

The Family Circle.

DIES IRÆ.

I. Day of wrath, thine awful morning Burns to ashes earth's adorning, As the saint and seer give warning. II. Then what terror of each nation When the Judge shall take His station, Strictly trying His creation. III. When the trumpet tone of thunder, Bursting bands of toms assunder, Bids men face that throne of wonder. IV. Death and Nature He surprises, Who, a creature, yet arises Unto those most dread assizes. V. There that written book remaineth Whose sure registry containeth That which all the world arraigneth. VI. Therefore when He judgeth rightly We shall view each net unsightly; Nothing shall be pardoned lightly. VII. With what answer shall I meet Him, By what advocate attend Him, When the just may scarcely greet Him? VIII. King of mightiest coronation, Some through grace gain approbation— Save me, source of all salvation! IX. Hear me, O Thou Holy Saviour, Brought to earth through my behaviour— Take not then away Thy favor. X. Seeking me Thy love untore Thee, And the cross, my ransom, bore Thee: Let this not seem light before Thee. XI. Righteous Judge of my condition, Grant me, for my sins, remission, Ere the day which ends contrition. XII. In my guilt, for pity yearning, With my shame my face is burning; Spare me, Lord, to Thee returning! XIII. Thou, once touched by Mary's crying, Who didst save the thief, though dying, Gavest hope to me when sighing. XIV. Poorly are my prayers ascending, But do Thou in mercy bending, Leave me not to flames unending. XV. Give me with Thy sheep a station, Far from goats in separation— On Thy right my habitation. XVI. When the wicked meet conviction, Doomed to fires of sharp affliction, Call me forth with benediction. XVII. Now I pray Thee, naught commending, Flames of pride to ashes tending; Guard me then when earth is ending. XVIII. O that day so full of weeping, When, in dust no longer sleeping, Man must face his worst behaviour! Therefore, spare me, God and Saviour! SAMUEL W. DUFFIELD.

THE BAR OR THE PULPIT.

"What book is that, my son?" asked a middle-aged lady, as she stepped out on the verandah of a Southern home, and took a seat by a slender young man who was poring intently over a large, clumsy volume bound in law calf. "It is a volume of Blackstone's Commentaries on the Laws of England. Would you like to read it, dear mother?" was the smiling reply. "No, no, keep it. But why are you so interested in that book? Have you resolved to study law?" As the mother asked this question, another lady reached out of an adjoining window, and replied for the young man: "Yes; since Richard came to Alabama he has caught the fever that most of our young men are affected with, once in a life-time at least, and means to become a politician. He made a speech a few weeks ago at a temperance barbecue, which was very well indeed for a youngster fresh from college; but some of our boys and girls, particularly the last, applauded it so highly that he actually fancied he is an orator, and may yet electrify the Congress of the United States with his eloquence; so he studies the law as the surest means of making his dreams a reality." "Now, now, aunt; you always did ridicule my plans. Never mind; I'll make you laugh for pleasure some of these days. But, mother dear, it is true; since coming to the South I have decided on the law as a profession." "But during your college life you had the ministry in view. You certainly cannot think the profession of a Blackstone preferable to the calling of a Paul?" "No; but you know college life is not favorable to religion, and I wandered far from my Saviour. I sought father's and your consent to come to Alabama after graduating, because the associations of home reminded me too much of my former state and present unhappy condition." "I have feared that, my dear boy," said the mother, with a tremulous voice, "and I have blamed myself for not manifesting a deeper interest in your spiritual welfare, both while in college and after your return home. But I was proud of your talents, and acted as though I forgot that your success in the high calling you had marked out for yourself depended as much upon living piety as upon talents."

