“The Penrhyn Slate Quarry”
in Wales, England

In Saturday Magazine, No. 12, pp. 93

September 8th, 1832

(Images of the entire magazine are available in this document. You will find the article, “The Penrhyn Slate Quarry,” on pp. 93. A transcription of the article is placed after the images.)


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March 2012
CROSBY HALL.

"I do love these ancient ruins---
We never tread upon them, but we set
Our feet upon some revered history."

In this sentiment of an old writer had prevailed more generally, how many relics of noble buildings, now levelled with the dust, would have been spared to us! The rage for modern improvement, or the blind fury of a mob has, in a few hours, frequently destroyed the works of centuries; all that skill, and labour, and wealth were able to effect; and what to successive generations would have furnished invaluable models for the instruction of architects and workmen. The keen regret that follows these acts of wanton violence must be deep, as the mischief is not to be repaired, but let us hope that better feelings have taken root amongst us, and that henceforward every lofty spire and venerable tower will be cherished with care and reverence, as legacies of patient and costly labour, bequeathed to us by our ancestors, as well for our use as our delight.

The accompanying print represents the exterior as it now appears, of a very curious building; the oldest Hall, (originally belonging to a private residence), and the most perfect specimen of the domestic architecture of the fifteenth century, existing in London.

Crosby Hall or Place, on the east side of Bishopsgate-street, was built in the reign of Henry V., by Sir John Crosby, or Croseleader, a wealthy grocer and woolman. After his death in 1475, we learn, that amongst its possessors or inmates, were Richard Duke of Gloucester, (afterwards Richard III), some distinguished merchants of Italy and London, and ambassadors from Denmark and France.
The Hall extends about 69 feet in length by 27 in breadth; the height, to the apex of the roof, is about 40 feet; but when converted into a warehouse, it was intersected by a door, which prevents any judgment being formed of the general effect. The Hall has the usual recesses, the treatment of a large bay-window, or recess. Both this, and the windows on the opposite side, are of great beauty, and bear some resemblance to the windows in the hall at Eltham. A little above the recess is a door, communicating with a smaller apartment (42 feet by 22). The roof of the Hall, which is of admirable design and workmanship, and in some places has been gilt, will be better understood from our view of the interior, than by any verbal description that we can give of it.

The ceiling of the smaller room is in form a four-centered arch divided into rows of square panels, each panel originally filled with richly tracery.

The Hall is so completely hidden, that hundreds of our readers must have passed it unknowingly, and their first knowledge that such a building ever existed might have been the news of its destruction.

In a statement lately circulated, we are told "there is reason to believe that in a very few years every vestige of this interesting fabric would have been swept away, and the ground occupied by modern houses, had it not been for the zealous interference of two or three neighbouring families. Desirous to avert such a loss to the arts, and such a discredit to the age, a few gentlemen met together, and resolved to make an appeal to such individuals as taste and influence of they thought likely to co-operate with them in the work of preservation. That primary appeal has been answered in the most encouraging manner. A committee has been formed, and subscriptions have been opened with a spirit that promises a satisfactory result."

From this gratifying statement, we trust that this building will be preserved to distant ages. We would urge our readers to visit it, (as it is open for inspection) and also the Church of St. Helen's, in the immediate neighbourhood, as that is also a building of great beauty, and is preserved with a degree of neatness that confers the highest credit upon its guardians.

In that church rest the builder of Crosby Hall, and also the famous Sir Thomas Gresham, and Sir Andrew Hudz, the founder of Tynburn, old boy. These "Traffickers" were indeed among the honourable of the earth," and gave a lustre to the name of the London Merchant. "They were honoured in their generation, and were the glory of their times; and they have left a name behind them that their praises might be reported."

MEMORIAL OF DOCTOR JOHNSON.

