollect whether it was a frame or a brick house, dew ye?"

Not long before his death the Hon. Thomas B. Reed visited some friends at their summer residence and missed the train, the last Boston-bound train stopping at Westery that night.

As Mr. Reed had an important engagement in Boston early the next day, he seemed worried until he learned that there was a Boston express which passed Westery at 9 o'clock. Then he smiled.

Going to the telegraph office he directed a telegram to the superintendent of the road in Boston, and sent the following message: "Will you stop the 9 o'clock express at Westery to-night for a large party for Boston?"

The answer came: "Yes. Will stop train."

Mr. Reed read the message and smiled again. When the train pulled in, Mr. Reed quietly started to board it, when the conductor said: "Where is that large party we were to stop for?"

"I am the large party," replied Mr. Reed, and he boarded the train.

Burdock BLOOD BITTERS CURES
Dyspepsia, Bolls, Pimples, Headaches, Constipation, Loss of Appetite, Salt Rheum, Erysipelas, Scrofula, and all troubles arising from the Stomach, Liver, Bowels or Blood.

Burdock BLOOD BITTERS

Burdock BLOOD BITTERS

Mrs. A. Lethbridge, of Ballyduff, Ont., writes: "I believe I would have been in my grave long ago had it not been for Burdock Blood Bitters. I was run down to such an extent that I could scarcely move about the house. I was subject to severe headaches, backaches and dizziness; my appetite was gone and I was unable to do my household work. After using two bottles of B. B. B. I found my health fully restored. I warmly recommend it to all tired and worn out women."

GREAT ENGLISH REMEDY

BLAIR'S GOUT AND RHEUMATIC PILLS

The best and surest cure for GOUT and RHEUMATISM. Thousands have testified to it. All stores and the BOLE DRUG CO., Ltd., Winnipeg, and LYMAN, SONS & CO., Montreal and Toronto.

Drumrossie Shorthorns—"Drumrossie Chief"—28832— and "Orange Chief"—58866— at head of herd. Young things for sale at all times.

J. & W. SHARP, Lacombe, Alta.

Sittyton Stock Farm SCOTCH SHORTHORNS

Members of this herd won the two grand championships as Regina Fat-stock Show, 1905; also diploma herd 1903 and 1904.

FOR SALE—Twenty young cows and heifers in calf to Sittyton Hero 7th, my great show and stock bull.

GEO. KINNON.

Cottonwood, Assn.

Grandview Herd. Scotch Shorthorns. Herd headed by **Crimson Chief**—24057— and **Trout Creek Favorite**. Stock for sale at all times. Correspondence solicited. **JAS. WILSON,** Innisfail, Alberta. Farm 3 miles south of town.

Scotch Shorthorns

Herd headed by **Royal Macgregor**, an excellent stock bull and prize winner of note. Young stock of both sexes for sale.

P. TALBOT & SONS, - Lacombe, Alta.

THORNDALE STOCK FARM.

SHORTHORN herd numbers 160, headed by **Challenge**—30402— and **Royal Sailor**—57071—, sixteen yearling bulls for sale, and a lot of younger ones; also females of all ages.

T. W. ROSSON, Manitou, Man.

Shorthorn Bulls, Heifers and Heifer Calves for Sale.

The get of **Sir Colin Campbell (Imp.)**—28875— and **General**—30890—. Cows all ages, in calf or calf at foot. Seventy head to choose from.

