

## FOR THE FARMER

### Butter Making.

It may not be generally known that the DeLaval cream separator was used last season by Mr. Sprague, at his creamery at Amelburg, and was an entire success. This machine obviates the necessity of placing the milk to stand, for the cream to rise. The milk is put at once into the machine which revolves with such rapidity that the cream being the lightest particles, is thrown to the top, and is drawn off. The following is a description of Mr. Sprague's factory. His present building is only small in comparison to many factories, but all the space is profitably utilized. The whole building is only 32 by 32 feet, and is 1 1/2 stories high; the engine room is 8 by 16; butter room, 15 by 20; cheese room 16 by 25; drying room 15 by 20; driveway, 15 by 22. The building cost \$500; the implements, including the DeLaval separator, \$750. The farmer having reached the factory, puts the milk he has brought into the receiving can, where the milk is examined and weighed. From the receiving can a conductor leads to the feeding can; from the latter it is admitted into the DeLaval separator. The velocity of the separator is such that it revolves at the rate of four miles a minute. This rapid motion throws the milk to the outside edge of the separator, and the cream being the lightest, rises to the top, and is discharged. The cream runs into the cream can standing on the floor, the milk pouring into the conductor to be made into cheese. From the receiving can a second conductor through runs from the bottom of the can into the cheese factory. The cans containing the cream are placed in a cooling vat, which is 2 1/2 by 7 1/2 feet, and contains 12 cans; the cans are 19 inches high by 9 inches across. When the proper temperature is obtained, it is placed in the churn. The churning is not such a rapid process as gathering the cream, for a slow motion is required to obtain good butter. The churn will hold 80 gallons, but 60 is the working capacity. When churned, the butter is taken out, properly cleaned, salted and packed.

### Substitutes for Hay.

In prosecuting a regular rotation of crops on the farm, it often happens that the farmer has too small an area of land for pasturage and the production of a winter supply of hay to carry his stock through. The rotation usually goes by fields, of which the sizes and qualities vary considerably. Then, too, the supply of hay is largely dependent upon the favorableness of the season. Owing to these and other causes the hay will sometimes vary several tons from one year to another.

This shortage in the hay crop often induces the farmer to cut down his stock proportionally. While it might sometimes be advisable to do this rather than cramp other interests by taking capital to buy hay, it is certainly a bad thing to lessen the manufacture of manure, and do away with the home market for the produce of the farm. This would be the result if the stock were cut down.

It is much better to devote a few acres to the production of substitutes for hay. We have several resources for such an emergency. There are several forage plants that may be sown late in the season, when we will be able to determine almost to a certainty what the shortage will be.

Prominent among these may be mentioned corn, millet, rye and Hungarian. Of these I am very much in favor of the corn. It may be sown any time up to the 1st of July in an ordinary season with a pretty positive assurance that it will bring forth a heavy crop of forage. It will stand the dry, hot weather that usually comes in August better than most other plants. If bound in small bundles and stood up in narrow shocks it will cure excellently.

It costs much more to seed an acre with sowed corn than it does with millet or rye, but the yield is so much greater that the extra expense can well be afforded. Three bushels to the acre is hardly enough unless it be sown early in the season on very rich land. If sown toward the last of June four bushels to the acre is none too much.

### Potato Notes.

Mr. Monroe Morse, a closely observing farmer, says that after trying many of the "new kinds" of potatoes, he finds nothing to take the place of the Early Rose. Other kinds often do well one year, and then fill the next, but the Rose is particularly reliable. Several of the newer varieties are but old sorts under a new name, or new sorts so nearly like the old ones that no one can separate them if mixed in a heap. His Clark No. 1, and early Vermont can not be distinguished from the Early Rose, nor can the Early White Elephant from the Beauty of Hebron, though there are two or more kinds of Beauty of Hebron. The best time and place to select seed potatoes is, when digging in the field at harvest time; select seed from the best hills.

### A Very Rich Couple.

Elisha Sands and his wife lived on a farm in Westchester county, N. Y., and were not supposed to be worth much money. Sands died a few years ago and his wife's demise occurred several days ago. On examining her effects there was found a small old petticoat \$30,000. Pinned to the package was a note stating that the money was collected in 1871, thus showing that it had been in the house for 14 years. Bank books were also found, showing deposits to the full limit allowed by law in saving banks in New York city, the whole amount being \$110,000. There was also found \$100,000 in government and other bonds. In addition to this Mrs. Sands left real estate in Seventh avenue, Elm and Cherry streets and the Bowery, and the farm, unencumbered, upon which she resided.

