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[^0]THE FARMER'S ADVOCATE

## EDITORIAL

## Mr. John Jackson's Southdowns

 Our front page illustration of Southdowns is fair representation of one of the finest flocks of this breed of sheep on the continent, owned by John Count \& Sons, Woodside Farm, Abingdon, Lincoln Dominion, established over thirty years, althoug it has been entirely renewed thirty years, although years by intirely renewed during the last thirteen years by importations of the best to be found inEngland. The Messrs. Jackson have been particular in securing the very best stock rams, both for pedigree and individual merit, regardless of cost. The same practice has been followed in the selection of the ewes. The following is a list of Royal winner added to the flock during the last ten years: 1st and 2nd prize ewes at York in 1883; 1st prize ewes at Shrewsbury in 188t; 1st prize ewes at Newcastle
in 1887; 2nd prize ewes at Nottingham, 1888; 1st prize ewes at Windsor, 1889; 1st prize ewes at Plymouth, 1890 ; reserve number at Warwick, 1892 . The stock rams used in the flock in 1892 were a follows: Imported Norwich Beau -2919-, bred by J. J. Colman; this ram has been shown twenty five times and has won as many first prizes, having never taken a lower place. Imported Royal War
wick $-5609-$, bred by E. Ellis; this ram prize at the Bath \& West, also second at the Oxford Show, and reserve number at the Royal at Warwick and first at Toronto and London in 1892. Imported Lodore [44], bred by Geo. Jonas; this ram was second prize at Toronto and London in 1892. Imported Bill-5614-, bred by E. Ellis-a lineal descendant of Royal Newcastle; this sheep was second 1892 . Imported Warnham (410) Vol as a lamb in Imported Warnham (410), Vol. 2, E. F. B. as a lamb at Toronto, 1892 Imported Ben 5613 bred by E. Ellis, was first prize as a lamb at London 1892. The lambs of this year, although by so many different sires, are a very even lot.
The Woodside flock has been shown with great Uncess at the largest shows in Canada and the United States, and during the last ten years have en gold and silver medals, making a clean sweep of the Detroit International Show for two years in succession.
The Messrs. Jackson always take pleasure in showing their flock to all interested in this breed of sheep. The lot selected for the World's Fair at Chicago is an exceedingly fine lot all round. Cusomers can he supplied with and no sidered the prices are as low as the lowest.
The ewe lamb in the front of our illustration Duchess Northumberland - $5615-$, was bred by His Grace the Duke of Northumberland, Albury Park, Guildford, England. She has for her sire Ellis "117" (399), that won the champion prize for best ram any age or breed at the Bath and West, and
at the Oxford shows in 1891. This lamb took first prize at Toronto and London, also at the Fat Stock Show at Guelph in 1892. The two shearling eowes on the right and left are twin sisters, bred at Woodside ; sired by Norwich Beau -2919-, their dam heing Royal Windsor "5. - 1318 -, one of the pen of ewes awarded first prize at the Royal Show at Iindsor, 1889. These two ewes were first prize as 1891: and when shown singly in the shearling lass were first and second, and were in the flock hat won first, the get of one ram, at the Fat Stock Show at Guelph, 1892, where they were photographed for this sketch
The Western Division of the Travelling Dairy nder the management of F. B. Linfield, has begun its work dow
of Lambton.
The death of Joseph Harris, at " Moreton Farm," in New York State. has removed one of the best known American agricultural writers of the past quarter century. He did much to promote the ap-
plication of scientific methods to farming. Among plication of scientific methods to farming. Among
his most widely read works were ${ }^{\text {. Talks on }}$ his most widely read works were "Talks on
Manures," "Walks and Talks on the Farm," and "Hanures, " Hallis on the Pig."

Nothing gives a farm such an unsightly appearance as dilapidated fences and gates. Between planting and haying is a good time to complete any careful that no barrier is so low or shaky is to tempt stock into the growing crop. In one night they may acquire a bad habit that will worry their cowner for the whole season.

Farmers who only send their milk once a day should be very careful to thoroughly stir and aerate will be in flakes, which will not readily enter the pipette, and the patron will not be paid for all the butterfat his milk really contains. Do not blame ness, unless you give him a proper sample to work ness, unless you give him a moper cheese and better
with. Milk will also make moter cheese when thoroughly aerated.
We hear that sharpers are now practising a new fraud upon unsuspecting farmers, Ao than drive up to a farmer's house in great haste and gives him a telegram announcing the serious illness of some relative. On the face of the envelope the charges are $\$ 3$ or $\$ 5$. He pays the charges and takes the first train for the home of the relative, only to find on arriving there that he has been duped. Thest tiller of the soil.
Though it is a recognized fact that both the dockng and castrating of lambs should be done while hey are quite young, still many farmers neglect the suffering and loss of blood greater and the reovery more doubtful, but the flies will be troublesome. nd unless the lambs are closely watched death may esult. If the above operations have not alreah the weather is cool and before the flies make their appearance. A wether lamb will fatten easier, will not worry the ewes, can be fed later in the season, and lastly is worth more per pound.
An enquirer in the Country Gentleman writes: I have used ashes from Canada, but the trans portation to my farm on the top of the Catskills is so high that it does not pay me to buy them," and e then asks for a substitute. The editor of that paper suggests a mixture which will be lighter in s the paper says, "a little less than Canada ashe cost on the average." In view of the number of articles on this subject in the Advocate, it surely is not necessary for us to make any comment on the bove, nor to call attention again to the folly
elling and shipping ashes from Canadian farms. Are your trees troubled with the ovster shel bark louse? If so, now is the time to spray with erosene emulsion to kill the young larva. They leave the parent scale towards the end of May and sert their tiny beaks and never move from the spot gain. An a few days threadsgrow out frem the odies, and in a very short time they are covered of the tree will dislodge them. Spray while in the unprotected state with kerosene emulsion, made as
follows:-Dissolve half pound of common soap in ne gallon of boiling water: pour into two gallon coal oil, churn with a force pump; when col Have h Pas
Have the Paris green ready for the potato ach female killed at this time may be said to epresent five or ten hundred of the se said to generation, for if not prevented she will lay that number of eggs. The handiest way to apply Paris Green at this stage is in the dry form; take old
cans, punch holes in the bottom, and dust it on the plants where the beetles are at work, in the proportion of one part to forty of plaster, ashes or flour. crop, mix with water, and use the force pump, apply in proportion of one pound to two hundred or two hundred and fifty gallons of water. The combined mixture (Bordeaux and Paris green
gives good results. See last issue, page 153 , gives good results. See last issue, page 1 s :
some farmers seem afraid that the introduction the Babcock test for the division of proceeds in power in the hands of an inexperienced or unscrupulous person who may be in charge of the the scales, or what is better, has wereither watche privately. Many farmers occasionally the load weight of milk credited to them bo the use of their own scales. Every farmer who sends mith may
have a small Babcock, and know the per cont, of fat which his milk contains. Then if any varia-
tion is disclosed by the report received fom the factory. he can soon find out the reasom why if in quality as well as quantity any of them do

A cheap insecticide has been prepared by B. W Kilgore, assistant chemist of the North Carolin Experiment Station, as follows:-A mixture of on pounds of lime, boiled together for half an hour in from two to five gallons of water, and then diluted to about one hundred gallons of water
Do not neglect your currant bushes at this busy season of the year. During the press of spring have stolen a march on the farmer and left the bushes nearly bare of leaves. Paris green may be used to destroy the first brood, but is too dangerou for use later on. Powdered Hellebore is the best remedy, either dusting it on pure or mixing with or one part to ten of dust, ashes, or flour

The different brands of Paris green and the other chemicals used will often vary so much in strength and purity that it is a good practice to any of the leaves turn brown use a less quantity next time. As the Paris green does not dissolve merely being held in suspension in the water, great care is necessary to keep the mixture properly stirred, for if this is not done the Paris green will settle to the bottom, and the last of the barrel will be so strong that the leaves will be found to be severely burned.
Get your spraying apparatus ready, so that when it is wanted for use you will not have to drive ten or twelve miles for a new pump, repairs to the old
one, or for a supply of chemicals. A delay of or three days at the proper season of the year will be just enough time to allow the grubs to get beyond the reach of Paris green, and the spraving will be comparatively useless. Never spray while the tree. are in full bloom, for no good will be done and
bees may be poisoned, but just as soon as the petals bees may be poisoned, but just
fall make the first application.
The practical use of the Bordeaux mixture has shown that it is of great value in combating the sab of apples, and also that its use increases the keeping qualities of fruit, and to a certain extent prevents the appeaince of ro. A good combinathe Bordeaux mixture and Paris oreen follows: Copper sulphate, four pounds; fresh lime f pounds; Paris green, four ounces; water, fifty gallons. This will cost about 45 c. or 50 c, or $\$ 2.00$ per
acre. (See page 128). The combined fungicides arre. (See page 128). The combined fungicides and insecticides effect a great s.
less liable to injure the foliage.
The tarve of the codting moth shotid be given their first dose of Paris green as soon as they hatch
and before they have had time to eat their way into he apple, where no treatment can affect them until they choose to come out. Spray the second time in hout a week or ten days. If the trees are sprayed at the proper time there will be very few wormy
apples, as is proven by the perfect fruit in orchards apples, as is proven by the perfect fruit in orchards
where spraying has been practiced for several

For the curculio the treatment is the same, but he result is hardly so satisfactory, though sufficiently so to pay for the trouble of spraying many imes over. Here the object is different; instead of the young insect it is the mature one which you wish to poison while it feeds upon the leaves or is lay its egg. The egg is lad mark on the plum to arva is well out of harm's way. One reason of the only partial success of the treatment is, that many eggs may be laid before the female is poisoned. Spray at the same time as for codlingmoth, and give two or three applications, at
intervals of a week or ten days, or oftener, if rain hatrvals of a week or ten days, or oftener, if rain
has fallen. Use one pound of Paris Green to two has fallen. Use one pound of Paris Green to two
hundred gallons of water for apple trees, and a ittle less for plum and cherry trees.
The black knot scourge is spreading through the ountry, and if the plum and cherry trees are to be aved then united action must be taken by all armers and gardeners. The appointment of an inspector for each township is giving good results n some places. The best remedy is to cut out all by the roots. Very often when spoken to about the hint a farmer will say, "Oh, those trees are of no use, on 1 did not bother eutting away the knots." This is just where most of the harm comes from Kerosene is satid to kill the growth, but we could not rommemd it except when the knot is on a large
limblif: rery valuable tree, and then it might be riul. Suthing gives such good results as the knife