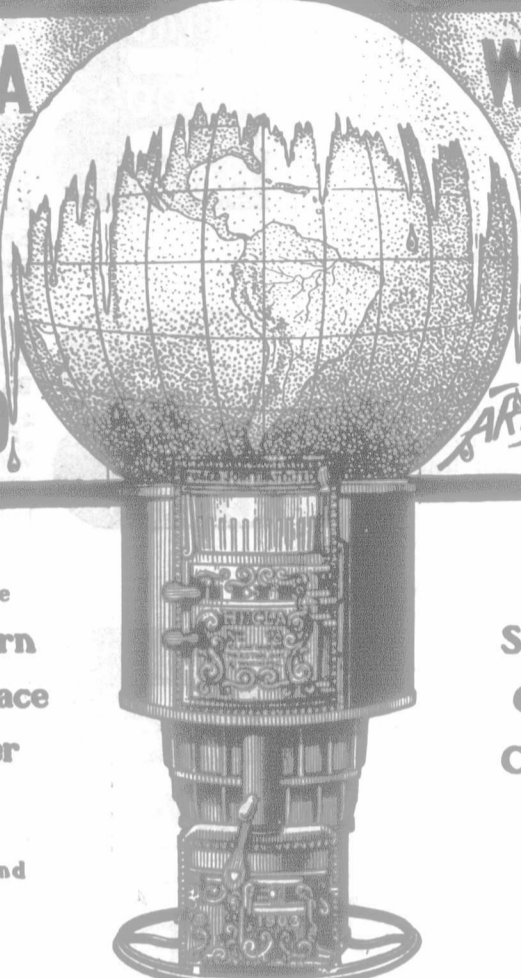
Three Clydesdale Stallions two and three years old. Also mares and fillies, **Leicester Sheep**, both sexes. Stock always on hand. **Geo. Rankin & Sons, Hamiota, Man.**

SUNNY SLOPE SHORTHORNS

I have now for sale one 2-year-old red bull (imp.) and six extra well-bred yearling bulls and several cows and heifers. Prices reasonable and quality right.

JOHN RAMSAY, Friddis, Alta.

HECLA FURNACES ARE FOUND



WHEREVER WINTERS ARE COLD

We also make
The Hillborn Wood Furnace
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Steel Ranges
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Send for a Booklet Describing the Only Furnace Made with ABSOLUTELY TIGHT JOINTS

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Sunshine Furnace

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WIDE-TIRE IRON WHEELS
FOR WAGONS.

Made any height, any width of tire, and to fit any axle. Just the thing for the farm, are stronger, lighter and cheaper than wooden wheels.



OUR QUEEN CITY HANDY WAGON

with iron wheels and wide tires. Is low and convenient for farm and general work. Made by skilled workmen and of the best material. Guaranteed to carry five thousand pounds. Write for catalogue with full description of both wheels and wagon.

DOMINION WROUGHT IRON WHEEL CO.
ORILLIA, ONT. LIMITED.
H. F. ANDERSON & CO., Winnipeg, Agents for Manitoba and the N.-W. T., always carry a full stock of our "Handy Wagons."

QUESTIONS AND ANSWERS.
Veterinary.

COW WITH COUGH.

Cow has had a cough for a month. She is on grass and doing well, and does not cough much. B. C.

Ans.—This indicates tuberculosis. If the cough continues you had better have your veterinarian test her with tuberculin, and if she reacts dispose of her as he directs. Do not allow her out during cold or wet weather, and if she is not tubercular the cough will gradually disappear. V.

CONTRACTED FEET, ETC.

1. Clydesdale weighing 1,640 lbs. has dry feet; the heels are becoming narrow and high, and tipping to one side. He is also slightly knee-sprung.

2. Three-year-old was castrated a year ago, and one side of scrotum is still large.

3. Five-year-old sprained his leg in January, and there is a bony growth on inside of fetlock joint. R. H. F.

Ans.—1. Remove shoes; cut the heels well down, and get the feet as near a normal shape as possible, then blister the coronets every month. Details for blistering are frequently given in these columns. Allow him to run on a damp pasture between blisterings. This will encourage growth of horn better than any other treatment, and will also be beneficial to the weak knee. When in the stable give him a box stall, and feed off the floor.

2. This is what is called scirrhus cord, and an operation by a veterinarian is necessary to remove it. Unless it is quite large it will not interfere with his usefulness.

3. This cannot be removed, but may be reduced some by repeated blistering, as in question 1. V.

INGUINAL HERNIA.

Five-weeks-old colt has double scrotal hernia. My veterinarian applied a bandage and lotion, but the colt got very sore and was no better. I notice that "Whip" advocates castrating colts while on the dam. Would it be wise to castrate this one? W. A. S.

Ans.—If you read the article you mention by "Whip" on "Castration," you will notice that he makes special mention of cases of this kind. He says: "In my opinion, the better time to castrate colts, provided, of course, there is no abnormality as hernia, etc., is from ten days to three weeks of age." Now, as your colt has double hernia he is excepted. Leave him alone, do not interfere with the scrotum at all. Watch it closely, and if you notice the hernia is becoming larger and larger you must get a veterinarian to perform what is called "the covered operation." It is probable it will not increase in size, and it is also very probable it will disappear before he is a year old, although in some cases it does not disappear until the second year, and in rare cases not at all. Unless it becomes larger, give nature a chance. V.

