# WAYSIDE CHATS.



floor again this week. While I was passing away an hour or two the other day I strolled into a commission house. I there

farmers and several apple and patato buyers. After a time the conversation turned on the best way of keeping apples. I tried to be an attentive listener, but one of the buyers held such absurd views that without thinking I took a hand in the

The buyer said it was all nonsense to keep

apples barrelled in warehouses where they would be sold out to retail dealers in the city. Indeed the best way to keep apples was in bins, and he would advise farmers to treat apples as they would potatoes. He always recommended city people, when they laid in several barrels of apples for use daring the winter, to dump them on the cellar

Some of the farmers looked at the fellow with wide-eyed wonder, and well they might, as I never heard such nonsense talked by any

I asked the talkative buyer, who expressed his views with a positiveness that almost knocked one down, if he really meant what he said, or was he indulging in a little chaff, just to see how much we would swallow. He replied that he was in dead earnest, and knew what he was talking about. After one of the farmers had ventured to set the fellow straight, and got snubbed for his pains, I said:—
"My friend, would you put all apples,

"My friend, would you put all apples, regardless of variety, on a floor, to shrivel or sweat, and thus lead to loss of flavour or decay, or would you discriminate?"

"Apples is apples," he said, "and you can't make anything else out of 'em."

This remark rather fired me, and I promptly added:—"Fools are fools, and you can't make anythink else out of 'em." He looked wild but I was as firm looking as a pine stump, and when I had subdued him with the

flash in my eyes I said:—
"Your plan of dumping apples on the floor has more in it than you want us to understand. When you get apples in barrels they are tightly packed, and if sold in that condition the person who buys from you receives the same value as you do. But you empty the apples on the floor, and when a customer comes along and orders a barrel you throw the apples in loosely, and the chances are that out of every dozen barrels you make one. You're a nice specimen of

an honest trader—"
"A couple of ladies entered the store before I could complete the sentence, and after a moment's hesitation I gracefully retired, as my temper was somewhat aroused, and I feared I might use even stronger language if I remained.

"Would you advise me to make cider out

of my apples, or to convert them into cider?"
said a visitor to me the other day.
"Cider is a nice drink, and refreshing,"
I answered, "but the trouble is to keep it from fermenting. Fermentation begins almost as soon as the cider is made, and in a short time is contains. So I read a few days

short time it contains, so I read a few days ago, more alcohol than lager beer."
"Now that's the point I wanted to get at," said my visitor. I don't believe much in cider drinking, as I have a notion it leads to intemperance, and that those who make the cider are indirectly making drunkards. I know my opinion will not be accepted by many apple-growers, but all the same I'll cling to them. After that remark of your's about cider containing so much alcohol I'll confine myself to making cider vinegar."

not hold the belief of my visitor, and who would like to keep their cider for home consumption. Any one who has attempted to cider knows the difficulties encountered and the loss often sustained. Popular Gar. dening recently gave the following as a formula to be observed in curing cider :-

The best and only method of preventing fermentation in early made cider is by heating to 175 degrees Fahr., and placing in an tight package and sealing up while hot. following the usual method of canning fruit Cider put up by this process I have kept through the second Summer, as sweet as when it ran from the press. The objection to this method is that it changes to some extent the flavour of the cider, and when opened for use it ferments just as does canned fruit. A method of preserving late made cider is to add some antisepic, advertised in the cider journals, which has at its active in gredient either sulphur or salicylic acid, the latter being the most used. One ounce of the acid to thirty-two gallons of cider being the rule, the quantity being so small as not to be detected, and not injuring it for vinegar making.

An old friend of mine with considerable time on his hands and money in his pocket recently embarked in a moderate way in the fowl business. He has a nice hen house, filled up with all conveniences and comforts for the hens, which are of various strains, none of them being pure bred. He believe in the native hen, whatever that is, and is determined to show that common towl are as profitable for commercial purposes as the high-priced ones. I use the word commercial to distinguish those who raise fowl for table purposes and for their products from those who devote their energies to producing fancy strains, and selling their eggs at fancy

My old friend has been very successful, and has a large quantity of eggs put away for sale when prices go up. I asked him the other day how he packed them, or what he considered the best way of packing. 'What is the object of packing?" he

"To exclude the air, of course," I an-

swered. "Right you are, partner. Keep the air out and the business is complete. Ain't it tiresome to hear and read about all the methods used for keeping eggs? It positively uses me up. I started out with this idea, that packing eggs was a dangerous process, for if the air is kept out the eggs run a chance of losing their flavour, and then who would want to buy them-leastways I wouldn't sell them, although some people would. Give me bran or sawdust to pack my eggs in, and if I then keep then keep them in a cool place, with the temperature even, they will keep several months. I wouldn't attempt to keep eggs more than from four to six months, and I'd favour four rather than six, because eggs that are kept longer, I don't care by what process, are never good eating. I've studied this thing out, and ain't talking at random."