The young man laid aside his book and wept as his mother spoke. His past life came up like a panorama before him. He saw that mother and himself, then a small boy, bowing together in the chamber, as she poured forth her soul to God that he might be brought early to Christ. He recalled the scenes of that revival meeting when, bowed beneath the weight of conviction, he tottered up the crowded aisle to manifest his desire for salvation. Then came the agonizing struggle with his stubborn will, followed by the joy of submission. He remembered that mother's tears of happiness as she clasped him in her arms on learning his hope of pardon, and her exhortation to think prayerfully of the ministry. The scenes of his college course passed before his memory—first, his zeal and devotion; then, his ardent wooing, his gradual withdrawing from association with religious students, plunging into the gaieties of the world, and final confirmed backsliding. "It may not be," he said bitterly. "My religious friends have lost confidence in me. In fact I have no confidence in myself. And God, I know, is angry with me. I can never be as I once was. Aunt spoke the truth. Ambition has taken possession of my heart, for God has left it." His aunt, who had come out on the verandah while he was speaking, threw her arms around him and said, "Pardon my rallery, Dick. It was ill-timed. Cheer up, too. You ought to know that there is ever forgiveness with God. It was only the morning before your dear parents came to visit us that we read at family worship those words of the apostle, 'Where sin hath abounded grace did much more abound.' You repeated the words over and over again. Surely you have not forgotten their glorious truth." The young man could not reply. It was true; that passage had struck him with unusual force, and he took the words as it were out of his uncle's mouth, repeating them, as one often passes the hand over an aching brow, with the hope of at least temporary relief. But the joy of his parent's arrival, which was not expected, and important cares, had temporarily checked the rising feeling of penitence and hope. During this scene the mother had remained silent; but her mind and heart were busy. She saw that her fears were but too truly founded. She also saw with pain that she had greatly erred in permitting her son's religious life to swing clear of her influence. But with the humble confidence of an experienced Christian she turned to him, drawing his head to her side, and passing her hands through his hair in the familiar way of yore, she sweetly said: "Your aunt speaks truly, my dear boy. There is hope for the penitent backslider. Even he who denied his Lord with oaths, was received into favor, and had a glorious work committed to his charge. I have faith to believe that God has great things in store for you yet." Richard retired to his room. His aunt's exhortation, but above all his mother's striking words, produced their desired effect. He threw aside his Blackstone. He returned to his Bible. Not many years passed and that mother slept in Jesus; but her words lived in the son's heart; and when he stood up before the council that examined him for ordination, the widowed father, who was present, heard him say: "My hopes of becoming a minister of Jesus were revived by the words of my sainted mother; 'I have faith to believe that God has great things in store for you yet.'" His subsequent career showed that the mother's faith was not a phantom.—The American Messenger.

WOMAN'S UNION MISSION TO WOMAN.

"Her last completed handiwork (Mrs. Lyman Beecher, who died March 13,) was to embroider a tidy, to be sold at the coming fair for the support of the Zenana Mission."—Independent, March 18. Do you ask what a Zenana is? In India it means the women's apartment of the house. Miss Brittan, a Zenana teacher in Calcutta, says:—"The house is generally the father's, who is its head; or, if dead, he is succeeded by his eldest son, while their wives are the mistresses of the house. All the sons bring their wives to their father's house, where they have each separate suites of apartments. In this way, perhaps, in one Zenana there may be six or seven women, and any number of children; quite a school of itself. If they are of high caste, they can never go into the street, nor be seen anywhere. Should they visit their relations, they are closely veiled, and shut up in palanquins so tight that no one can see in or out. Just fancy women from forty to fifty years old, never having seen even the moon or a tree—not able to use properly that glorious gift of God, the sight." Would you like to look into a Zenana? Miss Nottingham, another of our missionaries, says:—"Yesterday I opened a house which was exactly like those I had read of. The babu, or gentleman of the house, had a suit of rooms furnished elegantly, rich carpets, sofas, chairs, beautiful paintings and statuary, with a centre table covered with vases and curiosities. It was refreshing to see such beauty and elegance. But, alas! I was shown into the women's apartments, and the tears came to my eyes. Ah, how sad! The babu spoke English, and was a gentleman; his wife sat on a dirty mat, which was thrown on a damp stone floor, her hair uncombed, her one article of clothing a sauree, wretchedly dirty, and the appearance of everything in the bare, miserable little room she lived in, was that of lowest heathenism." Till quite recently, these apartments were closed against all foreigners; but now, in Calcutta and Lucknow alone, a thousand Zenana pupils are under the instruction of our Mission. The work is spreading over the length and breadth of the land. Miss Brittan made a recent visit to the province of Jeypoor, invited by the native King to consult with him in regard to this great educational movement for the women of India. On her return she found petitions from seven different places, all desiring ladies to be sent to open Zenana schools. Her words are full of meaning