DR. SAMUEL JOHNSON, one of the best, as well as most illustrious, men of whom England can boast, was born on the 7th of September, 1709, at Lichfield, where his father was a bookseller, in very low circumstances. He contrived, however, to maintain his son for some time at Oxford. On his death, the young student was compelled by necessity to engage himself as usher in a grammar-school. In this situation he was treated in a manner which so wounded his feelings, that it was a subject of painful remembrance to him for the rest of his life. On quitting it he made some unsuccessful attempts to maintain himself by his pen; and soon afterwards married Mrs. Porter, the widow of a merchant of Birmingham, with whom he received a small sum of money, which enabled him to open a boarding-school. In this, too, he was unsuccessful; he abandoned his plan and resolved to try his fortune in London. His first work of any note was his celebrated poem of London. It was published without his name, but soon attracted the attention of the most distinguished individuals of the day. For a considerable time after this, his chief employment was writing the Gentleman's Magazine, to which work he gave great interest by reporting the debates in the Houses of Parliament under the fiction of "Debates in the Senate of Lilliput." In those days the accuracy of the daily papers by means of which the debates of a whole night are laid out on our breakfast tables in the morning, was not in existence; and the public was delighted with discussions full of vigour and eloquence, much of which was given to them by the reporter. In 1747, he published his plan of an English Dictionary, for which he endeavoured to obtain the patronage of the Earl of Chesterfield, so well known for his writings on the subject of politeness. But the intercourse between the polished courtier and the rough scholar, was equally unsatisfactory to both; and Johnson informed the world in his preface, that "the English Dictionary was written with little assistance from the learned, and without any patronage of the great; not in the soft obscurities of retirement, or under the shelter of academic bowers, but amidst inconvenience and distraction, in sickness and sorrow." Chesterfield, on the other hand, ridiculed Johnson's department and manner, of which he gave a satirical description in one of his Letters to his Son.

In 1749, Johnson produced another admirable satire, The Vanity of Human Wishes, and his tragedy of Irene.

He now began The Rambler, a work which was at first received in a manner not greatly to its great excellence. Written entirely by himself, and in a very serious tone, it wanted the variety and gaiety necessary to attract the readers of periodical publications. But after it was collected into volumes, its merit was fully perceived; and the author lived to see it reach a tenth edition.

Soon after the close of the Rambler, he lost his wife, who had been his faithful and affectionate partner in all his difficulties and distresses, and whose death he deeply deplored. His Dictionary, the labour of many years, was now brought out, and hailed by the public as a valuable addition to English literature. The profit he derived from it did not, however, smooth his difficulties; he had, in fact, been living upon it beforehand during nearly the whole time of its preparation. He then began the Idler, a series of delightful Essays, which were published in a weekly newspaper. So severe did his struggles with poverty still continue to be, that, on the death of his mother, in 1759, he wrote the beautiful moral tale of Rasselas, for the purpose of raising a sufficient sum of money to defray the expenses of her funeral and discharge her little debts.

In 1762, he received a pension from king George the third; by which, and the profits of his literary labours, he was placed in easy circumstances. The only great work which he produced after this period was his Lives of the English Poets, which was completed in 1781. He died on the 13th of December, 1784, in the 75th year of his age; his remains were interred in Westminster Abbey, and, a monument is erected to his memory in St. Paul's Cathedral.

Dr. Johnson, as a writer, has never been surpassed in the greatness of his conceptions, and the elevation of his religious and moral sentiments. Living much in the world, and understanding the true changes of life, his philosophy was built on experience and observation of human nature; and, if his pencil, on the whole, is a dark one, yet there are beau
tiful lights, as well as deep shades, in his pictures. His views of religion have most unjustly been blamed as gloomy. That he laboured, at times, under a greater fear of death than might have been expected from his Christian principles and general strength of mind, is true; but this, with some imperfections of character (of no great moment, indeed) is to be ascribed to the diseased state of his bodily frame during the whole of his long life. In his trials and calamities, we find him always resorting to heaven for support and consolation; and, in his writings, while the duties of religion are represented as utterly inconsistent with the slightest degree of vicious indulgence, they are never placed as bars to innocent enjoyment. His style has been the subject of much criticism, and frequently exposed to petulant ridicule. But it seems perfectly suited to his turn of the mind, and, in his pages, a grand and solemn truce of redactions becomes more impressive from the magnificient flow of the language in which it is clothed.

In private life, Dr. Johnson was not less beloved than revered. He was rough in his exterior, but his heart was full of the milk of human kindness. He has been represented as rude and overbearing in society; but his rudeness will be found to have been generally worthy of a better name, and to have exhibited itself in stern reproof of presumptuous ignorance or unbecoming levity; while his life was spent in offices of kindness and charity, to the utmost extent of his means. Even his ordinary conversation was full of instruction; and Boswell, who wrote his life, has, by merely preserving what fell from his lips, produced one of the most valuable books in our language.

