

THE FARM.

HOW TO RING A BULL CALF.—The Rural New-Yorker thus explains the process to an inquirer who owns a bull calf eleven months old, and wants to know the best way to put a ring in its nose:

Purchase a trochar and canula, which is an instrument made for the purpose, and which pierces the cartilage between the nostrils and leaves a tube in the orifice. The ring is opened and one end is inserted into the tube, which is then withdrawn, bringing the ring through the cartilage. The ring is then closed, and the screw which secures it is inserted. The trochar and canula costs \$1, and a copper ring \$1.25. The bull should be secured by fastening the horns firmly to a post, or by tying the feet and throwing him. This is best done by tying the fore feet and then the hind feet and drawing these together, pushing the animal over as the rope is drawn tight. The end is secured, and while one sits upon the head the nose is pierced and the ring fixed. If one has no trochar and canula, the hole in the cartilage may be cut by thrusting the blade of a large penknife through it in two directions crosswise, making a cut like an +, and the ring may then be put in it. It is best to ring a young bull before he becomes so strong as to give trouble. Six months is a good age, and every bull should be ringed as a precaution for safety.

A Western man gets his supply of cucumbers in this peculiar way: He takes a common salt barrel, knocks out both ends, sets it in a convenient place, and fills it nearly full of well-rotted manure. He forms three hills for the vines, one on the east, one on the west, and the other on the south side of the barrel. But three plants are allowed to each hill, and brush is placed to keep the vines up from the ground. "Keep the barrel well watered," he says, "and if those three hills don't furnish enough pickles for a large family, then think me a false prophet."

THE USE OF LIQUID MANURE.—I have seen the question raised, "Will a cow's manure make her feed?" My experience is that it will, and more; but to do it, all the manure, liquid and solid, must be saved and utilized. Were this not true, dairy farming would be an exhausting and not a renovating husbandry, as it has proved in Vermont. Of the two subjects most actively interesting our farmers just now—ensilage and liquid manure tanks—I think the latter the more important. The results that have followed the application of cattle urine from sprinkling-carts upon grass during the past four years are entirely convincing to the neighbors of those who have tried it, and twenty tanks to one silo are being made in this part of Vermont.

SCIENCE.

PLENTY OF COAL.—If a fear has ever been entertained by any one that the supply of coal might possibly fail, it may at once be dismissed as altogether groundless. The Hamburg exhibition of that mineral held some time since, called attention to the immense resources of Germany for furnishing the world with that commodity, if need be. While the Westphalian coal is superior in lighting power to English, it is found that Germany has coal fields vastly more extensive than any England can show. The Westphalian coal basin alone, it is said, is capable of producing for seven centuries to come the same quantity of best coal annually, that all England now yields, and not only this, but the basin is not yet fully explored, and is believed to be capable of great extension beyond what has already been discovered by means of the investigations of some of the most eminent geologists. Sufficient provision is evidently made for both heat and light so long as the world exists.

A teaspoonful of turpentine, boiled with white clothes, will aid the whitening process.

Benzine and common clay will clean marble.

WEIGHING THE EARTH.—One would scarcely think that the earth could be weighed in scales like a package of merchandise, but Herr von Jolly, of Munich, has done so, and finds it is 5,692 times as heavy as a body of water of the same size, or about half as heavy as if it was of solid lead. He placed his balance in the top of a high tower, and from each of the scales suspended, by means of wire, a second scale at the foot of the tower. Two bodies which would balance in the upper scales were out of balance when one was removed to the lower scale, because the latter was nearer the center of the earth. By comparing this difference with the difference caused by a large ball of lead (1 metre in diameter) in close proximity to the lower scale, he obtained an equation which, with the known size and density of the ball of lead, and the known size of the earth, gave the density of the latter as above stated.

FIREPROOFING SHINGLES.—Spon recommends, for rendering shingles fireproof, a wash composed of lime, salt, and fine sand or wood ashes, to be applied as in putting on a coat of whitewash. This coating, he adds, will render an ordinary shingle roof fifty-fold more safe against fire from falling cinders in case of a neighbouring fire, than one without it. He adds, also, that it will have a preservative effect on the shingles, protecting them against rotting from exposure to the weather, and against warping, and states that the older and more weather-beaten the shingles are the more benefit they will derive from this application. He recommends, finally, that a small quantity of lampblack be mixed with the wash to give the coating a darker colour, thus avoiding the offensive glare of a white-washed roof.