when she says:—"There is a deplorable outcry for teachers. O that you could send out others for this deeply interesting work, which can be commenced without the acquaintance of the language. The work is immense. O, that I could plead with our wealthy ladies at home! I am sure thousands would come forward and give up one little luxury a year, to support the teachers who seek to elevate these degraded women." Such is the mission for which Mrs. Beecher's last handiwork was done. Reader, can you aid us? The appeal comes not from New York and Philadelphia. We but echo the cry that is borne to us from the women of India and China, for the bread and the water of life. Shall this entreaty for light to guide these benighted women into the new and narrow way, be unheeded? Christian women, who owe all that you are to the Bible, what is your reply? Philadelphia has its branch society, organized in 1861, but three months later than that of New York. Together they are doing a noble work. Without a paid agent in this country, sending every dollar collected to its work for the women of the East, they have, in their first eight years, employed 20 missionaries, 78 Bible readers, opened 20 schools for girls, and supported 30 children by specific contributions. Just now the entire society is making a special effort, in addition to its mission work, to secure a permanent and comfortable "Home," in Calcutta, for Miss Brittan and her noble band of eleven associate laborers. In New York and Brooklyn they resort to a Fair (for which Mrs. Beecher's tidy was made,) to raise the funds. In Philadelphia we hope to raise our proportion by individual subscriptions, and by life memberships of pastors and others, (\$50 each.) "Stewards of our Lord, can we not lay this, among other offerings, on His altar, as our expression of gratitude for the priceless blessings of Christianity?" Would you know more of this Society? Send to the Corresponding Secretary, Miss S. A. Scull, 1615 Chestnut street, Philadelphia, or Miss S. Doremus, care of Doremus & Nixon, New York. They will be happy to forward to you the publications and reports of the Society. D.

A LITTLE GOOSEY.

[The following exquisitely simple verses from the pen of an 'Unknown' will touch the heart of every father and mother:]

The chill November day was done,
The working world home faring;
The wind came roaring through the streets
And set the gas-lights flaring,
And hopelessly and aimlessly,
The scared old leaves were flying;
When mingled with the sighing wind
I heard a small voice crying—
And shivering on the corner stood
A child of four or over;
No cloak nor hat her small soft arms
And wind-blown curls to cover.
Her dimpled face was stained with tears:
Her round blue eyes ran over!
She cherished in her wee, cold hand,
A bunch of faded clover;
And one hand round her treasure, while
She slipped in mine the other!
Half scared, half confidential, said,
'O, please, I want my mother.'
'Tell me your street and number, pet,
'Don't cry, I'll take you to it.'
Sobbing she answered, 'I forget;
The organ made me do it.'

'He came and played at Miller's steps,
The monkey took the money;
And so I followed down the street,
That monkey was so funny.
I've walked about a hundred hours
From one street to another;
The monkey's gone, I've spoiled my flowers—
O, please, I want my mother.'

'But what's your mother's name, and what
The street?—now think a minute.'
'My mother's name is mamma dear—
The street—I can't begin it.'
'But what is strange about the house,
Or new, not like the others?'
'I guess you mean my trundle-bed,—
Mine, and my little brother's.'

'O dear! I ought to be at home
To help him say his prayers,
He's such a baby he forgets,
And we are both such play-ers—
And there's a bar between to keep
From pitching on each other,
For Harry rolls when he's asleep;
O dear! I want my mother.'

The sky grew stormy; people passed
And the muffling homeward faring;
'You'll have to spend the night with me,'
I said at last despairing.
I tied a kerchief round her neck—
'What ribbon's this, my blossom?'
'Why! I don't you know?' she smiling asked,
And drew it from her bosom.

A card with number, street and name;
My eyes astonished met it;
'For,' said the little one, 'you see
I might sometimes forget it;
And so I wear a little thing
That tells you all about it;
For mother says she's very sure
I would get lost without it.'

—Zion's Herald.

NEVER IN SUNDAY-SCHOOL.

Rev. C. L. Braze, whose life long labors among the destitute give him the best opportunity of knowing, has no faith in the assertion of Oliver Dyer that a large majority of the prostitutes in New York were once Sunday-school scholars. He says that the poor girls who "live their brief and painful lives of shame," do so "because they were lazy little girls; because they were fond of dress, and could not earn it; because their mothers sent them out on the streets to sell flowers, or pick rags, or beg; because they lived in a house where old and young, virtuous and criminal, were all packed together, because they did not go to Sunday-school, and get an idea of religion; because they did not go to day-school and acquire habits of industry and impressions of purity." This is a sensible, though not very sensational view of the question.

The Riverside Echo, published at Portland, Me., tells the following story of a dog: "The children were in the habit of sliding down a hill near the house, accompanied by a favorite dog. Early one morning they discovered that the dog

had taken the sled, drawn it to the top, and was sliding down hill all alone by himself; this was frequently repeated."

Scientific.

MEASURING EARTHQUAKES, OR SEISMO-METRY.

