



THE MELTING TEST FOR BUTTER.
This test, says E. Reich, is only preliminary, and no claim is made that it is invariably conclusive. Pure, fresh butter when melted is perfectly clear or only slightly cloudy, usually dark yellow, and has the familiar odor of pure butter-fat. Pure stale butter may be very cloudy and even opaque when melted, is usually of a dark yellow color, and has the odor of rancid butter. Melted margarine, on the other hand, is very opaque, of a light yellow color, and has a characteristic indescribable odor.—Literary Digest.

"DOUGLAS'S MIXTURE."
The solution known as "Douglas's Mixture," and so much in favor among English poultrymen as a tonic, is made by putting eight ounces of sulphate of iron (also known as green vitriol and coppers) into a jug with two gallons of water and adding one ounce of sulphuric acid. This is to be put into the drinking water of the fowls in the proportion of a teaspoonful to each pint. This mixture should be made and kept in a stone jug or glass bottle, and never in a metal vessel. So soon as any disease breaks out among poultry this should be given to the healthy, to enable them to resist it, together with more nutritious and easily digestible food.—New York Sun.

TO PREVENT TREES LEANING.
Those who have trees which have been set one or two seasons will do well to bear in mind the importance of staking them so that they will resist the influence of the most frequently prevailing or heaviest winds. Those which have been set two years need it as much as those which were put out last spring, as they are likely to present as much surface to the wind as they have roots in the earth. Put down a stout stake a few feet from the trunk, and then put on a withe or a strip of cloth, binding the tree to the stake in the form of a figure 8, so that the crossing of the band will prevent any chafing of the tree-trunk against the stake. In this way can be prevented the spectacle so often seen of whole orchards leaning over, showing definitely the direction of the prevailing winds. If you want to have your orchard permanent keep your trees up straight from the start.—Rural Life.

HINTS FOR YOUR GARDEN.
White clover and bluegrass make the best mixture for a lawn.
Buy plants of hardy perennials. Most of them are difficult to grow from seed.
Prune your trees now and the wound will be quickly healed by the running sap.
Make a definite plan for your garden. Don't put in everything helterskelter.
Get a practical florist's advice if you try roses; this is a hard climate to grow them in.
Hollyhocks do best when treated as biennials. They are less able to stand our severe climate after flowering.
The bridal wreath is a pretty shrub, whether in flower or leaf. Don't prune it and the slender branches will droop gracefully with the weight of their white foliage.
Double petunias are beautiful flowers and delightfully fragrant. Buy a few plants, as the seed is expensive and uncertain about growing. Single petunias, which are also very pretty, grow from seed like a weed.—New York Advertiser.

CLUB ROOT OF CABBAGE.
The club root of cabbage and the several plants of the cabbage family is a well known and dreaded disease among Eastern farmers and gardeners. But, while more prevalent in the Eastern portion of the country, it is also known in the West and South, causing often heavy losses.
A bulletin issued from the New Jersey Agricultural Experiment Station gives in detail the results of experiments and investigations made on the station grounds and elsewhere, with a view to assisting farmers in fighting the club root. Many of the facts contained in this bulletin are of general interest to the cultivators of cabbage, turnips, kale, etc.
Briefly stated, the malady is due to a microscopic parasite which infests the cells of the roots, causing them to become swollen and distorted. The spores of the fungus, upon the decay of the part affected, become scattered through the soil, and from thence the enemy enters the host plant. The club root infests several plants of the cabbage family, including turnip, kale, radish, stock and candytuft. Two common weeds—namely, shepherd's purse and hedge mustard—are now to be added to the list of plants infested with club root.
Preventive measures must be relied upon for the affected parts of a plant are below ground and not readily reached by any fungicide. If the crop is diseased all refuse at harvest time of roots, stems and leaves should be burned. All seedlings from hotbeds with signs of club root should be destroyed, and, if possible, use only plants from beds in which there is no disease. Cabbage, kale, Brussels sprouts, kohlrabi, turnips or radishes should not follow each other on the same land if club root is prevalent. Lime added to the land, several-five bushels per acre, has proved effective. It is

possible that some commercial fertilizers may be found to check the trouble. Keep the land free from shepherd's purse and hedge mustard and other weeds of the same family, as their roots become "clubbed" and thereby propagate the enemy.—New England Farmer.