After an interesting conversation, of which I took mental notes for future reference, I asked him what he thought of the Douglas mixture as a tonic for poultry. "It can't be beaten, and if you don't know

how to make it up I'll give the ingredients and their quantities. If you do, why man, you ought to publish it, because it's worth it's weight in gold to everyone who keeps

I said his suggestion would be adopted, and here's the recipe :- Take of sulphate of iron (common copperas), eight ounces; sul-phuric acid, half a fluid ounce. Put one gallon of water into a bottle or jug; into this put the sulphate of iron. As soon as the iron is dissolved add the acid, and when the mixture is clear it is ready to use. Put a gill every other day in the drinking water to every twenty-five fowls. and you will seldom be troubled with disease, and will have fine,

used every day. Smaller quantities may be poured into smaller vessels of water. Besides being a fine tonic and alterative, it possesses valuable antiseptic properties, which make it a remedy as well as a tonic.

A subscriber in Cobourg wrote thus to me a few days ago:—"Will you oblige a reader of FARM AND FIRESIDE by giving him the supposed formula of Wizard Oil, which was published in 1886 or 1887 in one of the American journals, and copied by some of the

Canadian papers?"

I could give him a supposed formula, because I'm inventive-enough to produce even a new form of the marriage ceremony, but it wouldn't follow that the supposed formula would be the correct thing. As most of such medicines are patented in some way it would answer no good purpose to give the component parts of the mixture asked for if I were able to do it.

Here is a letter received from a correspondent in Ridgetown:—"I can load a car of potatoes at 50 cents per bushel of the finest octatoes. Will car them in good condition. Now what does this correspondent mean? If he means what he says he wants coo much for his potatoes just at present. If he wants to let me know how many potatoes he has, and the quality, he has succeeded, but why did he take the trouble to give me such news. I'm under the impression he wants to know if such a proceeding on his part would pay, that is, if there is any money for him in loading a car of good potatoes, and offering them at 50c. per bushel. Well I rather think there is, provided he can get purchasers, as potatoes are selling here at 55c a bag. If my correspondent will add the freight and cost of handling here to the 50c he will find that he asks more for a bushel than can be procured for a bag. Watch the market re-ports, my friend, and be guided by them.

I'm rather fond of fast horses, and enjoy sitting behind a pair, especially if they are trotting along on a smooth road and going at such a pace as to cause me to place my hand on my head to prevent the hair from being blown off. Trotting horses and speeding in the ring have been given great prominence at all our fall fairs this season, and that's

just what set me thinking.
Of what special use are fast horses, to the of what special use are last norses, to the great bulk of our populations? The farmer has no great need for a fast horse, but what he wants are good, powerful horses. Now would it not be a good idea for some of our fair managers to give prizes for strength in horses as well as speed? I think it would, and having made the suggestion I leave it with my readers, who can bring their influ-ence to bear in their respective localities upon fair managers.
strength not speed. fair managers. Remember the suggestion is

"Just give my farmer friends a pointer about taking care of tools and implements," said an old man, who called on me the other

day.
"In what direction?" I asked. "You see this is about the time all farm implements are housed in the barn and tools put away until next season. If the woodwork of the implements were given a coat of paint or raw linseed oil the wood would be benefitted, and last longer. Then the metal parts could be cleaned, the ruse if any, rub-bed off, and a coating of some mixture of

grease applied, to prevent rust again appearing."
"What sort of a mixture do you recom-

mend?" I asked.
"I recommend what I use myself, which is three parts of lard and one part of powderad rosin. It works well. Just give the ed rosin. It works well. Just give the farmers this idea, and if they adopt it dollars on dollars will be saved next spring."

I promised to do as requested, and the old man went off with a pleased smile on his weather beaten face.

