

AT THE DOOR.

EUGENE FIELD.

I thought myself indeed secure
So fast the door so firm the lock;
But lo! he rattling comes to lure
My parent ear with timorous knock.

FOOD FOR THOUGHT.

One lives and learns.
He lives long who lives well.
Vanity is the most jealous disease.
We are all of us slaves to something.

POWERFUL GUNS.

How the New War Ships of Our Navy are Armed.

From an article on the above by Commander C. F. Goodrich, in the Century, we quote as follows: "How very few persons, by the way, appreciate the latent power of a modern projectile when in motion. Those who have visited the Atlanta and have seen her smaller guns, of six inches caliber, whisked about by one man, will be even the less likely to realize that their shot can pierce an iron plate over eight inches thick at the distance of a thousand yards. Try to imagine for a moment the number of men who would have to pull on a line that, arranged in any conceivable way, could be made to throw the hundred-pound shot with force enough to make such a hole. Yet all of this power is stored up in a cartridge weighing less than fifty pounds. To contain and restrain such a power, we must, it is evident, use the best material obtainable; the best at the beginning, best in the midst of the firing, and best at the close. It must stand the sudden and heavy first shock; must yield a little, without rupture or permanent distortion, when the pressure is at its greatest; must return to its original shape when all is over; and it must offer, at all times, the greatest possible resistance to fracture. Technically our metal must be tough, elastic and of great tensile strength. These qualities find their highest development in forged steel. As in guns, so in what they throw, the tendency is towards larger masses, more perfect material, greater destructiveness. The cannon-ball of our grandfathers gave place to the eight-inch and nine-inch shell of our fathers. To-day we are using elongated steel projectiles—weighing in some cases a ton each—that will pierce iron armor measured in thickness by the foot, or even the yard; we are charging some with melinite or other frightful explosives that will create untold havoc, or with noxious chemicals to suffocate a whole ship's company.

A Chalk Mountain.

Last winter the discovery of a huge mountain of pure chalk in Union county, Missouri, one mile from the Alexander county line, three miles from the line of the Grand Tower and Carbonate railroad, and within three miles of the Mississippi river, was announced; but until the past few weeks the magnitude of the find was not appreciated, inasmuch as the work of development had not proceeded to any extent. The mountain is about 150 feet high, and from borings thus far made there does not appear to be any limit to the chalky substance. The mountain is the property of Jonathan Peery, whose residence is at Mount Vernon, Ill., and who is just now putting the chalk on the cars at \$5 per ton. The chalk is found by scratching away about a foot of the soil, when the pure white substance is exposed in a solid mass, unalloyed by any foreign elements, apparently as pure as the driven snow. The discovery is the more important from the fact that it is said to be the only chalk bank known in the United States, and as it is convenient to the railroad and to the Mississippi river, where it may be handled in barges, its value is not likely to be over-estimated. A company of capitalists in this city are investigating the mine with a view to purchasing the entire property. [Commercial Advertiser.

AN ADVERTISING TRADE.

Perhaps it may have Happened in Blissville County, Fairyland.

"I would like to have an advertisement inserted."
This is a slogan that would resurrect a dead man behind a newspaper counter, and the clerk turned as if moved by an electric current, and ejaculated:
"Yes, sir; want the top of the column, is it?"
"No, I am not particular," said the advertiser.
"Want it inside next leading editorial?"
"Either page will answer," replied the other.
"Want a cut of a death's-head and marrow-bones or a sore leg to make it attractive, or a portrait of the advertiser with long hair and turned-down shirt collar?"
"Clear type, black ink and white paper are good enough for me," was the response.
"Will you want a head line in type an inch longer than Jenkins' ad in next column, or will you have it put in upside down, or your name in crooked letter like forked lightning all over it?"
"None; plain, straightforward advertisement in a space of four inches will answer my purpose."
"Good enough. Want about ten inches of notice free, don't you? Family history, how your grandfather blacked Washington's boots once; mention of yourself as a member of a circulating library, church, fire company, co-operative store, baseball club and other important public positions?"
The customer said he did not care for any notice.
"Of course," said the clerk, "you want a paper—each member of the firm; one for yourself and the privilege of taking half a dozen off the counter every week for the next year or two because you advertise!"
The gentleman expected to pay for his paper, and asked the price of the advertisement.
The delighted clerk figured it up, and then asked:
"If we send the bill around in about a year, you can tell the boy when to call again, can't you?"
"No, I will pay you now," said the other, taking out a roll of bills.
The newspaper man's eyes bulged as he said:
"Ah! you want to ask for 75 per cent. discount and 25 per cent. off for cash?"
"I am ready to pay a fair price for value received. Tell me your regular rates and here is the money."
A beatific expression spread over the wan face of the worn clerk, and he murmured:
"Stranger, when did you come down, and when do you expect the apostles along?"—[Boston Commercial Bulletin.

