

FOR FARMERS

Seasonable and Profitable Hints for the Busy Tillers of the Soil.

WHEAT STRAW.

What straw is the most extensively used material for bedding in farming. It is generally used extravagantly because under the system of ordinary farming the supply of straw is usually far in excess of the actual needs of the stables, says a correspondent.

Scientifically wheat straw shows a food value that should save it from being wasted, and practically we who have fed animals know it is often highly relished by them, even when they are supposed to have as much other highly regarded foods as they can eat and digest. A certain bulk is necessary in the ration for stomach distention purposes as well as to increase the working area of the more nutritious foods, and clean, bright straw can be used profitably for adding this bulk, securing it more cheaply in the straw than in the more expensive fodders. One can make a good cow ration with ensilage and straw for the roughage should there be a shortage of hay or if hay can be sold at a price above its feeding value compared with its straw substitute to leave a profit after adding protein concentrates to supply what was withdrawn in the hay. In actual practice I have made the substitution of clean wheat straw for high priced hay, increased my concentrated portion of the ration and not only had a profit from selling hay and buying meal, but got more milk from the change of food.

I do not mean that the farmer at large shall cease using straw for bedding, for whatever feeding value we may know it contains the fact remains that we have no material on the farm that is as cheap for bedding as straw. But I do mean that we should not use it so wastefully. Straw as it comes from the thresher is not a good absorbent of liquids. Nature made it strong, resistant and practically indurated for its and the seed's protection, and until the straw is crushed or cut or its organism in some way broken, it takes up very little moisture, and as an agent for the conservation of liquid excrement it is nearly useless. But let it be run through the cutter so that it is cut and haggled and crushed, and it is no longer impervious to moisture. When so prepared, half the quantity of straw will produce better results both in absorbing liquids and keeping the animals clean than can be secured when the long straw is used.

SAWDUST AS MANURE.

Since the use of silage has become so general, and with it the feeding of cut straw along with the silage, the question of getting sufficient bedding for the stock has become of growing importance. In many cases sawdust and shavings have been largely used, in fact, sawdust has been shipped long distances by rail for this purpose. This led to an investigation of the effect of sawdust on land and crops manured with this material. Some years ago Cornell University Experiment station experimented on accurately measured plots to determine, if possible, if shavings when used as bedding, injured the quality of the manure or the crop. One stall was bedded with pine shavings, the other with cut straw, in equal weights. The horses were changed every day. When about 1,500 pounds of manure had accumulated in these stalls, the manure in each was thoroughly mixed, 1,000 pounds weighed out of each and put on two plots. A third plot was left untreated. This experiment was carried on for about four years. Barley was grown continuously on the land, which was a rather moderately light gravelly soil. From this experiment no injury to the soil was discovered from the use of pine shavings as bedding, neither was the manure found to be inferior to that which was mixed with cut straw. In observing the results of the use of manure mixed with sawdust or shavings, the conclusion was arrived at that all of the trouble had resulted, first, from using too much bedding, so that the resultant manure contained but a small percentage of the excrements of the animals; and second, that it was applied too thickly. One need not hesitate to use a moderate quantity of shavings if we have a spreader to distribute the manure, provided that not more than six or eight tons at most were applied to each acre. However, it might be advisable to pile the manure and let it rot for one year, adding water to it if the rainfall is not sufficient firefanging. take a piece of butter size of a small

PURE WATER NECESSARY.

The watering accommodation for the swine should be the first thing considered in laying out the hog yard or pasture. The pumped water, all things considered, is the best and safest. The well can be located so as to be free from all drainage of the lot or surroundings. It can be fenced, fitted up and made dry and solid for some distance around the pump. The troughs can be located on a dry cemented floor, or broken stone that can be flushed frequently and thus kept free from the usual hog yard filth. The trough should be guarded to keep out all filth, or

watering tanks used. The purpose of cleanliness can be carried out by anyone who wills to do it.