LARYNGITIS.

Aged horse cannot swallow well. He tries to eat and drink, but it all falls out of his mouth. He slavers badly. I got his teeth fixed, but he is no better. How long can he live without eating? H. E.

If there is no broken tooth or irritant in the mouth, the trouble is in the throat, and no doubt he will be either dead or better by the time you see this. In my opinion he has laryngitis, and the treatment is to steam him, by holding his head over a pot of boiling water two or three times daily. Rub the throat twice daily with equal parts spirits of ammonia, oil of turpentine and raw linseed oil. Give him 3 drams chlorate of potash three times daily, by dropping on the back of the tongue out of a spoon. Feed out of a high manger, and hold the water high for him to drink. Feed anything he will eat. This disease is liable to many complications, which must be treated according to symptoms. The length of time he will live without eating depends upon his condition and the severity of the disease. V.

Bone Spavin

Know it by the lump and the limp—a hard, bony growth on the inner side of the hock joint, usually low down and a little forward of the center of the leg—a quick hitch with the sound leg, and a stiff movement of the lame leg, bearing the weight on the toe, most noticeable in starting.

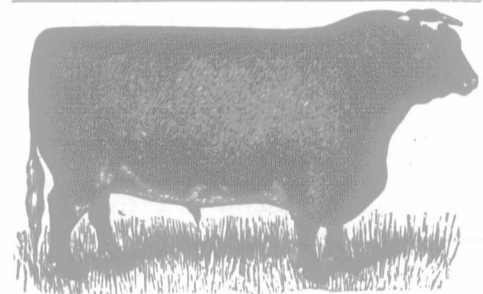
New cases, old and bad cases, the very worst cases, cases where firing has failed, are cured by

Fleming's Spavin and Ringbone Paste

Guaranteed to cure the lameness for good—may or may not take off the lump. Easily used by anybody, and a single 45-minute application usually does the work—occasionally two required. Write for Free Horse Book before ordering. It gives all the particulars, and tells you what to do for other kinds of blemishes.

FLEMING BROS., Chemists,
46 Front Street, West, Toronto, Can.

W. W. CHAPMAN,
Secretary of the National Sheep Breeders' Association.
Secretary of the Kent or Romney Marsh Sheep Breeders' Association,
and late Secretary of the Southdown Sheep Society.
Pedigree Live Stock Agent, Exporter and Shipper. All kinds of registered stock personally selected and exported on commission; quotations given, and all enquiries answered.
Address: MOWBRAY HOUSE, NORFOLK ST. LONDON, W. C., ENGLAND.
Cables—Sheepcote, London.



Arthur Johnston
GREENWOOD, ONT.

Offers the following:
 5 imp. bulls, all registered in E. H. B.
 7 high-class home-bred bulls, all by imp. sires, and from imp. or pure Scotch cows.
 7 imp. cows and heifers.
 7 very fine heifers of our own breeding, by imp. sires, and mostly from imp. dams. om


SHORTHORNS

Still have a few good young bulls to offer. Also an exceptionally good lot of heifers, among which there are show animals. Prices easy.

CATALOGUE.

H. CARGILL & SON, CARGILL, ONT.
JOHN CLANCY, Manager, om

MAPLE SHADE SHORTHORNS



Three young bulls fit for service. Showing the finest Cruickshank breeding.

Good Size, Quality, Flesh and Bone.

