

FOR FARMERS

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

MILK PRODUCING FUNCTIONS.

Of all the functions of the animal organism, none has been more modified than that of milk production. The milk producing cow of to-day is an artificial development. Her power to elaborate milk far exceeds what nature designed. Her motherly functions, rarely kept up in a state of nature more than five or six months, are now taxing her system ten, eleven, and sometimes twelve months of the year.

This unusual development of the milking functions has also favored the development of the nervous system. In fact, the function of reproduction and its natural sequence, the formation of milk seems to be closely correlated to the nervous system.

Just how the milk is formed, just what influence the food constituents exert on the quality of the milk, are questions which baffle our best scientists.

All we can say to-day, is that the constituents of the milk are built up out of the blood, into the cell structure of the udder, and that these cells are again broken down to form the milk. The wonderful development of the blood vessels in and about the udder, which carry the necessary fluid for the development of the milk helps to show the great drain which the work of this organ must cause on the energy of the animal. Her power to elaborate milk is indicated, to a certain degree, by the size and substance of this organ.

The size and substance of the udder, however, when taken as evidence of an economical milk producer, is often deceptive.

THE AMOUNT OF MILK.

produced for the first few months after calving is usually indicated by a large and capacious udder. When the cow is "fresh," but persistence in milk production, a most valuable quality, cannot be judged by the udder capacity of the cow.

To the producer of dairy stock for sale, the question of breed is one of prime importance. The general quantity and quality of the products of the different breeds will vary not a little, and should be carefully considered by every dairyman before deciding on the best breed for a particular purpose.

Unprejudiced experience, as well as the results of experiments, indicate that on the whole the Holsteins and Ayrshires are characteristically milk-producing breeds, while the Jerseys and the Guernseys are characteristically butter breeds.

This does not imply that there are no good butter cows among the Holsteins or Ayrshires, nor that the Jerseys or Guernseys are always unprofitable for the milk production. It simply means that the general tendency among the Holsteins and Ayrshires is to produce large quantities of milk, rather low in per cent. of butter fat, while the Jerseys and the Guernseys produce much smaller amounts of milk, of a relatively high percentage of butter fat.

When all is said, that may reasonably be said regarding the merits of different breeds, however, we often find there are about as great differences between individuals within a breed, as between individuals of distinctive breeds.

Every producer of thoroughbred stock knows something regarding the relative value of families or strains within his chosen breed, but even when we have made a close study of breeds and families, we still find

INDIVIDUAL DIFFERENCES

which greatly modify the productive value of the animals. In fact, it seems a matter to be regretted that so many of the high-priced strains of thoroughbred stock are high-priced more as a matter of fancy than as a matter of individual merit as indicated by productiveness.

In the end we must come down to the matter of selection and individual merit, as indicated by productiveness, as the true basis upon which to build up the herd. The matter of selection may apply well to the selection of ordinary grade stock, as well as the selection of animals for breeding. It has long been known that there are certain external points in the animal which are indicative of other points of value, which in and of themselves, cannot well be judged.

Nearly all breeders' associations have their standards for judging animals of their particular breeds. It is a different matter to say just what weight should be given to the various points which are known to be, or thought to be, indicative of dairy qualities.

In the light of recent developments of science, however, it seems to many careful students of dairying that a revision of the standards of judging is now of greater significance than has been given to them in the past, are the digestive and assimilative capacity of the animal, as indicated mainly by the size and shape of the barrel, and the other, the nervous system of the animal.

A careful study of cows which have been noted for a large amount of dairy products, will show a much

larger development of the barrel just in front of the udder than is seen in other dairy cows. The barrel should be decidedly pear-shaped, as shown by a cross-section, with the largest part of the barrel low down and just in front of the udder. A flat-sided form of the barrel is decidedly objectionable and indicates a lack of assimilative power.

Several of the standards for thoroughbred stock by breeders' associations call for a straight back, back level to the

SETTING OF THE TAIL.

