AGRICULTURAL.

"Cleanliness in Dairying." Of lar, his heading is often seen, used alike by i 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 someat the blindness-willful blindness-of

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 be eliminated, but how about the unseen, come to it through the air, from contact with the milking vessel, hands of the milkor 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 He is liberal in his expenditures, athow to keep it clean. The milk which tends entertainments of all kinds at the stands in the teats is found to be full of bacteria, and if there is one dairyman who his children well; provided his daughters has not the fixed habit of milking this out with a good organ; has a place worth \$5,into a separate vessel or onto the ground | 300, and in the judgment of a man who let him turn over a new leaf to-day. Sev- ought to know, lives as well as a man poseral times we have recommended thorough. sibly could in Moline on a salary of \$1,500 ly washing the udder, underside of the a year. It may be added that he is not cow's body and the flanks, only to receive anxious to know what the government some sarcastic reply from persons either | can do for him-he does things for himself 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 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 show that salt was the "forbidden fruit," formed a decided antipathy and feel "mov- and that since our first parents ate it, it has ed" 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 that in the flesh is heir. Science tells us that the latter sours from six to twelve hours sooner | body of every human being weighing one

than that in the former.

tastes in milk are almost universally due to needs in a year about fifteen pounds of salt. 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 tempera-

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. | carly period, salt was produced from brine-All the trouble is, the one makes work, the springs; and it seems that all the localities other saves it.

Saving.

After a crop has matured it seems poor economy to allow any of it to be wasted. lower strata, causing "cave-ins." It is This holds good with grass in the pastures, supposed that the salt dries up the undergrain in the fields, vegetables in the garden or fruit in the orchard or small fruit plot. surface-weight. Our illustrations are char-Every part of the crop should be utilized acteristic of the districts. Great fissures so far as possible, to the best advantage, and it is the avoidance of waste that helps ling down, and other effects of what one 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 A new and as yet unexplainable blight has 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.

surplus fruit can be used at least in a way | crop is worth a million dollars a year to that will avoid waste. In the orchard one of the easiest ways of converting the surplus food into a marketable product is by all the fallen fruit the sheep can readily has spread over the orchards, causing the this is the saving of all labor, while at the | young apples to fall to the ground. One same time more or less insect pests will farmer alone in this vicinity says his anbe destroyed, especially those in the fruit. | nual crop, in average seasons, of 1,000 barfruit to remain on the ground and rot is fruit having grown to about the size of cher- cake. that a good portion of it is infested with ries. Similar reports come from all parts either worms or insect pests that if not of the apple district. This blight never apdestroyed will injure the fruit and trees peared in western New York before. It the juice and grated rind of one lemon and next year. It is even better, if the orchard is not the result of any worm or insect a cupful of sugar, and cook for five minutes, is not arranged so that the sheep can be pest. 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 | lady he is with to-night?" is the lessened risk of loss, the cleaner and better quality of the product, the saving love." of the time and the better price it is possible to realize.

More or less of the waste fruit may be converted into cider and can be marketed later on as vinegar at a price that will pay well for the work. With a good kettle or evaporating pan more or less may be made into jelly. Any of these plans admit of storing away and selling during the winter and early spring, and even though a low price be realized, in nearly all cases it will prove better than allowing it to go waste.

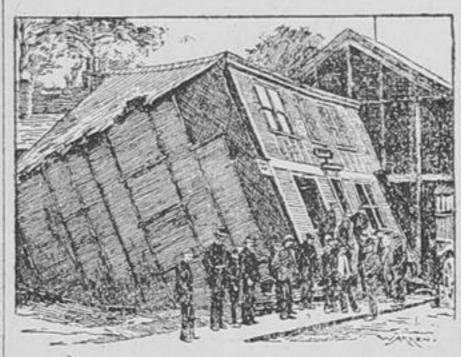
A Model Small Farm.

Some of the farmers who cannot, or who where? Indeed we have been astonished say they cannot, make a living on 160 acres of land, might get some pointers of some writers, even, who set themselves up B. F. Stevens, of Orion, Ohio, who has a 53acre farm. He bought it in 1871, going in debt for what every one thought was a very poor piece of land. He built hin a good house, good barn, etc., and is as independent as though he had a section of land. Last year he raised thirty-one acres of corn course that which is seen is most likely to the remainder of his farm being garden, house lawn, pasture and meadow. He ha the myriads of bacterial germs that have forty-three hogs ready for market that are estimated to be worth \$560, besides having eighteen stock hogson handall thoroughbred Poland-China. He has six horses, some of er and various other sources? Every hair | which are for sale. He sold four fat cattle and one calf last year. He has 400 bushels of corn on hand. He has 100 fine Plymouth Rock chickens. He sold 100 to butchers last year, besides fifty roosters to farmers for breeding purposes. He sold some turkeys and some fruit, vegetables, and a good amount of butter and eggs. He did not pay out a dollar for help or for teed. village which is a mile and a half away has a well-furnished house; has educated and makes money.