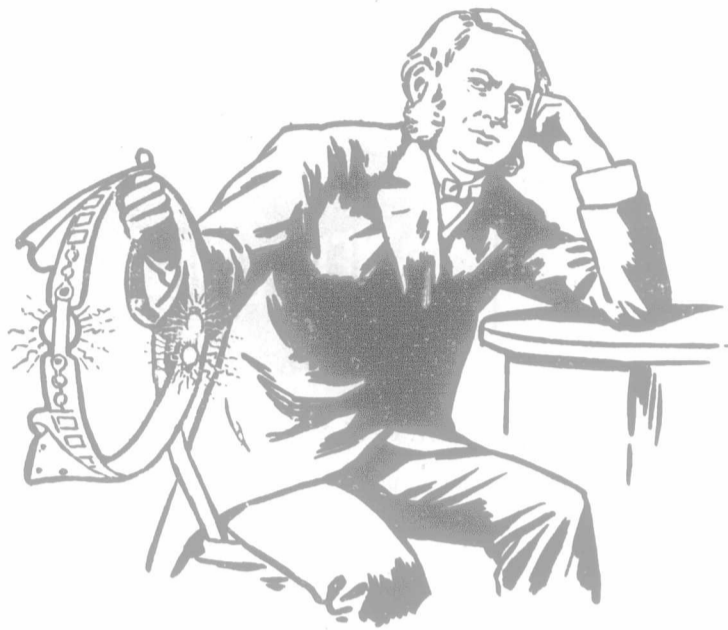
Inspection invited. Catalogues on application. om
JOHN DRYDEN & SON, Brooklin P.O., Ont.

MAPLE LODGE STOCK FARM
1854.
15 Short-horn heifers, sired by imp. bull, and in calf to imp. bull. Also two first-class young bulls. Cows are large milkers. om

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

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Forty years ago, when I first discarded drugs and devoted my whole attention to the study of Electricity, I could not afford to do business on to-day's basis, but I have so perfected my Electric Appliances, and the knowledge I have gained from all these years of experience and research is so great, that I will now give my world-famed Dr. Sanden Electric Belt, with Electric Suspensory, to any man who suffers from Nervous Debility, Varicocele, Losses, Rheumatism, Lamé Back, Stomach, Liver and Kidney Troubles, absolutely

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I don't ask you to pay or deposit one cent until I convince you. Simply call or write for a Belt and wear it for two months, and if cured pay me the usual price—in many cases not over \$5.00. If not cured, return the Belt, and that ends the matter. If you prefer to pay cash, I give you the usual wholesale discount. Be sure you get the genuine. My great success has brought forth many imitators, and I must caution the public against their worthless, blistering imitations.

Call to-day and take a Belt along, or write for one and my two valuable books on Electricity and its medical uses. Sent, sealed, free by mail.

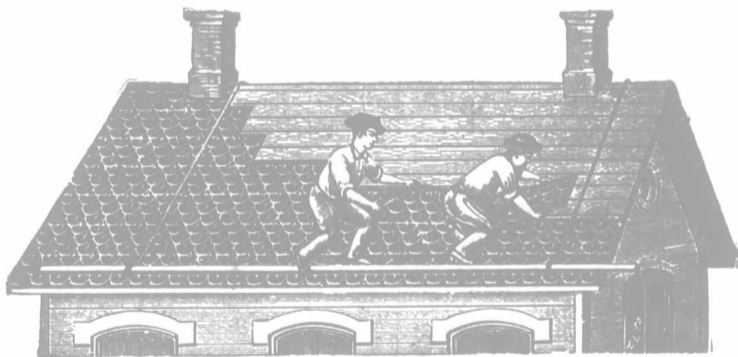
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FIRE, WATER AND LIGHTNING PROOF.

Send in your order for as many squares (10x10 feet) as you require to cover your new or old building. The very best roofing for this climate. We can supply Kave Trough, all sizes, Corrugated or Plain Round, Conductor Pipes, Eaves, Elbows, Spikes, Tubes.

All goods shipped day after order is received. We are the largest concern of the kind under the British flag. Established 1861. Capital invested \$150,000.00.

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Write Your Nearest Office.

TO SECURE THE BEST RESULTS
Place an Ad. in the Farmer's Advocate

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

QUESTIONS AND ANSWERS Veterinary.

PARTURIENT LAMINITIS.

Mare foaled May 23rd. On the 24th I let her out on grass for three hours; when I put her in she was very stiff. I could hardly get her to the stable. She is considerably better now. J. E.

Ans.—Your mare had parturient laminitis (founder). The grass did not cause it. It frequently occurs after foaling. Treatment consists in removing the shoes and applying hot poultices to the feet. (The hind feet are usually affected.) Internally she should be given half a dram quinine four times daily. It is probable a spontaneous recovery will have taken place before this. V.

INVERSION OF THE VAGINA.