### Origin of Opium.

According to the Bengali legend there once lived on the banks of the holy River Ganga a rishi, or sage, in whose hut made of palm leaves, there was a mouse which became a favorite with the seer, and was endowed by him with the gift of speech. After awhile the mouse, having been frightened by a cat, at its earnest solicitation was changed by the rishi into a cat; then, alarmed by dogs, into a dog; then into an ape, then into a bear, then into an elephant, and finally, being still discontented with its lot, into a beautiful maiden, to whom the sage gave the name of "Postamani," or the "poppy-seed lady." One day, while tending her plants, the king approached the rishi's cottage, and was invited to rest and refresh himself by Postamani, who offered him some delicious fruit. The king, however, struck by the girl's beauty, refused to eat until she had told her parentage. Postamani, to deceive the king, told him she was a princess whom the rishi had found in the woods and had brought up. The upshot was that the king made love to the girl, and they were married by the holy sage. She was treated as the favorite queen, and was very happy, but one day while standing by a well she turned gladdly and fell into the water and died. The rishi then appeared before the king and begged him not to give way to consuming grief, assuring him that the late queen was not of royal blood. Said he: "She was a mouse; and according to her own wish, I changed her successively into a cat, a dog, an ape, a bear, an elephant, and a lovely girl. Let her body remain in the well; fill up the well with earth. Out of her flesh and bones will grow a tree, which shall be called after her, 'Posto'; that is, the 'poppy-tree.' From this tree will be obtained a drug called 'opium,' which will be either swallowed or smoked until the end of time. The opium swallower or smoker will have one quality of each of the animals to which Postamani was transformed. He will be mischievous, like a mouse; fond of milk, like a cat; quarrelsome, like a dog; filthy like an ape; savage, like a bear; and high-tempered, like a queen."—*Weekly Medical Recorder*.

### The Shihs and Sunis.

One of the most striking characteristics of the Afghan Turcoman tribes, which has more than once been very skillfully utilized by Russia in her operations against them, is the extreme bitterness with which they take sides in the great controversy between the Suni and Shihs sects, which may be called the Catholics and Protestants of Islam. The Shihs, who are strong in Persia, held Mohammed's son-in-law, Ali, the fourth Caliph to be the prophet's only legitimate successor, denouncing his three fore-runners as usurpers, while the Sunis, who abound in Afghanistan, hold a directly opposite creed. This feeling, which has made the countless Perso-Afghan wars unpeppably ferocious, is carried to such a height that an Englishman who lately bagged the life of a wounded Persian was answered by one of his Afghan comrades: "Were he only an unbeliever I would spare him, but being a Shah he must die." A stranger entering an Afghan or Turcoman camp is often met with the challenge, "What stay'st thou of the first three Caliphs?" and should he pronounce in their favor the crucial question follows, "What think'st thou of Ali?" to which, if he value his life he must answer "Ali was a Kafir (infidel)."

### The Bright Side of Being Little.

Unfortunate as they deem themselves for their fine feet and less of goodness and dimples, no women are so looked after, petted, housed tenderly and made "much of" as are little women. Men rush forward to shield them from danger and comfort them as they would babies who may be walked on by great, hulking women Gullivers, who always stoop before seaside mirrors. Who ever heard of anyone soothing and mollifying a tall woman? She can stand in the car because she is big enough to reach the strap. Little women are hustled about by the big ones, but men frown ferociously at this and take up their battles.

"Oh, I wish you were bigger, Sallie," said a blacksmith once, "wot a wollopin' I'd give yer, gal."

Big men almost always are captured at sight by little mites of women—their helplessness appeals to them. Suppose some one should hurt them! Yet little women are blind to all this obvious advantage and are forever bemoaning a lot which stunted their growth.

### A Bit of Eye Surgery.

Cocaine, the new anesthetic, is a fluid not unlike glycerine. Under its effects a patient at a hospital the other day submitted to the ball of his eye being punctured by a delicate spearhead knife, and in its place a small suction pump inserted which brought out some pus from a sac which the knife had punctured, and all the while the patient, mentally conscious, chatted pleasantly with the operator, as insensible of the operation as though it were being performed on his hat band.

### What Mr. Gould Likes to Eat.

"I am very fond of baked potatoes," said Mr. Jay Gould the other day. They are about the simplest thing one can eat, and I find that the simpler my food is the better for my head. At home I do not care for what you call 'fancy dishes.' Plain meats and vegetables, good bread and butter, good milk, sometimes porridge or grits for breakfast satisfy me. As you may suppose, I find my time filled up pretty well with business, and I certainly find that I can get along better when my food is the plainest of the plain. I have never lost my fondness for the country food I used to be accustomed to in my boyhood."