The two points which most strikingly indicate a nervous development, are a broad, clear, prominent eye, and loose, open condition of the spinal column with a prominent pelvic arch. This loose, open condition of the vertebrae of the spinal column is almost always accompanied by a somewhat hollowing back and a decided prominence at the pelvic arch.

A cow of a decidedly nervous make-up is almost always thin in flesh, usually rather too much so to please the fancy buyer. But if in connection with a strong, nervous temperament, she also, has a powerful digestive system, she will turn her energies almost entirely to the production of milk and butter.

As we have already indicated, the selection of valuable dairy cows is not wholly a matter of breed, nor is it a matter of families within a breed, but must rather be the results of a study of individuals.

There are many meritorious dairy animals whose names have never been found in the herd books. In fact, about the only point wherein thoroughbred stock has advantages not possessed by grades, is in the greater degree of certainty with which their valuable qualities are transmitted.

The majority of dairymen will not be breeders of thoroughbred stock, either from choice or lack of capital, but every practical dairyman should be a student of the dairy form and of dairy types. By the selection of the best thoroughbred males on the one side, and the typical dairy form on the part of the cow, a strain of as valuable stock, when measured by their products, may, in the course of a few generations, be produced, as can be found among the best thoroughbreds with lengthy pedigrees.

METHOD IN FARM WORK.

Lack of time is an excuse often given for the neglect of farm work, while the real trouble is lack of ability to arrange work so as to avoid loss of time. City business men with great interests and responsibilities train themselves to think and work systematically, doing as much in the five or six hours spent at their desks as others do in a day by haphazard methods. Here and there a farmer is found who has a reputation for getting along with his work better than others. It may not be his physical strength, superior teams and tools or favorably situated farm, but merely the knack of doing things. A man of this type acts as ginger and pepper sauce for a whole neighborhood. Through his example other farmers are stirred up, perhaps unconsciously, to do better work. His influence on the young is of great value. A farm community without men of this stamp is in a bad way. Things drag along year after year, and the young grow up without anything to spur them on to better things. In the city a young man is sure to have whatever latent ambition is in him aroused. The struggle for position is so great that he must either move on or see others pass him, a hard thing for a self-respecting young man to endure.

RICH LAND.

The man that dreams of farming always imagines himself owning rich land. There is no other kind that it is a pleasure to till. There is no other kind that will yield a profit from the operation of tillage. The richness of land regulates the value of the farm both in the market and in the operation of farming. Yet in the face of this well-known fact, millions of acres of our most valuable and productive land have been allowed to deteriorate in fertility. The great problem of how to bring them back to their former state of fertility is one with which the best of scientists are working. It is not practical for a man to buy enough stable manure or commercial fertilizers to at once bring back his land to its original state. A few facts in relation to the composition of the soil helps us in determining the best course to pursue. One of these facts is that the poverty of the land comes principally from the exhaustion of the plant food that is not at once available. In the process of years the new unavailable plant food becomes available, some each year. We have but to put back on the soil year by year as much as we take off in the way of fertilizer to gradually bring back the land to a rich condition, by the annual increase of available plant food from natural causes. This is a slow process, but it is far better than no process of recuperation.

DISAPPOINTED DUCKS.

The absence of water, owing to the great drought, led a flight of ducks at Cobar, New South Wales, to make a strange mistake. They were seen to descend on to the shiny surface of a galvanized iron roof and make desperate attempts to swim.

FOR THE HOME

Recipes for the Kitchen. Hygiene and Other Notes for the Housekeeper.

KITCHEN HELPS.

If you are planning a new house, be sure to arrange everything in the kitchen as conveniently as possible, even if the parlor is not as elaborately furnished or decorated as you would like. The kitchen is the workroom of the house, the room in which the average housekeeper spends the most of her time, and it should be pleasantly located and well lighted, for nothing is more disagreeable than a dark, gloomy kitchen. Of course its arrangement must be left to the individual taste, for every woman who has kept house a few years has her own ideas as to what she likes in her kitchen; still there are a few general rules that will apply to all of them.