HOG FEEDING.
No one knows all there is to know in pig feeding. Professor Roberts says he used to feed 600 head per year, and got to be a close observer. He says that pure food and cleanliness are essential to the best success, and that in feeding hogs the man who feeds them will succeed with them.

In spite of the general opinion to the contrary, some maintain that the hog has a preference for being clean, and cite many instances of his keeping one side of his pen clean if at all encouraged or started with it clean, etc. Here is one man's idea in regard to a clean pen and pure food: Every farmer with 100 acres ought to feed from twenty to 100 hogs. The common way of constructing the floors of the pens is unsuitable. If they slope backward from the trough they will be kept wet. That means sickly hogs that do not thrive well. I prefer to make the floors slant toward the trough. Twice the profit can be made when the animals lie dry all the while, and besides that their health is much better. Then the feeding trough should have its holding capacity in length and not in depth. It pays to have them fed with good, clean feed, which means the difference between profit and loss. They will take the waste from the table. It does not do, as is usually the case, to have it put into a tub or barrel which is never cleaned. That becomes poison. It ferments and sours and makes bad blood. With the sow and young pigs taking it, the consequence is they die before ten days old, and even little pigs have the right to be well born. Hogs fed on clean food should gain at least one pound for every four and a half pounds of grain used; a man can tell whether it is paying to keep them or put his labor to other sources of profit. If any man feeds his hogs too long it costs more than he can make out of them.—Western Agriculturist.

FARM AND GARDEN NOTES.
Be kind to the colts and you will have gentle horses.
There is no fruit that can be grown as readily as the grape.

Big horns and a fleshy udder are regarded as bad points in a milk cow.
A sick cow should be put by herself at once and covered with a warm blanket.

Standard-bred trotters that can't trot are poor property for any breeder to stock up with.
Care and feed are just as important factors as pedigree in raising trotting stock at a profit.

It is a pretty well established fact that a profitable butter cow is a profitable cheese cow.
The poultry keeper who does not furnish a dust bath deprives his chickens of a necessity.

The financial success of breeding the trotter depends upon the financial prosperity of trotting sport.
Much of the failure of seeds to germinate in the spring is due to the fact that they are planted too deep.

When hens or hogs get weak in the legs it is often a sign that they have been fed too much corn and cornmeal.
A farmer wants to know how much alike to sow to the acre. Ten pounds of seed would be a great sufficiency on good land.

If the hen house is overcrowded there will be trouble. Disease will almost surely appear and the hens will not lay.
Tie up the horses' tails whenever it is muddy, but don't leave them tied up over night. It injures their appearance to say the least.

There is not very much difference in the cost of feeding a cow that makes 150 pounds of butter in one year and one making double as much.
Study the horse's foot and the proper methods of shoeing. It will then be possible for you to know if your blacksmith knows his business.

Currants should have a space of four feet, and gooseberries the same, and be kept trimmed and cultivated. Cut out old wood when it becomes unthrifty.
The sugar beet is valuable as a food for fowls. Served raw through the summer it answers to the purpose of green food when other vegetables are scarce.

Crude petroleum is better than kerosene, comes cheaper, and if often applied to your hen roosts and hen houses will soon destroy all rats, mites, etc.
Turkeys will come home to roost if fed regularly in the evening. Grain may be fed entirely, but if mixed with bread crumbs and scraps from the table the birds will like it much better.

An average yield of black raspberries is about seventy-five to eighty bushels, red raspberries seventy, blackberries 100 bushels per acre, according to the estimates of Professor Baily, of the Cornell Experiment Station.

CHASE OF THE SLAVER CORA

THE LAST SLAVE-SHIP CAPTURED BY THE UNITED STATES.

She Fell Prize to the Steamer Constellation, and Was Taken in Charge by a Mere Lad.