Kay, agent of the M. C. R. R., at Edgar's Mills, sent the following on a postal card the other day:—"I have in my ossession a potato weighing 494 oz. It is of the white kind, and was raised by Joseph Martin, on lot No. 9, township of Colchester, Essex. The potato can be seen at the M. C. Ry Depot, Edgar's Mills.'

Mr. Kay wants to know who can beat this. Just in this connection will as many of my juvenile readers as feel disposed drop me a card, giving the numbers of potatoes of the same weight as mentioned above in a bushel of 60 lbs.

Circumstances sometimes induce me to put in this column what may seem out of place. It must be recollected that I have a large circle of readers, and being only a tramp they take advantage of my easy going ways, and write to me on all kinds of subjects. Frequently I'm compelled to destroy many letters, and I was prompted to drop this into the basket, but a second thought induced me to give it a place, as there is no reason why an expert cooper should not receive some prominence as well as an expert in any walk of life. The letter is dated Burlington, but bears no signature beyond that worn out one, "A constant reader":—
"Joseph W. Smith made 80 barrels here last Thurshay. That I consider is fast barrel making for one cooper to make in ten hours. Kindly make an note of this in your paper." Now the road is clear for others clever in their business to make known their powers of handiwork, but the line will be drawn at bank thieves and champion liars, as they are such a large community that I couldn't devote space to their exploits.

THE TRAMP BRAN AS CATTLE FOOD.

TOO R. WALDO F. BROWN, of Iowa. has been experimenting with bran, has teed for cattle, and gives the results of his tests as follows:—
"I have recently learned of some experiments in feeding cattle on hay and bran that have interested the service of the service o

bran that have interested me greatly, a ynopsis of which I will give our readers. Fifteen ordinary scrub steers were selected for the experiment, and they were stallfed for four months, being allowed exercise a part of each day in a small barn-yard. The steers averaged 914 pounds at the beginning of the experiment. These steers were fed all the hay and bran they would eat, and during the four months the average amount of hay eaten per day was about 16 pounds, being a fraction above this the first nonth, and a little below for the remaining months. The average daily ration of bran was a small fraction over 13 pounds per day for the entire time. The average gain of the herd for the time was two pounds per day or a gain of 240 pounds each for the period of four months. These cattle when slaughtered were ripe and showed well on the block. The experiment was made at Minneapolis, Minn., and the bran fed was made from spring wheat at the Pillsbury mills, and was thoroughly cleaned that there was liter-

ally no flour left in it. Some experiments made by Dr. Goessman, at the Massachusets Experiment Station, show that a ton of bran contains about 60 pounds more of digestible protein than a ton of corn, and that the bran has about one-fifth more of this valuable ingredient than the corn. In my market bran usually costs more per pound than corn, but when I can exchange a pound of bran I would always feed at least half bran to fattening stock, and a much larger proportion to young growing stock; and even when bran costs 50 per cent more than corn I always use it in preference for calves and colts under a year

The most satisfactory and economical feed for cattle that I have ever used is cob meal and bran used in equal bulk. With the modern mills geared to run at a high rate of

healthy fowls. In case of disease it can be can scarcely detect it in the meal, and a mill costing one hundred dollars or less will grind from 25 to 50 bushels per hour, the smaller amount when ground very fine. I paid but four cents a bushel for grinding 70 pounds of ears, and with corn at 30 cents a bushel this feed costs but half a cent a pound. This meal weighs for a given bulk nearly or quite twice as much as bran, and with bran at \$14 a ton the ration of cob meal and bran mixed for a thousand pound steer must exceed 15 pounds to cost 9 cents. I think this would constitute a ration heavy enough for a steer that would finish off to about 1,200 pounds. For the first month the feed would be somewhat lighter. If the cattle had the run of a straw stack for a part of each day the ration of hay might be reduced or corn fodder substituted for it, or with good bright straw by adding a few pounds to the grain ration the cattle would do well without other rough feed."

### FRUIT TREES STARVED TO DEATH

F any person were to chain an animal to a stake in the field and leave it to shift for itself, then to watch this animal until it gets thin and decrepit from loss of flesh and strength it is quite probable that the humane society would be after him with properly deserved punishment. Yet this is precisely what thousands of farmers are doing with their fruit orchards, of course barring the difference between the insensate tree and the living animal. Like the latter, the tree is chained to one locality, and can-not go abroad for food; but fortunately it tire satisfaction.

has no sense of suffering, or at least none

that we can appreciate. And yet even for a tree there must be something akin to pain in

the process of slow starvation-the seeking

found. It takes an enormous amount of

various manures to form fruit and seeds.