WHO IS ALONE?

How heartily the path of life
Is trod by him who walks alone;
Who hears not, on his dreary way,
Affection's sweet and cheering tone.
Alone, although his heart should bound
With love to all things great and fair,
They love not him,—there is not one
His arrow or his joy to share.
The ancient stars look coldly down
On man, the creature of a day;
Till his remembrance pass away.
The mountain lifts its hoary head,
Nor is his homage deemed reply;
The stream of life ceases to flow
Regarding which—he live or die.
The flow'ret blooms unseen by him,
Unmindful of his earnest praise;
And if it fade, seeks not his hand
Its drooping loneliness to raise.
The brute creation own his power,
Selfish and ungrateful to him,
Yet cannot sympathise with man,
For he weeps, they shed no tear.

Alone, though in the busy town,

Where hundreds hurry to and fro,
If there is none who for his sake
A selfish pleasure would forego;
Oh! how lonely, among those
Who have no skill to read his heart,
When first he learns how summer friends
At sight of winter storms depart.

My sorrow! and didst thou too feel
How sad it is to be alone,
Desolate in the desolate hour
By those who most thy love had known?
The gloomy path, though distant still,
Was ever present to thy view;
Oh! how couldst thou, foreseeing it,
For as that painful source buries.

Parakshet by thy nearest friends,
Surrounded by malicious foes;
No kindly voice encouraged thee,
When the loud shout of scorn arose.
Yet there was calm within thy soul,
Nor Stone priece that calmness kept,
Nor Godhead, unapproached by weep;
Like man thou liest both loved and wept.

Thou wert not then alone, for God
Sustained thee by his mighty power;
His arm most felt, his care most seen.
When needed most in saddest hour;
None else could comfort, none else knew
How dreadful was the curse of sin—
He who controll'd the storm without.
Could gently whisper peace within.

Who is alone, if God be nigh?
Who shall rejoice at loss of friends,
While he has One of boundless power,
Whose constancy never ends;
Whose presence felt, enhances joy,
Whose love can stop the flowing tear,
And cause upon the darkest cloud
The pledge of mercy to appear.

SIR EDWARD COKE being now very infirm in body, a friend of his sent him two or three doctors to regulate his health, whom he told, that he had never taken physic since he was born, and would not now begin; and that he had now upon him a disease which all the drugs of Asia, the gold of Africa, the silver of America, nor all the doctors of Europe could cure—Old Age: he therefore thanked them and his friend that sent them, and dismissed them nobly with a reward.—ELLIOT'S Letters.

VEGETABLE TITAN.

(Rafflesia Arnolds, or Kechill.)

This gigantic flower was discovered in Sumatra, in 1818, when Sir Stamford Raffles, then governor of that island, made his first journey from Bencoolen into the interior. In that journey he was accompanied by a naturalist of great zeal and acquirements, the late Dr. Joseph Arnold, a member of the Linnaean Society, from whose researches, aided by the friendship and influence of the governor in an island so favourably situated and so imperfectly known as Sumatra, the greatest expectations had been formed. But these expectations were never to be realized, for the same letter which gave the account of the gigantic flower, brought also the intelligence of Dr. Arnold's death. This letter was one from Sir Stamford Raffles to Sir Joseph Banks, and in it he included the following extract written by the lamented Arnold to some unknown friend, (for the epistle was left unfinished,) in which he gives an account of the discovery of this, which Sir Stamford Raffles well denominated—"most magnificent flower."

After describing the previous route, Arnold says:—"At Polo Liban, on the Manna River, I rejoice to tell you, I met with what I consider the greatest prodigy of the vegetable world. I had ventured some way before the party, when one of the Malay servants came running to me, with wonder in his eyes, and said, 'Come with me, sir, come! a flower very large, beautiful, wonderful!' I went with the man about a hundred yards into the jungle, and he pointed to a flower growing close to the ground, under the bushes, which was truly astonishing. My first impulse was to cut it up and carry it to the hut; I therefore seized the Malay's parang, (a sort of instrument like a woodman's chopping-hoe,) and finding that it sprang from a small root, which ran horizontally, (about as large as two fingers,) I soon detached it, and removed it to our hut. To tell you the truth, I had been alone, and had been an eyewitness, I should, I think, have been fearful of mentioning the
dimensions of this flower, so much does it exceed every flower I have ever seen or heard of; but I had Sir Stamford and Lady Raffles with me, and Mr. Palgrave, who, though equally astonished with myself, yet are able to testify as to the truth.