A great earthquake as usual accompanied by smaller tremors, visited the kingdom of Naples and desolated the southern part of it on the 16th of December, 1857. On the 27th of January, 1858, Mr. Mallet left London for the purpose of gathering evidence of the mode of action which had been left in the effects: on the 10th of February he was permitted to begin his work; in 1862 appeared the volumes which contain the results, amply illustrated by maps, sections, and representations of ruined cities and other interesting objects. This is the one great work on 'Observational' Seismology. In it the terrible hand-writing of nature in overturned cities has been translated into mechanical and mathematical language; and thus the conditions under which the forces acted, to overthrow them, the velocity with which the ground was moved, the extent of its oscillations, and ultimately the centre of the disturbance and the depth from which it sprang, have been determined. The method of observation was founded on the obvious truth that buildings fractured and solid objects displaced must furnish evidence of the force and direction of the mechanical agencies which occasioned the effects—a method never tried before, never indeed possible to be tried, without the advantage of such 'working tools,' as Mr. Mallet justly entitles the series of mathematical equations suited to meet the various states of overthrow, fracture, and torsion, in which the injured houses and other objects were found. However varied the effects, they all depend on one constant condition—the swift passage under them all of a low undulation of the ground, a real but far from prominent swell, which, if it passed slowly, would be unnoticed, but passing as it does very swiftly,—600 miles an hour or more, half as fast as a cannon shot—objects may be lifted upward or forward, or backward, or fractured or shaken to ruins. They are in no case moved through spaces proportioned to the 'transit velocity' of the wave, but partake of the movement impressed on the particles of the ground while the wave passes through it, and that movement is often not more rapid than what bodies acquire by falling freely from a height of two or three feet. The nature of the earthquake-wave in rocks may perhaps require illustration beyond the statement; that it is a wave of 'elastic compression.' Let it be supposed that in the midst of a mass of rock a cavity is produced. Into this cavity let high-pressure steam of great force enter suddenly; the effect will be to exercise outward pressure on every part of the surface, the pressure of many atmospheres on every square inch. The cavity may be enlarged by the steam-pressure; the rock, being an elastic substance, yields to this pressure through a certain depth from the surface, and more or less parallel to it; thus a zone of 'compressed' rock of a certain depth or thickness is formed, beyond which the next zone in its turn receives the pressure, and sends it onward. Thus there is always a zone of pressure in course of movement through the rocks; the space behind recovers its first condition, the space in front is untroubled till its turn arrives. This travelling zone is the wave of elastic compression. If, instead of high-pressure steam entering such a cavity, any other action capable of sustaining and communicating sufficient pressure be substituted, the effect is similar; in any such case the rock would be compressed, the wave would be formed, and would be transmitted. All the particles of rock within the wave are set into vibratory motion, and this is all the real movement which they experience—a going and returning through a certain space, a small space compared to that of the zone or wave within which all the particles are in motion. The earthquake-wave, then, is a travelling zone of vibration; the ground is shaken by these vibrations; objects may be displaced by them by means of the force of their short movements during the passage of the wave, which bears the system of the particle motions, but not the particles, onward at the rate of ten, fifteen, or twenty miles in a minute. The results arrived at by the investigations of the great Neapolitan earthquake are expressed in large maps, which show the radiating directions of the wave-paths, and the curves of equal intensity of disturbance. They do not, as perhaps might be expected, encircle Vesuvius, but are referable to a tract of the Apennine country, about 75 miles east-south-east of Vesuvius, and about 40 miles South of Mount Vultur. The direction of the axis of the ellipse is nearly north-west and south-east, and the intensity curves are so arranged as to insulate the Vesuvian region, though it was much shaken, and form it into a separate system. The areas disturbed by the earthquake are grouped by Mr. Mallet round the focus in several closed curves, according to the degree of the dislocations produced. The curves are more or less of an elliptical character, one focus of the curve corresponding nearly with the focus of the earthquake. The innermost or meizoseismal area included 716 square geographical miles, and within it was a total destruction of edifices and great loss of life; the next outward included 1,685 square miles, and was marked by great prostration of edifices and loss of life; the third included 4,976 square miles, and in it houses were partially overthrown, and always fissured; beyond this, 29,500 square miles felt the shock and suffered occasional injury. Sounds accompanying the shock were heard over 2,500 square miles. The place on the surface of the ground from which the wave-paths radiated, or seemed to radiate all round, was certainly contained within a circle of 10 miles in diameter, the centre of which was very nearly coincident with the town of Caggiano, situated 58 geographical miles to the east of Naples, and 16½ miles south of that city, in a sort of basin, in the midst of ridges of Apennine limestone. Sixty lines on the map representing wave-paths fell within this circle; forty-eight fell within a smaller concentric circle of five miles in diameter; thirty-two within a circle two miles in diameter; and sixteen actually cross at a focal point, which is the centre of