The leafy part of the tree may mostly come

from carbonic acid gas of the atmosphere, but the stone fruits need a great deal of pot-

ash. Grapes and pears require considerable

amounts of phosphate in addition. There is

perhaps no place on the farm where a good dressing of manure will do greater good than

in an old apple orchard where the trees seem

TIPS OR SHOES.

CCASIONALLY the question of shoe-

ing horses with tips is discussed by

veterinarians and horsemen, the former generally favouring tips. To give our

readers a correct idea of what is mean

tips two illustrations are introduced.

which are taken from Simpson's "Tips and Toe Weights." They show very plainly the

way this sort of shoe appears upon the foot, and by their aid any blacksmith should be

able to make and properly put on tips with-out any danger of making a serious mistake.

These cuts illustrate the square-shouldered

tips, which seem to be the most popular

among those who have tried both kinds,

The other method of making them is to draw

the ends of the tip to an edge, making it "feather-edged," in which case the hoof is

"feather-edged," in which case the hoof is trimmed level, the shoulder being omitted

The square end placed neatly against an offset made in the shell of the hoof holds the

tips on more securely and firmly and gives

better satisfaction on account of lasting

to be running out. - Western Rural.

exhausted rootlets, of food that cannot be

The horse is ready for wox any time on hard or soft ground. This to gives the horse what nature intended hm to have at all times, viz: frog pressure. The frog coming into contact with the gound receives the moisture, and by bearing the weight of the horse, expands till the bock of the foot is as broad as the front. A bose should with these broad as the front. A hose shod with these

TORONTO, THURSDAY, OCTOBER 18, 1888.

tis can pound the hrdest streets of the olies without flinch. in Take the pressure atay from the frog, anthe principal part of the foot, the frog itelf, dries up, and the horse has corns, as the foot becomes centacted. Tip your hases, and they will b running barefooted al thus be resting thirfeeteightmonths ir the year. This is the only humane way tahoe a horse, and costs less than one-half smuch as new shoes

with calks and toes. If he frog is small and dried up it may be best pive him frog pressure gradually. A hors shod with tips may go sore for the first 'er days, but he soon comes around, and moves better than he formerly did when of "stilts," with the whole weight of his bod on the heel. The veteran live stockwriter, A. B. Allen, recommends tips for ordnary farm work, and

says he uses them on his own horses with en-



R. HIRAM SMITH, the well known Wisconsin dairyman, is convinced by his own experience, that it is better in every way not to bind grain. In a contribution to Hoard's Dairyman he discusses the subject, as follows:

Does it save labour in securing the crop Does it shorten time of exposure before it can be safely housed or stacked? Does it make the kernels of the gain any better? Does is save the straw in any better condition for feeding cattle? Can it be threshed with less help, or waste of time? To all of these questions the observing farmer, must give his empathic answer, no!

What are the claimed advantages and what are the known losses in binding any kind of grain (with the possible exception of wheat,

where the straw is not to be utilized?)
It was anciently claimed that there was less scattered and left on the ground, when bound, than when harvested unbound. While this claim originally, had some merit, vet since the advance of civilization to the use of sulky rakes-that gather up all-the claim is left without force or logic. It was originally claimed that bundles could be unloaded to better advantage than loose grain. While this claim had some merit, under the old system of farming, when grain was pitched over the "big beam" by hand, since the advance of civilization to horse forks, the claim is without merit or fact to sustain it. Great claims have been put forth for the self-binder, in the great amount of labour

poultry house. Fill the bottom of the nests with dry earth, mixing a tablespoonful of insect powder and tobacco refuse in the hay. The house will then be clear of vermic. All filth must be carefully removed, while the old nests should be burned. The yards should not be spaded, so as to render them clean. By thus cleaning the premises disease may be warded off, the house disinfected and rendered more comfortable for the nens, and a large number of eggs se-cured.—Farm and Garden.