Measurements of Criminals.

Experience confirms the belief that M. Bertillon's system of measuring parts of the human frame, referred to in our columns some months ago, affords a far more trustworthy means of identifying criminals than photographic portraiture. According to Mr. Spearman's article on "Criminals in France," in the English Illustrated Magazine, the French authorities, with an experience in the measurement of nearly one hundred and fifty thousand subjects, have never yet found two cases in which all the measurements were alike. The size and position of the same organs, when measured with the same extreme accuracy, afford a sort of check upon the bodily measurements. It is said that exact duplicates of two or more marks have never been found on two individuals. If, therefore, they get a suspected person whose measurements and marks prove to be absolutely identical with a record, it becomes certain that the record refers to him. So convinced are the French officials of this that we are told that they now trust entirely to the figures and never even look at a photograph till they have satisfied themselves of the absolute tallying of the anthropometrical description. [London News.

Cool Washing.

A coal washing plant has been erected at a colliery in Yorkshire, Eng. The plant has a capacity of 400 tons per day, but has dealt with 500 tons by the wet process. The system adopted is carefully sizing the smudge and automatically washing and rewashing after crushing the various sizes. The plant is driven by a 100-horse power steam engine, and the water used in the process of washing is circulated by means of a powerful centrifugal pump, which, when in full work, circulates nearly five tons of water per minute. The object in erecting this plant was to produce a high-class coke out of a mixture of very dirty hard and soft smudge. The coke produced is of uniform quality, and the ash in the coke is steadily kept below four per cent. Besides the preparation of the smudge for the coke ovens, a quantity of small peat, suitable for fuel, is produced by the washer.

Turning the Tables on Vanderbilt.

There is a story of a young man employed on one of the Vanderbilt roads who, after fruitless endeavors to get his salary raised, finally went to William H. Vanderbilt himself. He was kindly received, but when it came to the question of an increase in salary, Mr. Vanderbilt said "Young man, the trouble in these days is not that men do not get salaries enough, but that they are extravagant and do not keep what they get." With admirable composure the young man took a note book and pencil from his pocket, and, after a little figuring, said: "Mr. Vanderbilt, as I figure it, if God had given Adam a salary of \$25,000 a year, and he had lived till the present day and he'd earned every cent of it during these 6,000 years, he would still be \$50,000,000 poorer than you are. Are there not possibly other ways of getting ahead besides saving one's salary?" Mr. Vanderbilt quickly closed the ledger, but it is said to have ordered the young man's salary raised in recognition of his coolness and keeness. [Boston Herald.

SCIENTIFIC AND INDUSTRIAL.

Fireproof paper is now being manufactured.

