

anecdote, which is not new, but which may be found in the memoir attached to the recent edition of his works.

The anecdote is related of Backus, the successor of Bellamy, that soon after his settlement in Bethlehem, as he was one day riding out, he met an old negro eminent for his piety, who had long attended on Bellamy's ministry; and as they were going in the same direction, fell into conversation with him. Perceiving very soon that he was not recognized, he asked as a matter of curiosity—"Well, how do you like your new minister here?" "Very much" was the reply, "but he does not preach as well as massa Bellamy. Massa Bellamy, he make God so great—so GREAT!" "A most discriminating estimate," said a minister who had often listened to Bellamy; "for of all preachers I ever heard, Dr. B. was the most successful in making God great, great in his character, and great in his government."

RECEIPTS FOR WASHING.

It seems that the whole country has been flooded with pamphlets and paragraphs about rendering washing no job at all, that being performed merely by steeping and boiling without any scrubbing and rubbing, as was done in the old fashioned way. It is promised by all these new-fangled receipts that one person may do a washing for twenty before taking breakfast. As this is a feat worthy of Jack the Giant Killer, it would be a great blessing were it only a fact, but it happens only to be a fiction.

The bleacher of cotton goods, and the artistic shawl washer (a very particular business) have long been in advance of the domestic economist in respect to the purifying and cleansing of goods, and so far as what is termed science is concerned, we must say, that as a general thing, the majority of our scientific men are sadly defective in knowledge of the operative useful arts. Caustic lye made of soda and lime is used in every bleaching establishment, and is the best liquid with which we are acquainted for dissolving grease. It is this which combines with tallow to make soap, hence a little of it used in water for steeping clothes previous to washing, will soften the grease that may be in them, and enable it to be rinsed away in the water. But it is no labor saving soap to mix good soap with caustic lye—it is the very reverse. The smallest possible amount of lye that can be used in washing, so much the better for the texture of the clothes. As caustic lye is very severe on the hands, we advise no one to use it who has tender hands. Washing is made easy by using an abundant supply of good soap. The following plan for white clothes, we believe is the best that can be used.

Dissolve a little soda in clean warm water, and steep the clothes for about twenty minutes. Then take them out and rub good hard soap on the creases that are most soiled, rubbing those parts between the hands or on the board, and wring them out of the suds, and put them into a tub of warm water, in which has been dissolved some soft soap; pound them in this, then boil them, then rinse them in clean water, then blue them, wring them well, and hang them out to dry. It is best to use a little soda in the boiling. No soap must be allowed to dry in the clothes, or they will appear in yellow streaks. There is indeed no necessity for so much rubbing, as a general thing, only those parts that are very dirty, such as wristbands, &c.—without rubbing they will not be made clean; this is the universal testimony of all those who have used the advertised labor-saving soaps. It would be well if more good soap was used in washing clothes—it would save a great deal of labor. A bar of soap ought to be cut into small pieces and dissolved in some water, and kept always at the side of the rubbing tub, and as the suds get weak, they should be strengthened by an addition of some more dissolved soap. When the suds get dirty, don't use them any longer for white clothes. Calicoes should be washed in strong cold suds,—so strong that they will feel slippery between the fingers; flannels should be washed in the same way, and then rinsed out in cold water, softened with a little soda. The soap should never be rubbed on calicoes nor flannels; calicoes of very indifferent colors can be washed with safety in cold suds—(but they must be quite cold.) Flour paste, beef's gall, and all such things could be avoided. Cold strong suds, made of dissolved hard soap, is the best substance to use for white clothes, and calicoes and fine woollen colored goods should always be sent for washing to those who make it their

business. About an ounce of borax dissolved in water along with a bar of hard soap for washing, is a most excellent substance for those who have tender hands, and it assists in the removal of grease and dirt along with the soap. It would be well if those who make their own soft soap in the country, paid particular attention to put no grease but that which is clean in their barrel, or if this cannot well be done, it is best to dissolve all the soap they use in warm water before washing, let it settle awhile, and then pour off the clean. This should also be done with dissolved hard soap, for there is some that is very dirty. The cleaner the soap is, so much the better for washing.—*Scientific American.*

Interior of the Earth.

A fact of general interest has been proved by the boring of the Artesian wells in the suburbs of Paris, namely, as we go towards the centre of the earth, the temperature increases at the rate of about one degree for every fifty feet. That the whole interior portion of the earth, or at least a portion of it, is an ingenious ocean of melted rock, agitated by violent winds, though I dare not affirm it, is still rendered highly probable by the phenomena of volcanoes. The facts connected with their eruption have been ascertained and placed beyond a doubt. How then are they to be accounted for? The theory prevalent some years since, that they are caused by immense coal beds, is perfectly puerile, and entirely abandoned. All the coal in the world would never afford fuel enough for a single capital exhibition of Vesuvius. We must look higher than this, and I have little doubt that the whole rests on the action of electric and galvanic principles, which are constantly in operation in the earth.