ONE of those true romances of the sea that put to blush the best efforts of a Captain Marryat, a Fenimore Cooper or a Clark Russell, was the chase and capture of the American slave-ship Cora, by the United States steamer Constellation.
The Cora was a staunch bark, freighted with no less than 720 slaves, and she was commanded by a bold, resolute and resourceful man. At the time of the capture the captain gave his name as Campbell, and claimed that he was an English subject, and merely a passenger on the bark. By masonic friendship he managed to escape from the Constellation at St. Paul de Loando, and in after years he met the young naval officer who was detailed to command the prize. Then he was the painted and spangled performer in a circus, the celebrated clown, William B. Donaldson, and he confessed that this was his real name. Says his captor: "He had been sailor, lounge, and pseudo-gentleman of leisure on Broadway, negro minstrel, clown, slave-captain—perhaps the list had better be closed; but he had a faithful, generous heart. He was a brave man, even though a statutory pirate."

The Cora was the last slave-ship captured by the United States, and the young officer who played so prominent a part in the affair was Lieutenant Wilburn Hall. As soon as Lieutenant Hall, who was in command of the Cora, landed his prize in New York, he cast his fortunes with the Confederacy. After serving through the Civil War he became one of the Khehive of Egypt. He is now the American Consul at Nice.

Major Hall has written a graphic account of the chase and capture of the Cora for the Century. An extract from his story follows:

"In President Monroe's administration, the United States and Great Britain by treaty agreed to maintain each a squadron carrying at least eighty guns, on the African coast, to suppress the slave-trade, which to that time had received no real check. Each nation could search and might capture the merchant vessels of either, upon proof which satisfied the naval officer of the violation of the laws. In point of fact, while this right was occasionally used by British men-of-war, still they seldom exercised it against American vessels, and it became almost the rule that American men-of-war should perform the duty. This fact came about because the slave-trade was largely carried on by American vessels. And strange as it may seem, by way of parenthesis, the American vessels were invariably fitted out and despatched from Northern ports, only one in many years immediately preceding the war, having Southern ownership—the schooner Wanderer, which landed slaves on the coast of Georgia; but these slaves were at once gathered in by the United States Government, and sent back to Africa on the steam-ship Niagara."

"Engaged in this duty the Constellation was cruising on the African coast, the men finding relaxation only at long intervals in a short rest at Madeira, or the Canaries; or perhaps on one of the islands in the Bight of Benin. After one of these cruises, when off the Ambriz River, near the Congo, in August, 1850, the calm gave way to a refreshing breeze, and the Constellation, with all squaresail to royals, had just shaped her course for St. Paul de Loando. It was about 7 p. m., the sea was as smooth as a floor and a beautiful moon lit the waters with a splendor rarely seen. The crew and officers were all on deck enjoying the refreshing change. Songs were heard forward, messenger boys were skylarking in the gangways, officers were pacing the lee quarter-deck. Suddenly from the foretopmast yard rang out the cry, 'Sail ho!'"

"Instantly laughter ceased, songs ended, men jumped to their feet—all was now expectancy. 'Where away?' came sharply through the speaking-trumpet from the officer of the deck. 'About one point forward of the weather beam, sir.' Every eye caught the direction indicated. Sure enough, bright and glistening in the reflected moonlight the sails of the stranger were seen, hull down, with the upper parts of the courses in view.

"The slaver was well on our starboard bow. Mr. Fairfax called me to go with him on the gun-deck, where we ran two heavy 32's out to our bridle-ports ready for a chase dead ahead, which soon occurred. I was directed to carry away the upper spars and rigging, and under no circumstances to hit the vessel's hull. 'Aim high and make your mark,' he continued. I touched my cap and smiled; it was so like the admonition of an ambitious mother to her son. Soon one gun was sending round-shot whirling through the rigging. Suddenly our attention was attracted by dark objects on the water ahead of us. The slaver was lightening ship by throwing overboard casks, spars, and even spare masts. The sea appeared as if filled with wreckage in a long line. All at once boats were seen. 'They are filled with negroes,' I heard some one cry on deck. 'Steady on your course,' I heard the flag officer shout on the forecabin just above my head. Sure enough they were boats, and as we sped they seemed to be coming swiftly to us. My heart beat with quick emotion as I thought I saw them crowded with human forms. Men on deck shouted that

they were crowded with people, but we swept by, passing them rapidly. The slaver hoped we would stop to pick up his boats, and thus gain more time, but his ruse made us even more eager. Now, our guns redoubled, we knew the end must come soon, but there seemed no way to stop the chase without sinking her, and humanity forbade a shot in her hull. Her captain realized the situation, but even then his courage was wonderful.