### Thirst Trials in Africa.

At Taro we for the first time in four days enjoyed the glorious luxury of a wash in good water. So far we had only met water that had been characterized by an amount of "body" and a "bouquet" that required all the pangs of thirst to make us drink it; even after much boiling and filtering through grass and cloth—for our pocket filters were absolutely useless in this liquid mud, the color of road washings or sepia ink. Though we drank this decoction, the idea of washing even our feet in it was looked upon as rather too good a joke. We therefore had to take it internally and sweat it out, and the perspiration was copious a rough, with the aid of our handkerchiefs, to keep us from becoming literally enervated. From Taro a difficult waterless march was before us, which would tax all the strength and stamina of my men, and all my patience and influence to get them along. Starting at daybreak, we traversed an undulating region, which seemed wonderfully fertile, and was covered with a pleasant, open forest, under the shelter of which grew a rich carpet of tender grass. Five hours march through this agreeable tract, and we to our delight came unexpectedly upon a small hole filled with filthy water. Uninviting as the liquid seemed, it was a perfect God-send to several of our men, who, with the characteristic recklessness of the negro, had already drunk up all the water they had brought with them for two terrible marches. There was just sufficient to give each man a mouthful, and after draining it to the dregs, or to the mud—for it was all dregs—we resumed our march.

### The Treatment of Hydrophobia.

A native surgeon, M. Nursimulu, has written a letter to the editor of the *Times of India* from which it would appear that he has treated successfully a case having all the symptoms of hydrophobia. The treatment adopted was the subcutaneous injection of a sixteenth of a grain of atropia. The breathing became infrequent (twelve per minute) and the pulse slow to the rate of 50 per minute. A quarter of a grain of morphia was injected hypodermically as an antidote to the atropia, and this was repeated several times. The symptoms disappeared the third day after the onset of the malsady. The patient was a soldier, aged 24, who had been bitten by a dog the week before the symptoms resembling hydrophobia appeared. If the case was one of hydrophobia, it must be allowed the period of incubation was very short; the dog is not stated to have been mad, and it must not be forgotten that the presence of symptoms closely resembling, if not identical with hydrophobia, do not prove that the case was one of genuine rabias.

### The Lustre of Pearls.

Pearls deteriorate by age, contact with acids, gas and noxious vapors of all sorts. This is especially true of pierced pearls. Various means for restoring them have been tried, but experience shows them to be useless. The best way to preserve pearls is to wipe them with a clean linen cloth after being worn and deposit them wrapped in linen, in a closed box or casket. A leading importer of pearls advises that pearl necklaces, which are liable to deteriorate by coming in contact with the skin, be restrung once a year, as drawing the silk threads out and in through the pierced parts tends to cleanse the pearls. In Ceylon, we are assured on fairly good authority, that when it is desired to restore the lustre to Oriental pearls the pearls are allowed to be swallowed by chickens. The fowls with this precious diet are then killed and the pearls regained in a white and lustrous state.

### Boiling Water in a Sheet of Paper.

Take a piece of paper and fold it up, as school boys do, into a square box without a lid. Hang this up to a walking stick by four threads, and support the stick on books or other convenient props. Then a lamp or taper must be placed under this dainty cauldron. In a few moments the water will boil.

The only fear is lest the threads should catch fire and let the water spill into the lamp and over the table. The flame must therefore not be too large. The paper does not burn, because it is wet, and even if it resisted the wet it would not be burned through, because the heat imparted to it one side by the flame would be very rapidly conducted away by the other.—[Nature.]

### Oliver Pain's Cruel-Looking Face.

The following is the text of the official notification regarding the capture of the communist, Oliver Pain, alleged to have been acting in El Mahdi's camp in violation of international law: "Fifty pounds reward.—The above reward is offered to any one producing Oliver Pain (and his papers), dead or alive. He left Debbeh on a camel on the 13th of March, 1885. His description is as follows: Fair, with light hair and beard, about 5 feet 7 inches high, blue eyes, slight build, thin, compressed lips, with a cruel-looking face, reticent in speech and manner. He is very probably disguised as an Arab. His blue eyes should betray him.—G. F. Wilson, Capt. R. E., Commandant Sarraa."

### A Big Duck Story.

A New Haven man says that the steamer *Rosanoak*, from Norfolk bound for New York, struck in among 500 black ducks. The steamer is lighted with electric lights and has one at the bow. Ducks to the number of 128 landed dead on the deck and were taken by the hands. The night was hazy and they were blinded by the light on the bow of the steamer. The "lookout" of the vessel was struck by several of the birds with such force as to knock him down almost senseless.

