

FARM-FIELD AND GARDEN

CARE OF MILK.

An authority on dairying says that "all the results of scientific investigation which have found such great practical application in the treatment of disease, in disinfection and in the preservation of various products, are almost entirely ignored in milking." On the above subject Mr. F. W. Bouska says that this is not because the application of these principles is difficult or hard to understand, but rather because their value is not realized.

Continuing, Mr. Bouska points out the great pains that are taken in selecting and buying cows, as well as the care exercised in bringing up the calf. It usually takes about three years before the heifer comes in and starts the credit side of her account. In addition to this, considerable expense is involved in the buying or raising of feeds of the proper character, so that the cow, together with her care and the feed she consumes, represents considerable capital. To this must be added the labor of milking, there being no returns until money is received for the milk. The value of the milk depends upon its keeping quality. If it is sold for table use it should not only keep until delivered, but a reasonable time afterwards to give satisfaction. If it is to be made into butter or cheese it should keep well, because otherwise taints develop that may lower the value of the product enough to materially cut the price. At the best the entire profit on milk is comparatively small, and when the quality is poor

IT MAY OCCASION A LOSS. It is deplorable that after so many laborious and expensive details milk frequently is more or less injured through lack of care just before it passes out of the farmer's hands. The additional effort involved to keep the milk properly is scarcely appreciable when compared with the routine involved before the milk can be marketed, even in a poor state. In this matter success may truly be traced to the little things. For example, the milk should be drawn by a clean milkster into clean pails and pans; these utensils should be washed with hot water, a brush and such materials as sal soda, borax or washing powder. After this the vessels should be rinsed and aired perfectly in the sun. The stable and cows should be kept clean, for exclusion of dirt is one of the two principles of milk preservation. The other principle is cooling. This should be done rapidly by pouring from one vessel to another, passing it over an aerator or stirring in the vessel for some time. Of course in cool weather the temperature will lower somewhat quickly if the milk is allowed to stand, but it is better to hasten matters by stirring or pouring.

Morning and evening milk mixed usually keeps poorly because of the fact that the morning milk raises the temperature and consequently brings about conditions for the development of the organisms in previous milkings. If mixing is necessary morning milk should be cooled at least to the same temperature as the evening before adding.

KEEPING UP THE FARM.

One of the things that the wide-awake farmer needs to look to more than ever before is keeping the farm up to a high standard of production. When produce of any kind is sold off of the farm it takes with it a certain amount of fertility. To return it back to the soil in as economical a way as possible is a matter of no small consideration. When marketing a crop the farmer should make a note of the kind of crop and the field on which it was grown, price received, and cost, as near as possible, of the production of the product. At the end of the year, by a comparison, he will be able to practice a correct rotation of crops, and also be able to get an accurate account of his profit and loss. "Rut farming" is anything but modern farming, and the sooner the farmer learns to estimate his farm plant and study in detail his conditions and how they may be improved by the introduction of new methods, the better it will be for him. The well posted farmer now-a-days is the successful one. While special farming will always find a place because such farming is adapted to certain localities, still diversified or mixed farming is bound to find a large place in this country, and it stands the farmer well in hand who is engaged in diversified farming to husband his crops and stock in such a way as to put back into the soil as much fertility as possible that may be taken out by disposing of farm products. If he is selling considerable live stock he should aim to produce as much of the feed used as possible, and feed with an idea of getting returns from the compost heap. Equally as great care should be exercised

WHERE FEED IS PURCHASED, and feeding with judgment to avoid waste is essential. Those who sell butter and milk deprive the soil of large quantities of nitrogen and phosphates. This holds

good with those who raise, buy and fatten cattle for market. Nitrogen, phosphoric acid and lime are sent off of the farm in live stock and dairy products, leaving a greater part of the potash behind. Stable manure in most cases is richer in potash than in nitrogen and phosphoric acid, especially so when produced by growing animals or dairy cows, the latter substances going largely to the production of bone, hair, flesh, milk and tissue and are consequently sent away from the farm.

Specialists who are studying formulas of commercial fertilizers for crops are depending more upon the natural production of the sections to which they are sending their fertilizers, than upon analysis. It is well for the farmer to understand thoroughly the products he is selling, or the crops he is producing and selling off of the farm, and then strive to reach a balance in nature that will prevent a one-sided development of his soil. If the farmers throughout the length and breadth of our country would put more thought upon the sustaining of their farm and in keeping up the fertility of their land, there would be fewer mortgages, less renters, and many rural communities now going backward would become prosperous farming centres.