When the kitchen is used only for cooking, and separate rooms have been provided for dining room and laundry, it should be a small room. Have the sink and woodbox close to the stove, so the trips back and forth while replenishing the fire and washing the dishes will be as short as possible. There should be a door opening into the dining room, another into the pantry, and a third into the cellar stairway. An arrangement which one housekeeper finds very convenient is a cupboard built in the partition, with a door opening into the kitchen and another into the dining room. The cupboard reaches from the ceiling half way to the floor. Below this are drawers, some opening into one room and some into the other.

The kitchen floor has been the subject of much anxious thought. Carpets are out of place, and oil cloth is expensive and not very durable. The best finish is either paint or oil. Paint can be purchased already mixed in almost any color you may select. Apply two coats giving the first plenty of time to dry before putting on the second. Some who have tried painted floors have complained that the paint does not wear well. This is due to the way it has been cleaned. It is not necessary to use a scrubbing brush, boiling water, lye nor soda. Heat the water until luke warm, dissolve a little powdered borax in it, and enough good soap to make a suds. The mop should be of soft flannel or knit underwear. The borax makes the cleaning easy without injuring the paint. If oiled floors are preferred to painted ones, get a gallon of linseed oil and a large brush. Heat a quart of oil at a time, and apply it almost boiling. Two or three coats are necessary, and the floor should be thoroughly clean and dry before you begin work.

HOW TO CURE CORNS.

When the feet are pressed into tight fitting shoes—high heels make the pressure greater—by adding friction we have a needle-like point formed in the skin; and the greater the pressure the deeper the point will grow. The best preventive remedy known is really to go barefooted; but since this is not considered ethical in civilized life, we will give a few simple remedies which may be of some value for the afflicted.

1. Place on the corn a piece of cold, moist linen folded several times, wrap it up in dry linen, then go to bed. With this treatment the hard epidermis swells up, and after six or eight hours the outer covering of the corn can be removed with a dull knife. When this treatment has been followed for three or four days, a small needle-like growth (the corn) can be extracted without pain or bleeding. By washing the feet often in cold water the tender place will heal rapidly. After getting rid of this corn it is well to wear shoes which are neither too large nor too small, so as to avoid excessive pressure or friction.

2. In place of the linen a crust of bread soaked in vinegar may be applied.

3. The best application is to soak a whole onion twenty-four hours in vinegar, then apply one of the layers of the onion to the corn and keep it in place by a bandage through the night. After repeating this procedure a few times, the corn can be removed without any trouble. By either of these simple applications this troublesome agent can be removed without any danger of blood poison, and, "free of charge."

DOMESTIC RECIPES.

Sweet Apple Pickle.—Take four pounds sweet apples, pared and quartered. Make a syrup of three pounds of sugar and a pint of vinegar, half an ounce of stick cinnamon and a quarter ounce of whole cloves. Put the fruit in the syrup, after skimming it, and cook gently till tender; boil down the syrup, fill up the cans and seal. If the apples are inclined to be tough, steam them till partly done first. Pears and peaches can be pickled by this recipe.

Preserved Quinces.—Pare, quarter and core nice large quinces, dropping the pieces, as you prepare them, into cold water. When all are done, drain and weigh them. Put into a preserving pan, cover with boiling water, and cook till a straw will pene-

trate them easily. Take them out, being careful not to break them, on flat dishes. To each cup of the water in which they were cooked allow three-quarters of a pound of sugar, boil to a rich syrup, put in the quinces, simmer very gently on the back of the stove till transparent, or nearly so, carefully fill into jars, and fill up with the syrup, after boiling it down if necessary. If you try this method you will never return to the old way of putting the quince into the hot syrup and boiling till it is as hard as a chip.

