

AGRICULTURAL.

"Cleanliness in Dairying."

Of late this heading is often seen, used alike by its advocates and its satirists. Of all places that cleanliness is necessary it is in the dairy, and of all places where it is urged, it meets the most opposition here. Why is this? Does it not convey the impression that the shoe pinches somewhere? Indeed we have been astonished at the blindness—willful blindness—of some writers, even, who set themselves up as teachers of the people.

But whether men will hear or forbear, the truth remains that milk, milked and cared for in the manner of the average dairyman or farmer, is filthy, and by filthy we mean full of dirt, seen and unseen. Of course that which is seen is most likely to be eliminated, but how about the unseen, the myriads of bacterial germs that have come to it through the air, from contact with the milking vessel, hands of the milk-er and various other sources? Every hair or other bit of "seen" dirt bears with it scores of bacteria. One may strain the former out, but the latter remains to develop in the warm, nutritious fluid.

The milk in the udder, with the exception of the fore milk is clean; now the question that should concern everybody is how to keep it clean. The milk which stands in the teats is found to be full of bacteria, and if there is one dairyman who has not the fixed habit of milking this out into a separate vessel or onto the ground let him turn over a new leaf to-day. Several times we have recommended thoroughly washing the udder, underside of the cow's body and the flanks, only to receive some sarcastic reply from persons either too wise or too lazy to learn.

We know what long and intelligent experiment is proving to be true. Prof. Russell tells us that thus washing the parts indicated reduces the number of bacterial germs "from one-half to two-thirds" at a milking, because bacteria can not be readily dislodged from a wet surface. Of course these germs may seem more real to those of us who have actually seen them as they look when "fattened on gelatine," but after viewing many plates of them, we have formed a decided antipathy and feel "moved" to declare war against them.

We wish we could look into the faces of all milkmen and milkmaids as we ask the question: "Do you always wash your hands before beginning to milk?" On them and on your clothes these infinitesimal germs are gathered, but there they might remain, inert and harmless, but the minute they touch the milk—ah, there's the rub! Growth and activity begin at once.

But—we were going to say above everything else, and will—have clean vessels to receive the milk. Prof. Russell says wooden pails should never be used and advises those of tin or galvanized material. Even scalding vessels does not kill all bacterial germs—we mean just turning water in and at once pouring it out. Nothing short of actually immersing them in boiling water and keeping them there, boiling, for many minutes will suffice.

Testing milk by straining half of the same milking into a sterilized can and half into an unsterilized one shows that in the latter sours from six to twelve hours sooner than that in the former.

Sourness, ripeness, color, or bad odors or tastes in milk are almost universally due to bacteria. Some of these germs give an agreeable flavor to the milk and butter, but the majority neither please the taste nor go toward the betterment of health universal. Heat is necessary to rapid growth of these germs, and as many of them are harmless until warmed up enough to grow, we prefer to keep all milk in a very low temperature.

In reviewing this matter do we see anything unreasonable, anything calculated to call out protest or senseless sarcasm from intelligent readers? No need to bring up the hackneyed expression "but how about our grandfathers?" They lived, of course they did, and up to their light; but why do we take stock in anything that later scientific research or ingenuity has brought to our notice and aid? As well scoff at modern machinery as modern discoveries. All the trouble is, the one makes work, the other saves it.

Saving.

After a crop has matured it seems poor economy to allow any of it to be wasted. This holds good with grass in the pastures, grain in the fields, vegetables in the garden or fruit in the orchard or small fruit plot. Every part of the crop should be utilized so far as possible, to the best advantage, and it is the avoidance of waste that helps materially to increase the profits.

When fruit is scarce all the surplus can be readily marketed at a price that will pay well for the trouble of picking and getting ready to sell. But when there is anything like a fair crop it is not always possible to sell it all at even a low price and it must be used or cared for in some way so that it can be marketed later.

There are a number of ways that the surplus fruit can be used at least in a way that will avoid waste. In the orchard one of the easiest ways of converting the surplus food into a marketable product is by turning in the hogs, and if they cannot eat all the fallen fruit the sheep can readily be turned in to help. One advantage of this is the saving of all labor, while at the same time more or less insect pests will be destroyed, especially those in the fruit. One good reason for not allowing the fallen fruit to remain on the ground and rot is that a good portion of it is infested with either worms or insect pests that if not destroyed will injure the fruit and trees next year. It is even better, if the orchard is not arranged so that the sheep can be turned in, to gather up the fallen fruit and feed to the hogs rather than to allow it to rot on the ground under the trees. More or less of the fruit can be dried or evaporated. The advantage with the evaporated is the lessened risk of loss, the cleaner and better quality of the product, the saving of the time and the better price it is possible to realize.