BRAN AS A FOOD.

One advantage possessed by bran is that it contains a fair proportion of the phosphates, and for that reason may be used with the ration in order to render it more complete. It is now advisable to feed it in the soft condition if it can be used by sprinkling it on cut clover that has been scalded, although a mess of scalded bran and ground oats in the morning of a cold winter day is very invigorating and nourishing. Even when the food is not varied some advantages may be derived by way of compensation for omission of certain foods, by the use of bran and linseed meal. Two pounds of bran, mixed with one pound of linseed meal and a pound of ground meat fed to the hens once a day, allowing a pint of the mixture to ten days, will greatly add to the egg producing materials. As a food for chicks bran should always be scalded and allowed to stand for an hour or two in order to soften.

SMOKE MADE USEFUL.

Apparatus Which Separates the Various Elements.

Smoke is not only a waste, it is a nuisance, when produced in great quantities, as it is in our large cities and manufacturing centres. It darkens the light of day and vitiates the air—a sort of visible symbol of error and ignorance.

What now if smoke could be turned to some good by which in its disappearance the air could not only be purified, but heat and light could be produced? If only the symbolized error and ignorance of society that vitiates the vital air of goodness and obscures the light of truth could be treated in the same way! Smoke, we are told, is made up of pulverulent matters, incombustible gases, as nitrogen and carbonic anhydride and combustible gases, such as oxide of carbon, hydrocarbons, and hydrogen. In the treatment of smoke the desideratum is, by burning its combustible elements and making it disappear, to find some profitable use of the process of destruction.

La Nature has recently given a description of an apparatus used by M. Tobiansky who succeeds in separating the various elements in smoke and making practical use of the combustible ones. In detail La Nature says:

"The operator by means of an instrument of suction forces the smoke into a filter filled with a porous substance which is saturated with a volatile hydrocarbon such as naphtha or petroleum. The porous matter is a combustible; for example, coke, and we will see in a moment

WHY THIS IS SO. In passing through the filter the smoke deposits on the coke a portion of the hydrocarbons or tars which it contains, at the same time becoming charged with the vapor of the volatile hydrocarbons with which the porous matter is saturated. After filtration the smoke is only composed of combustible gases, such as oxide of carbon, hydrocarbon vapors and hydrogen, and of incombustible gas, as nitrogen and carbonic acid.

"By this method M. Tobiansky obtains from smoke of all sorts the greatest possible profit, utilizing first the heat which is present in the smoke for the purpose of heating the hydrocarbons of the filter, the volatilization of these hydrocarbons being all the more complete and their employment all the easier since the heavy hydrocarbons, such as petroleum, while being cheap, may perfectly answer every requirement of this system. The heat of the smoke warms the water of the refrigerator which surrounds the filter, and this hot water in turn can feed a boiler. Finally the porous matter, the coke of the filter, after having been charged with condensed hydrocarbons and with the carbon in suspension in the smoke, forms an excellent and very rich combustible. In fact, the Tobiansky method makes the combustion of material employed in whatever way is as simple as possible, and this is no small economy when one considers that in a locomotive where all is combined to produce the smallest loss the return is only fifteen per cent."

About the ... House

TO LIGHTEN LAUNDRY WORK.

Washing day is justly dreaded. Anything that lightens the work is therefore especially welcome, but though the tools of to-day are superior to those of our grandmother's modern invention has done comparatively little to lighten the labors of the laundry. In spite of the cost of washing machines and the representations of their agents, a perforated zinc rubbing board is still the most useful tool that a good laundress can command.

One of the most important parts of washing is the assorting of the clothes. There are many stains which, like those of perspiration, disappear magically with a little cold water and soap, and others, like fruit and coffee, which must be treated with boiling water, but are permanently set by lukewarm water. If it is the practice of the family to soak all the clothes in cold water before the washing has begun, a great many stains will be permanently set; but if the various kinds of stains are carefully sorted out and properly treated hours of rubbing will be saved.