## CHICKENS AND DUCKS.

OTHING will enlarge the capacity of a chicken quicker than a varied bill of fare and a good supply of green food. To chickens in confinement, onion tops are relished more than are the bulbs themselves. Beet and turnip tops will be greedily devoured. That they may not be wasted, lay them with the tops all one way and weight them down with a stone. Bran and shorts, wheat and oats, table-scraps and meat, with a very little corn, a few sunflower seeds and a small amount of buckwheat, make an irresistible combination, combination that will make a chicken thrive and grow in spite of itself.

To make pullets trot along toward maturity with a wonderfully accelerated pace, give them every morning a warm feed of bran and shorts and ground oats mixed up with milk, or meat stock in which is a little salt. At noon give a feed of meas, and at night all the wheat they will eat and a little left to scratch for the next day. In addition to this, provide green food, crushed bones and pure water, and give each day one heavy feed of broken dishes; they will be eaten with avidity.

Feeding pepper often to fowls as a regular appetizer is a bad practice. Although a very little will do no harm, yet the continued use of the condiment is liable to cause liver complaint. Warm feed tends to have the same stimulating effect without possessing the injurious qualities of the cayenne.

The only way to make a chicken-house is to build it with a broad floor. Where the droppings nightly fall on the ground the soil will become foul and damp, even if it be cleaned out every day of the year. The odors that then arise are unwholesome in the extreme, will cause roup, and in fact nearly all the ills that poultry flesh is heir to. The board floor should then be kept covered with two or three inches of dry soil, which should be repeatedly renewed.

The only way to make roosts is to make them on a movable frame, that may be taken out of doors, there to be scalded with boiling hot water in which is a little crude carboli acid. Make the roosts all on a level and not more than two feet high, thereby preventing much quarrelling and the bumble foot.

Ducks and chickens should never be kept on the same place unless they can be sepa-rately fenced. Ducks are not the cleanest animals in the world; they will foul any water to which they may have access. If this be a running stream or a large pond kept purposely for their use, well and good; but if they must run with the chickens, or if the horses must drink after them, verily the duck

Ducks grow very rapidly, and one engaged in the duck business can turn his money over quickly if he will go into the business in a systematic manner, prepared to make it a study and to take advantage of every good

point the duck has.

It is quite probable that the Pekin is the best breed for all purposes. The feathers are white and will sell well, and it is said that the feathers alone will pay for the feed of a flock. They may be placked every six weeks, and if not plucked, the feathers fall off and are wasted. When they are what is called ripe, they come out easily and will cause no pain.

The ducks commonly found in this country under the name of the Pekin are not of that breed at all, but are much smaller. They are the White Aylesbury. The Pekin is a Ducks should be fed every two hours. Every other feed should be of green food alfalfa, clover cabbage, turnips or potatoes. Milk when it can be had promotes rapid growth, as does also lean meat, of which they should have one meal a day. Corn should be fed only the last ten days, when it and iat meat should be given in plenty, just as much as they can stand.—Cackler.

HOW TO FEED SUGAR TO BEES.

YOW to feed is an important question. The ordinary regulating bottle-feeder will be of little service this season; fast-feeder may be used. There are plenty of these to choose from, and where expense is of little object, any of the boxes of numerous divisions, upon the principle of which most fast-feeders now are made, can be used, but there other and cheaper methods of making a fast-feeder the following one we frequently use:

Obtain a tin dish, having almost perpendicular sides; into this place a wood float almost fitting the dish, and having a number of holes, freely dispersed, bored through, We place this on top of the frames, after filling it with syrup, and under the quilts. allowing, by laying pieces of wood across the tin dish, the bees to work up over the edge and take the syrup down. It is not what we call a tidy way of doing it, but it answers

as well as the most expensive feeder. The dish is refilled through the hole in the quilt, and will hold about four pounds of syrup. The quilts must be tucked down snugly around. A good colony with this feeder can be fed up in about ten days or less, if the weather is warm.

It is very noticeable that beet sugar is objected to by most bee keepers, and rightly so. Although beet sugar is, chemically speaking, cane sugar, it is vastly inferior in its saccharine properties to sugar made from the sugar-cane. If we place a quantity equal in bulk to what we usually find with sugar-cane sugar sufficient for sweetening a cup of tea, it will be found quite unsuited to our taste, necessitating a further addition of at least one-fourth the original bulk. Bees fed on the same do not winter in at all a satisfactory manner : therefore we think that a knowledge as to where to get a sugar free from beet will of great service to our readers, and likewise a comfort to our bees through the rigours of the winter of 1888-9. - British Bee Journal.