For a week before calving, a mass would appear through the vulva of my heifer when she was lying, but disappeared when she stood up. I think it was the womb. She had difficulty in calving. One of her hind legs is swollen, and the mass still appears when she lies, but not as large as it was. P. M.

Ans.—This is not the womb. It is the vagina. Tie her in a narrow stall and build up behind so that when either standing or lying her hind part is a foot or more higher than her fore. Bathe the swollen leg with warm water, and rub with camphorated liniment three times daily. Do not breed her again for several months, if at all. V.

INFECTIOUS BRONCHITIS.

My hogs have had a cough since last summer. They cough up white phlegm. The young pigs have contracted it, and some have died. They have been out on grass for five weeks. The disease seems to be in the lungs. E. O. H.

Ans.—This is an infectious form of bronchitis. I would advise you to get your veterinarian to examine the herd, and hold a post-mortem on the next that dies. It is possible it is something even more serious, and, if so, the Government will send a man to handle the case. If I am correct in my diagnosis, you should treat as follows: Shut the herd in a pen, close the openings, and burn sulphur as long as you can stand the fumes, then open doors and windows to admit air. Repeat treatment every two days, as long as necessary. Disinfect the pens by washing with a five-per-cent. solution of carbolic acid, and then giving a thorough coat of hot lime wash with five per cent. carbolic acid, before introducing fresh stock. V.

ABORTION.

1. How long after the accident should a mare be bred?
2. Is the owner of a stallion justified in refusing to breed his horse to aborted mares?
3. Is it better for owners of both mares and stallions to defer breeding for at least six months?
4. Is it better for the stallion owner to lose a few mares than take chances of infection?
5. In the long run, will both parties profit by pursuing such a course, and should breeders uphold the same, or should they patronize the first stallion whose owner is willing to do business on any terms?
6. About what period of pregnancy do mares usually abort?

Ans.—While infectious abortion is not uncommon in cows, it is rarely seen in mares. Accidental abortion occurs in mares at all periods of gestation, and it is safe to breed her again as soon as she recovers from the accident. We will answer the above questions on the assumption that it is infectious abortion, and, of course, all aborted mares, and all mares, pregnant or otherwise, that have been exposed to infection, should be treated as per infectious abortion in cows, details of which were given in a December number of this journal.

1. At least six months, better a year.
2. Yes.
3. Yes.
4. Yes.
5. Under no circumstances should affected animals of either sex be bred.
6. They abort at all periods. V.

COOPER SHEEP DIP

Standard of the World

for 60 years. Used on 250 millions annually. One dipping kills Ticks, Lice and Nits. No smell. Keeps flock clean a long time. Increases growth of wool.

Dipping Tanks at cost.

Send for Pamphlet to Chicago.

If local druggist cannot supply send \$1.75 for \$2 (100 gal.) pkt. to

MARTIN, BOLE & WYNNE CO., Winnipeg, Man.
BOLE DRUG CO., Winnipeg, Man.
WM. COOPER & NEPHEWS, Chicago, Ill.

T. DOUGLAS & SONS,
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SHORTHORNS and CLYDESDALES

Present offerings: 12 young bulls of No. 1 quality, ready for immediate service; also cows and heifers of all ages. Also one imp. stallion and two brood mares. Prices reasonable. Visitors welcome. Farm one mile from town. om

PINE GROVE STOCK FARM
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Breeders of choice

SCOTCH SHORTHORNS and SHROPSHIREs.

W. C. EDWARDS & CO., Ltd., Props.
JOSEPH W. BARNET, Manager, om

JOHN GARDHOUSE & SONS
Highfield P. O., Ont., Breeders of

Scotch and Scotch-topped Shorthorns, Shire Horses, Lincoln and Leicester Sheep.

A good selection of young stock of both sexes always on hand for sale. Scottish Prince (Imp.), Vol. 45, a head of herd, Royal Albert (Imp.) 20267, at head of stud. Farms 24 miles from Weston, G. T. R. and C. P. R., and electric cars from Toronto. om

Shorthorn Cattle and Lincoln Sheep

Shorthorn bulls, cows and heifers for sale at greatly reduced prices for the next 60 days. om

J. T. GIBSON, Denfield, Ont.

Scotch Shorthorns

Herd headed by Imp. Royal Champion. Young stock for sale from Imp. sires and dams. For particulars write to

ED ROBINSON, Markham Sta. & P. O.
Farm within town limits.