"The whole flower was a very thick substance; the petals and stamens in no places less than a quarter of an inch thick, and in some places three quarters of an inch; the substance of it was very succulent. When I first saw it, a swarm of flies were hovering over the mouth of the nectary, and apparently laying their eggs in the substance of it. It had precisely the smell of tainted beef."

"Now for the dimensions, which are the most astonishing part of the flower. It measured a full yard across; the petals being twelve inches high, and a foot apart from each other. The stamens, in the opinion of us all, would hold twelve plates; and the weight of this prodigy we calculated to be fifteen pounds!"

A guide from the interior of the country said that such flowers were rare, but that he had seen several, and that the natives call them Krûbûl. Later information, however, has shown that the Krûbûl, or Great Flower, is much more generally known than its first European discoverer suspected. In some districts it is called Krûbûl, and in others simply Ambon Ambo. It is said to take three months, from the first appearance of the bud, to the full expansion of the flower, and it appears but once a-year, at the conclusion of the rainy season. It has no stem of its own, but grows on the roots and stumps of a woody species of cissus (Cissus angustifolia). Upon this plant the Krûbûl seems to take its origin in some crack or hollow of the stem, and soon swells itself in the form of a round knot, which, when cut through, exhibits the infant flower enveloped in numerous sheaths; these open and wither away as the flower enlarges, until at the time of its fulness, but very few remain. The blossoms rot away not long after their expansion, and the seeds (spores) are raised with the puppy moss.

This giant flower may well be esteemed the wonder of the vegetable world; and although several others, similar to it in form and habits, have been found, none have as yet been discovered that equal it in size. A small species has been mentioned by Dr. Horsfield; but his flower, instead of measuring three feet across, only measured three inches. A second very magnificent species, measuring two feet across, has been discovered in a small island near Java, called Nusa Kembangan, which has been described and figured by Blume, in his Flora Javae, from this work our second and third figures have been taken. By the natives it is called Patma, and hence the botanical name proposed is Rajfasia.

**Patma (see Fig. 2).** Another of these vegetable paradoxes, figured also by Blume, is a native of the province of Buitenzorg, in the western parts of Java, and grows at the height of from 1200 to 1500 feet above the level of the sea. It has been called Brugmonia Zippelii ( Vide Fig. 3).

**Brugmonia Zippelii**

All these curious plants agree in several circumstances. In the first place, they have no proper roots of their own, and derive their nourishment from the vegetables on which they grow. In the second place, they have no stems, the flowers being seated on the roots which support them. Thirdly, they are destitute of leaves, the flowers being encased only by scales, which are purplish, or brownish, and resemble the outer coverings of buds, or rather the shaggy scales of other clinging plants; for, deriving their nourishment through the leaves of another vegetable, they do not require leaves of their own. So that here we have plants consisting of flower only, neither root, stem, nor leaves being present. And what is still more curious is, that, although the largest and most magnificent flowers in the world, they have very little in common with other flowering plants. They have no proper seeds, but are multiplied by spores, similar to the spores of mushrooms, to which, indeed, their general form bears very great resemblance. The flowers are of a mushroom-like substance, and smell like tainted beef; they contain no hollow vessels, like most other flowering plants, but consist of cells alone, like the mushroom-tribe; and they arise from beneath the bark of the cissus, which becomes enlarged by their growth, and very much resembles that false covering which some of that tribe have which grow upon living plants; raising the outer surface into transversal, and bursting it as they become more fully grown, such as the biltips and bladders of corn, and so forth. Hence these stupendous flowers, which are six to nine feet in circumference, shew their likeness to the most lofty of the mushroom tribes, some of which are so minute as scarcely to be visible to the naked eye.
THE PENRHYN SLATE QUARRY

The Penrhyn Slate Quarry, located in Caernarvonshire, about six miles from Bangor, at the entrance of the romantic valley named Naun Frongos, and belongs to G. H. D. Pennant, Esq. of Penrhyn Castle. The summit of the slate mountain is termed Pen Rhon, a name which signifies breast or pop, and is frequently given to the tops of hills which do not rise abruptly. The perpendicular height is not more than 600 or 700 yards.