Magnetism is now proposed for overcoming scale in boilers.
A mountain of sandstone suitable for grindstones is reported nine miles from Grant's Pass, Oregon.
At D'er Island, in Columbia County, Oregon, a vein of sand stone, estimated to be 200 feet in depth, has been discovered.
Mexican onyx is a form of stalagmite, and its colors are formed by oxides of metals in the earth over the caves through which calcareous water passes.
A claim has now been made by Professor Braun, of Tubingen, that he can produce electricity direct from mechanical work, and he is now at work on the construction of a practical generator on this principle.
The rapidity with which files pass through the air is not likely to be appreciated by those who see only with what apparent ease they do it. Files will keep up with a fast horse, and that, too, without lighting on him.
A report comes from the West of the discovery of a process by which iron ore can be so softened by the concentrated rays of an arc light as to be worked with a comparatively small amount of labor. If this discovery is confirmed, it may lead to a considerable modification of the present modes of treating ores.
Professor Boys, in a communication to the Royal Society, England, on measurements of the heat of the moon and stars by means of his radiometer, gives an account of a test with a candle at 250.7 yards distance, which gave a deflection of thirty-eight millimeters. In other words, this instrument would show the heat of a candle at 1.71 miles distance.
The most important occurrence at the international medical congress in Berlin was the reading of a paper by Dr. Koch, the famous bacteriologist and investigator, on the tuberculous bacillus, which he claims is the cause of pulmonary consumption. He announced that he has discovered a substitute which is capable of killing the bacillus and curing the disease.
Some years ago Plateau made experiments which showed that eyeless myriopods can distinguish between daylight and darkness, their skin being sensitive to light. Eyeless maggots are also sensitive to light. M. Raphael Dubois has recently studied the perception of luminous radiations by the skin, as exemplified by the blind Proteus of the grottoes of Carniola. By a number of experiments upon this animal, which is a salamander with persistent gills, Dubois demonstrates that the sensibility of its skin to light is about half of the sensibility of its rudimentary eyes, and further that this sensibility varies with the color of the light employed, being greatest for yellow light.

Corn Husk Paper.

It is stated that one of the best utilized waste products in Australia is that of corn husks for the production of cloth and paper. The husks are boiled with an alkali in tubular boilers, the glutinous matter being pressed out from the fibre by hydraulic apparatus, leaving the fibres in the shape of a mass or chain of longitudinal threads, interspersed with a dense mass of short fibres. The fibre is easily worked, either alone or in combination with rags, into the finest writing or printing papers, and it also very readily takes any tint or color. If the gluten is left in the pulp, in the process of manufacture, the paper can be made extremely transparent.

The Vitality of the Snail.

The snail is blessed with a very great power of vitality. A case is recorded of an Egyptian desert snail, which came to life on being immersed in warm water, after it had passed four years glued to a card in the British Museum. Some specimens in the collection of a naturalist received after they had apparently been dead for fifteen years, and snails frozen for weeks together in solid blocks of ice have recovered on being thawed out. The eggs of this creature are as hard to destroy as himself. They are perfectly indifferent to freezing, and have been known to prove productive after having been shivered up in an oven to the semblance of grains of sand.

A Bigamist Bird.

A Scranton man who gives his attention to raising pigeons says that the only bigamist he has ever seen among pigeons is a male now owned by him. During the breeding season the bigamist maintained two separate wives and households, devoting just about as much attention to one as to the other. He helped raise the broods of each female, and his affection for each was equal. The double duty kept him very busy, but he seemed to take pride in having so much responsibility.

In the Conservatory.

She (widow and rich)—"What do you think of my garden?"
He (single and poor)—"Beautiful, and you the fairest flower in it. I would I were your gardener."
She—"You would make a queer gardener. Come, now, I will examine you. What is the first thing you would do were you gardener here?"
He—"I'd ask your permission to remove your weeds."
But she married a fellow as rich as herself, and he's in training still.

Profanity never did any man the least good.

No man is richer, happier or wiser for it. It commends no one to society; it is disgusting to refined people and abominable to the good.
The silent man may be a reservoir of experienced knowledge, but the world will be no wiser for having him in its midst.

THE FARM AND GARDEN.

WHEN TO WATER HORSES.

A writer in some agricultural papers says: "Never water a horse within three hours after eating." This must be a mistake. He was right in saying: "Water them before they are fed." But some times they will not drink before eating if more hungry than dry. Now, it would be cruel to drive a horse, especially in a hot day, fifteen or twenty miles before giving him drink. How would a man like such treatment? A horse may be given a little water in half an hour after eating when he is being worked. Some think it safe to let a horse drink all he wants while going right along on the road, but many valuable horses have been killed by doing this. A little and often is a better way.—New York World.

GRASS FOR PIGS.