We know that when certain metals are brought together powerful electric action is developed, and a light is produced, superior even in effulgence to that of the sun. Now if a small arrangement produce such results, what may we not expect from the combination of those immense beds of metal to be found in the earth? Here we may have the key to all the grand phenomena of volcanic action. An illustration on a small scale, may be seen in an instrument called the thermo electrical battery, made of zinc, bismuth and antimony, packed in a box varnished. In this, heat is involved below, while the top is cold; and here we have the very cause of volcanoes, when in the interior a fiery ocean is heaving its surges, while its peak is capped with everlasting snow.—*Prof. Silliman.*

A New Form of Mesmerism.

The New-York *Evening Post* says that certain clock makers at Bristol, Connecticut, in making some chronometers lately, found it impossible for the workmen to keep awake when they were setting the instruments a going. It is necessary, in regulating them, to count the beats in a minute by a regulator, and change the hair-spring until both go nearly in time; then the screws in the balance are turned until the greatest maximum is obtained, when they are rated and the rate registered. The workmen find no difficulty with the parts, but when the whole movement is going, any person who sits down and counts the beats, or watches the motion of the balance, invariably becomes drowsy. Attempts have been made with other clocks, but they do not produce the same sensation. The clocks are of polished work, and gilded by a peculiar galvanic process, which, if the facts be as here stated, may have something to do with the effect.—What is curious is, that the person who is put to sleep continues to count the beatings of the time with his hand or foot. The writer in the *Boston Post*, who gives an account of the matter, adds:—

"It affords some amusement to visitors to see a company of men at work and half of them asleep, yet laboring to keep themselves awake. Experiments have been made with strangers, and it invariably produces the same effect. On Saturday last a collier came to the factory with a load of coals, and was admitted into the finishing room to see the clocks. One of the workmen desired to make the experiment; accordingly the old man was put to count, striking on the bench with his hand in time with the clock; he went to sleep in three minutes, and was kept under the influence for nearly an hour. His dog that had followed him into the room, upon discovering his situation, exhibited alarm and ran about howling in a most dismal manner; all this did not disturb the sleeper, but the moment the clock

was stopped he awoke, and was surprised that so much time had passed. There is some great principle hidden in these phenomena that is truly mysterious."

Wood vs. Iron.

One of the most curious inventions that we have heard of lately, is one for extracting from the pores of wood all perishable matter, and filling them with an insoluble material as hard as iron, resisting dry rot, wet rot, fire and water. This process, it is said, renders common pine wood as durable as *hardack* or iron wood—the timber never shrinks, and from the color of the injection, the appearance of the wood is entirely changed when worked up.—It is said to be susceptible of a high degree of polish, and it is supposed that ere long it will supersede iron in railways, and oak in ship-building. In the erection of houses it must be valuable, as it could never burn up! We see it stated that this practical wooden alchemy was invented by an Englishman, and introduced here by a Yankee. A company is about to be formed to manufacture this material in New-York. What a city this will be, when the streets are lighted and the houses are warmed with *Paine's* water gas, and the houses themselves are all built with *Payne's*—what shall we call it?—*Express.*

The Farm.

WORK FOR JULY.

We have selected for this department this week some articles giving hints on the cutting and curing of hay, a work of great consequence to the farmers of New Brunswick and one in which our readers many of them will soon be engaged.

In your preparations for haying, you have no occasion to refill that empty wine bottle nor rum barrel, for if Bacchus would consider himself honoured by such a service, Ceres, the superior goddess of harvest, demands no such sacrifice. His devotees are a doomed race, and if they turn not from their evil way, the sooner they die the better for the world. "Rum in hay-time" has long ago ceased to be an agricultural maxim. Some farmers use brewed beer, coffee, or ginger and molasses in water; but the best beverage between regular meals is pure cold water. It supplies perspiration, and both moistens and cleanses the throat. Glutinous and saccharine preparations do not so well allay thirst, and often produce diarrhoea, and other complaints of the bowels. Drink cold water; and if excessive perspiration or any other cause produce exhaustion, take a lunch not a dram.

Hay making requires hard and skilful labor, yet it is one of the most agreeable operations of farmers.

But some will ask, when shall we cut our hay? Botanists assure us that medicinal and culinary herbs should be cut in the bloom, certainly before the ripening of the seed; since at that time they possess more saccharine matter and essential oil. We think the same rule is of general application to the grasses intended for the food of beasts. Clover, for instance, cut in the blossom, is a rich fodder, but allowed to ripen and it is not better than oat straw.