# WINTER QUARTERS.

CORRESPONDENT of the Iowa Homestead, writing about the time at which bees should be put into winter quarters, says :--I see it is advised by some writers not to put bees into winter repositories until cold, freezing weather. This, I think, can-

not be endorsed by practical beekeepers, although we know of bees that wintered under these circumstances. Yet I call it bad economy. It may be advisable to avoid long confinement, as I see it very often advised to give bees a fly when the weather will permit luring the winter. This I do not approve of, as bees can be kept in a good repository for a much longer time than is required in this climate, and kept in good condition.

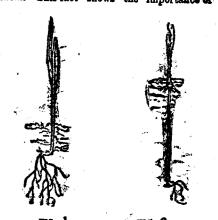
To winter bees well they should be put

in the winter quarters before frost gets in the hive, be it the first of November or the last. I had two colonies put in on the 24th day of October and weighed. The very same day I also weighed twenty colonies and left them on their summer stands. On the 16th day of November I weighed them again, and put them in the repository. I found that they consumed on the average three pounds to the colony, while the two in the repository only consumed one pound. On the whole number I lost 160 pounds of honey on those I left on the summer stands; or, in other words, I should have saved 160 pounds of honey if I better than a greater depth. But if a placed in their proper positions in the had put them all in on October 24. Bees are sufficient preparation has been given, is

very light in stores, and placing them in winter quarters early may save many a colony. To keep them in long confinement, these three points are necessary: First, place them in the repository before the frost gets in the hive, or approach of cold weather; second, the temperature should be kept at 40 or 45 degrees above zero, either by natural or artificial heat (mine is natural); third the ficial heat (mine is natural); third, they must never be so disturbed as to break their cluster when in winter quiet or hibernated.

#### SOWING WINTER WHEAT.

T often happens at the time that farmers are sowing their winter wheat in the earlier part of autumn, that dry weather perc or autumn, that dry weather prevails, and there is not sufficient moisture in the soil to cause the newly sown grain to germinate. In such seasons, and at the time when wheat fields are expected to present a uniformly green surface, large patches are seen where the ground remains entirely bare. The young plants have not started. Now if such fields are examined, it, will commonly be found that the soil of the bare spots is hard or cleddy, or has not been finely pulverized, while such vorticuls as present the green and while such portions as present the green surface of the new crop are of such a nature that cultivation has thoroughly mellowed them. This fact shows the importance of



/ FIG. 2. preparing well the soil to receive the seed for the purpose of securing a prompt vegeta-

tion, so important to subsequent success.

But whether to guard against drouth or not, there are other strong reasons in favour offine pulverization in preparing for the wheat ground meal or hour; or his the attempt to raise a hill of pumpkins in a heap of stones. The practice of many of the best farmers has proved the value of repeated harrowings to render the soil mellow. Land which has given so small a return in the crop as scarcely to pay the cost of cultivating, has been made to give thirty bushels or more of wheat to the acre by putting it in a fine condition

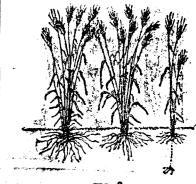
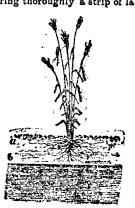


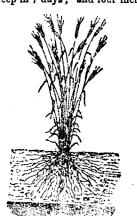
FIG. 3. with the harrow and other implements. Our correspondent W. F. Brown reported some years ago to the Country Centleman instances in his own neighbourhood where poor crops, resulting nearly in failure, were at once changed to twenty-five, twenty-eight and thirty bushels to the acre by thorough and repeated use of the harrow. plank drag, roller and other tools for reduc-ing the land to fine tilth before sowing; and he came to the conclusion that one dollar per acre in extra work with pulverizers would add from five to ten bushels per acre in the crop.

Another advantage of a fine preparation is in avoiding deep planting. Farmers who deem it necessary to give much depth to their sowing in order to get down to the moisture, are suffering a loss every year. A satisfactory and instructivet experiment, teaching a valuable and durable lesson may be mad by preparing thoroughly a strip of land, and



especially with a mellow surface, and sowing the grain on it just deep enough to germinate freely; and on another strip without good preparation setting the tubes of the drill six nches or more in depth, and then observe the difference in the new crop when it makes its appearance. Or the experiment may be tried on a more limited scale. The seed covered at a moderate depth will start at once and grow freely, as shown by fig. 1; the deeply covered seed will be several days longer in coming up, the time will be lost, and before it can get a strong hold of the nearer the surface as in fig. 2.