The solid masses of slate which are taken from this quarry are from 80 to 100 feet in height; and when the sun shines they exhibit with great brilliancy all the colours of the rainbow. The business of separating the layers from the main body appears a dangerous employment, particularly when it is necessary to split the rock from the summit. This is effected by fastening a small beam to the top, with ropes at each end, as represented in the sketch.

Upon this beam, four, five, or six men, frequently stand, and with their iron crow and sledge hammers, flake off the slate from the sides in masses, six or seven feet in length, from two to eight in breadth.

The various pieces of slate are shaped upon the spot, according to the purposes for which they are intended, such as gravestones, chimney-pieces, covering of houses, cisterns, rails, &c. The rude slates are first reduced to shape and size by a small edged tool, the slate being first laid upon the edge of an iron plate, fixed in an upright position; they are then taken to the scraper, who, with a small piece of thin steel takes off the rough parts and reduces the surface to a level; and are afterwards piled up in grosses for exportation. Formerly they were conveyed to the port at a very heavy expense, by means of carts, driven along the ordinary road, but afterwards an iron rail-road was formed, which reaches from the quarry to Port Penrhyn, a distance of six miles. Upon this line are several inclined and sloping planes. The waggons are now made of iron, and each holds about half a ton; several of them can be drawn by one horse, so that six or eight horses now perform the work which formerly required sixty or eighty. At Port Penrhyn the slates are shipped, not only for all parts of Great Britain, but even for the United States of America.

The expense of the inclined planes, and rail roads, connected with this quarry, and incurred by the late Lord Penrhyn, in diminishing the labour of conveying the slates, is said to have been upwards of £170,000.

THE PUMA (Felis Concolor)

This animal, which is found in America, from Patagonia to California, is frequently called the American Lion. It is large, and uniformly of a yellow colour, and so far has some similarity to the lion of the Old World, but it is without mane or tuft to the tail. Its length, from the nose to the root of the tail, is about five feet; and its height, from the bottom of the foot to the shoulder, twenty-six inches and a half.

The Puma lies concealed in the underwood, and does not have recourse to caverns for shelter. It ascends and descends the highest trees with swiftness and ease, though it may be considered rather as an inhabitant of the plains than of the forests. Its depredations are generally confined to quadrupeds of a middling size, as calves, sheep, &c.; but against those its ferocity is more insatiable than its appetite, destroying many at an attack, but carrying away perhaps only one. If it has more than sufficient for a meal, it will cover and conceal the residue for a second repast.

A'Zara possessed a tame puma, which was as gentle as a dog, but very inactive. It would play with any one; and if an orange were presented to it, would strike it with the paw, push it away, and seize it again, in the manner of a cat playing with a mouse. It had all the manners of a cat, when engaged in surprising a bird, not excepting the agitation of the tail; and when caressed purred like that animal.

An incident occurred a few years back, not far from New York, which disproves the assertion that the puma will not attack a man. Two hunters went out in quest of game on the Katekill mountains, in New York, each armed with a gun, and accompanied by his dog. They agreed to go in contrary directions round the base of a hill, and that, if either discharged his piece, the other should cross the hill as expeditiously as possible, to join his companion. Shortly after separating, one heard the other fire, and hastened to his comrade. After searching for him for some time without effect, he found his dog dead and dreadfully torn. Knowing from this circumstance that the
animal shot at was large and ferocious, he became more anxious, and assiduously continued his search for his friend; when his attention was suddenly diverted, by a deep growl, to a large branch of a tree, where he saw a puma touching the body of the man, and directing his eyes toward him, apparently hesitating whether to descend and make an attack on the survivor, or to relinquish its prey and take to flight. Conscious that much depended on celerity, the hunter discharged his piece, and the puma, mortally wounded, and the body of the man, fell together from the tree. The surviving dog then flew at the fallen beast, but a single blow from its paw laid the dog dead by its side.

Finding that his comrade was dead, and that there was still danger in approaching the wounded animal, the man prudently retired, and brought several persons to the spot, where the unfortunate hunter, the puma, and both the dogs, were all lying dead together.

Major Smith witnessed an extraordinary instance of the great ferocity of this animal, when engaged with its food. A puma, which had been killed and was confined, was led out to be shot, which was done immediately after the animal had received its food; the first ball went through his body, and the only notice he took of it was by a shrill growl, doubling his efforts to devour its food, which he actually continued to swallow with quantities of his own blood, till he fell.