"On we went. Suddenly, I saw her course begin to change; she was coming to windward—her studding sails came fluttering down, her skysails and royals were clewed up, her foresail also, and as she rounded up to the wind and backed her maintop-sail, the Constellation had barely time to get in her canvas, and round to under her maintop-sail, scarcely two hundred yards to windward. 'Away there, first cutters, away!' called the boatwain's mates, as their shrill whistles ceased. 'I had barely time to get on deck, after the guns had been secured, before I saw the first cutter, with our gallant first-lieutenant himself as the boarding officer, speeding like an arrow to the vessel, her oars scattering sparkling diamonds of phosphorescent water as they rose and fell. Every officer and man was leaning over our low hammock-rails, breathlessly waiting and watching. We saw the cutter round up to the gangway. 'In bows; way enough!' we could hear Fairfax say distinctly, though his orders were low. Then came the rattling of the oars as they were tossed, and the grating of the cutter alongside.

"Fairfax's active figure could be seen quickly mounting the side, and then he disappeared as he leaped over the gangway into the waist. For two or three minutes the stillness was painful. One could hear men breathing in their excited anxiety. Suddenly there was a hail, in tones which I can recall as if heard to-day—clear, distinct, manly, 'Constellation ahoy! You have captured a prize with over seven hundred slaves.'

"For a second the quiet still prevailed, and then the crew forward of the mainmast spontaneously gave three loud, ringing cheers. Only the sanctity of the quarter deck prevented the officers from joining, but they shared the feelings of the crew. Aside from the natural feeling which success in a chase brings, there was large prize-money in prospect, for in every such capture the law divided among officers and men a sum equal to half the value of the ship and her outfit, and an additional sum of \$25 for each slave captured, amounting in this case to at least \$30,000. To a practical mind there was reason for cheering. The prize, however, was not surrendered by her captain, but by the crew, who in terror of our guns hove to the vessel."

"It was about 2 a. m. when, by order of the flag officer, I went on board the slaver with a prize crew, consisting of nine men all told, one being a negro servant.
The deck was covered with articles of all kinds, which were to have been cast overboard to lighten the ship. The crew could only be seen as called to me. They were a set of cutthroats—bearded, dark-looking, scowling Spaniards and Portuguese, not a native American among them. The slaves were nearly all on the upper-deck, shouting and screaming in terror and anxiety. I leaned over the main hatchway holding a lantern, and the writhing mass of humanity, with their cries and struggles, can only be compared in one's mind to the horrors of hell as pictured in former days."

WISE WORDS.
Cupid is not a calculator.
Life is too short to get square.
No man can buy the sunshine.
Love is a spontaneous combustion.
The world is the tramp's treadmill.
Economy was not born in the poor-house.
The fools do not say all the silly things.
Many absurdities are accepted as axioms.
A genuine holiday must be honestly earned.
The king can do no wrong without everybody knowing it.
Pessimism is an evidence of a sour stomach or of inherited taint.
All things come to the way of him who does not expect too much.
A house that is divided against itself cannot stand outside interference.
He who has schooled himself to silence has set his world wondering.
It can never be that everybody else is wrong and you alone are right.
Much harm is done by people who think they are doing what is right.
A man who really loves horses and dogs loves women and children next.
It is pitiable to see a poor man "ganged" wrong for a small income.
The man who is sometimes too busy to hear the whistle blow is seldom out of work.
People talk little ills into great ones, but seldom talk little goods into great ones.
It is hard lines to win a woman with bonbons for a year and feed her on bread and butter for a lifetime.