The damage resulting from forcing swine to drink impure, filthy water must be impressed upon the mind of every hog raiser. When this is done, then there will be a way devised to supply the swine with pure water. Look over your hog lots and see what the condition of the water is that they are forced to use. If the hogs are wading around in mud knee deep and go to a muddy trough or mudhole to get a drink, you can depend upon it that they are forced to unnatural conditions and sooner or later you will be the loser by a scourge of cholera or similar disease. The raising of hogs is one of the best money-making lines of the stock business connected with agriculture, but it must not be abused by neglect or carelessness. If it pays, take care of it and it will continue to pay. One of the surest means of doing this is to look after the watering of the swine. See that they are liberally supplied with pure water and plenty of it.

CATTLE IN STABLES.

My cow barn is only 14 feet wide. I thought it best to have but one manger, writes Mr. G. G. Gibbs. A row of studs are placed 3 feet 10 inches from the east side of the stable and the studs are 3 feet 4 inches from centre to centre. To each side of each stud is bolted a 3/4-inch iron rod, and midway between each two studs a cow is fastened by an ordinary cow-tie, secured by chains to rings, which slide up and down the rods. By this arrangement the cow has much liberty and yet is securely fastened and cannot disturb the animals adjoining her. When she lies down the chains slide down the rods and she can lay her head by her side. When she gets up the chains slide up the rods and she can lick herself on any part of her body. Still she has no more forward and backward movement than if she were in a rigid stanchion.

The front of the manger is merely the foundation wall of the building and the bottom is cement, which slopes gently from the wall toward the row of studs. Fourteen inches from the studs it drops 2 inches and is level from there to the studs. The platform on which the cows stand as well as the floor behind them is earth. I expect to have both the floor and gutter behind them made of cement. In front of the cows every 15 feet is a window containing 12 glasses, and behind them, next the ceiling, is a window of three glass between every alternate pair of studs.

PACK BUTTER WITH CARE.

Butter for shipment or for the home market should have much greater care than is usually given at the farm dairy. Of course the size and kind of package will depend upon the demands of the customers. If tubs are wanted see that the butter is put in solidly. The top may be smoothed off evenly by means of a straight edge or wire. A cloth is then spread over the top of the tub, and a light layer of salt is sprinkled over the cloth. If prints are wanted, see that they are carefully and neatly made and wrapped in parchment paper and carefully packed. Use special care with small packages designed for custom trade.

FORTUNATE MISFORTUNES

IT'S AN ILL WIND THAT BLOWS NOBODY GOOD.

Many Marvellous Triumphs of Mind Over Matter—Brave Hearts.

A great actor has said that no man can act until he has suffered. Be that as it may, it is an open secret in the "profession," that the wonderful character impersonations of a well-known tragic actress are largely the offspring of her own domestic infelicities. It would be invidious to mention names, but the circumstances are undeniable. Married at an early age to a dissolute man very much her senior, she was speedily disillusioned as to his real character. Instead, however, of going into retirement, or a lunatic asylum, she threw herself heart and soul into her profession. She has succeeded, beyond her wildest dreams. But her audience little suspect the secret of her power. Why the pleading love, the malignant jealousy, the fierce hate, and the one thousand and other emotions which her sublime art conveys to them in turn, thrill them in so extraordinary a manner. And yet it is so simple. She really feels the emotions that so many of her craft merely ape. She acts as intensely as she has suffered, says Pearson's Weekly.

So happy-go-lucky was Oliver Goldsmith, that it is doubtful whether he would have given a single work to the world had it not been for his grinding poverty and his hounding creditors. His misfortunes were mostly of his own choosing, and largely arose out of his Hibernian versatility. He nearly lost his sizarship at Trinity College, Dublin, through pumping on a constable, and giving a ball in the college attics.

"THE VICAR OF WAKEFIELD."

After vainly trying half a dozen professions, he applied for ordination. But as he appeared clad in flaming scarlet, he was turned out of the bishop's palace. He decided to emigrate to America, but lost all his

passage money in a gambling den. The same fate overtook the money which was subscribed for his study of the law. Finally, after begging his way with a flute half over the Continent, he brought his weary limbs back to London, where he took a miserable garret, at the top of Breakneck Steps, overhanging the Fleet Ditch.