CLEARING MUDDY WATER WITH ALUM.—It is not universally known as it should be, that muddy water may be cleaned with a comparatively very small quantity of alum. It is a peculiar property of this substance that, when in solution, it will combine with the most foreign particles in suspension, or even in solution. In fact, on this property is founded the manufacture of the lake used in painting, the dissolved colouring matter being precipitated by alum. In the same manner, all dirty colouring matter in a pailful of water may be precipitated by dissolving in it a piece of alum as small as a hickory nut or even smaller, according to the degree of the impurity of the water. Simply dissolve the alum, stir up, and let it settle. Along the Missouri and Mississippi rivers this method is frequently employed. When an excess of alum is used this also is mostly carried down in the deposits.

BUILDING CHIMNEYS.—In building a chimney put a quantity of salt into the mortar with which the intercourses of brick are to be laid. The effect will be that there will never be any accumulation of soot in the chimney. The philosophy is thus stated: The salt in the portion of mortar which is exposed, absorbs moisture from the atmosphere every damp day. The soot thus becoming damp, falls down the fireplace. This is an English discovery. It is used with success in Canada.—Maine Farmer.

In Edinburgh, the most beautiful city of Great Britain, noted for education and refinement, a new and elegant hand barrow has just been introduced for the convenience of the policemen in carrying drunkards to the police stations.

Insects are proportionately stronger than animals. A cockchafer can draw a load fourteen times greater than his body; a bee twenty times; an ant thirty times.

To clean gold ornaments, wash in warm soap and water with a clean brush, and dry with wash-leather.

Castor oil is an excellent thing to soften leather.

Lemon juice and glycerine will remove tan and freckles.

HEALTH HINTS.

RHEUMATISM.—Common rheumatism is a disease which affects the joints, the hinges of the body, in such a way that the slightest motion of the ailing parts gives pain. A creaking hinge is dry and turns hard. A single drop of oil to moisten it makes a wonderful change, and it instantly moves on itself with the utmost facility. All kinds of rheumatism are an inflammation of the surface of the joints. Inflammation is heat; this heat dries their surfaces; hence the very slightest effort at motion gives piercing pain. In a healthy condition of the parts, nature is constantly throwing out a lubricating oil which keeps the joints in a perfectly smooth and easy working condition. Rheumatism is almost always caused by—indeed, it may be nearer the truth to say, that it is always the result of—a cold dampness. A dry cold, or warm dampness, does not induce rheumatism.

A garment, wetted by perspiration or water in any other form, about a joint, and allowed to dry while the person is in a state of rest, is the most common way of causing rheumatism.

A partial wetting of a garment is more apt to induce an attack than if the entire clothing were wetted, because, in the latter case, it would be certainly and speedily exchanged for dry garments. There are two very certain methods of preventing rheumatism. The moment a garment is wetted in whole or in part, change it, or keep in motion sufficient to maintain a very slight perspiration until the clothing is perfectly dried.

The failure to wear woolen flannel next the skin is the most frequent cause of rheumatism; for a common muslin, or linen, or silk shirt of a person in a perspiration becomes damp and cold the instant a puff of air strikes it, even in mid-summer. This is not the case where woolen flannel is worn next to the skin. The easiest, most certain, and least hurtful way of curing this troublesome affliction is, first, to keep the joint affected wound around with several folds of woolen flannel; live entirely on the lightest kind of food, such as coarse breads, ripe fruits, berries, boiled turnips, stewed apples and the like. If such things were eaten to the extent of keeping the system freely open, and exercise were taken, so that a slight moisture should be on the surface of the skin all the time; or if in bed the same thing were accomplished by hot teas and plentiful bed clothing, a grateful relief and an ultimate cure will very certainly result in a reasonably short time. Without this soft and moist and warm condition of the skin, and an open state of the system, the disease will continue to torture for weeks and months and years. Inflammatory rheumatism may, for all practical purposes, be regarded as an aggravated form of the common kind, extended to all the joints of the body, instead of implicating only one or two. For all kinds, time, flannel, and warmth, with a light and cooling diet, are the great remedies.—Hall's Jour. of Health.

VARIETIES.

"What a change," exclaimed the novelist, Roe, "one little woman can make in a man's life!" Exactly, and what a heap of "change" she requires while doing it.

Last Sabbath I asked my class of little boys if they remembered last Sunday's Golden Text. It had been a difficult one to teach them, as I could not seem to make them remember the meaning of the words; so I was not much surprised to see but one little hand raised, though I confess to being slightly astonished to hear, in response to my "Well, Irvie, say it out real loud, so they can all hear," "A doubled-minded man is up on top of his barn in all his ways."

Last Sunday morning Dr. Hemphill paused somewhat about "tentily" in his sermon, and said: "We would all be glad if that young man in the vestibule will come inside and satisfy himself that she is, or is not, here. That would be much better than keeping a half-inch draft on the occupants of the back pew." And in the solemn silence that followed, the congregation could hear a sound outside as of the retreat of an army with banners.

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