For Sale—Some Young Cows, with calves at choice and heifers, foot, and om

BELL BROS., The "Cedars" Stock Farm, Bradford, Ont. om

For Sale—Three extra good SHORTHORN BULLS, at special prices for one month. Ages range from 6 to 11 months; two are dark red and one dark roan. All are first-class individuals, and will sell at reduced prices if sold within one month. om

JOHN McFARLANE, Dutton, Ont.

BARREN COW CURE

makes any animal under 10 years old breed, or refund money. Given in feed twice a day. Particulars from

L. F. SULLOCK, Morrisburg, Ont.

Brampton Jersey Herd—We have now for immediate sale ten Bu Is, from 6 to 18 months old, descended from St. Lambert or imported stock; also females of all ages. In order to reduce our stock, we are making a special offer. For full particulars, address,

H. B. BULL & SON,
Phone 68. om Brampton, Ont.

AYRSHIRES, 4 choice bull calves four to service, six months old; 1 bull fit for production. **DAVID LEITCH,** Prices right. Cornwall, G. T. R. **CORNWALL, ONT.**
Apple Hill. C. P. R. om

YORKSHIRES

We are now able to ship young stock, six weeks and two months old, out of imported and Canadian-bred sows, at prices that should appeal to you, if you want to get some well-bred young stuff. We can supply pairs or trios, not akin. Write us for prices.

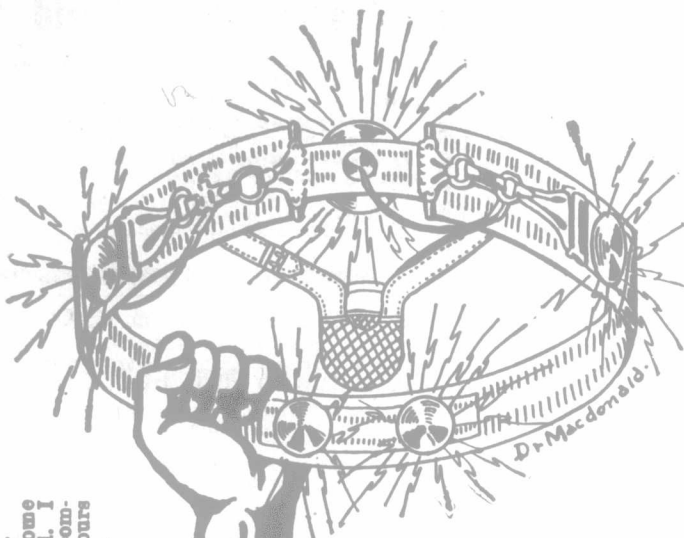
WALTER JAMES & SONS,
Rosser. om Manitoba

MOUNT FARM BERKSHIRES

CHOICE-BRED STOCK now for sale; PAIRS SUPPLIED NOT AKIN. Inspection requested, and correspondence invited and promptly answered.

O. G. BULSTRODE,
Mount Farm, QU'APPELLE, A95A

"I AM ENTIRELY CURED



of my
troublesome
disease. I
consider
your Electric
Belt one of
the won-
ders of the
world."

May 10th, 1906.
DR. MACDONALD: Dear Sir, I am entirely cured of my troublesome disease. I consider your Electric Belt one of the wonders of the world. I will recommend it when and where I can. It has worked exactly as you said it would. Truly,
LOUIS J. ESSER, Easton, Mich.

That's all true. My Belt is one of the world's wonders. I can cure every case which I take up. I have never yet failed. I apply the greatest power on earth to cure you. The Electric current generated in my Belt possesses specific and peculiar qualities, which make it the strongest curative force in the universe. No other kind will act so well or be of such immediate benefit to your particular case. The nerves control the health of all the organs of the body. Electricity, as applied by my particular method, strengthens and builds up the nerve centres, purifies the blood, and banishes disease from the system. It does not matter what the disease is, or how long you have suffered, once I take it up you will be cured, and cured more quickly, more certainly and more thoroughly than by any other method.

Rheumatism, Weakness, Lame Back, Scrofula, Indigestion, Piles, Constipation, Dropsy, Bladder Complaint, Liver Complaint, are only a few of the numerous ailments which Dr. Macdonald's Belt will permanently cure.