"Make hay while the sun shines," is a maxim as wise as it is old. But he who would govern his conduct by it must use the scythe while the sun is rising. "Up and at it" was the significant phrase by which a skilful cultivator was wont to summon his workmen from their nightly repose to the scythe at 4 o'clock, A. M. They completed their daily task of mowing at 10 o'clock, and all the work of the day before sunset. By this means he dried his hay more in one day than many of his neighbors in two. But there is such a thing as drying it too much. Many of the best farmers in some parts of New York cut their hay, give it the sun one day, then put it into cocks of 75 or 100 lbs., where it remains two or three days, after which the cocks are opened, the hay spread out in the sun for two or three hours, and then put into the barn, scattering upon it four quarts of salt to a ton. In this way they convert it into a rich fodder for their cattle, instead of that sapless, husky, tasteless old dry fodder which some call hay. We believe that farmers sometimes dry most of the juices and nutritious matter out of their hay. Like their manure heap, they suffer evaporation to carry off most that is valuable, and so starve their cattle as they do their soil, with a mere residuum. Look well therefore to the making of hay, and neither dry it too much nor too little.

Don't stack your hay, unless you can afford to lose a large share of it, for we have seldom seen hay thus kept, where several inches upon the surface of the stack were not worthless. If your barn will not contain your crop, and you have not time or cannot afford to build an additional shelter, purchase a press, and put your hay into small bundles, and then you can store a large quantity in a small barn.

Have you a good horse rake? There are few instruments for the same money that will save so much time, especially *hay time*, is money. A man and a horse with one of these rakes, will do the work of ten or twelve men. "No farmer with a dozen acres of hay should be without one."

Cutting Grass and Curing Hay.

This must depend on the kinds of grass cultivated. Timothy affords nearly double the quantity of nutriment, if cut after the seed is formed, instead of while in the flower, and it is then much more relished by horses and a portion of the stock. This grass, therefore, should never be cut for them, except when the seed is formed. The proper time for harvesting, is between the milk and dough state, when it will nearly ripen after cutting. Orchard grass, on the other hand, although possessing two-sevenths more nutritive value for hay in the seed, yet it is more tender, and much preferred by stock, when cut in flower, and as it continues to grow rapidly afterward, it should be cut at that time. Even a few days will make an important difference in the value of grass, when cut for hay. The kind of grass, and the stock to which it is to be fed, cannot, therefore, be too closely noted, to detect the precise moment when the grass will best subserve the purpose for which it is intended.

Many farmers do not consider the scorching effects of our cloudless June and July suns, and the consequence is, that hay is too much dried in this country. Unless the grass be very thick and heavy, it will generally cure sufficiently when exposed in the swath for two days. When shook, or stirred out, it should not remain in this condition beyond the first day, or it will thus lose much of its nutritive juices, nor should dew or rain be permitted to fall upon it unless in cocks. It is better, after partially drying, to expose it for three or four days in this way, and as soon as properly cured, place it under cover. It is a good practice to salt hay when put up, as it is thus secured against damage from occasional greenness; and there is no waste of the salt as it serves the double object after curing the hay, of furnishing salt to the cattle and the manure heap.

Clover should be cut after having fully blossomed and assumed a brownish hue. By close cutting, more forage is secured, and the clover afterwards springs more rapidly and evenly. The swath, unless very heavy, ought never to be stirred open, but allowed to wilt on the top. It may then be carefully turned over, and when thus partially cured, placed in high slender cocks, and remain until sufficiently dry to remove into the barn. Clover may be housed in a much greener state, by spreading evenly over it in the mow, from ten to twenty quarts of salt per ton. Some add a bushel, but this is more than is either necessary for the clover, or judicious for the stock consuming it; as the purgative effects of too much salt induce a wasteful consumption of the forage. A mixture of alternate layers of dry straw with the clover, by absorbing its juices, answers the same purpose, while it materially improves the flavour of the straw for fodder.—*Am. Agriculturist.*

THINGS A FARMER SHOULD NOT DO.

A farmer should never undertake to cultivate more land than he can do thoroughly—half-tilled land is growing poorer—well-tilled land is constantly improving. A farmer should never keep more cattle, horses, sheep, or hogs, than he can keep in good order; an animal in high order the first of December, is already half wintered. No farmer should allow the reproach of neglecting education to lie against himself or family; if knowledge is power, the beginning of it should be early and deeply laid in the district school. A farmer should never use ardent spirits as a drink; if, while undergoing severe fatigue, and the hard labours of a summer, he would enjoy robust health, let him be temperate in all things. A farmer should never be so immersed in political matters, as to forget to sow his wheat, dig his potatoes, and bank up his cellar; nor should he be so inattentive to them as to remain ignorant of those great questions of national and state policy which always agitate, more or less, a free people.