On one occasion his landlady having called in a sheriff's officer. Dr. Johnson was hastily sent for. Johnson arrived, only to find that the guinea he had sent in advance was already changed for a bottle of Madeira. Irritated beyond measure, the doctor was suddenly appeased by the sight of a manuscript, which Goldsmith had hastily turned out under the combined pressure of hunger, cold and duns. That MS. was "The Vicar of Wakefield," which Johnson immediately sold for £60, and the popularity of which has continued to this day. Most of Goldsmith's other masterpieces were only wrung from him under similar pressure.

Curiously enough, the great doctor himself produced two of his best known works under the stress of great mental agony. The loss of his wife, who, by all accounts, was neither beautiful nor lovable, plunged him into the most violent grief. He only retained his mental balance, by turning doggedly to the completion of his great work. For three years he scarcely raised pen from paper. At the end of that time his grief had abated, and

JOHNSON'S DICTIONARY

was given to the world. Owing to various causes, Johnson benefited but little financially from his great work. Consequently, when, a few years later, his mother died, at Lichfield, at the ripe old age of ninety, he was unable to pay even her few debts and funeral expenses. So haunted was he by the idea that this beloved relative should leave a pauper's reputation, that he immediately commenced a novel, where-with to pay off these bills. By working day and night, and sending his sheets straight to the press, without even so much as reading them through, he accomplished his superhuman task in a week. In this way he raised the necessary £100, and his publishers received the world-famous "Rasselas."

Emile Zola and many other famous French writers were driven to fame by sheer hunger. With Zola, as with Goldsmith, it was write or starve. His early Parisian days were passed in a tiny seventh floor garret, where he had frequently to sit in his shirt sleeves, because "uncle" had charge of his only coat. Doth Alphonse Daudet and Victor Hugo were goaded on by the same gaunt hound.

When Hugo was in Belgium his miserable attic had several unauthorized openings to the sky, and was so small that his bedstead stretched right across it. At seventeen, the penniless Daudet was tramping the streets of Paris, glad to beg a bed from the first friend he could meet; whilst Balzac was only a shade more comfortable in a garret, through which the wind whistled, "Like Tullon through his flute, though not so pleasantly."

"SOME DAY."

Perhaps one of the most successful songs of last century was Milton Welling's celebrated "Some Day." The story of its inspiration gives only one more proof that, despite himself, the shadow of a great grief often wrests a man's best work from him. Briefly, the history of "Some Day" is as follows:

Mrs. Wellings was absent from London on a yachting cruise, when word was brought to her husband that the tiny craft had met with an accident. He immediately telegraphed to Cowes, whither his wife had gone but received no reply. Again and again he wired without result, until at length it became too late to telegraph.

All that night he sat up in the utmost agony of mind, awaiting the message that never came. Restlessly pacing his room, he chanced upon the manuscript of "Some Day," which was lying upon his desk. The deep significance of the line, "Or are you dead, or do you live?" at once appealed to him, whilst almost unconsciously, his tuneful genius suggested a fitting melody. The day that brought the glad tidings of his wife's safety, saw "Some Day" given to the world.

Deep in the Great Smoky Range of the South Carolina mountains, lies a little place, called "The Thousand Pines." Here, in a tiny bungalow, about two miles from Tyron village, the great American actor, William Gillette, conceives those remarkable creations with which he has thrilled the audiences of two continents.

It is a queer, lonely spot for the home of Sherlock Holmes; but it has an exceedingly pathetic interest. It was here that the great actor fled in search of oblivion, after the loss of his wife—a loss that shattered his health, and came very near terminating his career. Then, like the brave heart he is; Gillette plunged heart and soul into his work. The result has been the most famous of all his successes, the stirring drama now playing at the Lyceum Theatre, London.

MONUMENT TO A COOK.