THE HOME.

Jack's Wife.

O, sing, blithely sing, o'er the sparkling foam
On dishes glistening in the pan;
Swash and rub 'em immaculately clean,
And polish them bright as you can.

The prosy task so constant must be done
By sisters, or housewives o'er the land;
Ah, little things 'tis that make or mar
Our houses, be they humble or grand.

A Shoe Button Bag.

Cover a piece of cardboard, four by eight, with any pretty-figured silk or satin—a white ground strewn with scarlet flowers is bright and clean looking. Gather two pockets of the same material, and attach one above the other to the covered board, beginning at the bottom. Draw a narrow ribbon through a spool of very strong black thread, and hang the spool at the top of the card by tacking one end of the ribbon to the left corner, of the other to the right. It must be loose enough for the thread to easily draw off. Cut a few pieces of white flannel and sew into the upper pocket for needles, and hang it up by a ribbon. When you have added the large needle, a thimble and shoe buttons to the pockets you will have all the things needed.

The old-fashioned square lightstand is retained or varnished, and a new knob fitted to the drawer which is to hold threads, etc., while a dainty spread is made from some old linen lawn. This is cut four inches larger all around than the stand top, and its whiteness set off by a delicate tracery of outline embroidery in each corner. The design, a figure or flower, is in yellow wash sewing silk. The whole is edged with a two-inch double ruffle.

A pretty receptacle for crochet to set on this table is made from a strawberry basket; paint white, make a bag twelve inches square of figured silkolene in yellow, gather the lower edge and girth to the bottom of the basket; shir the upper edge on a draw string of yellow baby ribbon, leaving a double ruffle an inch wide. It droops gracefully in the basket when the ribbon is drawn.

Care of the Oven.

There are some women who, careful even to fastidiousness in other household details, frequently neglect one important thing in the kitchen. The oven, in which sweets and savories are in turn cooked, is allowed to go, week in and week out, without any attention except an occasional brush out—and that only when pastry has been burnt and allowed to crumble. In houses where the oven is frequently used it should be well washed out once a week with hot water, to which a little soda or ammonia has been added. It may even require scrubbing; and where syrup from a fruit or gravy from a meat pie has boiled over, the hard substance must be scraped off with a knife. It is a good plan to get into the habit of wiping out the oven with a wet cloth after it is used; then when next it is required there will be no delay and consequent vexation of spirit before the day's cooking is commenced.

A Starch Gloss.

I have had so many letters on this important subject—that is, important to amateur laundresses—that I have kept my eyes open, and have at last discovered a simple, yet reliable preparation, and here it is:—Mix together five ounces of glycerine, two ounces of gum arabic—or gum senegal, as the cheapest kind is called—two ounces of spermaceti, and the same of borax. Boil all these gently in forty-nine ounces of tain water, and bottle for use. When needed, add two tablespoonfuls to a quarter of a pound of boiled starch, stirring well for a minute or so, and you will find that your iron will pass smoothly and easily over your linen, which will take as brilliant a gloss as you can wish.

Useful Recipes.

Caramel Filling.—Put one teaspoonful of sugar in a saucepan on the fire, stir until it melts, then let it cook until it begins to smoke and brown; add $\frac{1}{2}$ cupful of hot water and let it boil, without stirring, until it spins a thread. Beat the white of one egg to a dry froth, pour the boiling caramel on the egg in a thin stream, beating all the while. Beat until cold, then spread between the cakes.

Maple Sugar Caramel.—Cook $\frac{1}{2}$ pound of maple sugar in a saucepan until it begins to smoke. Add four tablespoonfuls of milk and boil until it forms a thick syrup. Remove from the fire, add a piece of butter as large as a walnut and beat until cool and smooth.

