

SCIENCE.

ABOUT BRICKS.—An average day's work for a brick-layer is 1,500 on outside and inside walls; on facings and angles, and finishing around wood or stone work, not more than half of this number can be laid. To find the number of bricks in a wall, first determine the number of square feet of surface, and then multiply by 7 for a 4 inch wall, by 14 for an 8 inch wall, by 21 for a 12 inch wall, and by 28 for a 16 inch wall. For staining bricks red, melt 1 ounce of glue in 1 gallon of water; add a piece of alum the size of an egg, then one-half pound of Venetian red and one pound of Spanish brown. Try the color on the bricks before using, and change to light or dark with the red or brown, using a yellow mineral for buff. For coloring black, heat asphaltum to a fluid state, and moderately heat true surface bricks and dip them. Or, make a hot mixture of linseed oil and asphalt, heat the bricks, and dip them. Tar and asphalt are also used for the same purpose. It is important that the bricks be sufficiently hot, and be held in the mixture to absorb the color to the depth of one sixteenth of an inch.—*The California Architect.*

An American is reported to have discovered an ingenious method of severing bars and shafts of iron. A wheel like a buzz-saw, but without teeth, is made to revolve at a high rate of speed, nearly (but not quite) in contact with the bar it is desired to cut, which is revolved in the same direction at a lower rate. The result is that the latter is almost instantly cut in twain, although there is no actual contact between the two metals. Drops of melted iron fall rapidly while the process is going on; but they are not hot, though liquid.

THE MOSQUITO'S INSTRUMENT OF TORTURE.—A writer in the *London Sportsman* thus describes a mosquito as seen under a microscope:

It appears that in the "bill" of the little beast alone there are no fewer than five distinct surgical instruments. These are described as a lance, two neat saws, a suction pump, and a small Corliss engine. It appears that when a "skeeter" settles down to his work upon a nice tender portion of the human frame the lance is first pushed into the flesh, then the two saws, placed back to back, begin to work up and down to enlarge the hole, then the pump is inserted, and the victim's blood is siphoned up to the reservoirs carried behind, and finally, to complete the cruelty of the performance, the wretch drops a quantity of poison into the wound to keep it irritated. Then the diminutive fiend takes a fly around just to digest your gore, and makes tracks for a fresh victim, or if the first has been of unusual good quality he returns to the same happy hunting ground. The mosquito's marvelous energy, combined with his portable operating chest, make him at once a terror and a pest.

As the fly season is again upon us, it is pleasant to be again informed that the two eyes of the common house fly are composed of 8,000 little globules, through every one of which it is capable of forming an image of the object, putting us at the mercy of the observation of thousands of eyes in one fly.

In the late accident on the Manchester, Sheffield, & Lincolnshire Railway a rail was torn from its fastenings and twisted round and round an axle shaft like a piece of wire.

The condor can withstand variations of temperature beyond human endurance, and hatches its young above the snow line—nevertheless, it rests quite comfortably on the burning sands of the southern seacoast. It haunts the whole western slope of the Andes—not only Chili, but Peru, Bolivia, and Patagonia. With the vast spread of its wings—often exceeding twelve feet—it can perform prodigious journeys in a few hours. Its eye is miraculously keen; for when no bird is visible in the sky, even with the aid of a powerful glass, if a mule or other animal in a convoy fall or die, the

condors instantly drop upon it like lightning from heaven.

A Western novelty is a petrified pig discovered in a limpid mountain lake. It is supposed that he turned to stone on looking into the water and discovering what he looked like.

FARM AND GARDEN.

HARVEST SONG.

Most sweet it is to sit in peace
Beside your household door,
And watch your harvest's rich increase,
The while the heavy hours release
Their toil, and day is o'er.

Most sweet, as on the mellow eve
We see it and rejoice;
While o'er the hill tops, ere he leave,
The great sun pauses to receive
The blessings of our voice.

Most sweet, the happy household round,
The babe upon the knee,
To sit with peace and plenty crowned,
And know the unregarded ground
From which these blessings be.

Every farm should own a good farmer; the fertilizer of any soil is a spirit of industry, enterprise and intelligence.

KINDNESS AS AN INVESTMENT.

There is nothing worse for domestic animals than to scare them half to death. Fright uses up the vital forces more than work, more than the growth of flesh or fat, more than anything else, unless it is persistent starvation. We have had two men working for us, with teams, on the same farm at the same time. One would take his horses from the stable when they had been refreshed by a few days' rest and were feeling well, and, because they were pretty frisky while they were being harnessed, and the off-horse did not keep the furrow well at the first send-off, would get out of patience and yell at his team till finally they would break into a trot, when he would throw the plough to the full depth into the first hummock, he could find, bring the team to a full stop, and by this time they would be well in a "lather" and quivering with excitement. After he had yelled for a few minutes, and the horses had become fully frightened, they had used up enough strength to move the plough for an hour.