A Rhyme for "Massachusetts."
Referring to a statement in the Boston Globe that there is no rhyme for Massachusetts, and the attempt of a Massachusetts man to show that there is, a correspondent of the New York Tribune submits a rhyme which he thinks wholly beyond criticism. It is as follows:

A man named Heath
Has of false teeth,
Just got him two brand new sets.
Now, Tribune, dear,
Pray find just here
A rhyme to Massachusetts.

HOUSEHOLD AFFAIRS.

TO MEND TABLE LINEN.

Table linen is best mended with embroidery cotton of a number to correspond with the quality of the cloth. Under the ragged edges of the ten baste a piece of stiff paper, and make a network of fine stitches about an inch beyond the tear. Thin places and breaks in linen may be run with flax or embroidery floss, and towels should be mended in the same way.—New York Journal.

TO DEFEAT THE MOTHS.

If you wish to defy that unpleasant little animal, the moth, in packing away your furs and woolen garments, here are a few suggestions to follow:
First, beat out all the dust from the garment and let it hang in the open air and sunshine for a day. After this, shake very hard, fold neatly and sew up closely in muslin or linen cloth, putting a small lump of gum-camphor in the centre of each bundle. Wrap newspapers about all. In addition to these precautions, secure as a packing case a whisky or alcohol barrel but lately emptied and still strongly scented by the liquor. Have a close head and fit it in neatly. Then set away in the garret.—New York World.

AN OLD SEWING MACHINE.

Blessed is the plant lover that can count among her possessions an old sewing machine, exclaims Anna Lyman in the New York Independent. Mine was gathering dust and cobwebs in the garret, when the happy thought suggested itself to make it into a plant stand. The top works and large wheel underneath were soon taken away, and here was a strong, pretty looking table on iron legs with casters, the last being invaluable on zero nights to wheel my establishment nearer the stove. A box was made, six inches high and somewhat larger than the stand. This was half filled with sand. Here I learned a florist's secret. You notice they put their pots on sand or soft earth and not on a dry shelf or table, as we amateurs generally do. So my geraniums and other plants were put down on the sand, and the air was kept moist, as plants like to have it. Tradescanti was stuck in around the pots, making a shaded carpet. The old fashioned green Virginia creeper has gone out, and lovely colored leaves take its place—striped, silvered, pink, white, gray, bright as flowers. My stand was a grand success all winter, and I hope to get hold of another old sewing machine to make a fernery for my north window. In the summer it will be moved to the piazza, and I can have a geranium in bloom, or some other pot plant, and it will be a grand place for the chrysanthemum later. If I want stands or vases for my plants, I am pretty sure to find some discarded thing in garret or cellar that answers the purpose.

RECIPES.
Hard Gingerbread—One cupful of sugar, one of butter, one-third of a cupful of molasses, half a cupful of sour milk or cream, one teaspoonful of saleratus, one tablespoonful of ginger, flour enough to roll. Roll thin, cut in oblong pieces and bake quickly. Care must be taken that too much flour is not mixed in with the dough. All kinds of cakes that are rolled should have no more flour than is absolutely necessary to work them.
Cheese Fingers—Take one-quarter of a pound of puff paste and roll it out thin; then take two ounces of Parmesan cheese, half a teaspoonful of cayenne and a pint of salt. Mix these and sprinkle the cheese over half the paste, turn the other half over it and cut it with a sharp knife half an inch wide and any length you please. Bake in a quick oven and serve hot, shaking a little grated cheese over them. The fingers must be piled in a dish, crossing each other at right angles.

For Chicken Omelet—Scrape the bits of meat left on the body bones of a cooked chicken after it has done service on the dinner table. Use all the dressing left with it. Mince fine with the chopping knife. Beat two eggs light, and add one spoonful of flour and one gill of milk. Mix with the minced chicken and fry in a well-buttered pan on top of the stove. When brown and set, fold over in half and serve at once. Omelets should never be allowed to stand and grow cold.
Rice Muffins—One pint of milk, one quart of flour, one pint of boiled rice, three eggs, two tablespoonfuls of sugar, one teaspoonful of salt, one of soda, two of cream of tartar. Mix the sugar, salt, soda and cream of tartar with the flour and rub through a sieve. Beat the eggs and add to the milk. Stir gradually into the flour. When it makes a smooth, light paste, add the rice and beat thoroughly. Bake thirty-five minutes in buttered pans. This quantity will make three dozen muffins.