The first monument ever erected to a cook is about to be inaugurated in Paris. The chef is question is Urbain Dubois, who labored in the German Emperor's kitchen. So popular was he that his brother cooks have united to do him honor.

DISEASE SPREAD BY CATS

AGENCY SHOWN IN AN EPIDEMIC OF DIPHTHERIA.

Human Beings Infected First—Foxes and Other Wild Animals Next Affected.

That the microbe of the bubonic plague has been carried across seas by rats on board ships is a fact demonstrated by science. It is also said to be demonstrable that malarial fever is disseminated among the inhabitants of tropical lands by the mosquito.

The cheerfully buzzing bluebottle fly has been accused of conveying blood poison from putrifying carcasses to human beings. But it is not so generally known that many of the diseases of humanity may be contracted by that favorite of all our domestic animal friends, the sleek and purring cat, and communicated through it to human beings.

In one locality in Canada where a quickly fatal type of diphtheria was prevalent, the spread of the disease was for a long time puzzling to those who engaged in fighting it. As the community was widely scattered and the popular fear of the disease very great, it might appear to have been easy to avoid contagion. But day after day new cases appeared in houses separated by long distances until a king of panic set in, and most of the uninfected families shut themselves up in their houses, and refused all communication with friends, strangers or visitors.

Still the disease continued its ravages with deadly effect, until a clue was accidentally given by a young woman who called across the front garden from the doorway of her home to a passing traveller to inquire about the diphtheria epidemic. There was no other house within a mile or two, the road was little used and the family had so far escaped the plague.

"It's as lonely as can be," the young woman declared. "We go nowhere and nobody comes here. The only excitement is over the cats, for old Jim is very sick, and the little Manx tortoiseshell is dead. We cannot think what in the world is the matter with them."

The words came back to her friend as he stood at her graveside two days later and heard that two lads of the household were also in the grip of diphtheria.

Then a woman of means in a neighboring house asked the advice of the local practitioner respecting her Angora, which had a sore throat. On general principles he refused to have anything to do with grimalkin, but advised doing away with it at once.

Instead of following the advice the woman vainly attempted to save her pet's life by blowing sulphur down its throat. The next day she developed diphtheria, and within the week her baby was buried and she was fighting between life and death, from which struggle she escaped, a physical wreck.

After that the cats were looked after, when to the general surprise it was discovered that very few were to be found. Those that remained had short shrift of it, but were sacrificed to the public good.

When the plague subsided there was not a pussy in the community and it was a long time before the settlers began importing them. Evidence and subsequent result appeared to prove conclusively that the cats had been among the most potent factors in the spread of the disease. And the effect of their sickness was farther reaching than could have been imagined.

Dead foxes began to be found about the stone piles in the fields, and the farmers' wives noticed that the young turkeys and chickens were not molested by these sly thieves. The word was sent around that something was killing off the foxes.

A connecting link was discovered when an incredulous trapper came along and was heard lamenting the lack of cats, wherewith to bait his fox traps.

"Nothing will draw a fox like a cat," he said, divulging what was evidently one of the secrets of the trade, since very few people had heard of such a thing before.

Then it was remembered that as a rule the bodies of the cats had not been found around the farm buildings, the suffering creatures having generally crawled away to die in solitude in the woods. So it ceases to be a wonder that the foxes of the country were passing away.

But the effects of the mortality among the cats did not end there. From the Indian reserves to the north came the information that the Indians had made requisition upon the Department of the Interior through their local agent for winter supplies instead of leaving for their hereditary hunting grounds as usual.

Inquiry showed that the young men of the tribe had unexpectedly and in fright returned from the preliminary spying out of the trapping routes for the winter's work, with martens, fisher and mink dead in all directions. Three or four bear skins and one lynx skin were brought back which they had stripped from animals found dead in the bush.

Some sickness was about that was clear. Two of the young hunters had become possessed by something which took them by the throat inside and strangled them, and then the hunters had left dead behind them. The devil—Mache Manitou—was in it all, or there was something wrong about their charms; it was bad medicine to be in the woods the Indians said.