## Economical Farm Fencing.

How to fence has for many years been one of the most difficult problems to solve in connection with
the management of the farm whil the management of the farm. While timber for
fencing was in abundance, all that was required was to supply the labor hetween the standing tree and
the spake fence, and although this for the snake fence, and although this fence was considered a vast improvement upon the first barrier
that pioneers were wont to form in the that pioneers were wont to form in the woods to
keep their stock in bounds, and whose keep their stock in bounds, and whose appearance
has been well indicated by the old saying, "Homely has been well indicated by the old saying, "Homely
as a brush fence," yet it requires a strong stretch of imagination to see anything in the crooked rail fence beyond a temporary barrier, and a very unsightly one at that.
Wil fence, contending that if procate the crooked and ridered, it will last as long as any other varied of wooden fence, but the land it occupies, which is worse than wasted, toge ther with the utter impractilocalities, puts it entire, y out of the question. Most localites, puts it entire, y out of the question. Most
old "snake" fences will yield enough sound rails to construct a straight fence four or tive rails high, if posts are used and wire loops and staples for
fastening. Some of these patent reconstructed rail fences, however, are entirely worthless. Too many farmers are apparently striving to excel their neighbors in expending work building useless the farm gets behind, for nothing contributes to economical labor like laying out work so that when performed it it finished and lasting. In this way with the first heavy gale and they are again raised to their tottering height only to undergo the same experience, and th
perpetual turmoil.
If there is anything annoying it is bad fences;
they not only teach the stock they not only teach the stock on the farm to be breachy and troublesome, but contribute more to ill-
will leetween neighbors than any other cause is an open question which would first become reconciled atter being ensconced behind their more secur-
surroundings-the breachy stock or the cantanker ous neighbors.
It requires very little reflection and less calculation to become conversant with the fact that
fencing is the most costly department expense account; much of this is due to the farm expense account; much of this is due to the tem-
porary character of the fences most commend built. For example, to lay out a one-hundred-ancre farm in convenient form and in ten acre fields it will take over 1,000 rods of fence, and if this be
built with boards it will cost fully $\$ 1.00$ per rod in other words $\$ 1,000$. Supposing this fence to last (Wenty years, with simple interest at six per cent.
per annum, divide the principle in twent per annum, divide the principle in twenty equal
parts, the combined interest and principle will just amount to $\$ 110$ per year. A pretty serious item in the farm expenditure any farmer will say, yet there it is
out of it.
Side by side with every conceivable sort of rail,
board and picket fence, we have wire fences pretty nearly the same multiformity. Some of strong claims, for example, are made on behalf of
the Page Woven Wire Fence as a complete barn to anl kinds of stock, in being a complitete barrier strengh and elasticity owing to its coiled springs. is said that it will not sag nor draw together be-
tween, but we would be disposed to recommend more in order to greater security. After a thorough
test on a small scale the Lake Erie te Detroit Rail-
wis liast year used seventy-five miles of this Rence way last year used seventy-five miles of this fence.
Some forty rods having been in use for years on the Solne forty rods having been in use for years on the
Mich ivigan Agricultural College Farm, the Executive
Solumite unanimously ordered more of it This st yle of fence is sold ready to stretch on the posts. fences, doubtless instituted witha view of providing
winter pasture for fiel mice, if we may judge of
the wa puthese rodents have gone for rods of hedge plants during last winter. They have appreciated
t'le cflorts of the companies who have provided the plants, but just who is to fo her the loss the fed tarmer will tell later on, and probably when settling time
connes round pleasantries will be at a premium.
 expertidions the company will be that thas had itils
pervalitive agents abroad. This we can say, that
 it hese prospective hedges, the the owners of of
of ithe that the alloted time when the
tence should be handed over is drawing
 ", Hlants were first set out.
they will make an impassable barrier if
n. pists and wires are placed amone the
nhive no doubt, hut just what part the
hedge plant itself is to play, further than ornament
we wwill leave some one else to answer. With
wit regard to the obligations that farmers have placed
on themselves in on themselves in giving orders for these fences we
cannot say, but we would feel tempted to try how
 we countracts. inclined to pay the last instalment on
That wire fences future field barriers people seem prety are to be the farm is the question to be decequidements of the weak and strong points of each that we wish to
disust discuss. Those who have had thatuable whish to to
other animals ruined by the cruel barbed wire
realize thats other animals ruined by the cruel barbed wire
realize that it should have no place where valuable
stock is kept. A A ain this fonce stock is kept. Aghain, have no parace where valuatee does not answer
the purpose of a barrier, unless uncommonly well
hei built, as the wires are readily sprung apart, and by
this mean unvely upon the crops in the adjeining field. difficulty is found with many of the smooth wire
fences where no netting fences where no netting
to hold the wires together
Thow, what are the requisites of cheap fencing: The answer is, $A$ fence that requires the least number
of posts, with wire at the of posts, with wire at the cheapest rate per pound,
with the other necessary attributes of $a$, lasting structure thatsis is not injurious to the thect
it confines. This latter danger is strong smooth wire is used, and permanent dura-
bility is as this gained hy utilizing, stays and clamps, such
as the Locked Wire Fence
and applying, either in the case of of or or nece fenceses.
In building this sort, seven horizontal wires are used, althg this in sort, seven horizontal wires are
ered sufficient. $H$ 隹 cheap; it can be purchased at three smooth and cents per pound, but it is in the stay and lock that
forms the the wires strength, as the lock effectually ties all
con
an porming a truss that no animal can possibly get throngh or break down. Other
good points in this fence are. The ood pointsin this fence are: The ease with which
it can be joined if the wires have been cut to tont gap, or under any emergency; the fence readily
adjusts itself to excessive heat or cold ; if weighed
din own with ice or snow, when freed it springs back
and assumes its former position without assist It is strong and durable. Gates can be ver. cheaply made on the same principles. ch be very
also suitable for lawns and gardens.

Millet.
There are several distinct varieties of this grass,
of which the Hungarian grass and common millet of which the Hungarian grass and common millet
are the kinds most frequently sown, although German millet, which matures a little later in the season, is grown to some extent with good results.
Our experin with the view of providing a good substitute for hay in the short years, and they have a number of new varieties which they report as being much superior to the common varietieś now grown.
In this country it
In this country it is grown altogether as a fodder is especially valuable to supplemed as hay. Millet in bad years, for a farmer can wait until he cand termine the yield of his hay or ensilage crops before sowing, consequently he can calculate the amount of millet which will be necessary to insure the usual
amount of winter feed for his amount of winter feed for his stock; while nearly
all other crops require an earlier sowing as well all other crops require an earlier sowing as well as
a longer season of growth, millet can be put in A longer season of growth, millet can be put in
quite late in the season and still give a heavy crop of feed
A dry rich soil is desirable, but though it will will grow well on any soil of sufficient richnces to give a good crop of corn or potatoes. The soil
should be well pulverized smooth and level, so that the small seeds may not be are enough teeply. From three pecks to thirty quarts wre enough, when sown broaycast; if drilled, less
will be needed. After sowing the seed roll the sur-
face face. Sow after corn planting is finished, when the the
weather has become settled and the nights hre weather hhas become setled and the nights are
warm, wich will doubtless, in most phrts of (anada,
be It should be cut as soon as the heals are well formed and before the seed as thens headd are well
very irregularly: some heads will be rilet rivens others rege just shooting out, so it should the cut on the early side to get the best quality of feedn (Ont
with a mower and cure the same as common hay. with a mower and cure the same as common hay.
One objection to the general growth of this crop is reound that it is an annual and thus repurires the Son. Minllet mrakees very rich the seed sed sown eatch sea-
stock eat it greedily, stock eat it greedily, so that most growers prefer to
mix it with common hay or other coarse fodder. If
any of the crop has been nllowe the any of the crop has been allowed to go to seced it
should he fed with great care and omly in smail quantities, as there is a certatill amount of danger in
feeding at this stage. (ireat care must be exererised
when buyin When buying silite and Hungrarian Hrast se exercised, thed
it is pure and free from foul weed seeds.
A trait it is pure and free froml foul weed seeds, A, Hreat
dealoo mustard and similar seedd have toen intro
duced into the Northwest ind Nanitoba in this


There is a peculiar Portraiture. done that comes to the satisisher in work well Though aiming at constant improvement in all departments, we are reminded by many congratul page illustrations of the FARMER'S ADVoc fron hibit a distinct advance in this feature of agricultural journalisin. Recognizing the existing oo be past years for mprovement, we are pleased to be able to place within reach of Canadian
breeders a class of work that will do life-like Justice to stock, the excellence of which has gained
world-wide repute. The portrait of Messrs. Jackson's Southdowns, occupying the place of honor in this is qualle, has probably never been excelle itity remarkable. Among others with which we hope
to fand John Bell's celebrated Tamworth swine of Mr. Gibson, \& Walker's Lincoln sheep and the noted
Ayrshire sire at the head of Mr. Thos. Guy's herd.
The Hawks and Owls of North America and Their Relation to Agriculture.
Bulletin No. 3 of the United States Departiment of Ornithology and Mammalogy describes the
above birds and their value to the farmer. The statements made in this book regarding the foods consumed are based upon a critical examination of about 2,00 stomachs, hous showing the enormous amount of labor expended in compiling the
work. The results prove beyond a doubt th class of birds commonly looked upon as enemies of
the farmer and destroved whenever occosion offers, really ranks asmong his best friends, and
with $n$ fect couraged exceptions, should be preserved and Only six of the the up upenty-three species of hawksand Owls are injurious, and of these three are so rare that
they need Hawk, is only indirectly injurious, leaving only two the Sharp-shinned Hawk and Cooper's, or the etrue
Chicken Hawk, that really need to be taken into Chicken Hawk, that really need to be taken into species which feed largely upon poultry and game,
2212 stomachs were examined, of which 5 g per cent contained miceand oxthersmali, of which 56 per cent. insects, and only 3 per cent poultry or $\%$ per cent, Insects, and only 3y per cent. pooltry or rame birds.
In view of this the folly of oftering bounties for the
destruction of hawk destruction of hawks and owls, as has been done by
 withdraw
At firs
divide birsts sight it would seem an easy matter to beneficial, but in fact therereat is nosses of injurious and
because the difficult task, hecause their habits vary with the different
locations and the different seasons of Focations and the different seasons of the year.
For instance, the bobolink is one of the most highly
prized visitors of the Northern Stes prized visitors of the Northern States and Canada,
hut in the Southern States this same bobolink, here called Southern States this same bobolink,
the bird, annually damages the rice crop to the extent of annually damanes the
crow is onsidered one on dollars. The crow is considered one of the worst enemies of the
corn field, but when the corn is past danger the crow changes from an obnoxious to an exennplary In -worm and other insects and
In spite of
re injurious, the general opinion that these birds owls are among the most heneficial of all birds, inficting very lititle damage upon the poulterer, and confrring vast benefits upon the farmer; also that
all haws, with possibly one or two exceptions, are to some extent heneficial to the farmer
This work divides hawks
classes; the first contains six and owls into four harmless birds, of which the Rough Legred Hal or or wrongly named Hen Hawk, is the best known, This hawk lives principally "pon mice and other
small rodents. The second class includes those sman rodents. The second, class includes those
which are mainly heneficial, and contains thirty-
four Spar varie Haw, of which the best known are the
Owl Bawn Owl, Screech Owl, Hawk thase in which the good and evill talance class includes This class contains seven birds, of which the
Golden Eacle, Bald Eayle Pigeon Golden Eagle, Bald Eagle, Pigeon Hawk and Great
Horned Ow Are well known. The fourth or injur
ious clusu has ious class has already been mentioned: Cooper's
Hawk is a States is a a common sanacies throughout the United which birds of prey are looked upon is due to the
depredations of this true chicken depredations of this true Chicken Hawk, to eether
with its smaller congener, the sharp-shinned tawk.
Vinquestionably both species should be destroyed nquestionably both species sho
whenever and wherever possible
It will be seen from this bulletim birds of prey there are hut two which hateserves our mercy. The greater number panss perstied without whole lives
in the constant performance of acth of wren




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## THE EARIIEESS AVOCAIE \& HONE NMAGAIINE

# the leading agriculival 

## DOMINION.

the william weld company (Limited). London, Ont., and Winnipeg. Man. $\begin{array}{ll}\text { John Weld, Manager. } & \text { F. W. Hodson, Editor. }\end{array}$ 1. The Farmer's Ad lt is impartial and independent of all cliques or parties,
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Our Monthly Prize Essays.






We extend an in ititation to diary farmers in all Selining the results of their past year's experience in








 of Ayrshire cattlit have been largele patronizod
Oen ort two auction sales have been failures, and
sever


 and altogether the sale wasa regaried as an unquati:
fied sucesess. The aged Fireavay mare Oromptonis,