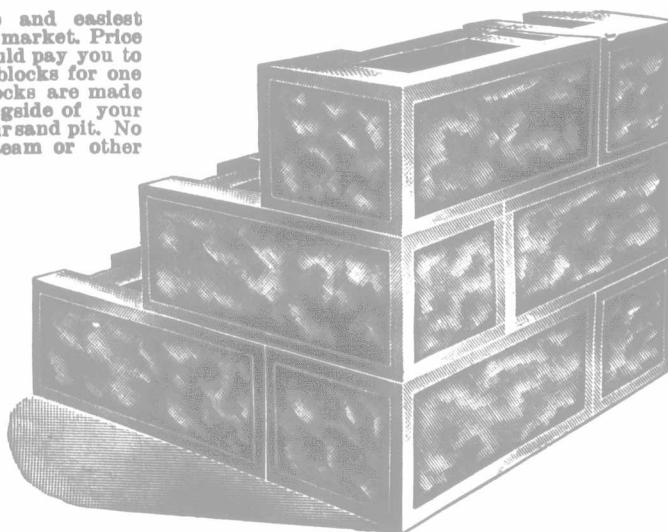
DR. J. Q. MACDONALD, 8 Bleury Street, MONTREAL, QUE.

Dunn's Hollow Concrete Block Machine

Most compact, portable and easiest operated machine in the market. Price so reasonable that it would pay you to buy one if only to make blocks for one fair-sized building. Blocks are made out in the open air, alongside of your building, or down by your sand pit. No firing or baking; no steam or other power required. Skilled labor not necessary. Full directions furnished with machine.

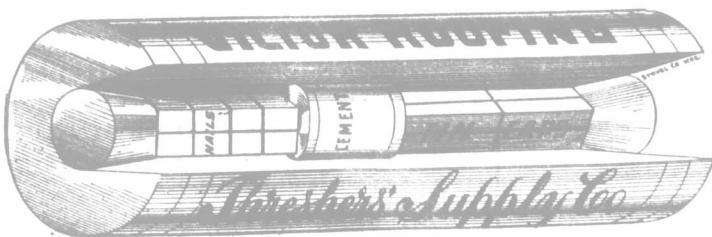
MAKES BLOCKS for houses, bank barns and buildings of every description. Cheaper than brick or stone and much hand-somer. Warmer in winter; cooler in summer; and indestructible.

Write for particulars to Dept. N. om



The JAS. STEWART MFG. CO., Ltd., Woodstock, Ont.

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Get our quotations and samples of

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

GOSSIP

A minister in Western Ontario relates this joke at his own expense. Driving on a toll road, one of which relics is still in existence, on which preachers were at that time exempt from the payment of toll, the regular fee was demanded by the toll keeper. The preacher demurred, claiming that ministers were entitled to free passage. The toll man professed ignorance of any such rule, and the preacher referred him to the list of rules and regulations, after consulting which the toll man said, "Your right, sir; ministers and manure go free."

A SENSITIVE ENGLISHMAN.

A bald-headed man entered a New York hotel the other day and registered thus: "Mc, London, Eng."

The clerk looked at the entry and politely asked him to write the rest of his name.

"That is all the name I have," said the guest.

The clerk looked at him dubiously for a moment, then thought he remembered his face.

"Haven't you been here before?" "Yes," the guest answered; "I was here two years ago."

At his earliest leisure the clerk looked up the registry of two years ago and found the following entry in the same handwriting:

"Harry McComb, Jr., M.P., London, Eng."

When next the guest came to the counter the clerk showed the old register to him.

"You wrote that, didn't you?" "Yes," the guest admitted.

"And that was your name, wasn't it?" "Yes."

"Then why do you say that 'Mc' is your full name now?"

"Well, I'll tell you," said the guest. "You see, when I was here before I was a member of Parliament, but I am not now. So I have no right to use the M. P. My father died a year ago, so, of course, I do not use the 'Jr.' any more. Then, last fall, I had a fever, and all my hair fell out; so, being no longer 'Harry,' I have no use for the 'Comb,' and there you are. There's nothing left but the Mc, you see."

COOPER'S GREAT JERSEY SALE.