Quince Marmalade.—Quince marmalade may be made of the smaller, inferior fruit, though "the best is good enough" for a superior article. Pare, quarter, core and weigh the fruit. Put the cores, seeds and parings into water enough to cover them, and stew till thoroughly done. Squeeze through a jelly bag. Put the quinces into this liquid and boil till thoroughly done, stirring often to prevent burning. Allow three-fourths of a pound of sugar to a pound of fruit, warm the sugar, stir it into the quince, cook ten minutes; put into glasses and seal by pasting paper over it after it has become cold.

Grape Juice.—Take twenty-five lbs. of well-ripened Concord grapes, pick from the stems, put on the back of the stove, and let them heat up slowly, without water, till the juice starts. When thoroughly cooked turn into stout jelly bags and drain off the juice without squeezing. Let stand till well settled, then pour off the juice without disturbing the settlements add to the juice four pounds of the best granulated sugar, heat to the boiling point, skim thoroughly, and can like fruit, or if you prefer, bottle it, and seal the bottles.

CLEANING RIBBONS.

Fill a glass fruit jar about three-fourths full of gasoline, put in your soiled ribbons of any kind or color, except white; screw the cover down as tightly as possible. Leave the ribbons in for three or four hours; shaking the jar several times in the meantime. Then take out the ribbons, shake out each one separately, and hang over a clean white cloth in the open air; leave them exposed to the air and sunshine until all odor has disappeared. No pressing will be necessary. Pour off the clear gasoline into your tank and empty out the dirt which will have settled in bottom of jar. The same gasoline can be returned to the jar if one wishes, keeping it tightly covered. It will do to use several times.

White ribbons turn yellow when cleaned with gasoline and for these prepare a suds of luke-warm water and ivory soap. Wash them as you would a fine handkerchief, do not wring, but squeeze them through the fingers. Rinse and let them partially dry. Take down while still damp and roll smoothly over a wide card-board, rolling a strip of white cloth with it. Have the cloth long enough to cover the ribbon entirely and place the whole under a heavy weight. Leave them until they have had time to dry. The ribbon will come out fresh and clean and in much better shape than when ironed.

HINTS TO HOUSEKEEPERS.

There is nothing equal to finely-sifted coal ashes for brightening metals of all kinds—brass, tin, copper, nickel. Rub over with a damp cloth dipped in the ashes.

Sometimes the soap is too greasy and there is no time to let it cool and remove the fat in the usual way. Every particle of fat can be removed from hot broth by passing it through a clean white cloth, wet in cold water. All the fat will remain on the cloth, and may be obtained by scraping or by putting the cloth into hot water.

Some time when you are in doubt what to have for supper try this: Scald a pint of fine cornmeal in boiling milk; add a little salt and let it simmer half an hour. Drop from a spoon on a hot griddle and brown on both sides. Eat with butter and syrup.

LONDON MOURNS FOR 'JIM'

THIS DOG EARNED \$4,000 DOLLARS.

Collected Donations for the Railway Servants' Widows and Orphans' Fund.

Tim, the most successful canine mendicant that ever wagged a tail in the cause of charity, is dead, says the London Daily Mail. He was an Airedale terrier, and belonged to Mr. Bush, the almost equally well-known Great Western Railway inspector at Paddington. For more than ten years Tim has cheerfully trotted from train to train with a box tied around his neck inviting donations to the Railway Servants' Widows and Orphans Fund. The sum total of his collections exceeds \$4,000.

Tim numbered his patrons among the highest in the land, and frequently came in for Royal recognition. He was an especial favorite of Queen Victoria, who on five separate occasions called Tim to her and placed a golden coin in his box. On the last occasion that her late Majesty took notice to Tim she called him and his master into the Royal saloon, and, patting the dog on the head, said: "I hope they treat you kindly, Tim." Tim's clear eye and healthy coat always bore eloquent testimony to the care that was taken of him.

IN THE ROYAL SALOON.

Tim was always a very privileged spectator of Royal arrivals and departures at Paddington. He seemed to divine the reason why carpet was laid on the platform, for there he would sit with his nose between his paws and refuse to budge until the Royal travelers came.