Chocolate Filling.—Dissolve one cup of sugar with three tablespoonfuls of water, then boil until it will "hair" from a spoon. Add $\frac{1}{4}$ tablespoonful of grated chocolate; beat the white of one egg to a stiff, dry froth; pour the chocolate syrup in a thin stream upon it, beating all the time. Beat until it is cold, add one teaspoonful of vanilla and spread on the cake.

Lemon Filling.—Bring one teaspoonful of milk to the boiling point; moisten one tablespoonful of cornstarch with a little cold milk, and stir it into the boiling milk until it thickens. Beat the yolks of two eggs and half a teaspoonful of sugar together; stir it into the custard and remove from the fire. Add the grated rind of one lemon, and when cold, as much of the juice of one lemon as you prefer. Orange filling may be made in the same way.

Coffee Filling.—Bring one cup of strong coffee and two tablespoonfuls of cream to the boiling point, and thicken with one tablespoonful of moistened cornstarch. Beat the yolks of two eggs and two tablespoonfuls of sugar together, stir them thoroughly into the custard, remove from the fire, and when cold spread between the cake.

Apple Filling.—Grate two large, fine flavored, tart apples into a saucepan, add the juice and grated rind of one lemon and a cupful of sugar, and cook for five minutes, stirring constantly. Add a piece of butter as large as a walnut, stir well and remove from the fire. When cold spread upon cake.

Boiled icing is a delicious foundation for any number of cake fillings, and is made as follows: Boil one cupful of sugar moistened with four tablespoonfuls of water until it spins a thread. Beat the white of one egg to a stiff froth, add $\frac{1}{2}$ teaspoonful of cream

tartar, pour the boiling syrup in a thin stream over the egg, beating all the time, and beat until cold. Chopped raisins or walnuts stirred into the cold icing and flavored make a delicious filling, and so does almonds or grated cocoanut. If shredded cocoanut is used soak it for fifteen minutes in boiling hot milk, then stir into the icing.

Figs, dates or raisins added to boiled icing make a delicious, rich filling. Figs should be chopped, also dates, after removing the stones and as much of the white lining as possible; seed raisins and cut them up with a knife. Add a little boiling water, just enough to make the mass pliable, and steam it on the back of the stove while the syrup is boiling. As soon as the latter has been added to the beaten white, put in the fruit paste and beat until cold. Cocoanut, or chopped nuts, are finely flavored by mixing them in caramel filling. Soak shredded or desiccated cocoanut, and chop walnuts.

SERPENTS ARE NOT NERVOUS.

Strange Muscular Power that Assists Them in Fascinating Their Victims.

The power of continuing motionless, with the lifted head projecting forward for an indefinite time, is one of the most wonderful of the serpent's muscular feats, and is one of the highest importance to the animal, both when fascinating its victim and when mimicking some inanimate object, as for instance, the stem and bud of an aquatic plant; here it is only referred to on account of the effect it produces on the human mind, as enhancing the serpent's strangeness. In this attitude, with the round, unwinking eyes fixed on the beholder's face, the effect may be very curious and uncanny.

Ernest Glanville, a South African writer, thus describes his own experience. When a boy he frequently went out into the bush in quest of game, and on one of these solitary excursions he sat down to rest in the shade of a willow on the banks of a shallow stream; sitting there with cheek resting on his hand he fell into a boyish reverie. After some time he became aware in a vague way that on the white, sandy bottom of the stream there was stretched a long, black line, which had not been there at first. He continued for some time regarding it without recognizing what it was, but all at once, with an inward snock, became fully conscious that he was looking at a large snake.

"Presently, without apparent motion, so softly and silently as it is done, the snake reared its head above the surface and held it there, erect and still with gleaming eyes fixed on me in question of what I was. It flashed upon me then that it would be a good opportunity to test the power of the human eye on a snake, and I set myself the task of looking it down. It was a foolish effort. The bronze head and sinewy neck, about which the water flowed without a ripple, were as if carved in stone, and the cruel unwinking eyes, with the light coming and going in them appeared to grow the brighter the longer I looked. Gradually there came over me a sensation of sickening fear, which, if I had yielded to it, would have left me powerless to move, but with a cry I leaped up, and seizing a fallen willow branch, attacked the reptile with a species of fury. Probably the idea of the Icarus, originated in a similar experience of some native."