 235 buineas, and some idea of the general run of
prices



 Morton's suceas
well-ldeserved.
II the tollowing week on Aprit 6th, the annual

 the Clydesdales there was a good demand, the three

 .pectastle Douylas Show is
 tinct ad anance on the last. Galloways here natur-
till took the ally took hhe place of hoonor, and the famous Tar-
breoch herd was well to the front in the premium
ort
 Messrs Cark. Cidimain, as fevequals. Messry. Big with fine top In the class of aged cows Mr. Cun three noble cows, Scottish Queen, Madonna, and younger cows, was an easy first with the beautiful a great display, and the herds of Mr. Andrew MitWardrop, Garlaff, Sir Mark J. Stewart, M. P., and others, sent forward animals that more than sus-
tained the fair name of the breed. Clydesdales
were prominent, as they could not well were prominent, as they could not well miss, heing
in the very centre of the Macgregor county and at class were both got by the famous Prince of Albion and bred by his owner, Mr. Gilmour, at Montrave.
The champion stallion was Montrave Dudley, owned by Mr. William Montgomery, and thechampion mare the 1000 guineas fily Q.leen of Moses, owned by
Mr. Pilkington. Mr. Andrew Montgomery's first hrood mare, Daisy Dear, is by Prince Lawrence; Mr.
Pilkington's first yeld mare, The Queen, is by Queen Own; the first three-year-old mare was Queen of
the Roses; the first two-year-old filly was owned by the Roses; the first two-year-old filly was owned by
her breeder, Mr. David A. Hood, and was got by
Balgreddan Prince, out of the dam of the celebrated Oliver Twist; and the first yearling filly was a
beauty got by Patrician and owned by Mr. William by the same gentleman, and got by Macgregor Kilmarnock Show, one of the great events of the
year, was held ten days later. year of the existence of the local Farmers' Society and the executive resolved to distinguish the meet hig by extending the show over two days. Cer a grander display of stock of every kind could not
have been looked for. The classes were all well illed, and the attendance of the public on two day passed. Hackneys musteredin in large numbers, and
Hr. Alex. Morton's Gowanbank stud was very suc essful in taking away a large share of the prize
money. The best driving Hackney in Scotland is money. The best driving. Hackney in Scotland is
undoubtedly, however, Mr. Andrew Hunter's Lady Lofty, a superb animal in harness, with action that
fairly eclipses that of almost any otherliving Hackhey. Her hock action is perfect, and she gets over
the ground in great style. Messrs. P. \& W. Craw-
ford, East field House. Dumfres, showed a grand brack stallion, Dash it All, a very fine specimen even more mumerons than at Castle Douglas, and
the quality was unnistakably high. The chanpion
cow was a brown animal owned by Mr. Jame Lawrie. Newtom, Strathaven unquestionably
a choice example of the breed. The chan-
pion bull was a fine beast, Duke of Mauchline,
 and thisen season proved no exception to the rule.
nIt.
 ecipsed all previous records by taking home both
chatanionships. His brood mare Prineess $A$ dino,

 prize winner, and looking vastly better than we have ever before known, was first in the the yeld mare
class. Queen of the Roses was first threclass. Queen of the Roses was first three-year-old
filly, being followed by two daughters of Flashwood, and the first two-year-old filly was Maggie Macaulay, owned by Mr. Howie, Hillhouse, Kilmarnock, and got by that famous horse Thit Macaulay. by Mr. Kean, and got by Prince of Carbury. It now
has joined the Barcheskie stud has joined the Barcheskie stud.
The principal events in the
were the East of Fife show at Coluisburgh and the spring show of the Royal Dublin Society. Fife-
shire is a county in which the modes of fay shire is a county in which the modes of farming differ somewhat from those that are popular in the
West of Scotland. The features are the Clydesdales, for which, however, all the credit is due to gentlemen like Mr. Gilmour, of Montrave, Mr. Balfour, of
Balbirnie, and tenant farmers like Mr. Anderson, Newbigging, Ceres, and Messrs. Meiklem, Begg Farm, hirkcaldy. Several magnificent Shorthorns and fat stock are generally well worth studying, the district heing largely a feeding one and pretty sharply divided on that account $r e$ the vexed ques-
tionof Canadian stores. Hunting horses, however al waysmakethe grandest display at this show, and this season was no exception to the rule. Mr. Gilmour exhibited some of his famous Clydesdales, and they
alone were well worth looking after. By far the best, however, was the pair of mares, Montrave Gay Lass and Tinwald Forest Flower. The two three${ }^{2}$ great pair, and the younger ones were also good. a great pair, and the younger ones were also good.
The Dublin Show is a notable gathering. but it does not at all approach the autumn show there as a
fashionable function. It is, however, well patronized by the farming community, and the display of all classes of stock indicates an advance.
The last week of the month has been a very notpurchased the celebrated Flashwood, without much doubt the hest living Clydesdale stallion. He unprecedented figure for a horse of his age. Ayr show has been held under most favorable auspices and has proved a great success, hnd the Maryhill The champion Ayrshire cow was Sloth II., owned by Mr. Steel, Burnhead, Darvel, and the Clydesold at Kilmarnock was the Banks horse Belverand the first at Ayr was also Mr. William Montgomery's fine thick horse, the Macmeekin. At
Maryhill and Ayr, Mr. Mitchells mares carried at most all the principal prizes, Princess Adino being championat the later show, while the chamThe Summit.
Notes on Sheep Feeding and Breeding Editor of the FARMER's ADVOCATE:
Your valuable journal recently contained a
letter on sheep breeding by "Practical," of Vird letter on sheep breeding by "Practical," of Virden,
Man. He says he thinks the Advocate should be in the hands of every farmer ; in that I quite agree with him, but with some of his remarks I do not straw is the best feed for he says half-threshed pea would be a great waste of peas in the straw, and do not think it necessary to afford as much grain as hand threshed), with a few roots and a ver straw quantity of grain, should feed twenty sheep for five ponths, and yield two hundred and fifty bushels of peaks of, would be too expensive feedround grain he n another place he says he selected the largest ewe he went but he s. In that he was right as far as tion, for a large sheep if not well formed will no take the eye of the judges, and should not be bred
com. Now, with regard to the condition of, the ewes when served will have more wes being twins. He says either the ram or the or four lambs from each ewe every year. II think ewe a few times he will be satisfied with two-at least I am-or even one, rather than three or four.
R. HoNEY, Warkworth, Ont

## A Home-Made Chemical Dehorner

 Dr.Salmon, the head of the U.S. governmentbureau horner" used in his experiments: A mixture is prepared by taking fifty parts of caustic soda, parts of water. An emulsion is made of the kero sene oil and soda by heating and vigorously stirring and this is then dissoived in water. The mixture isthen placed in a bottle with a solid rubber cork This cork is to rub the mixture in when a few drops are applied to the end of the coming horn of the
calf, which should not be more than three weeks
old. It is strong stuff and should be carefully con-
fined to the

Chester Whites as Bacon Hogs.
by R. H. harding, thorndale, ontario.
Many readers of the agricultural journals Canada readers of the agricultural journals of different breeds of swine, and having read the able
articles written by parties interested in Yorkshires, articles written by parties interested in Yorkshires,
Tamworths, etc., would naturally suppose that the above-mentioned breeds were the only suitable sorts
to fill the present demand as bacon hogs. Let me say, in my opinion there are breeds just as suitable for this purpose that will return fully as large if
not larger profits to the producer. One of these not larger profits to the producer. One of these
breeds is the Improved Chester Whites. I admit there are poor specimens of this breed, as among
other kinds, but $I$ do say the worst specimen of a hog I ever saw was at the last Industrial, and he was not a Chester White. The pig that will pro-
duce the largest amount of meat and lard of the
best quality at dese the largest amount of meat and lard of the
best quality at the least cost, at from six to eight
months old, is the most profitable pig, regardless months old, is the most profitable pig, regardless of breed. Although I did not hear the following
direct, I have it from a party not interested in any
breed, that the foreman in a well-known packing house said a few months ago that the best bacon hog they could get was the Chester-Berkshire grade
He said they had plenty of side aind better hams than grades of other breeds. The ideal hog must of
necessity have a strong constitution and a vigorous necessity have a strong constitution and a vigorous
appetite. If he will not feed he is of no use. The more a pig will eat and digest in proportion to its
size, the more profitable it will be. He must also be of a quiet disposition; the more discontent and stomach, consequently more food will be required merely to sustain the body. The best specimens may be described as long and deep in the carcass ham, light in the shoulder, head smans, fulin proportion to the body, nose not too long, face slightly dished broad between the eyes, and especially a heavy coat
of fine silky hair to protect him from cold in winter and the scorching sun in summer. The latter wil not thrive so well. Add to the above quiet habits being slaughtered at almost any age, and we have what is considered a typical Chester White. might also say that this sort seldom call thei as some other breeds were in the habit of doing at some other breeds were in the hatit of doing it is necessary for a pig to have a good appetite in they squeal themselves hungry.
Mr. Caswell, Manager of the , when addressing the Whadian Packing nen's Convention at London, Ont, when asked by some gentleman if the Chesters were not a suitable hog, said they were too fat when fully matured, and oonsequently were only fit for mess pork. I would any discussion) if he considers the breeds he was recommending as suitable for singed bacon fully matured at from 180 , to 220 pounds, the weights
most in demand. If so they should cer classed as small breeds instead of large, but it is
well-known this is not the case. I befleve it is a mistake to crack up any special breed as the only competing in is, " Who can produce the ideal bacon hog at the greatest profit?" A little swine feeding goes a long way if there are no profits in connection
therewith. A better way would be to pay extra prices for the hog most suitable, or reject the ones that are not suitable, and let the producer decide hog at the greatest profit to himself. The extrad interest to the farmer to arouse him in this matter. will produce, as they mondoubtedly will, a hoy at 24) pounds, with long, deep sidesiand especially good hams, well mixed with lean of a fine quality, what
more does the packer want? or, is it a fact that of other breeds? If so, they certainly have atwo-
fold object in view first, to keep their own breeds fold object in view first, to kepp their own breds
to the front, so as to sell their stork at good prices;
and second, to manufacture the offispring into hacon, thereby making dophle profit instead of single, also
giving all the creddit to the Yorshire, becamse the grades are mostly white, never considering that
they are largely produced by Chesters. While it is necessary that we cater to the packers wants, ye
the first thing hecessary is the profits on food con
sumed. At present prices of pork, any hreed sumed. At present prices of pork, any breed can
be fed at areasonathe protit, but when prices are
away down he profits are of necessity very small.
 pork any cheaper from one bred than another
athwer to this, I might say the grazing hog of th
most content dispusition, with light offats, al




they are seldom mentioned, except in the advertis-
ing columns of agricultural journals. I felt it was both a duty and a privilege, as a breeder of Chesters,
to say a word or two in their favor, as I know they are well deserving of a better place in public esteen are well deserving of a better place in public esteen
than they hold in Canada. This is what prompted
me to write this me to write this article.

## Duroc-Jersey Swine. <br> by tape bros.

The origin of the Duroc-Jerseys cannot be positively traced, and was evidently unknown to the
earliest historian of the hog; they have been traced back over half a century, but earlier than that little is known of them. Joseph B. Lyman has the
credit of first calling them Jersey Reds. He wa credit of first calling them Jersey Reds. He was
agricultural editor of the New York Tribune at the time and resided in New Jersey. In discussing the
merits of the red hog of New Jersey, he called them merits of the red hog of New Jersey, he called them
"Jersey Reds." Previous to this, they had been "Jersey Reds." Previous to this, they had heen
simply called red hogs. Mr. Lippencott, of New Jersey, was the first man to advertise the hogs as
Jersey Reds. Clark Petit's history of Jersey Reds Jersey Reds. Clark Petit's history of Jersey Reds
states that in 1832 there was a pair of red hogs shipstates that in 1832 there was a pair of red hogs ship-
ped to salem, N. J., but does not state who was the
exporter or importer. exporter or importer
Durocs wast
Durocs was undoubtedly the name given them
by Isaac Fink, a prominent farmer by Isaac Fink, a prominent farmer living near
Saratoga, N. Y. He named them after a noted stallion owned by Mr. Kelsley, who had a red sow with a litter of pigs. He said he had imported the
sire and dam. Mr. Fink bought a pair of the pigs, and called them Durocs.
Hon. James B. Clay is said to have imported Hon. James B. Clay is said to have imported a
pair of red pigs from Spain during his residence as doubt some of this stock reached other Southern States. Hon. Henry Clay is said to have imported four red shoats in 1837, and to have
been so well pleased with them that he tred the been so werl pleased with them that he bred them
on his arm atand for a number of years. They were probably the source from whence the family of southern-bred red hogs descended.
In all descriptions of hogs of the
of Europe-England, France or Spain-no were known except, those claimed to be brought
from the east coast of Guinea during the rom the east coast of Guinea during the slave trad
Coburn tells us that the Duroc-Jerseys are of
African breed and imported from the Guinea African breed and imported from the Guinea coast.
He says:-"I have been unable to find any domestic He says:-"I have been unable to find any domestic
red hog in any country where the slave trade not extend, and in almost every country where the captured Guinea slaves were landed, there we find
this valuable red hog, but only in the United States this valuable red hog, but only in the United States
are we able to find positive proof that it was hrought directly from Guinea. It is, therefore, a fair conclusion, from the circumstances and the
evidence showing the introduction into our country evidence showing the introduction into our country,
that the red hog of the several slave-trading cointries had one common origin.
Duroc-Jersey sows have large litters; youn eighteen.. Twelve and fourteen strong prom ten to
litter is not at ane stronger pigs at birth. No help is required when pigging, either fer the sews or pigs The pigs ar invigorated with strong blood and most excellent constitutions. The little pigs possess so much vigor
and the sows are so quiet that the loss of pigs is and the sows are so quiet that the loss of pigs is
very little. They are not so subiect to thumps as the more inactive sorts wo sublh feeble to theart action.
They are docile and easily confined. As foragers They are docile and easily confined. As foragers
they excel. A strong constitution is the foundation for a strong appetite, and a good appetite is natur
ally the outgrowth of a goond digestion and pow of assimilation. These favorable conditions are
found in these pigs in a marked deprer found in these pigs in a marked degree, which
makes them less liable to disease. They can be made to utilize the cheaper and coarser forms b food on the farm. They do wonderfully well on
pasture and make a good growth on it.