Various agricultural journals are remarking that there is meat in grass for pigs as well as for cattle and sheep. It is very true, but it is a mistake to suppose that the natural diet of pigs is grass, as it is for ruminant animals like cows and sheep. The two latter have a very bulky double stomach, and will thrive on coarser fare than the pig, that has only one digestive apparatus. With a doubt pigs are often fed on too concentrated food, and are benefited by a run at pasture, especially by the exercise it involves. But the notion that grain or some concentrated food is not needed even by growing pigs is a mistaken one. It is true pigs thrive well on milk, but even with the cream taken from it, milk is much more nutritious and therefore a more concentrated food than it is often supposed to be.—Colman's Rural World.

HOW BEST TO USE FODDER.

The hay crop is scarce in some parts of the country; corn fodder, like the poor, is always with us. Now, learn how to use that fodder to the best advantage. If you have a silo, cut the fodder short and put it in. This is undoubtedly the best plan now known, but if you have no silo and the chances are about one in a thousand only that you have such a "modern improvement," then cut the fodder and shock it in the field the best you know how and can afford. Take good care to go through the field every week and set up or haul to the barn all the shocks that show an inclination to fall apart or get otherwise injured. There is no economy of the farm like carefully looking after things, and this is particularly the case with corn fodder in a year when hay is scarce and high.—American Dairyman.

FARM AND GARDEN NOTES.

Keep the wagon well greased.
Neglect is the worst weed on a farm.
Prepare ground well for winter wheat.
Measure on land is concentrated activity.
Always have a hitching post at your door.
Long evenings coming; read and study.
If you work early and late, rest at midday.
Buy nothing you can produce as cheaply.
Put the manure where it will do the most good.
Always plan to save labor and thereby reduce cost.
The market is seldom overstocked with the best.
Have you done all you can for your fowls' comfort?
The best time to do a thing is before it is actually needed.
Do everything in the simplest and most sensible manner.
Better pay a good price for seed that use poor if given you.
Getting money out of dirt is dirty business, but it is honest.
Have you made your plans for next year? It is time you had.
During the rainy days repair the tools, oil the harness and fix up the cow stable.
Remember that one of the most important cares of the farm is the care of health.
Add the uncounted comforts to the money income before you say the farm does not pay.
When threshing take good care of the straw. Bright, clean straw is better for bedding as well as for feeding.
If you have nothing better, lay in a good supply of dry earth to use as an absorbent in your stables when needed.
Many diseases of the horse's feet are due to wearing shoes too long a time. Knock off the shoes during vacation.
Apply lime whitewash in your stables, your hen-house, your pig-pen and everywhere that insects can lay their nests.
When you dig your potatoes, dry them before storing, but do not expose them to the sun, if you can avoid it.
This is a good time to open up the ditches or to put in tile from that sink-hole that makes ugly jogs in all your work.
It is a bad plan to clean out the poultry houses and throw the refuse just outside the door. Barrel at once and put under cover.
Clear away the masses of foul stuff around the trunks of your fruit trees. They are harbors for vermin and injurious insects.
Eggs are the most marketable product that the farm yields. They are ready for the market the minute they are laid, and he sooner they are gotten to market the better.
There is nothing which helps us to feel that our lives have been worth living so much as the humble but grateful consciousness that we have helped some other soul to fill its destiny.
A recent invention is a camera in the form of an opera glass.

HORSE NOTES.