A Railroad of Curves.
The first railroad west of the Alleghenies was built from Lexington to Frankfort, Ky., in 1831. The road was laid out with as many curves as possible, the engineers declaring that this was an advantage. The cars were in two stories, the lower for women and children, the upper for men, four persons being seated in each compartment. The cars were at first drawn by mules, but after a time a locomotive was made by a Lexington mechanic. The tender was a big box for wood, and a hoghead was provided for water, which was drawn in buckets from convenient wells. In place of a cowcatcher there two poles in front fitted with hickory brooms for sweeping the track.—Lancaster Eagle.

One of the pioneers of California is Won Yip Nong, who came from Hong Kong in a sailing vessel in 1844.

ARMY AND NAVY UNIFORMS.
OFFICERS' OUTFITS ARE EXPENSIVE AND CHANGE IS COSTLY.

The Latest Fad is Whistles for the Army—Changes That Have Been Made—Items of Cost.

THE latest fad of Major-General Schofield is the army officer's whistle. The order has gone forth that every infantry officer must equip himself with this useful article, and that it must be set in the hilt of his sword. This is done "for the good of the service," and the necessary alterations will be made at the Springfield (Mass.) armory, but not at General Schofield's expense or at the expense of the Government. When the general commanding the army gets a notion that the service will be improved by a change in an officer's uniform or equipment, the officers of the army must pay for it. If General Schofield ordered a change in the regulation coat of the army officer to-morrow or in the regulation shoulder strap, the officers would have to throw aside the old coat or the old shoulder strap and equip themselves anew. The same rule holds in the navy.

An officer's outfit is expensive. The army outfit costs at the very lowest \$180. Very few officers would be satisfied with an \$180 outfit. It is made of cheap cloth, poorly finished. It is "regulation" and the commanding officer would have to pass it. But an officer would feel very mean in one of these outfits at an official reception. From \$180 the cost of the outfit ranges up to \$350. Most of the difference is in the cost of the material of the uniform.

A naval officer's outfit costs even more. At the Navy Department they say that in round numbers a "good" outfit will cost \$450. There are 1410 officers in the navy on the active list. If the Navy Department took a notion to alter the character of the uniform and equipment of its officers so radically that the present outfit would be useless, it would cost \$634,500 to make the change. All of this would come out of the pockets of the officers themselves. It is very well to make officers pay for their own outfits, but they cannot see the justice of paying for changes which depend on the whims of a superior officer and which benefit no one but Uncle Sam.

It would not be a novelty for the War Department to order a complete change in the army uniform. In the early history of the Government it was done rather frequently. Washington ordered the first change in the continental uniform in 1777. Up to that time the army button was white. Under Washington's order the regulation uniform was to consist of "a dark blue or black coat reaching to the knee and full trimmed, the lapels fastened back, with ten open worked buttonholes in yellow silk on the breast of each lapel and ten large regimental buttons at equal distances on each side, three large yellow regimental buttons on each cuff and a like number on each pocket flap." At the same time an order was issued for the navy to equip themselves with blue coats, with red facings; red waistcoats and blue breeches; the coats trimmed "yellow" buttons. The marine officers of the day wore green coats with white facings, white breeches edged with green, white vests, silver epaulettes, black gaiters and white buttons.

Two years later Washington ordered another change in the uniform of the army. The regulation coat thereafter was blue, the facings of white, buff or red and the buttons for the cavalry white. This lasted until 1782, when orders were issued to equip the infantry with white buttons, the coats to be of blue with red facing and white lining. By 1796 another change had been made. The infantry officer wore a dark blue coat reaching to the knee, full trimmed with scarlet lapels, cuffs and standing cape, white trimmings, white under dress, black stock and cocked hat with white binding. In 1810 the officers of the general staff were put into top boots with gilt spurs and other minor changes in their uniform were made.