Notwithstanding such instances of the violence of disposition of this animal, it is very easy to be tamed. The same gentleman saw another individual that was led about with a chain, carried in a wagggon, lying under the seat upon which his keeper sat, and fed by flinging a piece of meat into a tree, when his chain was coiled round his neck, and he was desired to fetch it down; an act which he performed in two or three bounds, with surprising ease and docility.

A tame puma, which died recently, was tame to the use of Mr. Kean the actor. It was quite docile and gentle. After the death of this animal, it was discovered that a musket-ball, in all probability, had injured its skull, which was not known in its lifetime.—Cuvier's Animal Kingdom.

A VISIT TO A SALT MINE.

The following account of a visit to the Salt Mine at Ischel is extracted from a lively and agreeable little volume* just published by Dr. Tobin, who accompanied the late Sir Humphry Davy on his visit to the Continent, from which that great philosopher did not live to return.

"I went with a very large party, consisting of almost all the strangers in Ischel, to visit the Salzhof, the salt mountain or rather mine, which was to be illuminated for the visitors. We set out at about one o'clock, a long string of carriages, and an hour's drive through a very pleasant valley, we arrived at the foot of the mountain which contains the mine. Here a number of miners were waiting with seated chairs for the ladies, many of whom however preferred walking up the mountain, and in about three quarters of an hour we arrived at the chief entrance of the mine. We were now to be attained, as is usual on entering the mines, in a long white mantle or frock, and a large wide broad hat, the latter to hinder us from knocking our brains out, and the former to keep our clothes clean. Here was confusion dire; this flock was too small, this too long; this lady had no binner, this gentleman could find no stick. I laid hold of the first flock and hat I met with, but up came a lady and begged I would exchange with her, as her flock was so long and could not fit in it, and mine so short that it did not reach to my knees. Dressing at length finished, the ladies were placed in their carriages, that is two in each wheelbarrow, face to face, with a miner before to pull, who carried a lamp in his hand, and another to push behind, and between every two barrows went another miner bearing a paper lantern. The gentlemen were of course on foot, with the exception of one or two gently invaders."

"In this guise, with half a dozen miners going before carrying lamps, the whole train entered the passage, and in a few seconds lost sight of daylight. After a long wet, and (in spite of our many lamps) dark journey through this narrow and low passage, where my head was continually coming in contact with the roof, we came to the Rutsch, or slide, which leads down into the salt-chamber. The Rutsch is formed of the trunks of large fir-trees laid close together, rounded and polished, and stands in an oblique position, in an angle of about forty degrees. A miner, with a lamp in one hand, places himself astride these trees, and holds with his other hand a cord which is fixed to the rock on the side. The person who wishes to descend sits himself behind the miner, and holds him by the shoulders. The miner then lets the cord slip through his hands, and down they go like lightning into what seems an abyss of darkness; safe at the bottom, he gives a signal that the next couple may follow. When the slide is very long, as in the mines at Hallein, near Salzburg, the miner always sits upon a thick leather cushion, and when alone makes no use of the cord, but rushes down with fearful speed into the salt-cave below. When we arrived at the slide, and the ladies had all got out of their barrows, after much discussion and many fears and doubts, they consented thus to descend, as the miners assured them it was more dangerous to do so by the steps cut in the rock, at which not one would venture. When we came to the bottom of the slide, which ends in a slight curve, to break the impetus of the descent, we found ourselves in an immense cavern, or room, excavated in the rock, about twelve feet high, and from ten to twelve thousand in circumference, supported in the middle by a massive pillar of rock, and lighted up by some hundred lamps, which, however, only served to give the scene a more awful and gloomy appearance. The visitors, whose number was considerable, in their long white mantles and hats, looked like spectres wandering in the shades of the nether world. The roof and walls of this cavern were covered with minute crystals of salt, not, however, sufficiently large to give it to the glittering appearance which I had expected. The mountain contains a great many of these salt-chambers, which at different periods are filled with fresh water, conducted into them by wooden pipes. When this has dissolved a sufficient quantity of salt, which operation occupies some months, it is drained off through a deep perpendicular shaft, near the middle of the cave, and is then conveyed through wooden pipes, often for a very great distance, to the boiling-houses, where it undergoes the process of evaporation."