all the circles, or else within a circle of 500 yards radius drawn round it. Nothing more certain or more satisfactory could be wished. The depth of the focus of the earthquake below the surface was computed for twenty-six wave-paths separately, after determining for each the angle at which the wave emerged. The computation is easy, the collection and interpretation of the data very much otherwise. Of these twenty-six wave-paths twenty-three start from a depth of about 7½ geographical miles=43,284 feet. The greatest depth indicated is 8½ miles=49,359 feet, and the least depth is 2½ miles=16,705 feet. Eighteen of the wave-paths agree to a mean focal depth of 5½ geographical miles, or 34,930 feet, which may be regarded as the depth of the focus; the whole vertical space from which the waves appear to start being probably 3 miles, or 18,225 feet at the utmost.

SUPPOSED TRACES OF MAN IN THE PALEOZOIC AGE.

The Buffalo Courier has the following: "There are now on exhibition at the rooms of the Society of Natural Sciences, in this city, two of the most remarkable discoveries in the annals of science. One is the fossil imprint of the foot of a man, or rather the cast of such an imprint. It was discovered by a workman, in a colliery in Western Pennsylvania, in the shale overlying a run of coal, and underlying two other veins which were being worked by the company. The spot where it was found was nearly a mile from the pit's mouth, and some three hundred feet from the surface. The rock in which it was imbedded belongs to the Paleozoic age, and the imprint, if such it be, was made millions of years before the present geological era commenced. It is the cast of the left foot of a man of ordinary size, and is perfectly defined; the foot was evidently protected by a sandal or moccasin; the heel, the arch, and the ball of the foot, and the slight impression made by the toes are perfect, and whether produced by the foot of a man or a freak of Dame Nature, the cast is as perfectly defined as if the work of a sculptor. By a curious coincidence, the society, a few days before this donation, received the second specimen from the Rev. Samuel Cowles, of Gowanda. It is a large slab of sandstone, on which, stamped in the solid rock, can be seen the imprint of horses' hoofs, as perfectly preserved as though they were formed but yesterday upon the muddy bank of a sluggish stream. There are at least a dozen of these impressions, varying in size from the track of a full grown horse to that of a young colt. They point in different directions, as though the animals were leisurely walking about and cropping the luxuriant grasses of that tropical period, some of them being obliterated by the more perfect form of a fresher imprint. Mr. Cowles has sent a similar specimen to the professors of Yale and other colleges, and we look with interest for the theories of those high authorities respecting the nature and character of the tracks, by what formed, and the condition of the earth at the date of their formation. If the theories of the discoveries be correct, the result will be to entirely overthrow the present received geological system, and to further complicate that terrible question, the effort to solve which has caused learned men so many soul-disturbing doubts and fears, and which brought Hugh Miller to so tragical an end; that is, whether the geological and scriptural records of the world's creation are reconcilable? The fossil foot-print was presented to the society by John Magee, now in Europe. We advise all who take an interest in geology to inspect for themselves these curious specimens, which affect that science so momentously." Go on, gentlemen, at this rate of new discovery and overthrow of old theories, Geology will soon become a fixed science.

A direct adhesion to Darwinism is considered to be given by Professor Owen, in the last volume of his great work, The Anatomy of Vertebrates. At the conclusion of an earnest and carefully written passage, he says that by the acquisition and comparison of all fresh facts, he "has been led to recognize species as exemplifying the continuous operation of natural law, or secondary cause, and that not only successively, but progressively, from the first embodiment of the vertebrate idea, under its old Ichthyic vestment, until it became arrayed in the glorious garb of the human form." [There seems to us still a very considerable gap between the great anatomist and the wild speculator. Ed.]

From recent accounts it would appear that the purchase of Alaska was a profitable speculation after all. A despatch from San Francisco states that immense discoveries of gold placers are reported on the mainland 120 miles from Kodiak Island, in latitude 61 degrees north and 100 degrees west from Greenwich. Three several discoveries have been made: the first on Kuyak River and Chignat Mountain; the second about 60 miles above Sitka, and the third on an island, the name of which is well-known. The mines, on account of the climate, can only be worked five months in the year. Fine specimens of gold from these mines are on exhibition at San Francisco.

The solar engine invented by a Frenchman named Mouchot, has proved successful, it is said. A concave reflector is used to concentrate the sunshine on a boiler blackened with smoke. It is computed that in the latitude of Paris the heat reflected from a surface of a square meter, 10.75 square feet, will make a quart of water, taken at the freezing point, boil in ten minutes. An area of 100 square metres will furnish as much heat in 10 hours as can be got from burning 60 pounds of coal.