The Icarus, it must be explained, is a powerful and malignant being that takes the form of a great serpent and lies at night in some deep, dark pool, and should a man incautiously approach and look down into the water he would be held here by the power of the great gleaming eyes, and finally drawn down against his will powerless and speechless, to disappear forever in the black depths.

A FIERCE BATTLE.

Italian Troops Capture Kassala After a Desperate Conflict.

A despatch from Massowah, Egypt, says:—A fierce battle has taken place between a force of native and Italian soldiers, commanded by the Governor-General and a large force of dervishes which had sought refuge at Kassala. The Italian troops were victorious and Kassala was captured. The following particulars of the engagement have reached here. A large body of dervishes recently raided Carabat, an Italian village. The dervishes killed many of the inhabitants and captured and sent into the interior as slaves all those who were not massacred. After leaving Carabat, the dervishes marched towards Agordat, with the intention of capturing that place. News of the raid reached the Governor-General, who was at Keren, on the Barca river, an Italian post situated somewhat less than half-way between this place and Kassala.

The Governor-General had at his disposal a force of 2,400 troops, natives and Italians, commanded by 54 officers. With this force the Governor-General started in pursuit of the dervishes, and after three days' toilsome marching, during which the troops suffered considerably, he arrived in the vicinity of Kassala. He was there informed by some natives that the dervishes had been notified of the pursuits of the Italian column, and that they had sought refuge in Kassala. The dervishes had strengthened the fortifications and prepared to make a desperate resistance. The Governor-General encamped for a while on the Mareb river, and made preparations to carry Kassala by assault. On the morning of Tuesday last, July 17, the Italian troops being thoroughly rested, an advance was made. The dervishes defended themselves with desperate bravery, but the town was finally carried by assault after a fierce battle. The loss of the dervishes was very heavy, and the Italians captured many flags and a large number of cannon.

Crawling Out.

Teacher—"What did you mean, sir, by speaking of me as 'an old cow?'"
Bad Boy—"Please, I only meant that you is the 'boss.'"

True Philosophy.

Neighbor—"Han't you goin' to hunt up that feller that eloped with your wife?"
Smartweed—"N-o. Let the crime bring its own punishment."

THE LOST ROCKER MINE.

A Bonanza Gold Story from the Wilds of the Far North.

In the spring of 1876 two miners left Sitka on a prospecting expedition, taking a course to the southeast, with the intention of exploring the islands along their route, but more especially to reach the mainland and make extensive search for placer diggings. Finding the islands barren of good results, they crossed Chatham Strait to the mainland, and pitched camp at the mouth of a large creek. To their experienced eyes the creek bed gave evidence of what they were in search of. It was strewn with quartz, and in "panning" the gravel "color" was found. They ascended the stream, and after two days travelling over boulders and winding through underbrush they reached the head waters of the creek on the divide. Beyond and below a short distance in the basin lay a beautiful little lake, with a small stream emptying into it from the west and another flowing out to the north. They descended and encamped on the margin of the lake. In the little stream putting into the lake they again found gold. After prospecting and panning the gravel, joy filled their breasts, for they had found a bonanza! The gravel yielded coarse gold the size of beans and a dollar or more to the pan. The lucky gold hunters lost no time in setting to work. One returned to the beach after the cached supplies, while the other partner set to work building a rocker. For a matter of two weeks they washed the golden sands and made occasional trips to their cache on the beach, with no thought whatever of approaching danger, and no intimation of the horrible tragedy that was about to occur.

On the eventful day, at about noon, as they were leaving work to prepare dinner, ambushed savages, who had tracked the two lone miners from the beach into the mountains to murder and to plunder, poured their fire from behind trees upon them. One was killed outright, but miraculously the other was untouched. Seeing his companion fall, and taking in the situation at a glance, he bounded into the timber. Fear lent wings to the pursued, and he soon outdistanced his pursuers, who were unable to get in an effective shot while both were dodging through the timber and underbrush. The pursued made direct for the cache and boat on the beach, and hastily loading up with the remainder of the provisions and effects he pulled out into the channel. He saw the Indians no more, and shaped his course, as he supposed, for Sitka, but not being acquainted with the channels their intricate windings and ever-changing courses led him astray. He was picked up by a gunn at on her way to the sound and landed in Fort Townsend. In a belt which he wore around his waist he had about \$1,500 in coarse gold, his share of the work by the lake.