So the hunters determined to remain at home and to set the medicine men to work upon a new set of incantations, and to allow the Government to feed them that winter. Beyond a doubt the fatal sickness had spread from the cats to the wild animals of various kinds over a good many square miles of territory, until at last it reached humanity again in the persons of the young Indian runners.

During the last epidemic of the grip some cats were noticed by close observers familiar with the above facts, as being afflicted with an illness in its symptoms not unlike that which laid so many people by the heels. The rapid spread of that disease may have been due to some extent to the visits of the domestic pet to cat friends suffering from its ravages.

It might be wise to subject russy's visiting list to strict supervision at times of sickness and epidemics.

TRAGEDIES OF THE ARCTIC

The Duke of Abruzzi's Expedition to the North Pole.

An extraordinary coincidence has been developed by a recent arctic tragedy brought about by the expedition of the Duke of Abruzzi.

When this navigator went on his journey to the North Pole he took with him among others Lieutenant Querini, a Venetian gentleman of an old and noble family. His work over, the Duke returned, but the lieutenant was not with him, for he had lost his life through an accident in the arctic regions.

Now, at the very time when this accident occurred, a professor in the technical school in Trieste, while rummaging in the archives of that city, discovered a manuscript bearing the date 1601, and containing an account of a journey made by one Pietro Querini, in 1431, to the arctic regions. Querini is not a common name, and a little investigation showed that Pietro Querini was a direct ancestor of the other Pietro Querini who lost his life in the arctic seas a few months ago.

"Querini," says the old manuscript, "sailed from Candia for Flanders on board a vessel loaded with merchandise and precious stones. When he arrived in Flanders he sold his cargo and started for the arctic regions. A storm forced him to abandon his ship and take refuge with his crew in two barks. The wind then carried them to the coast of Norway, but on January 9, 1432, Querini was again shipwrecked near the Lofoden Islands in seventy degrees north latitude, and almost all his companions were drowned."

For some time it was supposed that he, too, had been drowned, but in January, 1433, he appeared in Venice with ten companions, the only survivors of his original crew of seventy-eight men. It seems that he succeeded in gaining the shore after the others had been drowned, and then slowly made his way home through Denmark and Germany.

"Although these two Pietro Querinis," says a French writer, "are separated from each other by five centuries, we find the same destiny at work in the case of each." And he continues, with a dash of playfulness: "Is it not possible that the adventurer of the fifteenth century, desiring to enjoy once more the exciting days of his youth, actually became incarnated as a hero of the twentieth century?"

AT SHORT RANGE.

Exciting Experience With a Lion in Africa.

An Englishman who lived many years in Africa relates a thrilling experience which befell his family there. His home at the time was in the edge of the Transvaal wilderness, and it was there that the event occurred.

One evening about dusk my wife and child were sitting on the veranda of the bungalow. I was engaged a few rods away, putting the finishing touches to a bit of wagon-repairing. The servants were at the rear of the house. It was one of those peculiar quiet evenings when nothing seems to break the stillness.

Suddenly I felt, rather than saw, something moving near the veranda. I looked more closely, and to my horror perceived an enormous lion stealing along the ground in the direction of my wife and child. My wife saw the creature at the same instant, and despite her terror, fortunately remained perfectly motionless and silent.

Scarcely knowing what to do, I hastily crept toward the side of the bungalow to the open window of my room, where I knew a loaded rifle was leaning against the wall. I climbed in at the window, seized the rifle and leaped by another window out upon the veranda.

There was no time to think; the lion was within a few feet of my dear ones and crouching for a spring I called softly to my wife not to move, and then fired.

The ball passed directly over my boy's head and lodged in the forehead of the lion, immediately above the eyes, and stretched him on the ground.

There was an instant of fearful suspense. Then I fired again, but the second bullet was not necessary, for the lion had been killed at the first shot.

The Admiralty consists of the First Lord of the Admiralty and five other members. The Board of Admiralty have managed the navy for over two centuries.