## -To Prevent Cows Sucking Themselves.



合
 feet six inches long, and two
pieces one and athalf by two,
one foot six inches long, and
bolt them together (axs shown bolt them t both sides of the neek just
behhind the head. Cut a half-
inch grain in the upish inch gain in the upright pieces
for the long pieces to fit tight
into: al grod way into; a good way to fit the
frame to the neck is to bolt
the two Che cow's neck, and the untrights, pieces place it on on
 vavav

## Cross-Breeding for Mutton.

Sheep breeding for mutton has not had in Canada the attention it deserves. There has been in the resulting in many cases in a very nondescript flock of varied quality and type. The bulk of Ontario flocks are still of the long-woolled breeds or of grades, many of which are of Leicester and Cotswold Shropshires are well represented, but nome parts Down breeds have obtained such a footing as to give from our annual clip of wool any large percentage grading a Down quality. Our lambs are annually exported in large numbers to the United States for mutton, and too little attention has been given to the quality of our product. Breeders say that buyers are to blame to a large extent for this, as they will not give a specially good price for a
carefully bred lot, but pay the same general average for any lot.
Sheep will pay for good, careful breeding as well should be paid to careful cross-breeding. If a flock of young long-woolled ewes be selected from which the Down breeds. Select a probe-bred male of grod the Down breeds. Select a pure-bred male of good the pedigree not being of so much importance th quality of the animals named in it. If a Shropshire ram be selected he should not be used more than two years, and should be followed by an animal of a different breed ssay, an Oxford-Down or a Southdown). If the ewes are a good, uniform lot, the all be fed for the market. Give the ewes afte lambing plenty of good, nourishing food, and if they come early plenty of roots (either turnips or man or oats and bran, and when weaned should have hice bit of good pasture. These cross-bred lambs are good feeders, and make a superior quality of mutton. They should all be fed for mutton-none kept for breeding. It is objected to this plan that it requires a farmer to buy in his breeding ewes vetter plans, animals. This latter plan may be used ins-bred Cases with success, whenanother cross is desired for some special purpose. Where very early lambs are wanted for the spring market, it is claimed by some that by crossing a flock of grade Down ewes with a
Dorset Horn ram the ewes of the produce will, if rossed with a Leicester ram, give a quick-feeding There would be no special advantage in this plan of
breeđing, were we abte to get graie or purely bred Dorset Horn ewes at an ordinary price. At present
his can not be done, and the cross is suggested as giving a lot of breeding ewes at a low cost. The advantage claimed for the Dorset Horn breed is
that they will mate at any time in the yrent that they will mate at any time in the year, and
that therefore the lambs can be dropped at any time desired. If it be, as claimed by some, that this property is inherited by the cross-bred ewes, it is a
valuable point in breeding for early spring There is a large and increasing demand for such andy lamb in all the large cities, both of Canada ommodity, and will bring a much it is a scarce pound than anything else in the line of food per ducts that can be raised by the farmer. The earlier price they will bring. Good, warm buildings ber price they will bring. Good, warm buildings are
absolutely necessary for this trade, and careful
fieling ansonutely necessary for this trade, and careful
feeding of the ewees and lambs with a variety of
succulent food. These are already possessed by many farmers, while the lambs come at a season when there is plenty of time to give them extra care
and attention. In both these branches of sheep
and hreeding there is a good prospect of remunerative
returns to the breeder and feeder.

## The Foal.

Mr. W. Brownlea, of Hemmingford, Que., gives
is treatment of young foals as follows: We usually raise from two to six colts each year. If the an ing foction of strong suds made with castile soap and soft water at blood heat, to which it is well to injection with allo It is much easier to give an Give one injection after another until successful. Do not be discouraged if you have to spend the
whole day doctoring. We have never lost a colt since we began using the above treatment, with the
exception of the first one, which was xaception of the first one, which was allowed to go
too long before anything was done. We never
give castor oil inwardly, becill make castor oil inwardly, because we find that it
mack, and it will not suck and soon dies. For diarhara we give Dr. Fowler's Extract a mumber in this way, giving a quarter or a third of a bottle at a dose, one to three doses generally
effecting a cure, and never leaving any injurious
after effects.

## Iodide of Potassium.

Mr. E. Watson, South Hammond, N. Y., gives
experience with the iodide of potassium cure his experience with the i
for lumpy jaw as follows:
I had seen lumpy jaw treated in England with iodide of potassium, but did not have much faith, but as my heifer was getting worse I concluded to
give it a trial, so I got twelve drachms, paying fifty give it a trial, so I got twelve drachms, paying fifty
cents for it, and started to give it to the heifer in cents for it, and started to give it to the heifer in
two-drachm doses in her feed; but that did not give-drachm doses in her feed ; but that didaction, so I dissolved some in a little give me satisfaction, so I dissolved some in a
water and put it in a bottle and gave it in that way. After I had given it to her four days, I noticed her eyes started to weep, her nose began to run, and her hair was full of something like bran. Then I stopped for three days, then started again and kept it up for a
week longer. By that time I came to the conclusion week longer. By that time I came to the conclusion
that I had cured the heifer, for the running lump on her face as large as a man's fist had all dried up and disappeared, leaving nothing to tell the tale of umpy jaw but a scar, which is fast getting covered oor and thin is now a fine, thrifty-looking animal. am firmly convinced that if I had not given the heifer the iodide of potassium I would have lost her, for she was going down hill every day in spite of 11 I could feed her.
Mr. Watson also adds the testimony of another farmer as follows
One of my neighbors had a heifer which had all broke and started to run. I advised him to try iodide of potassium, which he did, and I saw him a week after and he told me his heifer was doing well, for the places had all dried up and the swelling had gone down. He only used fifty cents worth of potassium.

## Calf Feeding Pen.

by w. m. champion, reaburn, man
By the time your June number reaches your readers, many will be tussling with their young calves at feeding time, now just turned out to pas-
ture; and to save many knocks both to feeder and calves, I advise them to make a calf stanchion and build it into the fence. To make it, it requires two upright ends morticed into two blocks for feet; let centre. Now saw gains in uprights six inches from each end, leave one inch full of upright, now take either nicely smoothed poles, or better, strips of picketing, and nail in the gains cut in uprights.


Now you have your two end pieces standing on their own feet, and the strips, two top and bottom, through. Now any pieces of board will do for filling. The dimensions of my calf feeder are as follows, and I find it about right:- height of posts over all, four feet; between the long strips, three feet; a convenient length of feeder, twelve feet.
Now this part of our machine be careful about; begin at one end, and next post put into the stanchion a strip four inches wide; now leave nine inches; now fill fifteen inches, then leave nine nailing filling; now take four-inch strips for your
stanchion, and you have, as it were, a mortice at top stanchion, and you have, as it were, a mortice at top and leave only four inches for the calf's neck taper at the top your stanchion, so it will give you stanchion by putting in either a bolt or oak pin. When feeding time comes all the calves that can
get their heads in will be ready to fasten in, and When they are fed shove out their heads, and there
will soon be another ready to shut in: to hold the pails for feeding, run a pole from one foot to the
other, and between each stanchion brace to the huttom of feeder by nailing short pieces, and each
calf has its own bucket, and no wasted feed or

QUESTIONS AND ANSWERS.




## Veterinary.

wswered by dr. w. mole, M. r.
barrenness
Alex. Mclean, Turtle Lake, Ont.:-"I have a
heavy mare nine years old, and have raised tw colts from her, and now I cannot get her in foal. She has been covered two years in succession with-
out success. Can you advise any treatwent like out success. Can you advise any treatment likely
to succeed? What can I do for her?" Wour mare afraid that the attempt to breed from yourb is injured from her last parturition, and become too rigid and the opening too smanll to
allow of impregnation. However, if you are very
desirous desirous of breeeding her, pass the hand into vagina,
and with the finger closed proceed to dilate and with the finger closed proceed to dilate the
mouth of the womb, or procure one of mouth of the womb, or procure one of Lyman's
Impregnators and insert previous to the mare being put to the horse.

## DISORDERED TEETH

A. S. J., Willowdale, Ont.:--"I bought a cow a
few weeks ago, and found she would not eat as few weeks ago, and found she would not eat as
though she cared for her food, and the saliva is con
tinug tinually running out of her mouth. -1 find about rough and skin seems rather too tight. Will you
please tell me what is the matter, and what I can please tell me
do for her?"
You do not say how old the animal is. If she her mouth, and I think that you will find that the
temporary molars have not been cast oft and temporary molars have not been cast off, and will
thus account for all the symptoms you describe Anything wrong with the mouth or teeth of cattle
will cause an increased flow of saliva. Remove the will cause an increased flow of saliva. Remove th
crown, and give a dose of laxative medicine.
mammitis (inflammation of the udder).
Joseph Irwin, Salisbury, Ont. :- "I have a valu bag is caked. When I milk her the swelling down, but it is not good milk. If you will kindly tell me, through your val
should be much obliged?
This disease is known among farmers, cow caked bag, etc. It consists of inflammation of the udder, and is often of gevery intractable character especialy when it takes on the chronic form. The with redness of the skin, and it becomès increased in size and hard, very tender and pannful to the
touch, and when manipulating look out for kicks touch, and when manipulating look out for kicks.
Upon drawing the beg, instead of milk a thin, yel
lowish fluid will be obtained, mixed with small curds and strings of fibrin. For treatment foment
with warm water, by the application of a blanket across the loins, suspend the udder, which must be kept free from milk, and then apply some stimu
lating liniment: Water of ammonia oil, four parts; or the ordinary soap liniment from
the drug a chronic form, and instead of the active inflam-
mation forming an-abscess, a hard, nodular state of mation forming an-abscess, a hard, nodular state of
the udder ensues permanently. In this stage of the disease apply an ointment of iodide of potassium one part, to eight of lard. These measures must be perseveringly employed for a length of time with
discretion, and are usually attended with success. parasites in sheep.
Thos. E. Bartlett, Hybla, Ont.:-"I aǹ in
trouble about my sheep, as they are dying off rapidly. Last fall I Ihad about one hundred and fter another, and all I could do to save them proved of no avail. They are not able to hold up Most of them froth at the mouth at first, then be come purged and nothing would stop it. I find just before they die. I tapped six of them with Ido not think I will have a lamb of last year left. and only fourteen living. Some come and never move: some linger a day or two and even a week;
some are strong, run and jump around, still they die. Many of the ewes, even good mothers, drop their hey smell so bad, and I am at a loss to know what ails them."
Iuzzles me confess this alarming state of affairs difficult to locate the cause. My opinion, from the smptoms detailed of the odema or " watery con-
dition of the skin". points to parasites or worms in the intestines. $i$ qualified veterinary surgeon of those dead or dying, and suggest remedies for
further prevention. If there are any dogs around, or if the sheep have access to stagnant water, swamp
or marsh land undertres, it will be most likely due
to the parasites named Esophagotoma Columbian;
this will cause obstruction to the circulat tion of the
hlood and account for the do hood and account for the dropsy. The pess tor tem
would reveal the nodulur luulbs or concretionem the bowels. If this should prove to be the cases, see


## Miscellaneous.

## buckiwheat for feeding.

Alex. McLean, Turtle Lake, Ont.:...Is buck
wheat a good grain for fattening beef cattle., Buckwheat is seldom used as a feeding stuff mixed with corn is much used for fattening swin with places. It is also fed to other kinds of stock its use in this way would exter in some special case the selling price is usually above that of other For comile the feeding value is considerably below digestible nutrients areas follows: an example, the Albuminoids, 6.8; carbo-hydrates, $47.0 ;$ fat 12 ; natritive ratio, 7.4; value per hundred pounds, 77 c
Oats-Albuminoids, 9.0 ; carbo-hydrates, $+3.3 ;$ fat 4.7; nutritive ratio, 6.1 ; value per hundred pound

Answers re Tread-Power Threshers.
Othe Editor Farmer's advocate.
In reply to ""Manitoba Farmer," I would say that I am an Assiniboia farmer, and have used one of John Larmonth \& Co.'s (Montreal) tread-power
threshing outfits for five years mreshing outfits for five years, and never invested
my money better than in that machine. If your my money better than in that machine. If your
friends will write to me I will tell them all they
wish for, or they can call and see the machine wish for, or they can call and see the machine at
work. work.

$$
\begin{aligned}
& \text { Yours truly, } \\
& \text { A. L. Grugat, Moos }
\end{aligned}
$$