The miner returned to Sitka, and told the tale of his murdered partner and the finding of the bonanza, and induced a party to go with him in search of it again. The party, several in number, set forth in a small schooner, with the miner for their guide. But through the many changes made in the course in tacking against head winds, and the winding course that necessarily had to be taken with a schooner, the guide, as before, became lost. The crew began to doubt his story, and giving up all hope of finding the mouth of the creek that led to the goal, insisted upon a return. The guide persisted that he would surely find the place and insisted also that the search be continued, when the party became angry and threatened to hang him to the mast. The search was then abandoned.

A short time after their return to Sitka the miner, or hero of the "lost rocker," as it was now termed, was taken sick and died, but to his attendant during his illness, Mike Powers, one of the pioneers of this camp, he confided the secret of how to find the rocker by the lake. The rich find in Silver Bow basin back of Juneau occurred soon after his death, and Powers was one who joined in the stampede. Being a good prospector, and lucky, he secured valuable claims which demanded his attention, and delayed his search in the direction of the "lost rocker," and after a time he was about to undertake the trip when he was killed by a land slide in the basin; and thus died the only living white person who, unless by accident, could find the lost lake, the rocker, and the bleached bones of the unfortunate miner who fell beside it.

To this day prospecting parties every spring go in search of it, and this spring a number are fitting out for the expedition. Big rewards have been offered to Indians to reveal the locality, but, through fear of being implicated in the murder or otherwise, they remain silent.

Lighting Locomotive Fires.

A quarter of a cent is a very small sum in itself, but when multiplied enough times the product is considerable, a fact which railway managers thoroughly understand. A saving of only 1 mill a day in the running of a locomotive amounts to \$360 in a year, and with several thousand locomotives the saving is considerable. The good superintendent to-day is the man who makes these little savings and the number of ways in which they are done is astonishing. Take the matter of starting a fire for example. Most locomotives are fired up with wood, and about an eighth of a cord is necessary to start a good blaze. Wood is pretty expensive fuel to use for such purposes and several railways have begun to substitute oil for this. This oil is stored in a reservoir outside the round house and is forced by compressed air through a series of fixed pipes to flexible pipes near each locomotive stall. When it is necessary to start a fire a bed of coal is spread over the grate, some old waste thrown on top of it and lighted, and then the oil is sprayed into the firebox through the flexible pipes by the compressed air. It takes just about as long to start a fire with this apparatus as with wood, but with the former the cost is only about 25c while with wood it ranges from 11 to 35c, according to the price of wood.



A HOUSE IN CASTLE STREET, NORTHWICH.

that salt is the specific for all ills to which flesh is heir. Science tells us that the body of every human being weighing one hundred and fifty pounds contains one pound of salt; and that every one of us needs in a year about fifteen pounds of salt.

The salt industry in England is mainly



DUNKIRK ROAD, NEAR NORTHWICH.

confined in two districts, Cheshire and Worcestershire. In these districts, at an early period, salt was produced from brine springs; and it seems that all the localities where such springs or brine-pits existed were called Wich, a termination that still distinguishes most of the small towns. The most interesting fact relating to the brine-districts is the action of the salt upon the lower strata, causing "cave-ins." It is supposed that the salt dries up the underground water-currents, and thus takes from the ground the power to sustain great surface-weight. Our illustrations are characteristic of the districts. Great fissures are seen everywhere; houses almost tumbling down, and other effects of what one would be led to believe was an earthquake.

Destructive Apple Tree Blight.

A Mount Morris, N. Y., despatch says:—A new and as yet unexplainable blight has struck the apple orchards of Wyoming and adjacent counties, which threatens the total destruction of the crop. The apple crop is worth a million dollars a year to the farmers of this part of the State. At the opening of the season its prospects were never brighter. Within two weeks a blight has spread over the orchards, causing the leaves to shrivel and turn yellow, and the young apples to fall to the ground. One farmer alone in this vicinity says his annual crop, in average seasons, of 1,000 barrels of apples is lying on the ground, the fruit having grown to about the size of cherries. Similar reports come from all parts of the apple district. This blight never appeared in western New York before. It is not the result of any worm or insect pest.

No Room for Another.

"Is Taddles going to marry the young lady he is with to-night?"
She—"No. He's still devoted to his first love."
"Who's that?"
She—"Himself."