In experiments which we have made, seed buried one inch deep came up in 6 days; two inches deep in 7 days; and four inches deep



in 10 days. A month later the one-inch plants were stronger than two-inch, and much stronger than the deeper plantings. Fig. 3 shows the comparative strength of thedeep and shallow planting as the crops approach maturity. No invariable rule can be given for the best depth. It must vary with the character of the soil and of the season.

If the surface soil is moist enough, one inch would be better than two, and two-inches

FIG. 5.



longer. Among the points claimed for this manner of shoeing is the fact that it gives all the protection necessary for ordinary use, and yet allows the foot that freedon at the proper points which will preserve the natural inctions to the greatest degree of any method yet known, Nature demands that the quarters of the foot should be entirely free that the most perfect conditions be preserved. Proper pressure on the sole and foot is positively necessary, also a point which will be conceded by every one who has given the anatomy of the foot of the horse any study. It will be apparent at a glance that this system excels any other yet invented in allowing not only the freedom of the quarters, but also both frog and sole pressure. Another matter that is arged in favour of tips is economy. Cast-off shoes can be utilized this way. It is less expensive

to put on tips than shoes, as the former are more easily made and fitted to the foot. A horseman in Ohio, who has given this subject some study, thus deals with it from an economic point of view:—Have the smith take an old pair of cast-off shoes, cut off the ends and fit the tips around the shell of the foot. The end can be feathered, or an offset made for the foot to fit into. This done your horse is barefooted, has all the advantage of running barefoot, and more, the speed the cob can be ground so fine that one | shell is protected and the hoof cannot break. | -Orange County Farmer.

RIPE CREAM.

STAR OF STEWARTON, (588), (5376).

Imported by William Rennie, Toronto, July, 1887; foaled May 7, 18 5. Colour, brown, with white stripe on the face. He is a horse of

ve y compact build, round body, short legs, flat and well feathered and has grand action. He strongly resembles his famous sire, old Darnley. Was bred by John McCamon, Kirranrae, Kirkholm, Scotland. Now owned by Mr. Rennie.

ITH cream there is a certain stage of ripeness, if I have use the ripeness, if I hay use the term for cut, or that it is no injury to grain or straw the want of a better, which will not to so bind. only secure the greatest amount of butter from a given amount of cream, but will likewise produce the finest flavoured article. Vary this either way and you will meet with disappointment. Unripened cream makes less butter, overripe cream inferior butter.

How shall this golden mean be secured? I answer, only by patient observance and painstaking efforts. There are no set rules that will always secure the same invariable results; and experience, tempered by judg-ment, is the best guide. Under certain atmospheric conditions cream will ripen sooner at one time than at another. Again, the cream of certain cows will ripen sooner than others, or the kind of feed that is eaten will influence the ripening process. I have observed that corn meal fed a little in excess will hasten the ripening of the cream, but the butter therefrom was soft and oily; on the other hand, an excess of bran feed will retard not only the process of ripening, but churning as well, and the butter will be pale and sickly looking, as well as "crumbly." despite your best efforts. Any or all of these causes combined, help to make "butter It is only close observation and prompt action that will insure you continued success at the churn. After the cream is skimmed into the receptacle for ripening, be it crock, pan, bucket or jar, stir it frequenty, say once every day, at least—the æration is a help in the churning. Keep at a uni-form temperature if possible never allow it to get too warm-keep below rather than bove the required temperature. If necessary you can easily raise to the required tem perature, but once get above the requisite neat and your product is spoiled, manipulate it as you may. You can no more "doctor" scalded butter than you can mend a broken

egg. - Jersey Bulletin. THE FLAVOUR OF BUTTER.