SALT PITS OF ENGLAND.

milking, because bacteria can not be readily | The Action of the Salt Upon the Lower Strata Causes "Cave-Ins."

Some twenty-five years ago, a physician of some reputation published a treatise to been the cause of all our diseases. On the other hand there are those who maintain



A HOUSE IN CASTLE STREET, NORTHWICH. that salt is the specific for all ills to which hundred and fifty pounds contains one Sourness, ripeness, color, or bad odors or pound of salt; and that every one of us The salt-industry in England is mainly



DUNKIRK ROAD, NEAR NORTHWICH.

confined in two districts, Cheshire and Worcestershire. In these districts, at an 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 brinedistricts is the action of the salt upon the ground water-currents, and thus takes from the ground the power to sustain great are seen everywhere : houses almost tumbwould be led to believe was an earthquake.

Destructive Apple Tree Blight.

A Mount Morris, N. Y., despatch says :struck the apple orchards of Wyoming and adjacent counties, which threatens the There are a number of ways that the total destruction of the crop. The apple the fire. Add the grated rind of one lemon, the farmers of this part of the State. At the opening of the season its prospects were turning in the hogs, and if they cannot eat | never brighter. Within two weeks a blight be turned in to help. One advantage of leaves to shrivel and turn yellow, and the

No Room for Another.

"Is Taddles going to marry the young

"Who's that ?" She-" Himself."

THE HOME.

Jack's Wife.

O, sing, blithely sing, o'er the sparkling foam On dishes glistening in the pan; Swash and rub 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 homes, be they humble or grand.

A Shoe Button Bag.

Cover a piece of cardboard, four by eight, 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 speol 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 flaunel and sew inside the upper pocket for needles, and hang it up by a ribbon. When you have added the large needle, a thimble have all the things needed.

The old-fashioned square lightstand is restained or varnished, and a new knob fitted and is one of the highest importance to the to the drawer which is to hold threads, etc., animal, both when fascinating its victim 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 aquatic plant; here it is only referred to outline embroidery in each corner. The design, a figure or flower, is in yellow wash sewing silk. The whole is edged with a

this table is made from a strawberry basket; paint white, make a bag twelve inches and uncanny. square of figured silkolene in yellow, of the basket; shirr the upper edge on a a boy he frequently went out into the bush draw string of yellow baby ribbon, leaving in quest of game, and on one of these solia double ruffle an inch wide. It droops tary excursions he sat down to rest in the cur. gracefully in the basket when the ribbon is shade of a willow on the banks of a shallow

two-inch double ruffle.

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 outand 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 kniffe. 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'sc ooking is commenced.

A Starch Gloss.

I have had so many letters on this importlaundresses-that I have kept my eyes open, and have at last discovered a simple, yet pound of boiled starch, stirring well for a depths. minute orso, 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 teacupful of sugar in a saucepan on the fire, stir until it melts, then let it cook until it begins to 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 & 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

Chocolate Filling .- Dissolve one cup of sugar with three tablespoonfuls of water, then boil until it will "hair" from a spoon. Add 14 tablespoonfuls 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 teacupful 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 teacupful of sugar together; stir it into the custard and remove from 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 One good reason for not allowing the fallen rels of apples is lying on the ground, the the fire, and when cold spread between the

Apple Filling. - Grate two large, fine flavored, tart apples into a saucepan, add 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 She-"No. He's still devoted to his first | tollows : Boil one cupful of sugar moistened with four tablespoonfuls of water until it that feller that eloped with your wife?" spins a thread. Beat the white of one egg to a stiff froth, add 1 teaspoonful of cream its own punishment."