### Young Men Opposed to Marriage.

They are having their usual spring discussion over the matrimonial market. Did the reader ever notice how in the nutmeg state this topic buds and blossoms with the lilacs? Generally the discussion runs in the line of a lamentation over the large number of "likely" girls who remain upon their parents' hands during and long past the pairing season. For years the cry has gone up: "What shall we do with our surplus of marriageable daughters?" At one time it was thought that a liberal divorce law would encourage marriage, but recent investigation proves that this was a delusive theory. Before the American War the young men in the States did their duty nobly. It is computed that at least 90 per cent of them were married before they were 26 years old. Now, however, it is found that at least 50 per cent of the young men between 21 and 30 are unmarried. The young man is not what he used to be. He flocks too much by himself. In the day-time he chases fortune with unwearied steps, and at night dreams of the time when he can "afford to marry." In the meantime he is cheating the government of its fee, society of its most interesting gossip, and the census of 1890 of its proper increase. This matter of the disinclination of young men to take upon themselves the joys, duties, and grocery bills of married life is rapidly coming to the front as one of the great social problems of life in this country. The young man makes haste to get rich in hope that some time he can afford a home. His foreign-born fellow-citizen makes haste to marry, apparently believing that home is the first and best investment a young man can make for himself.

### A Woman at the Switch.

In Macon, Ga, there is living one of the most remarkable women in the world, Mary Carroll by name, whose occupation for fifteen years past has been that of a switch tender at the junction of the South-western and Central railroads. She lives in a house in the junction, in the centre of which is a large switch with crank and windlass. Her duty is to change the rails for different trains by this windlass. She saw the first bar of iron laid on the road in 1838, and has been personally acquainted with every engineer on the road since that time. Her work may be watched thus: Here comes the train from Atlanta. She puts aside her pipe and knitting, removes the pin from the windlass, grasps the handle, throws herself forward and, with a grunt, puts the switch in position when the train comes by. Away down the Southwestern track is seen a train delayed, and in another direction there is the Central train on time. It looks as if there is to be a collision. The woman stands, cool, with a strange glitter in her eye, her quick perception of danger causing her to be watchful. The switch is set, and, seizing the red flag, she gives the signal to the engineers and the trains pass by safely, the passengers little dreaming that their safety has been directed by the hand of a woman. Her life story is romantic. She has had three husbands and is the mother of five children. One of her husbands, named John Carroll, was a switchman at that point in 1869. When he died Mrs. Carroll's name was put on the roll, and during the time she has held the place twenty night brakemen have been discharged. She has never had any accidents.

### The Balloon Corps in the Sudan.

For the first time in British warfare balloons are being utilized in the Sudan campaign. The balloon and telegraph corps is a distinct branch of the expeditionary force, and it has under its care three balloons with all the necessary appliances for taking observations of the enemy's position. The whole outfit was made at the school of engineering. Nature thus describes the shipment of supplies, and how they will be turned to account: Compressed hydrogen for inflating the balloon is carried in iron cylinders 12 feet long by 1 foot in diameter, but these are only for a reserve supply, and, weighing half a ton each, will be left behind at the base of operations, where also a gas factory and pumping machine will be put up. Materials for this purpose are on board the ship, including a small gas-holder, and all the necessary chemicals for making more gas are provided. About a hundred lighter cylinders, easily carried by men, form part of the equipment. Each of these, which are nine feet long, contain 120 cubic feet of hydrogen in a compressed state, and, as they are emptied, they will be taken back to be recharged at the Suakin station. One wagon, containing one ton of stores, will suffice for a balloon ascent. Captive ascents only will be made, in which the balloons will be tethered by rope or wire. Communication by telephone will be established between the car and the ground, and the chief employment of the balloons will be to take observations of the enemy's movements.

### Mrs. Garfield's Fortune.

The subscription raised through the instrumentality of Cyrus W. Field aggregated, when invested in Government bonds, about \$312,000. Gen. Garfield's life was insured for \$50,000, the payment of which the companies, for the sake of the extended advertisement it would give them, if for no other purpose, promptly made. Congress also voted her the remnant of the salary which would have been due Gen. Garfield for the first year of service as President, which amounted to \$40,000. The little estate which Garfield left aggregates some \$30,000. This was all that he had been able to accumulate after a life of unusual activity. This makes her total estate, in round numbers, about \$450,000 in money well invested. From this, an income of probably \$16,000 is derived. In addition to that she has from Congress an annual pension of \$5,000 which is now voted to the widows of all ex-Presidents.