In reply to your correspo.
Farmer," I will give my own experience with tread-power threshing machine. EXis objections to getting the threshing done by hired machines are tions that notucerstated, and it was these objecpower machine in the year 1888, and which I have used with increased satisfaction ever since. The
chief points in its favor are: 1. Being able to do chief points in its favor are: 1. Being able to do
your threshing just when you are ready. 2. To take your own time and clean the grain thoroughly
out of the straw, and not "throw over." 3. When ut of the straw, and not " throw over." 3. When
finishing a stack, to leave no waste on the ground finishing a stack, to leave no waste on the ground.
4. To keep the 4 c ., 5 c . or 6 c . per bushel in your own pocket. My machine (John Abell's, of Toronto,) threshes in wheat about 30 to 35 bushels per hour; oats,
about 50 bushels per hour. Threshing from the stack, four men are all that are required, and threshing from the stook five men. I find threshing from
the stook is by far the best, and my method is as follows:-As soon as my grain is all in stook, I I be-
gin to thresh the first that was cut, setting the ma gin to thresh the first that was cut, setting the maand for a crop of about 200 acres use 6 horses-horses on the power, and using two wagons for rawing to the machine, changing horses at inter-
vals. One man with each wagon can own load and keep the machine supplied with sheaves; one man feeding and cutting bands; a Courth attends bushels and, if necessary, ties bags;
while a boy with a horse or an ox draws away the while a boy with a horse or an ox draws away the
straw. At noon and night we just take the sides off the racks, pile on the bags, and take our grain home with us. In this way I can, with only the threshed and safely housed in almost the same time that we should take to stack it. By this you for the threshing except the first outlay whatever chine, and I consider that in two seasons I fully save the price of that. I think greater care is re-
quired in the selection of a machine of this kind than Multum in Parvo, and I have seen several tread powers in operation that I would not give yard
room. The machine that I use has always given the greatest satisfaction; the power is given the greatest satisfaction; the power is a level
tread, that is, the horses feet are level, although they are walking up hill, and, although prejudice is
to the contrary, my horses come off the power as fresh and sound as when they went on, and two years, and have, in fact, doowe the five or six
dost of the threshing, are as sound in their legs to-day as when
they first went on. Every farmer with 100 acres or more should
have a machine of this description; with 200 acres or over I think a 3 -horse tread-power would be
advisable. My idea of farming in Manitoba, and I speak
from 11 years' experience, is, wherever practicable to go into mixed farming, (I myself raise, besides
grain, horses, cattle, sheep, etc.), and do all the work with your own machines, thus keeping every thing on the farm: with this object in view, I use
all the newest implements and machines, includine a hand cent rifugal cream separator, and last, Aermotor Windmill for grected an all-steel (ieared
hay and straw, etco, on one of of my barns, whiting consider one of my bes investments.
Yours truly,
Poplar Gove Farmp Hartney, Man.

## Farm Architecture

We take great pleasure in introducing this new and interesting feature to our many readers. Many it attractive in external experience, or of having the interior arrangements experience, or of making same time economizing space: whereas at the thought and planning, with little or no increase in the cost, a house could be made much more con-labor-saving and meated, better lighted, more out.
Farmers know how to appreciate a conveniently the arrangements of the to take little interest in house not only adds to the value of the forming a commercial standpoint, but adds much to the love all members of the family have for their home, and thus is a great factor in keeping the young folks on the farm. In having this plan prepared we have ient, and nothing elaborate, but a simple, conven-

## A Farm House.

by e. Lowery \& son, architects, winnipeg, man. The accompanying cut gives the elevations and $\$ 1,800$ to $\$ 2,000$, according to locality, costing from Size of Structure-Main part $30 \times 30$ feet ; rear wing, $14 \times 16$ feet. Size of Rooms-See plans. Height of Stories-Cellar, 6 feet 6 inches; first story in main part, 9 feet; in wing, 8 feet 6 inches; second story, main part, 8 feet 6 inches ; in wing, 8 feet. Materials-Foundation, posts;
first and second covered with shiplap, tar-paper and "drop" siding;" gables and roof paper. First floor of main tarpaper. First foor of main house and "T. \& G." flooring. Second floor, single, of white pine "T. \& G." flooring. Flooring of dining-

room, vestibule, pantry and kitchen to be of Douglas fir ; all other flooring, white pine. Shingles used on
building to be all of B. C. cedar.
Plasterin- Two crats,
with sunal Plaster of Paris with usual
hard finish. ${ }^{2}$
 Special Feature-A large
comfortable and comfortable and good
looking farm house for a of money; an isolated bed-room for the workingmen an earth-closet off winter use. This closet is
fitted with earthfitted with earth-drawer, which may be removed or
inserted from the outside of house. This closet is much more convenient and than the ordinary privy at
a distance from the house. a distance from the house.
Dining-room and kitchen are wainscoted with pine ceiling "clipped-tops" asshay be front elevation, or may be carried up in the ordinary
way, as shown on side eleway, as Shown on side ele-
vation. Dotted lines on second floor plan represent
the roof lines.

Sirs. I have no hesita-
tion in saying that I cun
 cope a rood, reliahbe and
very cheap agricultural
paper at and pery cheap agricultura
paper. It certainly furn
ishes its seaddery furn Shes its eaders from
month
ietymonthat great iety of correspondence and
vigorously vigorously written ed




council that he would call a special meeting of the
county council for the purpose of procuring seed county council for the purpose of procuring seed,
and that the Revere be authorized to apply for the sum of $\$ 1,000$ to procure seed for this township
(Colingwood). Yet the young farmers of Ontario by reading forestry reports, cannot buts be inprasessed
with the idea that the first settlers had nothing to do but just tickle the land and have peplenty.
 spring of 1888 it came on a wind and thunderstorm
which frightened us all a way to a small clearing near by, and of the great storm in Oxford last sumpeople that when the county was first setmed the the wards of sixty-five years ago, he witnessed one up a
bad if not worse.,
Rev. E. R. Young writes au Jorway House: the, irst evening after our arrival there came up
one of the worst thunderstorms we ever experienced The heavy mistion house, artehough ever exitperienced. we were on our knees that several large pictures fell from the wall, one of which tumbling on bruresther
Stringfellow's head put a sudden termination to his enings devotions.
Agriculture in the Public Schools
 A common question frequently asked is, "Why
do our boys leave the tarm" and many are
the answers given, aill more or less correct. the answers given, all more or less correct.
There is one answer, however, which is perhaps as much to the point as any, but which I have hever
heard given, viz. Our boys are not taught the
science of firmin, heard given, ifming, and consequently then the trow
sience of tith the idea that farming is a sort of low class
up up with the idea that farming is a sort of low class
occupation, from which, by dint of hard, dirty
labor an inorant stupid Occupation, from which, by dint of hard, dirty
labor, an igorant, stupid. simple set of men are
able to just keep body and soul together, the only spice of whose life is an occasional visit of the
bailift, whilst the city and town occupations require intellect, ducation and sharpness, which, when app-
intied secure for those employed in them coulplied, secure for those emplosyed
petence, dignity and respectability
are many well educated engaged in farming there
 theirr occupation; consequently, whilst they can
talk intelligently about politics, history, geology or
astronomy, they know nothing about he sciencef astronomy, they know nothing alaout the science of
argiculture. Someo these are exeellent paintors
or musicians, but in the business frem from which they
 some one else whom the consider a aoo fare farmer doing t, failing altogether to notice that the cir-
cumstances in his case are entirely different from
those in theirs. those in theirs.
But perhaps
But perhaps some one will ask: "Is there any
science in agriculture?" I answer, just as much is
 usisiness there is more need or knowledge, skill,
julgment and perspicuity than in agriculture, and
therefore I am disposed to dispute the claim to the name "profession" with some of those occupations
 farmer were ellenty of phys sical strength and mental
energy. But in these days of keen competition this improved methods, a man requires to exercise his mental even more than his physical powers; if
he is to e successfulin argriculture he must know
hhe whys and wherefores, he must know the erinthe whys and wherefores, he
ciples as well as the practice.
the prandest science on earth. a science, but it is the fountain of the oworlds life. .nd. Bececese it it it
was the only science practised hy man in his unWas the only science practised hy man in his un-
falle state. The sciences of law, medicine ete.,
fate only the results of sin.
Srd. It is the most in diepentent mode of existence offered to man-
 "ome foragriculture to be taughtin our publicschools.
As to the subjects to be taught, these are many As the subjects to be taught, these are.many
and aried. Whilst techical chemistry ir all very
well in its place, at the same time I believe that. for the present, the every hest text-book possible
could be compiled of extracts from our agricultural



 pusition to make a much more judicions selection
than a regular educationist.
I text-bok of this $k$ ind could be made very inA text-book of this kind conld be made very in-
teresting and instructive, and we have no doubt
would in thy







Then there is gardening in all its branches,
subject so important in contributing to the variet On the farmer's table, or to cultivating a taste fo
the beatiful ; also tree planting, the knowledge o Which seems to be very limited, and the practice of make country life pleasant, enjogabie and ele vating
And last, but not least, I would include And last, but nook fort the girls include in suct cooking, dairying, etc. I am afraid that too much pains are taken sometimes to teach the girls to ape
the lady under a sad misapprehension of the true meaning of that term, and not enough to teach them those things which are essential to theit
future usefulness, happiness and well-being; for ature use ulness, happiness and well-bening; for ing, stylish gait and simpering manners may be
very fascinating to the love-sick swain, but they add very fascinating to the love-sick swain, but they add
but little to the prosperity, contentment and happiness of after-life. 'A well-cooked meal, clean, cheery house, well-repaired pants, and a thrifty, intelligent
wife, who can talk intelligently about mutual inwife, who can talk intelligently alout mutual in
terests, will contribute to a husband's contentment
 charm. such a hook be conipiled, and I believe it
Lould be the most interestiting as well as the mosit instructive book in ourschools.
yometical observation. True and do be learned try boys have the practical partright before them? What they need is to be taught correct theories,
and by comparing these theories with th they see at home, whether that practice is ingt it wrong, they wil enjoy the very best facilities for learning the scienoe of agriculture
Now, as to the objectsto be
both important and far-reaching 1st. These are say that the ideas caught by the children at school,
and by them sugkested at hon and by them sulggested at home, would have an im-
mediate effect in improving the methods practised by the parents. 2nd. It would cause the children to be more observant farm operations, marking theorr, and vice cersct 3rd. The above two points
gained, I believe that seen in better mana thed and more productive far better and better kept stock, and, consequently, bet ter inancial results; and again, consequently, more
happy horles, because the old Scotch rhyme is true

4h. Our young people will learn that there is some-
thing more than plod in farm life; that there is a wide field for the exercise of their intellectual can he as respectable as that of any other man or woman who breathes the air of heaven. 5. Some
of the future results will be : Fewer of our boys
隹 leaving the farm ; fewer of our girls spreferring the
ltylish dude to the substantial, nolle-minded stylish dude to the substantial, noble-minded agri-
culturist; agriculture placed where it ought to be culturist; agriculture placed where it ought to be,
as the most independent and honorable calling open
to men and women, which God speed the day

## POULTRY

How to Start and Stock a Hennery
 ceiving mich attention from beginerss who have no practical experience, and they ask for information
on this important sulbject, to answer which privately on this important subbect, to answer which privately
would require too much time, so that 1 through
we coluwis of te yeneral princip) Poultry iskept principally for two purposes, - that
of furnishing tahle fowls, and supplying eggs. Some varieties are lest for one purpose and some
for the other. Some varieties are what might be terined general purpose fowls, combining to first decide what he wishes to produce, and select since fashion in poultry raising and poultry journalism has run so high, breeders of particular varieties have hecome so enthusiastic as to claim every good quality imaginable for their particular
favorites. Every sensible person, however should know that no one breed can excel in all character-
sitics. somle of the heav viest table fowlsare indifferent layer
 their varying conditions and receive rroper care
In order to assist the inexperienced in selecting th








The Wyandotte of late has come into public
otice they are very similar to the Rocks their strongest compet itors. They are shorter joint-
ed,more block y , finer boned and closer feathered, and

hem. The Leghorn is a non-setting variety, and one of
the best producers of eggs, being most prolific dur ing the producers of eggs, being most prolific dur earlv, though small broineres, and should only be
used as such, as their skin is to should sed as such, as their skin is too tough to make production alone. They mature early, many pullets The Lanyshans at five and a-half months old. Brahma, and perhaps as many of them, also of the same desirable color, but they are not considered first-class table fowl by the Americans on accoun
of their white skin. de ground in company with the Plymouth Rock poultry, Iminght just mention the Hamburg family whose chief merit is egg-production, one gold-
spangled hen having laid one hundred and fifty eggs in six months. Their meat is too dark to be harre to raise, ,ut when six or eight months old be-
come quite come quite hardy. The different varieties of this
family are gold and silver-spangled, gold and silver pencilled, and the white and black varieties, which have been introd wiced morer recently vieties, which
consider the hardiest and most prolific of $\mathbf{I}$ onsider the hardiest and most prolific of all. best layers, is equal in every respect to the Leghorns, laying a larger egg than any other breed. The fowls are reasonably hardy, the contrast of the pure white face and ear-lobes with the metallic green-hack prumage making them a very hand-
some, show bird but in some, showy bird, but in breeding for this par-
ticular marking much of their merit has been sacrificed.
The French class, comprising the Hoodans, Lein France, have failed to give general satisfanation in America. I heard of one pooltryman in the
SouthernStates who has been very successful with Hoodans, and who claims every excellence for them as table fowls, besides being yood layers. All these
varieties, however, as well as the Polish, require warm, dry quarters, as they are very liable to roup if kept in damp pens.
the whole race, especially in this dolicate to rear of more eggs from March to October than any other, not excepting Leghorns.