The other man knew better. When he observed, while "hitching up," that the horses' heads were carried high, and that they were feeling first-rate, he would say to himself, "There is a good head of steam on to-day, and I shall be able to get a good day's work out of these fellows if I save it all to be used to the best advantage." Therefore, he would speak in as quiet a tone as possible, would move gently about, and aim to get his team afield without the risk of any rum-pus or excitement, and would bear with a few irregularities, such as getting out of the furrow and pulling by fits and starts a few times. The consequence would be that when they were warmed up to their work, they would move on smoothly and at the same time quickly, and at the end of an hour there would be a row of nice, fresh furrows to show as an equivalent for the "steam" the other man had used up in mere fret and fume and worry and passion. As it is with larger animals, so it is true of fowls; if you at all times exercise kindness toward them, they will doubly repay you for all your care and kind attention.—*Poultry Journal.*

FEEDING AND FATTENING.—Dr. Sturtevant has discovered that it is better to give cattle only two meals a day when fattening. He means by this statement that two meals of condensed food in the form of meal are sufficient. The stomach needs to be emptied to keep up its tone and to cause an appetite. The digestive apparatus is not fitted for 'perpetual motion,' or at least it ought not to be made so; and when this is attempted the machinery gets quickly out of order. Cattle which are stall-fed are generally fed too much. Over worked, whether in the nature of periodical or continuous gorging, it makes but little difference. If there is more food put into the stomach than can be digested and afterwards assimilated, then there is loss. The surplus is thrown out of the stomach and voided as soon as possible and goes

into the manure pile. This is good for the manure pile, but not quite so sensible from the granary view of the matter. As a rule, when cattle are fed meal to make beef, they are given from one third to one-half too much at a time.

HOW TO FEED.

Cattle should have but two feedings of meal in 24 hours. Some feeders keep hay before their cattle all the time and thus allow them to eat all they wish. When eating meal, cattle will not eat so much hay; hence it is well to give them an extra feeding of hay in the middle of the day. They should be given hay so that they can eat some of it before and after the meal-ration in order that both kinds of feed may be mixed together as much as possible in the rumen to induce rumination and to prolong the period of the food in the stomach. The best way to give meal is with roots, and, in the absence of these, to chop or cut hay and mix it with the meal ration, the whole being wetted. This system of feeding will insure a more perfect mastication as well as rumination and digestion—all three important and really parts of a perfect system of feeding any animal of this genus.

STOMACHS DIFFER.

Two head of cattle of the same age standing side by side may eat alike, but it does not follow that they digest alike. The difference in this respect should be carefully noticed, and the animals be fed accordingly—each getting more or less than the other according to its ability to digest its food. An animal must have a variety of food and be kept out of the cold.

VARIETIES.

A colored man was at police headquarters yesterday to complain that some one had stolen his horse and wagon off the street, and to request unusual energy on the part of the police. "Oh, we'll get the rig back in a little time, I guess," said the official. "I hope so, sah, I hope so. I hope you'll get him back afore noon." "Got a job for the afternoon?" "No, sah; but if de pusson who stole dat hoss feeds him oats fur dinner, which he probably will, it'll take me six weeks to get him back to whar he'll relish old straw bed agin!"—*Detroit Free Press.*

The curious story is told that when, in 1808, it was proposed to place a memorial of Addison in Westminster Abbey, there was difficulty in finding a trustworthy portrait for the guidance of the sculptor. At length it was resolved to make use of a head size picture of the great essayist which had been in Holland House for many generations, and was always supposed to be a portrait of Addison. The statue in the Abbey was accordingly copied from this work, but some time afterward it was discovered that the picture in Holland House was in reality a portrait of Sir Andrew Fontaine. The statue placed in the Poet's Corner in honor of Addison is, therefore, in fact a portrait of his friend, the founder of the Norfolk collection, which was recently sold.

A woman who cannot shoe horses can shoe hens.

An English seamstress has prepared a table showing that there are 20,649 stitches in a shirt.

Nearly the entire population of Washington board—the rest keep boarders.

A white butterfly from the Hebrides brought \$65 at a recent London sale.

'Do you know what the board over that cow's face is for?' asked the Colonel. 'No,' responded the Major, 'unless it is to keep her blushes from being seen when the milkman works the pump-handle.'

The fondness of the coloured race for high-sounding names is illustrated by a Florida negro named Romeo, who is wedded to a maid of his race called Juliet. This couple have twins, whom they have named Romulus and Remus, and the family is conveyed to church on Sunday by a horse named Pontius Pilate.

A Kansas City youth sent seventy five cents to New York, to learn how to write without pen and ink, and received the recipe which read, "Write with a pencil."

We knew of a man who sent a dollar to New York for a "sure cure for rheumatism," and received the prescription—"Take the right kind of medicine." Those New York fellows are a very immoral community.

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GEO. A. McDONALD,

July 23.

Secretary.

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April 16.

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May 23.

IT IS TRUE!

KIND WORDS. WHAT OTHERS THINK OF BUDS AND BLOSSOMS.—The following is from *The Christian at Work*, a first-class religious weekly, published in New York: "In the City of Halifax, Nova Scotia, is published a monthly magazine called Buds and Blossoms, and edited by J. F. Avery. Each number contains forty pages, plentifully and handsomely illustrated, and at 75 cents a year is certainly one of the cheapest publications extant. But better still, it is one of the best. Its pages are full of the gospel spirit, excellent temperance sketches, missionary intelligence, short stories, household hints and suggestions, all entertaining clean and wholesome literature, suitable for the home and family circle, and calculated to promote purity and knowledge among its readers. We do not know what the circulation of this excellent publication may be, but of this we are sure, it ought to be double whatever it is, for it is just the right kind of reading to be put into the hands of young folks; bright, cheery, hopeful and strong, without cant or sickly sentimentality. We hold it as an indisputable truism that when an opportunity offers to promote the circulation of such literature among the young it becomes a religious duty to do so. Send to the publisher for a specimen copy, and you'll find that we have not said one-half the good things we might concerning it."

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Buds & Blossoms.

REV. J. F. AVERY, Editor, Mizpah Cottage, Kempt Road, Halifax, N. S. Aug. 6.



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