The auction sale on May 30th of imported Jersey cattle, from the herd of T. S. Cooper & Sons, Coopersburg, Pa., was probably the most successful event of the sort that has ever taken place in America, or in any country, as 103 head of Jerseys (all that were sold) brought the splendid average of \$621.50. The bidding on the 8-year-old Island-bred bull, Eminent 69631, A. J. C. C. (or Eminent 2nd, P. 2532, as he is registered in the Island Herdbook), sire Golden Fern's Lad, dam Eminence, by Traveller, was started at \$1,000, and participated in by half a dozen breeders until \$8,500 was reached, when it narrowed to a contest between Mr. W. R. Spann, of Texas, and Mr. Geo. E. Peer, of New York State, the latter becoming the buyer at \$10,000. (By an error in our last issue, this purchase was credited to Gedney Farm.) The highest price for a female, \$2,525, was realized for the seven-year-old cow, Reminder's Brown Duchess, purchased by Mr. A. M. Bowman, of Virginia. The sum of \$2,500 was paid for the six-year-old cow, Fontaine's Oxford Pride, purchased by Mr. Howard Willetts, Gedney Farm, N. Y.; and \$2,000 for the yearling heifer, Agatha's Dainty Lady, by the same buyer. A dozen females sold for prices ranging from \$1,000 to \$2,525, or an average of \$1,614 each. The cattle were pronounced a magnificent collection, combining beauty with utility in the highest degree, and were selected in person by Mr. Cooper, one of the best judges of Jerseys in the world, from the leading herds on the Island. There was a very large attendance of breeders from many States, and a few from Canada, among whom were Messrs. D. Duncan & Son, of Don, Ontario. These annual sales of Messrs. Cooper & Sons are unique in their management and results, and reflect great credit on the cattle and the men behind them.

STRONG AND VIGOROUS.

Every Organ of the Body Toned up and invigorated by



Mr. F. W. Meyers, King St. E., Berlin, Ont., says: "I suffered for five years with palpitation, shortness of breath, sleeplessness and pain in the heart, but one box of Milburn's Heart and Nerve Pills completely removed all these distressing symptoms. I have not suffered since taking them, and now sleep well and feel strong and vigorous."

Milburn's Heart and Nerve Pills cure all diseases arising from weak heart worn out nerve tissues, or watery blood.

Provincial Mutual Hail Insurance Company of Manitoba.

This company has been in business for fourteen seasons and can fairly claim to have done as profitable a business for those who have insured in it as any other doing business in the same line. An examination of the business done during and since the year 1891, shows that the company have not only paid losses, but have paid larger amounts per acre on an average during all these years than their competitors. The highest amount paid per acre in any one year was \$7.50, the lowest, \$3. On an average of the 14 years the company have paid \$5.50 per acre, and this on an average assessment of 22 cents per acre. Ten years, the company paid the full claims of \$6 per acre. Apart from local agents' commissions, for securing business, the total cost of running the company during the year 1904 was about \$3,000. The report does not set out the method of adjustment of the losses. By pointing out the methods adopted by some companies in this respect, the just and liberal method of this company becomes more apparent. In some companies, the farmer is assessed on a basis of a total loss of \$5 per acre. Should a storm strike his crop and a total loss result, he receives the full amount, providing the company can pay it.

Supposing the loss is only partial, or say one-half or one-fifth of the crop, the farmer is paid a proportion of the loss, as it stands, to the amount insured. Thus for one-fifth or a five-bushel loss on a wheat crop going twenty-five bushels an acre, the farmer is paid one dollar, because one dollar is a fifth of the five he is insured for. For a similar loss, The Provincial Mutual pays TWO DOLLARS, or forty cents a bushel for every bushel destroyed up to fifteen bushels, or six dollars per acre.

There are no percentage limits in the Provincial Mutual, every loss is adjusted at what it is found to be and thus the farmer whose crops are damaged by hail storms gets paid for the loss sustained, which is what he insures for, and not a percentage of it. If farmers would consider the different methods of paying for damages done by hail storms in Manitoba, they would find that the adjustments of the original company, the Provincial Mutual Hail Insurance Company, are still the fairest, and to the loser by storms, the cheapest of any company doing business in the Province. The remark was made the other day that the Provincial Mutual was too honest in their method of doing business. This should be the best kind of a recommendation.—[The Deloraine Times.]

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