## A Correction.

A while ago I saw a collection of statistics conwherein it was said some smaller eggss fell short of ${ }_{i}^{2}$ pound varying degree. Writing tharger kinds overran in varying degree Writing on another subject misquoted the above as requiring to a pound one
dozen large eggs of the hen. How I could have
 for I have often wished I could seli my hen-fruit by
the pound, since many specimens are too large for fitting ordinary egg-cases. Even the most accurate nods,", which I don't wonder at, if he had my
burden and variety of spring work. g work.
Mrs.
Secluded Nests
It is a mistake to locate the nests of the hen-
house in an open place, where the light can shin holl upon them. Such nests invite scratchine lecking and the eating of eggs. The pest should tirely, and it should be roomy, too, so as to prevent ggs from being crushed by the hen in getting into
t. Hens like cosy nests, and plenty of them. To neglect this point in the care of the flock is very
hhortsighted. The the ter it suits the hen. If we disinfect the nest boxes now, and every two weeks hereafter for the season,
we will we willhye no mites to worry the hens
weather gets warm.--|Tennessee Farmer.

Dangers in Impure Water.
The sanitary condition of the live stock of the
arm sometimes peceives more attention than that of the family. This is true more often in regard to the water used than in anything else. For con-
venience sake, the wells for domestic use are placed iear the house. Frequently they are found unde Chey are generally tightly eurbed, thus preventing free circulation of the air. Being in such near proximity to the houses, wells often serve as cess
pools for the drainage of the buildhngs and sur-
ound oundings. It need not be argued hat water from
wells which are not scrupulously clean, and as well ventilated as they can possibly be is thangerous.
Disease is often found in water which


## DAIRY.

## Fleecing the Dairy Farmer.

Practically single-handed, for a quartr of a exposed an endless number of schemes designed to fleece the farming public. When the movement in favor of improved butter dairying set in, occasion was taken to caution persons against starting
creameries without a certainty of a sufficient supply creameries without a certainty of a sufficient supply
of milk within a reasonably limited area out exercising the greatest possible care in the selection of plans and plant. It is no sedret that there are probably a thousand creameries in the United States, which have actually cost double what would have yielded the conscienceless concerns supplying the outfits a reasonably large margin of profit. Not a few of them are to-day standing idle for lack of milk, and some have been
"mysteriously burned down." We have in the "mysteriously burned down." We have in the past plant and building under reasonable conditions, and at the experimental dairy stations established in the different Canadian provinces practical information as to every detail can be obtained. Reliable men who have been in the business in
Canada for years are always ready to impart to Canada for years are always ready to impart to
beginners the benefit of their experience, so that beginners the benefit of their experience, so that
when an oily-tongued agent from abroad strikes a when an oily-tongued agent from abroad strikes a
district with his grip full of plans and golden statements of prospective profits it would be well to send him about his business and make enquiries nearer home. Usually this is not done. A little
mother wit ought to tell any one that these glibtalking travellers are not philanthropists, and that when a couple of "prominent farmers" are invited at "the expense of the company" on a trip of 400 or 500 miles to see a real creamery running, and are wined and dined into the bargain, it is not sor
their benefit nor for the benefit of their fellowfarmers who are to become shareholders. However, they bring home a glowing report, the stock
is taken up with a boom, the agent gets a $\$ \tilde{5}, 000$ or is taken up with a boom, the agent gets a $\$ 5,000$ or
$\$ 6,000$ contract signed hard and fast for what $\$ 0,0$ only to cost $\$ 3,000$, or when the cow popul-
ought on
ation of the community would not warrant a larger ation of the community would not warrant a larger
expenditure than that, and then takes his deparexpenditure than that, and then takes his depar-
ture for pastures fresh, leaving his victims to fight
it out with the collector of the company. necessary to reiterate previous warnings on this subject, in view of the increased attention being
given to buttermaking on the factory plan. given to buttermaking on the factory plan. The essent at home, and it can be successfully developed. just as Canadian cheese dairying was, without the application of Chicago hot-house methods. A little
common sense is a very good thing on which to liey common sense is a very good th
the foundation of a creamery.

Private Dairying in Manitoba.
by s. m. barre, winnipeg, presiden
toba dairy association.
Dairying is taking a larger hold than ever in the sparsely settled condition of the western country the greater part of the produdts must for years to
come be made in private dairies. We should, therecome be made in private dairies. We should, there-
fore, make an effort to improve our ways in mak-
ing and handling dairy butter. The following suggestions will, I trust, prove useful:- forsh
Cleaning the Mik-House.- The first thing to be done at the beginning of the The first thing to be
thorough cleaning of the milk-house, and of al utensils connected with the dairy. Take everything out of the milk-house, use plenty of scalding
water and lye to clean the shelving and all the
wood-work. Whitewash inside and wood-work. Whitewash inside and outside, to
wo
sweeten the atmosphere and alsorl) moisture. Use a weak solution of copperas or sulphuric acid to
clean the floors. Keep nothing but milk in the clean the floors. Keep nothing but milk in the
mik-house. $A$ vegetable cellar-kitchen is no place
for milk gund butter. If you have no milk-house for milk and butter. If y
partition a corner of your
milk in a cool, clean place. See that the cows get a full supply of succulent
food, plenty of pure water and satt at all timess of
the year, and particularly during the milking season.
sow a patch of corn, or of oats and peas, for soil-
ing purposes during the hot, troublesome days of








 claim it is lighter work. With thirty or forty
cows it is best to use a larger machine, and run it
with horse gear-a bull, an ox, or a pony could do with horse gear-a bull, an ox, or a pony could do
the work. A tread-power is the best for this purpose on account of securing more uniformity of
speed, but hundreds of sweep horse powers are
used for the purpose of turning separators used for the purpose of turning separators,
with good results, on the continent of Europe and elsewhere. The separator should be set in a clean,
cool, suitable place (it needs no costly building) not coo far from the cattle yard or shed. The separator is started about the time milking commences. both operations are completed about the same
time, and the warm, sweet skim-milk is ready for the calves to drink. There are no pans to wash, no cream to skim, no cold water to pump. Th
dairy operation is wonderfully simplified.
Preparing the Cream for the Churn.-The great
secret of making sweet, fancy butter lies in churn-
ing often, say every day when possible ing often, say every day when possible, and at quast every second day during hot weather. If the
quantity of cream is too limited for churning so quantity of cream is too limited for churning so
often, add new sweet milk to in order to increase
its bulk. The cream should be well mixed and its bulk. The cream should be well mixed and
stirred every time a fresh supply is added to the stirred every time a fresh supply is added to the
contents of the cream vesse.. No new milk or sweet cream should be added to the contents of the
cream vessel within ten hours of the time of churncream vessel within ten hours of the time of churn-
ing. Kep the cream vessel in a cool, clean, dark ing. Keep the cream vessel in a cool, clean, dark
place. Bear in mind that separator cream requires
to be cooled immediately after separation to ter to be cooled immediately after separation to a tem-
perature below $60^{\circ}$ Fahr.-I like to cool it to $50^{\circ}$. perature below $60^{\circ}$ Fahr.-I like to cool it to $50^{\circ}$.
This point should not be overlooked if you wish to yield of butter. The acidulation of quality and should not be left to chance and circumstances,
but be so regulated as to have the but be so regulated as to have the cream ready fo
the churn at a given time. It might begin ten or twelve hours before churning and be accomplished
twe thing begin ten or with heat, a ferment, or both, so as to produce the
best results. Cream in the right best results. Cream in the right condition for casine shoud be well separated from the fat (this is indicated by the fomentation of small pellets or
grains in the liquid), and it should have a mild, grains in the liquid), and it should have a mild
clean, sour taste. Churning, Washing and Packing Butter.Churn the cream in any kind of revolving or rock
ing churn at a temperature never above $58^{\circ}$ Fahr. in summer, if you wish to obtain quality and quantity thermometer before churning. When butter show signs of breaking, add a little brine to the contents
of the churn to assist separation. When the hutter grains are of the size of small shots, before taking out the butter-milk, add water at about $50^{\circ}$ during summer in quantity equal to about one-third of
the contents of the churn, agitate alittle the contents of the churn, agitate a little, draw off
the diluted liquid, and repeat washing with water
at $55^{\circ}$ until the water comes clear. Well water is at $55^{\circ}$ until the water comes clear. Well water is
genealy the best for washing butter. Let the butter drain a while. Salt at the rate of seven-
eights to an ottnce of salt per pound of butter, and work just enough to incorporate the salt with the butter. Let it then stand a few hours in a cool,
clean, dark place, and when hard enough rework clean, dark place, and when hard enough rework over-working; nine-tenths of dairy butter is overworked. Always use regular butter salt.
Three-quarters of our dairy butter
Three-quarters of our dairy butter is spoiled by because they are cheap. This'is a peryle neare them
bolicy. Pack butter solidly in policy. Pack butter solidly in neat mountain pruce tubs, which hold the pickle. Keep the frou it. This can be done by keeping a weight
over the butter until the tub is full. Fill the tub up ar within three-cuarters of an inch of the top,
of the remaining space with a thick coat of salt paste This is done by mixing fine salt with of sater. paste.
the tubs in brine five or six days before using How to Tau Butter. Tubs before using. How to Tare Butter Tubs.-1st. Weigh the
empty tub. 2nd. Weigh again when full. 3rd.
Put in the salt cloth, cover and tins, aldow Put in the salt cloth, cover and tins, allow an extra
half pound of butter for soakage and then tare half pound of butter for soakage, and then tare.
Then your weight will hold out if the butter is not
kept too long. Keep butter in a clean, cool, place. We cannot condemn too strongly the evil practice
of packing butter, and holding it from summer
intil fall and winter in foul cellars, or other plat untit for storing butter Butter is a perishable
article invway and will article anyway, and will not keep long even in a
cold storage. $i$ am fully convinced that und dairy butter is shipped weekly from the farm to some reliahle dealer, who could at once parm to it Let us, therefore, organize cold storage trans-