"Having wandered through these gloomy abodes of silence and night for some time, we ascended the stairs, the ladies resumed their seats in the barrows, and the procession returned as it had entered. To save my head from additional thumps to the many it
had received on entering, I took the place of one of the pushers, and after a merry drive of about twenty minutes we again saw daylight, like a distant star, increasing in size till we reached the entrance of the mine. We here took off our spectacled-clothes, and returned home in our usual appearance, and a merry party we were.

"ALL FOR THE BEST."

No one can have lived long in the world without observing how frequently it happens that events, which, at the time they happened, were the source of bitter disappointment, have, eventually proved very blessings to us; and that many of those things which have been most anxiously desired, but which it has pleased God to withhold from us, would have proved, if granted, the origin of certain ills.

The recollection of such circumstances in our own individual case, while it renders us deeply grateful to Divine Providence for the past, should make us trust with perfect confidence to the same Infinite Wisdom for the future.

It would be difficult perhaps to find an anecdote bearing more forcibly on what have just observed, than one which is mentioned in the life of Bernard Gilpin, that great and good man, whose pious labours in the counties of Westmoreland, Cumberland, Northumberland, and York, at the period of the Reformation, procured for him the title by which he is still remembered in those parts, as "The Apostle of the North." It appears that it was a frequent saying of him when exposed to losses or troubles,—"Ah, well! God's will be done: nothing happens which is not intended for our good."

Towards the close of Queen Mary's reign, Bernard Gilpin was accused of heresy before the merciless Bishop Bonner; he was long apprehended, and was left his quiet home, "nothing doubting," as he said, "but that it was all for the best," though he was well aware of the fate that might await him; for he found him giving directions to his steward "to provide him a long garment, that he might go the more comely to the stake," at which he would be burnt.

While on his way to London, by some accident he had a fall and broke his leg, and put a stop for some time to his journey. The persons in whose custody he was, took occasion uncharitably to return upon him his habitual remark. "What?" said they, "is this all for the best—you say, Master, that nothing happens which is not for our good; how you broke your leg is so intended?"—"Sir, I take no diminution of it," was the master's reply: and so in very true it proved; for before he was able to travel, Queen Mary died, the persecution ceased, and he was restored to his liberty and friends.

ABBREVIATIONS AND SIGNS.

Abbreviations and Signs, are generally used to express in small, that which is in itself large, or in short, that which is in itself long. In this way we write London on a pocket handkerchief, England on a bit of paper, or the whole surface of the earth and all the stars in the heavens, on the surface of two little globes, a foot or eighteen inches in diameter. So also we have the whole history of the world in a small book, which we can carry in our pocket; or the principal events in a table, which we can examine at a glance.

The words of language, to which we owe so much of our knowledge and enjoyment, are nothing but signs and abbreviations. It would take years to know and months to tell, in detail, all that we mean by the short word "man;" and yet we understand it whenever we hear it spoken or see it written.

The abbreviations and signs of speech are common to us all, learned and unlearned. But there are particular abbreviations and signs, belonging to particular branches of knowledge, or science; and these, though they use of very great advantage to those who do know them, are puzzling to those who do not, just in the same manner as a man who knows no language but French is puzzled with English.

Those signs are the Alphabets of the sciences, just as letters are the alphabets of languages; and it is just as impossible for any one to know the science without first knowing its alphabet, as it is for any one to be able to read a book without knowing the A, B, C.

The learning of their letters being the first and humblest lesson of children at school, persons who are farther advanced in life think it beneath them to learn alphabets; and, from that silly prejudice, they remain ignorant of the sciences to which those alphabets are the keys.

Yet those alphabets are the most wonderful of human contrivances. The steam engine and gas light are mere trifles compared with the A, B, C.

The figures 1, 2, 3, 60, which are the alphabet of numbers, are very curious; and enable us to do that in so many seconds, which, if we had no such contrivance, we could not do in so many centuries. The distance of the sun from the earth is about 199 millions of half miles, and half a mile is about a thousand paces; five miles an hour is fast walking, and the paces then are as fast as one can count distinctly. At that rate, though the first man had begun the journey, or the counting, at the moment of his creation, and he and his posterity continued it at twelve hours every day, it would have been more than 300 years after the birth of Christ before they had finished the task. By means of the alphabet of numbers, any body can do it as fast as three 0's can be written. The half miles are 190,000,000; the paces in half a mile 1000; we have only to add three 0's to the first of these, and we have the whole number of paces,—190,000,000,000.