He never needed a second invitation to enter the Royal saloon. Not long ago the King, after having taken his seat, saw Tim gazing wistfully up and asking, as plainly as any dog could, to be noticed. The train was delayed while his Majesty, reopening the door, cried: "Come along, old man," and Tim, heedless of the dislocation of the official time-table, leaped beside his Royal patron in the carriage, whence he did not emerge until his collecting box had been enriched.

A picture of "Tim" in oils now hangs on the walls of the King's apartments in Buckingham Palace, and so successful is the portrait that his Majesty commissioned the artist to execute a painting of his favorite Irish terrier "Jack," between whom and "Tim" there was some resemblance.

"Tim" was a general Royal favorite, and his death will be deplored by none more keenly than the younger princes and princesses who had occasion to make frequent railway journeys to and from Windsor. One day Mr. Bush received a telegram from Queen Victoria to have "Tim" in readiness on the Paddington platform. When the train arrived "Tim" was introduced by her late Majesty to Princess Henry of Battenberg, and her daughter Princess Ena, and went through the ordeal with becoming dignity.

He also attracted the attention of Mr. W. W. Astor, who was a frequent contributor to his box on his journeys to and from Taplow Court. Mr. Astor made "Tim" the very handsome present of a cheque for \$1,000 on the occasion of the coming of age of his son four years ago. For many years "Tim" was held by the mischievous boys who infected Paddington in greater respect than they accorded the station policeman. He instinctively seemed to realize when a loiterer had no lawful business, and would immediately give chase.

CURIOUS STORIES.

"Tim" had a great love for horses. Once a horse fell down in the shafts of a heavy van, and after every human effort to get him up failed "Tim," who had been an interested spectator, from the footpath, walked between the prostrate animal's legs and bit him gently but firmly on the hock. The effect was electrical, the horse springing to his feet, and amid the plaudits of the bystanders "Tim" walked quietly away serene in the superiority of canine intelligence.

On another occasion an exasperated cabman was unduly belaboring a refractory horse, and Mr. Bush, an indignant eye-witness, was on the point of interfering when "Tim," divining his intention, sprang at the driver's coat and hauled him to the ground. On arising the cabman was too astonished or abashed to make any rejoinder to Mr. Bush's comment: "I was just coming across to give you the same lesson."

Three times "Tim" stood his master in good stead when attacked in the course of his duty by station roughs. His procedure was always the same. He would hang on to the man's coat and pull him to the ground, but never bite.

Poor "Tim" is now in the hands of the taxidermist, and will soon occupy a prominent position under a glass case in Paddington Station. It was a similar figure in Brighton Station that ten years ago gave Mr. Bush the idea of turning "Tim" to charitable uses when he was little more than a puppy.

"Tim's" last day on duty was on August 22, when he collected 50 cents. He was bitten by a bulldog some time ago, and the wound, never properly healing, hastened his death.

"Women are hard to understand. I told her she carried her age well, and she was offended." "Was she, really?" "Yes; and then I told her she didn't carry it well, and she wouldn't speak."

"I guess that ain't me," said little Ralph, as he gazed earnestly at a photograph of himself. "What makes you think it isn't?" asked his mother. "Cause it's standin' still too long to be me," was the reply.

"Did you ever stop to think," said the village shopkeeper, recently, as he measured out half a peck of potatoes, "that these potatoe contain sugar, water, and starch?" "No, I didn't replied the boy, "I heard father say that you put peas and beans in your coffee, and about a pint of water in every quart o' milk you sell." The subject of natural philosophy was dropped.

PAPER "STRAW" HATS.

A novelty in "straw hats" is promised by French hatters for next season. Straw hats are to be made in future of paper. There will be two kinds of straw-colored hats; cheap one, to be obtained at the modest price of fivepence, and more expensive one, to be bought for half a crown. The latter looks exactly like the genuine article. The paper of which it is made is untearable, and unaffected by rain. The hats are being manufactured at Lyons.