The sad death of Walter E. Penrose will be regretted by many horse men.
Trotting meetings are far more popular in Kentucky than running meetings.
Adam Forepanth has purchased from J. H. Laughlin the pacing mare, Dolly M., record 2:27.
A trotting meeting will be held at Dr. McCoy's new kite-shaped track at St. George's, Del., in May.
There is a yearling brother to Arion at Palo Alto, and his dam has a sucking colt by Palo Alto, 2:09.
Budd Doble will drive Graylight, 2:16, and Dave Wilson, 2:24, to poles on the Terre Haute roads this winter.
Sunol's harness weighed six pounds and she pulled a forty-six pound sulky and a 150 pound driver when she trotted in 2:08.
Red Mack, 2:31, by Red Wilkes, owned by H. F. Pierce of Crystal Lake Stock Farm, Stanstead, Que., is now in Boston training for a record.
The blind stallion Cheyenne, son of Nutbourne and Jeanette, by Messenger Duroc, six years old, and has reduced his record just 111 seconds this year.
The Edwardo-Speculator race gave to New Glasgow the fastest Canadian record—2:31, 2:30, 2:29—until Israel made a mark at Halifax, third heat in 2:28.
We congratulate the Industrial American, of Lexington, Ky., on the handsome picture of W. L. Simmons, and the interesting sketch of his Wilkes stallions.
James H. Murphy, of Manayunk, has sold his dun pacer Barney (record 2:30) to John Daly, taking the dun pacer Yellow Tom, by Tom Hal, in part payment.
American horses are being shipped to Aberdeen, Scotland, for coach and driving purposes, and one dealer has opened a stable there for the exclusive handling of American-bred horses.
Manette (dam of Arion 2:24), by Nutwood, will appear in the great wood-mare list hereafter, another son, Ora Fino, by Eros, having got a record of 2:25 recently at Poughkeepsie, N. Y.
J. G. Davis, Superintendent of Highways Farm, Lee, Mass., has purchased from the estate of the late Lionel Smith the premier stallion Alcantara and all the trotting stock of that celebrated farm.
The bay gelding Confidence, by Windfall Scott, recently trotted a half in 1:11, to a cart. This horse has paced heretofore, but in a race for paces and trotters at White Plains recently he struck a trot and has trotted, since.
The 6-year-old pacer Bunco, Jr., 2:13, recently purchased in the West by George Leavitt, arrived at Boston, Mass., his new home. He will be a formidable addition next season to the free-for-all pacng brigade in the East.
It is not often that a mare eighteen years old is put in training, especially after she has raised a family of offspring. The bay mare, Nora Lee, foaled 1873, sired by W-edited Mambrino, 2:21, dam the dam of Voltaire, 2:31, by Mambrino Chief, trotted a mile recently in 2:32.
Lem. Ullman, after a prolonged season of successful programming of the leading trotting meetings, has returned to New York to spend the winter. He has brought back with him the bay gelding Clarence S., and proposes to become a member of the road brigade.
When Arion reduced his record to 2:10, recently, at Stockton, Cal., C. W. Winman, of Independence, Ia., immediately wired Senator Stanford as follows: "I will book ten high-bred fillies by Alberton to Arion for the season of 1895 at \$2500 each."
John B. Clarke, the well-known breeder, of Manchester, N. H., and proprietor of the Mirror and Farmer, is dead. He was 74 years old, and had lived a life which attracted to him the best element of the community. Among the horses owned by him were Mambrino Wilkes and Almost Eclipse.
W. H. Achuff, the contractor and driver, accompanied by his wife and child, had Fin Fan and Hudson on a wagon on Kensington avenue, Philadelphia, recently, when a pair of horses attached to a hay wagon ran into him, breaking his wagon and throwing out all its occupants. Fortunately none were hurt. His team stopped when spoken to.
The many friends of Abner King, superintendent of S. C. Wells' Dreamland Stock Farm, Le Roy, N. Y., will deeply regret to hear of his death by accident recently. He was drawing water from an open curb, and losing his balance, plunged head-foremost into water 65 feet below. Death was instantaneous. He leaves a wife and one son. He was 33 years old.
Charles Marvin rode over the Stockton track in 2:08. The next day he went over the course in 22.08 riding on a scraper. This is the way one of the most famous trainers and drivers in the world works to win great victories against time. He superintends every preparation for the speeding of his trotters, and when he is ready to drive them all conditions are favorable for fast records.
The friends of the old gray trotting gelding Hopetal, 2:14, will be glad to learn that he is still on deck, and has recently shown himself to be the champion trotter of his age. He is 28 years old, and recently, at Belair, Md., he was started to beat 2:50. The old patriarch started off with youthful vigor and went the first half under a pull in 1:30, finishing the mile in 2:49. He finished strong and in good style.