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 shreded cocoanut is used soak it for fifteen minutes in boiling hot milk, then stir it 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 it on the back of the stove while the syrpd with any pretty-figured silk or satin-a 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 o dessicated 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 and shoe buttons to the pockets you will indefinite time, is one of themost wondertul of the serpent's muscular feats, and when mimicking some inanimate object, as for instance, the stem and bud of an on account of the effect it produces on the human mind, as enhancing the serpent's strangeness. In this attitude, with the A pretty receptacle for crochet to set on | round, unwinking eyes fixed on the beholder's face, the effect may be very curious

> Ernest Glanville, a South African writer. on his hand he fell into a boyish reverie. After some time he became aware in 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, be-

a large snake. have left me powerless to move, but with a | the lake.

native."

A FIERCE BATTLE.

Italian Troops Capture Kassala After a Desperate Conflict.

A despatch from Massowah, Egypt, says :- A fierce battle has taken place had sought refuge at Kassala. The Italian taptured. The following particulars of the engagement have reached here. A large body of dervishes recently raided Carcabat, 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 Carcabat, the dervishes marched towards that place. News of the raid reached the beside it. 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 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 awhile 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 assaul after a fierce battle. The loss of the dervish es was very heavy, and the Italians capture 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

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 mainenough to make the mass phable, and stanu land, 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 gather the lower edge and glue to the bottom | thus describes his own experience. When approaching danger, and no intimation of the horrible tragedy that was about to ac-

> On the eventful day, at about noon, as stream; sitting there with cheek resting they were leaving work to prepare dinner, ambushed savages, who had tracked the vague way that on the white, sandy two lone miners from the beach into the bottom of the stream there was stretched a | 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 comcame fully conscious that he was looking at | panion fall, and taking in the situation at a glance, he bounded into the timber. Fear "Presently, without apparent motion, so lent wings to the pursued, and he soon outsoftly and silently was it done, the snake distanced his pursuers, who were unable to reared its head above the surface and held get in an effective shot while both were it there, erect and still with gleaming eyes | dodging through the timber and underfixed on me in question of what I was. It brush. The pursued made direct for the flashed upon me then that it would be a cache and boat on the beach, and hastily good opportunity to test the power of the loading up with the remainder of the prohuman eye on a snake, and I set myself the visions and effects he pulled out into the task of looking it down. It was a foolish channel. He saw the Indians no more, and effort. The bronze head and sinewy neck, shaped his course, as he supposed, for Sitka, about which the water flowed without a but not being acquainted with the channels ripple, were as if carved in stone, and the their intricate windings and ever-changing cruel unwinking eyes, with the light com- courses led him astray. He was picked up ing and going in them appeared to grow by a gunbrat on her way to the sound and the brighter the longer I looked. Gradually landed in Fort Townsend. In a belt which there came over me a sensation of sickening he wore around his waist he had about \$1, fear, which, if I had yielded to it, would 500 in coarse gold, his share of the work by

cry I leaped up, and seizing a fallen willow | The miner returned to Sitka, and told branch, attacked the reptile with a species | the tale of his murdered partner and the of fury. Probably the idea of the Icanti, finding of the bonanza, and induced a party ant subject—that is, important to amateur originated in a similar experience of some to go with him in search of it again. The party, several in number, set forth in a The Icarti, it must be explained, is a small schooner, with the miner for their reliable preparation, and here it is: - Mix powerful and malignant being that takes guide. Butthrough the many changes made together five ounces of glycerine, two ounces | the form of a great serpent and lies at night | in the course in tacking against head winds, of gum arabic-or gum senegal, as the in some deep, dark pool, and should a man and the winding course that necessarily had cheapest kind is called-two ounces of incautiously approach and lotok down into | to be taken with a schooner, the guide, as spermaceti, and the same of borax. Boil the water he would be held nere by the before, became lost. The crew began to all these gently in forty-nine ounces of rain power of the great gleaming eyes, and finally doubt his story, and giving up all hope of water, and bottle for use. When needed, drawn down against his will powerless an 1 finding the mouth of the creek that led to add two tablespoonfuls to a quarter of a speechless, to disappear forever in the black | 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 between a force of native and Italian this camp, he confided the secret of how to smoke and brown; add a cupful of hot soldiers, commanded by the Governor, find the rocker by the lake. The rich find General and a large force of dervishes which in Silver Bow basin back of Juneau occurred soon after his death, and Powers was one who joined in the stampede, croops were victorious and Kassala was 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 Agordat, with the intention of capturing bones of the unfortunate miner who fell

> To this day prospecting parties every spring go in search of it, an I 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 of the pursuits of the Italian column, and 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 361c 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 it. 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 21c Smartweed-" N-o. Let the crime bring while with wood it ranges from 11 to 35c, according to the price of wood.