Ta recent meeting of dairymen in Sherman, New York, an old reliable butter buyer remarked that the standard quality of butter in Chautauqua county is not as high as it was twentyfive years ago. The question was asked, it it was true, what is the cause? This is the answer given:

Twenty five years ago there were nearly 109,000 sheep in Chautauqua county. They in a large measure cleaned the pastures of weeds and rubbish, turning into the best of wool what is now a nuisance and the first cause of bad butter. The sheep are gone, and now our pastures and meadows blossom out with white and yellow daisies, rag weeds grow up, golden rods beautify the fields, toad plantain runs up in seed rods, adder tongues speckle the hills. All of these and many others grow laxuriantly in this country. Cows eat them, and thus every pound of button; made bitter and it is made bitter. butter is made bitter, and it is impossible to make good butter from such feed. assured, any bitter herb taints and defects the butter.
Second. In many cases during the latter

part of the summer, cows do not get plenty of pure water, so essential to the making o fine butter. Now, springs and brooks fail much sooner than twenty-five years ago. Third. In some cases cows are driven to and from pastures by dogs. Cows that get hot and nervous give milk that is fatal to good butter, and will taint the entire lot. To make good, sweet butter, requires healthy cows, good, sweet food, pure water and gentle treatment.

If these are the causes for reducing the high standard of butter in New York, may they not be the cause of the low standard of some butter? We should suggest that where there are no sheep to keep the pasture clean, that a hoe be used, and that everything you would not cut for hay be cut with the hoe. If you have any not facilities for having water where your cows can help themselves at any time, give them an opportunity to do so at least three times a day, and don't dog them.

eaved over the self-rake reaper and hand binding. This claim is only good when it can be shown that grain should be bound as last as

It was anciently claimed that bound grain could be threshed to better advantage than loose grain. This claim had a good deal of merit, when grain was threshed by hand If the heads were uniformly together, the flail would hit more heads at a single blow than if the grain was in a loose condition. But since the advance of civilization to threshing machines, the claim is destitute of

merit, reason or sense.

So much for the claimed advantages of binding grain. Now what are the known

losses and disadvantages? In the first place it takes three horses on a self-binder, to cut the same grain two horses will do with a self-raker, reaper, a loss of onethird of the power. It will take a good man to shock what a self-binder will cut. It must he left three times as long in the shock to dry out and be in condition to house or stack us it requires if left in the gavel, thereby trobling the danger of loss by exposure to storms. It takes double the time to unload bundles by hand in the barn than it does to anload loose grain with a horse fork. There is absolutely no gain, in threshing, to have it bound. Repeated trials, last week, showed that a ten-horse thresher run out one and one-half bushels of barley per minute from bound grain and from unbound barley from the same field, two bushels per minute were uniformly threshed, and both grain and straw were in better condition from the unbound. Poes any observing farmer believe that barley and oats are in fit condition to bind, when cut, if they are cut as early as they should be to save loss of grain from shelling and to get full value of straw for feeding stock—always worth to the dairyman \$4 per ton if mixed with nitrogenous food The experience of the present harvest has convinced me that barley and oats should never be cut with a self-binder, and that to bind after a self-rake reaper is worse than labour lost. If gavels are turned, the next day after reaping, and placed so as to leave an opening for the waggons, the day follow-ing and pitched on with barley forks, the crops can be put in the barn with less labour than

to bind and put it in shock. Study, investigation and experiments have convinced dairymen that the full value of a corn crop, for feeding purposes, can be secured in the silo, and the labour of shocking, husking, shelling and grinding saved. The same investigation and experiments will convince the observing farmer that binding grain under the most favourable conditions is dead loss of labour, no benefit to the grain, and an almost certain damage to the straw. Large bundles nearly always smell musty under the band. The musty odour will impregnate the whole stack, and cattle eat it with no better appetite than men eat musty bread. Binding grain delays the precious time of harvesting, which delay often entails loss. My entire harvesting and threshing was done before any other farmer in the neighbourhood had completed binding and hauling in, and several days before any grain cut with a self-binder was in fit condition to go in. If labour can be saved, and better results can be secured, by not binding grain,

TO CLEAN THE POULTRY HOUSE.

the question is worthy of consideration.

IRST remove all the contents—nests, roosts and boards for catching the droppings. Then slake some stone limits with the contents—nests, with warm water, and make a bucket of thick whitewash, adding a tablespoonful of carbolic acid. Apply it thickly, inside and outside, and into every crack and crevice, not even overlooking and under part of the roof and the floor. With a sponge apply kerosene to the roost poles. nests and boards, first cleaning them thoroughly and set fire to them. They will only burn until the oil is consumed, when the fire may be extinguished. This will destroy every egg or parasite on them. They may be again anointed with kerosene and