The Future Cheese and Buttermaker Read before the last meeting of the Western Ontario Dairy
men's Association, by $J$. S. Pearce, London, Ont.] The success or failure of not only the cheese and depends largely upon the skill and ability cheese and buttermakers. A large number of our cheese factories will soon require not only a cheesemaker but also a buttermaker, and the proprietors
of such will not employ two separate individuals when one should be fully two semparate individual It will, therefore, behoove all progressive and intelli gent cheesemakers to post themselves thoroughly on both lines of dairy work. To become a com does it require the experience that it does to be an A1 cheesemaker. I want to sound a note of warning both to cheesemakers and those who employ
them regarding the proficiency of those who under take to manage and run a factory. Many of these young men, and sometimes old men, are sadly defi-
cient in knowledge of their business and thi cient in knowledge of their business, and thi deficiency is encouraged and winked at by those
who employ them, because they work for less money than a fully competent man will. These persons will take the risk, for they have nothing to
oose. Those who employ this class of makers sight of the fact that by so doing they are putting
their factory on a par with the medium and secong their factory on a par with the medium and second
class factories. Cheesemakers and butter may be divided into three classes, viz. : First, thos who are striving by every means in their power to make the finest goods, and who are incessantly try ing to improve. Men of this class are never conten
with present attainments, but are anxious and will ing to learn from every one. Any intelligent make will tell you that the more he knows about his work the more he wants to know, and the more he learns in his own eyes. Second, there is another class of nakers who are now makng a fairly good article, adder, and imagine that if they only makea of the that will, by hook or crook, pass the inspection of the buyer, they have done their duty. These cheese makers will wake up some day and find they are
being left behind in the race, and will wonder how it is and blame every one but themselves. If you criticise their cheese and try to bring the fact home will tell you that theircheese sells themselves, they which is sufficient in their eyes. But they forget that if their cheese was up to the best fancy article, ingly higher. They seem blind to the fact that there is a wide range of both quality and fact that there finest or fancy down to the point where the culling but few words will be needed to describe hiser, and It is he who is so utterly lazy and shiftless that he does not seem to care what the result of his labor is. You can tell him by his work and surroundings often
before you see him. His days as a cheesent numbered, and I am happy to say that these men are becoming few and far between.
maker must or wossess no ordinary ability and ineesegence, and those who reach this point may intelliproud of their position. You may rest assured reach this goal. Thany makers who never can or will enable them to get there. But there are scores of others who, if they would only where are scores of
opportunities and keep alive wa to their opportunities and keep alive and abreast of the industry has made some very rapid strides in ad vance the past two or three rapirl strides in adsoon see other very important changes. Are the makers aiive and awake, and watching and prepar-
ing for these changes? I often am amazed at
indifer indifference of many makers to what is their own as well as their factory's interests.
And what about the fur
And what about the future cheese and butterthe watchword of the educational moverement more
the lines of business. There is just as much need of it
in the dairy business as in any mechanical m the dairy business as in any mechanical or important requisites in the future cheese and buttermaker, who will have to be an A1 man in
more ways than one. He will have to know more more ways than one. He will have to know more or even both. These will not be the only requisiter what the proprietors of cheese and butter factories maker, to hold his position, must understawen a principles that underlie his practice He the understand the dairy cow, what she should be fed for, how the milk should be handled before be care as well as how to handle it himself. He should also be abletoimpart thisknowledge to hispatrons, and by so doing get them upon a higher plane of intelligence. milk he is taking in, and know its composition
He should be able to handle the Babcock tester and Quenne Lactometer, and all other dairy appliances. Sore for those who prepare themselves for work long these lines. How many of our cheese and or begun to prepare themselves for this work:
For instance. how many of act and judgment to keep our makers have the with their patrons, to keep on pleasant relations

T* $=*==$


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THE FARMER'S ADVOCATE

## THE QUIET HOUR

## Blending Atmospheres.

(From "As it is in Heaven," by Lacy Larcom,
Continued from page 194.
$t$ is one of the perplexing problem
It is one of the perplexing problems of our
being, how to find ones right relations to the
natural world being, how to find one's right relations to the
natural world. In our best moods we feel, with
the good medixval saint, that the sun and the the good mediæval saint, that the sun and the
moon and the elements are our brothers and moon and the elements are our brothers and
sisters, children with us in the same household.
We cannot believer We cannot believe ourselves unrelated to anything
that God has made-and we are not. Yet matter that God has made-and we are not. Yet matter
is not spirit, nor is spirit matter, though neither
can find its true life apart from the other Wher can find its true life apart from the other. What
if out of our purified human hearts are to be the issues of life to the lower natures which surround us?
writes the author of "Foregleams of Immortality" "obey the law of the immortal man within them; let that be purged of evil and it will transform the clothings fit to us as our robe of righteousness. Matter is neither good nor evil, except as magnetized by the spirit within. ******In that day
when the savagery in men has been eliminated softened down, the savagery in brute natures will be softened also, as reflecting His own nature back
upon them for there are upon them; for there are fine, invisible nerves man into all the lower creation, and when he is himself redeemed will draw the lower creation towards him, and harmonize it with him in one great
atonement. For in just the measure that the lion in man's nature lies down with the lamb, just in things about hi
all humanity. She copies out of man what is in him, that he may see himself face to face. And so her types beneficent will grow fairer to us, and
sparkle with a more glorious beauty as we grow better and drink more largely the spirit of mercy and her ugly deformities will grow more ugly i $\stackrel{\text { they become the looking-glass of our own mind. }}{*}$ time, the redemption of all the creatures ove
which he has dominion, and the redemption or nature from the curse that lay upon it, for the curse is primarily in himself. Let his own heart and
mind become paradisiacal and he will enter Para dise again, for its light will be on the fields, the
rivers and the mountains." ivers and the mountains."
We are awed by the s
thus lays upon us of being creators, with Him, of the new heavens and the neev earth. His Spirit world feel within herself the stirrings of a living soul! His Spirit, Soul of our souls, Breath of our breath! Ah! Beautiful it is to live through Him,
in Him,-beautiful both for worlds and for souls! We feel Him around us, above us, within us, the pure exhilaration of immertality, The -rreath
of the Spirit is like the air which is astir everycrowths of the marsh, free and among the fetio mountain-top. We cannot live among the miasmatic exhalations of the bog, nor can we breathe Being human, we belong in zones where heaven and earth healthfully blend their atmospheres though we are seldom in danger, with our low It is from the highest heavens that earth and our souls must be continually refreshed - and there is
no vigor like that we obtain from accustoning our no vigor like that we obtain from accustoming our
selves to the air of lof y spiritual altitudes. Yet it is possible for rightheousness to be too
hard, and purity too cold. The flower will grow beneath the frowning rock, and even upon the the sun. It must have warmth as well as light and strength from the heavens. Love is the mother heartent of all life-the tremulons softlye fusing horizon-line that at once separates and unites the spheres, terminating our human vision: the trystits tender, atmospheric suffusions all imperfections is at one with itself, in its incompleteness, in it aspirations and its prophecies.
in all vast, lonely expansend, appeals tio a semp night of deeper vastness within ourselves. Girand as nature is, it only typifies something grander in man : un-
conscious hig ights and bradths and dept h. within him, waiting to embosom themselves within the
life and light of Gomd. Soeking that imeffathe oneness with Himb. man and hature send ily togetine
one yearning respons, through the holy silence OMe yearning res
Gint us Thy pee village and wilderness fall aiseop quin-tly, sids and by dews. Night falls softly upon the earth, revealing

 Hompling stilness, We feel only the thathe ory of
all the universe there is no longer any sigh o "So whation
So when for us life's evening hour
Soot falling shall descend,
Sort ralling shall descend,
May glory born of earth and heaven
The earth and heavens blend.
"Flooded with peace the spirit float,
Till whilent rapture glow
Till eare
Till where earth ends and heaven begins,
The soul shil scarely know!"

## FAMILY CIRCLE.

 the story.
## Betsey Somerset

Betsey also took out of a little box a a small mosaic brooc
which Hester had given her, which she had always gloate
over with



 little treasures of which nobody but the old woman herself
knew the value, and which indeed had no value excent in her
own heart, hhich had stam ped them, like coins with the royal mark, to her eyes alone.
heaped therer ther a her her anton apron into a bag; she
her dearly beloped little treasiures whicl Were in any way connected with Hester and Letitia; she car
ried them out in the kitchen, and lifted a cover from the store
 down huddled over it bent almost dose doub
 sunilgh, full of watery reflections, lay upon the itchen floor
and the old woman's dark curved back never stirred.
It was twlight when she heard the It was twlight when she heard the front door open, and
almost at the sanme instan a wailing try
She heard the sisterst voice, fare
 The kitchen door was opened, and Letitia spoke. When
that soft uril, now orhes, hat hant from her childish head, she
could not have spoken more timidy, with a more anxious and could not have spoken more timidy, with a more anxious and
deprecating appeal. "Mou there, Betsey ?" she said, peering
out into the dusky room. out into the dusky room.
Retsey never moved.
"Betsey"-Letitia came forward and touched Betsey',
shoulder
re not sick, are seomed to resist her like likewe cried out, quickly. are not sick, are you
Betesey grunted.
The wailfron
The wail from the sitting-room was more peremptory. "Ask
her to pease be utick." Hesters voice called from the distance.
thed betsy-" Letitia began again. Then she stopped,
 here was a faint touch of temper in it. That piteous waiting
had almost overcome the absolute power of per old Sat ammosiesister liad started oft with an actual sense of guilt
She and hat
hnd shame : they had


 rought him home to-night. We trust that you wil
ail in as whall and that he will grow to be a c
of him our old age."












 "I didi, but he didnitsem to like being trotted," responden










Than nipt hhe sileren sent in in bearoom of the sititing


















































 Hell





 that fib did



 she fridid
"Betsey. She has been gone alit the afternoon, and I have bee
wondering where she was.






lay. There", said she.







 MINNIE MAY'S DEPARTMENT. Our Irish Letter.
Dear Canadian Sisters and Brothers
I shall begin this month's letter by telling of a very
bright scene I witnessed last Sunday-a "Labor Day" celebration. As a rule, I avoid Sunday celebra cannot take place any other day; the laborers must be unemployed in order to take part in it.
Wewent into town early, and first attended service
in Christ's Church Cathedral, then I went to the in Christ's Church Cathedral, then I went to the
Alexandra Club, which being in the principal street,
(Grafton) (Grafton), the procession must pass on its way
from St. Stephen's Green, where the muster took from st. Stephen's Green, where the muster took
place, to the Phoenix Park, where platforms had
been erected to enable the different speakers to peak from above the dense crowds which were expected. My husband went straight to the park, and waited in town to see this procession. Thirty-six
trades took part in it-I counted each as they pass-
ed; they wer each headed by a carriage, in which ed; they wers each headed by a cacriage, in which t , and a picture representing the trade painted in
in lowing colors. Some of them were very pretty Each had their band, and as one ceased playing the hext in rotation took it up. It was a most orderly, respectable crowd, and "quite pleasant to look at
Not o pleasant the news which a little newsvende
attracted me by attracted me by calling out: "Extra Sunday Edition!
Attempt to blow up the four courts!" My friend Attempt to blow up the four courts!" My friend
got apaper and we saw that during the night some
wretched miscreant had attempted to do so, fortunwretched miscreant had attempted to do so
ately failing. This friend went straight to
for ately failing. This friend went straight to
for me, and indeed found the news too true pane of glass in the immense building had bee
shattered; somewhere about sixteen pounds will have to be expended on glass alone before it can be
used. Fortunately nolives were lost or Fortunately no lives were lost, or other dam
atedone. It is thought to have been a mild re
minder of the Phonix Park assassinations. which that day was an anniversary of, a kind of gentle "here we are again" business. I should think they
meant to do much more harm than they actually
succeeded in hecause some cain which should because some canisters were found the entire building, hat
they taken effect to another subject, one which affects my my poo
purse; I had my best frock ruined one day, rather one evening, lately. I had been visiting in
town, and thought I should enjoy a duiet walh
home by then cance along I met one carriage, then another, the
 Mins, carriages, cornapeons, cars, dust and sengs
I never remember feeling more dumbfounded
nogentleman with me, not even a boy, son. When

I got home, no tramp could have looked more
dreadful dust from crown to toe-and I had been
rather smartly got up for visiting me all the more. I gave my fusband tally-ho fornot reminding me of the races, but 'he went to them," so draw your own conclusions as to why he did not
do so. Men are deceiversever The Lord Lieutenant and sui road. I wish he had thought me the tramp which by this time I must have looked, and thrown me his purse; perhaps he had not much in it, tho', return
ing from Leapardstown. He drove four-in-hand another carriage followed (with sixe horses) full of ladies and children. (His sister does the Vicerega honorsfor him; he is a widower, with three little
daughters.) Then a third carriage, with the ladie in attendance, and several tandems. One mail phaeton closed the party, with the exception of the is a young, clean-looking man-l use this odd word, because it is exactly expresses him ; he seems
always spic and span, and I have come across hin several times. He is a painter, a sculptor, and
writes writes for magazines, as your humble servant does letter. It is going to be a bazaar on a very, very largement of the city of Dublin Hospitaland endowment of several beds. My daughters are to assist at different stalls one at the Down stall, which the Move Countess of Annesly, nee Miss Armitage
Moore, is to presideat, the others at the hospital stall The dresses for the latter are to be nurses'costumeshave you uniform for your hospital nurses in Can a young nurse expressed herself - "fetching," as one day to me. We have small dark bonnets, brown green or navy blue, according to hospital; long
cloaks same color, dress same, with large snow ap ron, body and straps fastening at waist behind; linen collars and long white caffs, small cap with
streamers at back, but when actually attending in streamers at back, but when actually attending in
sick room they must loop these up, to prevent their catching in or on anything. I think it is refreshing even to look at a good class of nurse-the con-
tained face and firm mouth, which as a rule they all have, and then an expression in the eye (which I at medical profession and in nurses) crowns all, to me admire them more as a body than any other I tions, but taken all in all nurses are a grand institution. Good-bye. Ever, your sincere friend,
S. M. Studdert-KENNED


A Splinter in His Foot. There he sits with the splinter. He tries to
catch the end with his nails, but they are tao short, it will not come. If he leave it it will grow worse
and yet he has. not the courage to take his knife and yet he has not the courage to take his knife
and open it up. He is only a boy, not a surgeon
yet, and it takes some moral courage. If his mother were only here with her needle he could shut his eyes and let her do it: she wouldn't hurt
any more than is necessary, for her hands are
rough but very kindly, and would touch him care any more than is necessary, for her hands are
rough but very kindly, and woult touch him care-
fully. Like a celebrated minister, who in preaching got a fly in his mouth, and did not know
whether to swallow it or let it go and stop his Whether to swallow it or let it go and stop his
sermon, conclutled to do the former, it will he
better for our little man to make one detormined effort and get the thing out, then he will be on the
road to recovery. It's ball cunough to get a splinte roat to recovery.
or a thistle in moses foot, but there are much worse
things. An old book, or rather a collection of things. An old book, or rather a collection of
 ©onething which is "o it rottemenes in the bones."