A housekeeper whose clothes always look as white as the driven snow says that it is best to soak coarse clothes in cold water, but the table linens and fine clothes need not be so treated. The same housekeeper says, that as soon as she has removed the stains from her clothes she puts them in cold water in a boiler and brings them to the boiling point, and then puts them in the washtub to be rubbed for the first time. The boiling starts the dirt, and the rubbing is much easier than it would otherwise be. After rubbing, the clothes are transferred at once to the first rinsing water, then to the second, and when they are thoroughly rinsed they are put a few at a time into the bluing water, provided they have not been blued for several weeks. If they have, they are wrung out with the wringer and put out to dry. All white clothes should be dried outdoors in the strongest sunlight. Both the freezing cold and the heat of the summer's sun bleach them. Brown soaps usually contain rosin and soda, and are good for washing white clothes, but they should not be used for colored clothes or flannels as soda bleaches the one and the rosin is injurious to the other. Use a good white soap for this purpose. All colored clothes should be dried as quickly as possible in the shade. Starched clothes are dried in the house in laundries, in order to keep them stiff. If they are yellow, they are bleached in the sun, and afterward starched and hung in the house to dry. Colored dresses which are trimmed or combined with white should be rinsed in cold water in which salt has been dissolved in about the proportion of a tablespoonful of water.

DOMESTIC RECIPES.

Cookies.—One cup molasses, one cup brown sugar, one-half cup lard or butter, one teaspoonful ginger, one dessert spoonful soda. Roll thin, bake quickly.

Salad Dressing.—Mix one teaspoonful flour or cornstarch with one of dry mustard; one pinch salt, one dash pepper and one egg. Mix with one-half cup vinegar, then add one-half cup boiling water and set on stove to boil until rather thick. Keep in a cool place.

Fruit Cake.—Three eggs, one cup brown sugar, two-thirds cup butter creamed, one cup of sour milk, one cup molasses, one teaspoonful soda, two teaspoonfuls cinnamon, one teaspoonful cloves, one nutmeg, three cups flour, one pound currants, one pound raisins, one-quarter pound citron. Bake in a pan loaf.

Cucumber Chowchow.—Peel ripe or seed cucumbers and measure three quarts; chop three pints of onion and two green peppers. Add one cup of tender nasturtium seeds, two ounces of white mustard seed, one tablespoon of black pepper and a few bits of horseradish or one round, syrup until it is thick, then pour over the tomatoes, which have been placed in small jars. Seal and set in a dark place, as tomatoes do not keep well in any form if exposed to the light.

Tomato and Onion Pickle.—Peel and slice half a peck of onions and slice a peck of green tomatoes. Pack in layers, sprinkle salt between them, using about a cup in all. Let the mixture stand over night, then drain and put in an agate or porcelain lined kettle with an ounce of whole mustard seed, one ounce each of ground allspice and cloves and four red peppers cut into shreds. Heat some vinegar to the boiling point and pour on enough to cover the pickle. After it comes to the boiling point put into jars with a few pieces of horseradish on top of each. Do not omit the horseradish.

Apple Butter.—Boil fermented apple juice until one-third has evaporated. Pare, core and slice good apples and put as many into the juice as it will cover. Cook slowly and when the apples are so tender as to break take out with a skimmer, draining well. Put in a second sup-

ply of apples or as many as the liquid will cover and cook like the first. Turn all together and let stand over night. Return to the kettle and cook until a smooth mass, stirring often, until the color is brown and there are no lumps. Add spices to the taste and put in small jars.

Stuffed Green Peppers.—Slice large green peppers half way across the stem end and pour boiling hot brine over them and let stand twenty-four hours. Drain and again pour scalding hot brine over, using one-cup of salt to one peck of peppers. At the end of the second twenty-four hours drain, take out the seeds and fill with the following mixture: Chop fine enough red cabbage to make four quarts, stir in three quarters cup of salt and cover with boiling water, let stand over night, drain, add two cups of white sugar, a rounding tablespoon each of whole cloves, allspice and ground cinnamon. Fill the peppers, sew them together, lay in a stone jar and pour cold vinegar over. Keep the pickle under vinegar by a plate laid on and it will be ready to eat in about four weeks. If any stuffing is left put it in a jar, cover with hot vinegar and serve as a chopped pickle.

SHIRT WAIST COMFORTS.

A piece of narrow tape long enough to go around the waist and tie will do much toward keeping the shirt waist in place. The tape should be stitched across the back and sides, and well toward the front. The front of the waist should be left unconfined by gathers, and when the tape strings are tied together, the fronts may be made to blouse neatly and evenly without that baggy look under the arms so annoying to many people, especially if they happen to be stout.

When the belt with the pin attachments, which now-a-days all well groomed shirt waist wearers consider indispensable, is buckled around the waist, the blouse may be adjusted and kept just where it is wanted without any fear that it will gradually widen until it reaches the under-arm seam.

BEFORE STOCKINGS WEAR.