### A Vain Russian Proposition.

Some of the jingo journals of Russia demand that the Baltic and Black Seas be closed by concert of the European powers to English vessels of war; others go still further and demand that the Buz canal be closed to British armed vessels by the same authority. When it is understood, however, that such a demand as this would neutralize three-quarters of Great Britain's power to wage an offensive warfare, it will be seen how impossible of practical realization such a proposition is.

In the first place, to give such a demand practical effect, it would be necessary to call a European congress. In the second place, such a congress would need to be substantially a unit on the proposition in order to place the necessary material force in the hands of those who favor it.

The law of nations has heretofore guaranteed the entire freedom of the seas to belligerents within certain prescribed limits. Consequently, to make a mere claim of any portions of the ocean, or its arms and bays, at the instance of any one power immediately threatened by another, would simply be for all the other nations except the threatening belligerent to range themselves against the latter.

If it is internationally just and right to close the Baltic against a particular belligerent, it is just and right to close the Mediterranean against her, or, if possible, the Atlantic and Pacific oceans.

It will accordingly be seen that this proposition just now put forward in the interest of a power weak in naval resources would so revolutionize the whole system of naval warfare, and those international laws which are framed for the purpose of restraining it within just and honorable bounds, that there is no possible chance of its receiving a respectful hearing on the part of any nation outside of that which has so inconsistently and doubtless vainly proposed it.

### The Poison in Tobacco.

If smoking is really a reprehensible habit, the physicians who had opposed it are largely to blame for its continuance, for their theories have been so promptly disproved by experience that men are quicker in assuming that expert opinions on poisons are not deserving of much respect. For instance, it has apparently been demonstrated by laboratory experiment that there is nicotine enough in a single mild cigar to kill a man. More than 1,000,000 cigars are consumed in New York every day, but who ever heard of a man dying of the effects of a single cigar? There is poison enough in a pound of the root from which manioc is prepared to kill a dozen men, yet two or three ounces of manioc are eaten daily by each of thousands of children with no bad effects. It is known, regarding this edible, that at a certain stage of preparation heat entirely destroys its poisonous properties; evidently a similar result, though not so radical, occurs when tobacco burns, otherwise each smoker would die after consuming a cigar. That some nicotine—an undoubted poison—is inhaled with tobacco smoke is quite evident, for the physical experiences of beginners are exactly those of persons who have taken an under-dose of poison; nevertheless the system speedily accommodates itself to the intruder, and among veteran and steady smokers may be found thousands of the strongest and most enduring physiques in America, and thousands, too, of delicate organizations, which would at once succumb to a poison as active and virulent as tobacco is said to be.

### He Couldn't Make It Out.

The proprietor of a tannery having erected a building on the main street for the sale of his leather, the purchase of hides, etc., began to consider what kind of a sign would be most attractive. At last what he thought a happy idea struck him. He bored an auger-hole through the door post and stuck a calf's tail into it, with the bushy end flaunting out. After a while he noticed a grave-looking person standing near the door, with spectacles on, gazing intently at the sign. So long did he gaze that finally the tanner stopped out and addressed the individual:

"Good morning!"  
"Morning," replied the man, without moving his eyes from the sign.  
"You want to buy leather?"—"No."  
"Want to sell hides?"—"No."  
"Are you a farmer?"—"No."  
"Are you a merchant?"—"No."  
"Lawyer?"—"No."  
"Doctor?"—"No."  
"Minister?"—"No."  
"What in thunder are you?"—"I'm a philosopher. I've been standing here half an hour trying to decide how that calf got through that auger-hole, and for the life of me, I can't make it out!"

### Why Hair Oil is Out of Fashion.

A lady can anticipate many disagreeable possibilities with firmness, but to wait calmly to grow bald-headed is too much for their endurance. So they dropped hair oil. Hair oil is now used by dudes and flashy men in order to insure a good comb. The cities are filled with prematurely bald-headed young men. But the women think too much of a head of hair to sacrifice it to oil. The great desire now is to get a fluid that is entirely free from grease to use on the hair. Several preparations have been invented. They use this to dampen and make the hair fluffy. The Langtry bang is going out of style and the hair is combed upon the head, so some dampness is required to make it dress easily. Oil was once the only thing used, but now harmless fluids have supplemented it entirely. The head furnishes enough nutriment to each strand of hair, and in some even too much. Putting grease on the hair does not make it healthy, nor impart vitality to its growth. On the contrary, it clogs up the scalp, and frequently causes the hair to fall out. The days of hair oil for ladies have passed away.