UNCLE TOM'S DEPARTMENT.
My Dear Nephews and Nieces:
Now that the potatoes are planted and the garden seeds sown and roots growing, you have a long evenings, as you water the flowers and vines and shrubs, you cannot help stopping to see how many yellow crocuses are looking out at you from the front bed, or see once more the tints of the tulips. Then,how smooth the lawn looks since it was raked, nd, yes, yonder is a full-blown rose showing among June, beautiful, beautiful June is out its perfume. and, like some haunting tune or chyme, brings back memories of long-gone happy days. Alike to mind come the orchards, flowerladen, with the hum of bees and whispering leaves, the wood-flowers shy, the winding stream kissed by the alders and willows; the quiet lake, just rippling on the sandy shore or reflecting in its depths rock and fern and tree. Memories of calm June sparksing dew of and twilight. How well it is these come so fresh to mind while the work and worry and care are wellnigh forgotten as memory turns the past over for contemplation; the sunbeams of joy and beauty re-
main, and the clouds and darkness and discord are forgotten. Amid the memories, however, and rising far above them, are the faces of the friends among even such beauty, no remembrance Alone, piness would be left. And this brings me to say, with Pope,

The proper study of mankind is man."
I have seen how deeply my nephews are inter and how glad they are to see them coming on well, rejoicing when the showers water them. I and feed that well-formed, strong-limle to groom with which, in their eyes, no Arab's steed can com pare. Thave seen the girls so combining nature pleasing resting seen, too, the spring hats and dresses eyes. I have graduates with their golden hair." But above all the flowers and the dresses were the girls themselves. Everything fails to reach the human being, and ennoble the person, be that boy or girl, man or woman, or the infant of a day. Made after God the Creator's image, what a privilege to co-work
with Him and make those around us more like with
Him.
So
So. my young friends, as you plant and water your and pigeons and hens, fust think over rat lines:-
"There is in every human heart
Some not completely barren part,
Where
And foeeds of ove onnd truth might grow
And foowers of generous virtue blo
To plant, to watch to water there,
This be our duty, this our care."
The words of J. G. Holland's "Gradatim" are
familiar to some of you:-
"I count this thing to be grandly true:
That anoble deen is atep thanard orod;
Lifting the soul from the common clod,
To the loftier ain
The fact of doing a right act often turns the natural it is for each of us to uphold what we have done; if it is wrong we stray, if it is right it throws taken that stand, it is easier to take it once having Ia would just like to tell you how small the things
I te which influence a life. The deep, wide Sasare which influence a life. The deep, wide Sas-
katchewan River starts away up in the Rocky katchewan River starts away up in the Rocky
Mountains-a tiny stream, but its volume increases as it journeys, and wide and deep and swift it ma-
jestically sweeps on its journey to the sea.
P. S.-I see some of you are becoming very I'm not surprised. We have been delayed by a few who were late in sending their photos, but the
group will be ready for distribution in a few group will be ready for distribution in a few days
now; it is tastefully arranged, and mounted on a card ten by twelve. The only unpleasant part a
have in connection with it is, that each recipient seventy-five cents, as I had to parge

## Answer to Correspondent

 applesgetting wormy if $k$ ept for any length of time Wh you suggest a cause and remedy? J.S. G way, fill a large tin and set it in the oven and in heating not to scorch the fruit. Stion Be careful Then take out and throw a thin cloth over it $i$ keep hies away metio it cools. Then put up onpaper bags and tien tightly. It is the fly that de
posits its larvar when the. fruit is ty


In perirs midst he built his log hut rude,
And ilved, his one companion solitude.
Vit
Yet not his only one, wher'er he trod,
In childike faith he walk'd with God.
His stalwart might, and keon, unorring nim,
Taught lurking savages to dread his name.
With quenchless courage and unfinghing toil,
Redeem'd he, day by day, the unwilling soil.
Primeval gloom, beneath his sturdy blows,
Beam' forth in glebes that blossom'd as the rose. And years rolld by. Europe her exiles sent-
Around him grew a thriving settlement. But 'tis not good for man to live alone,
He wood and won a maiden for his own. The flowers of June smiled on his marriage kiss,
And thrice ten years he tasted wedded biss. His children. born neatht Freedom,'sodn root-tree,
Were craded in the lap of Liberty. They lived to bless the author of their birth
And, by their deeds, renewa his honest worth. His neighbours loved the kindly, honest way.
Of one whose yea was Yea, whose nay was Nay. And did dispute arise, his word alone
Was jury, judge, and verdict blent in one. Dark day that, saw, and gloomier hearts which said, Yes: full of fears, beloved on everer hand,
His spirit lett them for the Better Land. Tread softly, stranger! reverently draw near,
The vanguard of a nation slumbers here.

Puzzies.
1-Charade.
1-Charade.
Dedicated to Sir' Henry Reeve.
"His Royal Highness," hear the boy talk,
"Chief High Lord, King and Ruler ".
"Chief High Lord, King and Ruler;",
Methinks, , perchance, , ourre a little off
Your base; pray, draw it cooler.
You seem to talk so terribly queer,
""Three in one, and one in three;"
"Arise, Sir Knight," and explain yourself,
As to what your meaning might be.
"Thou gracious one." Ha! Ha!! Ha !!! let me see,
Whom do you think you're addressing ?
I Total think for a moment, but then
You know, I'm Last good at guessing I Total think for a moment, but then
You know, I'm Last good at guessing.
"On bended knee," come down off your perch,
And "don thy robes of state." And "don thy robes of state."
Young Ievitt a middy of might First be,
In the good ship ADVOCATE.
Have you been getting a Gov'ment sit
That makes you feel so funny?
Or have you been out, on Sunday night,
Sitting up with your honey?
$\qquad$
Since I was an urchin of ten or eleven,
I've been a great puzzling gilly;
Ive puzzled so much,
C'e puzzled so much,
I wonder it didn't send me silly.
Just about ten years since I entered this " Dom,'
And Uncle Tom, he raised no objection,
But my puzzles he did reject.
Prime you pieture my dejection?
And then I toiled on, and was a wfully sad,
Because I got Last into the section.
But an Advocate I received one day,
But an Advocate I received one day,
With one of my puzzles so fitting:
I could n't help dancing around on my e
And some of the furniture splitting.
And thus 't will be with you, my friend,
If to enter our circle you're trying:
You't find you total succeed
Youtt find you total succeed unles you work,
And never give way to sighing or crying.
3-Charade. HENRY REEVE.
met a man from a foreign land;
ONE said he was wedded to Two;
And THREE he wandered from
Ande said he was wedded to Two;
Havinge he wandered from place to place,
Hidently nothing to do.
He finally landed in Canada,
And told fot he would no more roam,
Because it was the most total place
He had scen since leaving home.

$$
\boldsymbol{d} \text {-Charade. Ada Armand. }
$$

As I walked along the street,
Though I didn't mind it;
Through my LAsT I saw my rirst,
With a man behind it.
Then when I went to bed,
You perhaps may wonder,
I saw my whole, and in a trice
I put my body under. Irene M. Craig.
5-Diamond. Irene My first is in " metaphor,"
My second "an animal small."
My third it is " uncommon,"
My fourth is "a breast-high
My fifth is " moderately warm,""
My ixth "a color bright."
My seventh is in " merriment,"
$\qquad$
 spirler, but if it should be reversed and put before me you will find
an opportunity.
A. Howkins. Answers to ist May Puzzles. 1 Miss
(time.
FATE
GATE
HATE
MATE
MATE
RATE

## Economical Summer Drinks.

## ginger beer.

One teaspoonful of ground ginger, one spoonful cream of tartar, one pint of yeast, one pint of molasses, six quarts of cold water. Mix and let stand few hours, until it begins to ferment; then bottle , in eight hours it will be good.
Superior. - White sugar, five pounds; lemon
uice, quarter pint; honey, quarter pound; ginger, five ounces; water, four and one-half gal lonr. Boil ginger in three quarts of water for half an hour ; then add the sugar, lemon juice and honey with the remainder of water, and strain through a cloth; when cold, add the white of an egg and a whole stand four days and for months.
Ten pounds white sugar, nine fluid ounces of lemon juice, one pound of honey, eleven ounces of ground ginger. Boil the ginger in three gallons of water for half an hour; then add the sugar, the lemon juice and the rest of water, and strain through half a fluid ounce of lemon. White of an egg and bottle.

Take two gallons of ginger pop. two ounces of ground ginger and the peel of two pounds of white sugar. Let this stand until two warm. Then put in the other parts of the two
lemons, one teaspoonful lemons, one teaspoonful saleratus, four tablespoons of yeast and the whites of four eggs to clear. Ad
cinnamon and cloves to your taste.

Mix together citric acid, one part; finely pow
dered; white sugar, six parts; and keep in bottle The quantity to be put into a glass of water to be
regulated by taste

One-haif pound white sugar, one quart of wate
Boil over a slow fire Two drater four ounces of tartaric acid; when cold, add essetic acid, of lemon. Put one-sixth of the above into each
bottle filled and Cork it immediately and it will be fit for use. sprcce beer.
Put into a cask capable of holding the whole quantity four callons of cold water; boil four galpounds of molasses, with one-quarter pound of six sence of spruce. When the heat is reduced so as to
be just luke warm. be just luke-warm, add one-quarter pint of good
yeast. Stir the contents well yeast. Stir the contents well. Leave bung out for and leave for three weeks.
COMMON beER.

Take one peck of bran, good and sweet, and put good hops; boil till the bran and hops sink to the
bottom. Then add two quarts of molasses when about luke-warm melted, pour into a ten-galion cask, with two tea
spoonfuls of yeast. Whasse i spoonfuls of yeast. When the fermentation has
subsided bung up cask, and in four days it will subsided bu
for
Mix one grtop-a temperance drink.
of white sugar, one teaspoonful of lemon oil, one tablespoonful of flour, with the whites of five egge, one
well beaten up. Then divide the syrupand add to,
ounces of tartaric acid to the other part; bottle eac separately. Put enough fresh, cold water to half-
fill two pint tumblers. Put one tablesper
the the syrup from each bottle to each of the hanful of tumblers and pour together and drink. This makes a superb drink. cheap beer.
Boil four ounces of hops in two quarts of water cording to taste), two cups of blackstrap and (acinto a six-gallon cass of luke-warm water, and put yeast and let work for a few days. A cheap but re
freshing drint freshing drink

RASPBERRY SHRUb.
inegar ; let stand four days, then strain and keep inegar add one pound of sugar. Bottle

## Our Library Table

L'Art de la Mode, New York; $\$ 3.50$ per annum. han ever, and illustrates by colored plates artistic new, rare and beautiful in ladies' fashions. tha This bright little publication excells, Ont.; $\$ 1.00$. he variety of its reading matter and the inters in The articles which it contains. of the old stand-bysthly, New York ; $\$ 1.00-$ Is one ters which interest the ladies most-fashions matmestic talks, receipts and useful reading. The series and worth the price of the macation" is instructive, The Churchman, New York: $\$ 3.50$ alone. something in it to ine paper and ; beautiful type, and something in it to interest every person in its mis-
cellaneous articles.
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## SHROPSHIRES I

JOHN W. EDWARDS,




## SHROPSHIRES.



|  |
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|  |  |

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June 1, 1893
THE FARMER'S ADVOCATE

## NO COMBINE

 BINDER TWINE.HOW SHE MIADE HER MONEY.

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Clydiesdales, o consist of either or both sexes, itor. Gead to have been bred by the exhioBest display of five heed of Clydesdales, to
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the property of the exhibitor. Gold medal. Best ten head of Clyydesdales, of either or
both sexes, of a a age, the ten head to be the
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