Pasting a bit of velvet or chamois in the heel of the shoe makes it more comfortable for a long tramp and saves the heel of the stocking from wearing out so quickly. One should always darn the heels of a pair of hose before they are ever worn, especially when one wears fine cashmere, lisle thread or silk stockings. Odds and ends of crocheted silk I like best for darning material, both for wear and the appearance of the darned article; the silk finished cottons are my next choice, while darning cotton loses its color and seems unsatisfactory in other ways.

A NOVEL HOUSE PLANT.

Very pretty and decorative plants may be obtained by planting the top from a pineapple in a mixture of loam, leaf mold and cow manure, equal parts. It is equally as pretty a plant when well grown as any pandanus. It requires to be kept constantly moist, same as ferns, but not too wet and never allowed to become dry.

WHALEBONE GATEWAY.

In many parts of the country whalebones are made to serve useful and ornamental purposes. A case in point is at Shaldon, in South Devon, England, where a gateway is composed of this novel material. Presumably the relics came from a carcass which was stranded on the coast. Bones seemed to have had a fascination for the owner of the house, for they form quite a feature of the dwelling, the name—Hunter's Lodge—on the front being made of knucklebones from shoulders of mutton.

"They tell me, professor, you have mastered all the modern tongues." "Well, yes; all but my wife's and her mother's!"



Sunlight Soap will not injure your blankets or harden them. It will make them soft, white and fleecy.

WHEN YOU RIDE IN MEXICO

Don't Take the Cab With the Yellow Flag.

Cabs in Mexico city are only a trifle more expensive than in Paris. The charge for one "course" in Paris is one franc and a half, or 30 cents, and the charge for one "viaje" in Mexico city is three reals, or 37½ cents.

The cabs are drawn by shaggy little ponies which are driven at break-neck speed, and are forever racing to the curbs on the broad "paseo" at the imminent risk of disaster. The one that arrives first gets the passenger.

There are three grades of cabs in Mexico city, which are known as the red, or "colorado;" the blue, or "azul," and the yellow, or "amarillo." The latter must be avoided like the plague, which their color seems to typify. They are used to carry the lowest kind of peons, profligates and criminals, and more often than not are carrying a load of passengers who do not pay any fares, but who transfer their affections to any unfastened neophyte who happens to have the misfortune to enter the cab. The blue cabs are acceptable when a red cab is not to be had, but the red cabs are the best.

These three grades are distinguished by little tin flags of the corresponding color which are in plain view up by the seat of the driver. There is a joint in the stick which supports the flag, and when the cab has a fare the flag is bent down.

The cab fares are regulated by law, and a slip of paper must be pasted inside each cab opposite the seat to inform passengers of the rates, but the cabbies always expects a slight "propina." For a three-real trip he generally secures half a dollar from a foreigner. The climate is so even and so beautiful and invigorating that more than half the vehicles are open victorias, but the rates for them are the same.

There is just one point upon which the uninitiated is likely to trip. There are scores of "fiestas," holidays, on the Mexican calendar, and on a "fiesta" day the usual rate is almost doubled.

The drivers are unexceptionally dense, and if one makes the slightest mistake in pronunciation they throw up their hands in despair, and resort to the universal Mexican fatalistic expression: "Quien sabe?" The only equivalent in English which would indicate the same amount of indifference and despair is "God knows." Of course, the cabbies all try to cheat the "tourista," but an appeal to a gendarme will quickly bring the cabby to his senses. The gendarme in Mexico city is armed with a revolver hanging in a holster on the left side, and he has no composure about bringing a cabby to time with a flourish of that weapon.

At night the gendarmes stand in the middle of the street with a lantern between their feet. They maintain the same position for hours, but even if they go away, the lantern is sacred. Woe to the cabby who runs over it. A convivial Yankee who once facetiously kicked one of the lanterns was stabbed by the policeman. Fortunately the United States was represented in the person of an ambassador Clayton, and he understood the honor in which the police lanterns are held, and managed to smooth over the difficulty.

Jim Dumps a little girl possessed
Whom loss of appetite distressed.
"I des tant eat!" the child would
scream.

Jim fixed a dish of "Force" with
cream;
She tasted it, then, joy for him!
She begged for more from "Sunny
Jim."

Force

The Ready-to-Serve Cereal

a good fairy to
all youngsters.

Perfect Food for Children.
"What is a perfect summer cereal, and
efforts should be made to teach children
to eat it."
LOUISE E. HOGAN,
in "How to Feed Children."