The alphabet of numbers does not, however, express the relations of numbers, and so must have other signs for these; and, as the figures which stand for the numbers of numbers are different from the words, or names, which are the names of things, there are also different signs for the principal relations of numbers. Not as the value of every thing that can be valued is reckoned in numbers, the relations of numbers are of very general use; and as the signs of those relations are the shortest means of expressing them, every body should be acquainted with them.

These signs are sometimes called "Algebraical" signs, and the name is far from being an improper one. "Al" means "the" and "gebra" means "to consolidate, or bring together into little space, so that the whole may be seen at once; and thus "Algebra" means "the expressing of the greatest meaning by the fewest signs." Those signs are not explained, except in the books of science, which ordinary readers are not in the habit of consulting; but they are sometimes used in other books; and as, when so used they are puzzles to many people, simple explanations of them may be useful, and these we shall give on future occasions.

Great works are performed not by strength but by perseverance.—JOHNSON.

Sure are I that the discovery of a truth formerly unknown doth much convince men of ignorance than nature of ignorance.—RALEIGH.
BOSCOBEL COTTAGE.

Boscober Cottage is celebrated in English history as having been the first place of refuge in which King Charles II took shelter after his defeat at the battle of Worcester, 3rd. Sept. 1651. It is situated near the little town of Madeley, on the confines of Worcestershire and Shropshire, and was, at the time referred to, the residence of William Penderell, a forester or servant in husbandry to Mr. Giffard, the owner of the surrounding domain. To the fidelity of this man, his wife, his mother and his four brothers, Richard, Humphrey, John, and George Penderell, was the fugitive king indebted for some days of concealment and safety, when even the noble and gentle who parted from him chose to remain in voluntary ignorance of the exact place of his retreat "as they knew not what they might be forced to confess."

Few palaces awake more pleasing recollections of human nature in our minds than does this lowly cottage. Its inhabitants were of the poorest among the poor, the humblest among the humble; death, on the one hand, was the certain punishment which attended their fidelity if discovered; while, on the other hand, riches, beyond any thing they could have contemplated, courted their acceptance, and might have been secured by one single treachery word; yet did this virtuous band of brothers retain their fidelity untempted and their loyalty unshaken. In the immediate vicinity of this house stood the "Royal Oak," among the branches of which the king remained concealed while his pursuers actually passed round and under it: the original tree was, after the Restoration, speedily destroyed by the zeal of the royalists to possess relics of their sovereign's hiding place, but another, raised from one of its branches, is still flourishing.

Is the Nicol Ilands the natives build their vessels, make the sails and cordage, supply them with provisions and necessaries, and provide a cargo of arack, vinegar, oil, coarse sugar, cocoanuts, verdage, black paint, and several inferior articles, for foreign markets, entirely from the cocoanut tree.—Forester's Oriental Memoirs.

REMARKABLE FACTS.

A million of Bank Notes placed one above another would form a pile 416 feet in height, which is much higher than St. Paul's, and more than double the height of the Monument. Supposing them to be spread out, they would extend over 250,000 square feet, a space equal to the area of Grosvenor Square, London.

The various combinations into which the twenty-four letters of the alphabet may be arranged, amount to 820,418,601,735,389,480,000,000.

If a person were employed telling money, reckoning a hundred pieces a minute, and continuing at work ten hours each day, he would take nearly seventeen days to tell a million. A thousand men would take forty-five years to reckon a trillion.

The number of miles run by Stage Coaches in England is annually about 40,580,000. The expense of driving coaches by horses is about two shillings per mile, so that the annual expenditure for horse-keep is about 4,000,000.
The Penryn Slate Quarry

“Is considered one of the greatest curiosities in Wales. It is situated at Dolawen, in Caernarvonshire, about six miles from Bangor, at the entrance of the romantic valley named Nant Frangon, and belongs to the G. H. D. Pennant, Esq. of Penrhyn Castle. The summit of the slate mountain is termed Y Bron, a name which signifies breast or pap, and is frequently given to the tops of hills which do not rise abruptly. The perpendicular height is not more than 600 to 700 yards.

“The solid masses of slate which are taken from this quarry are from 80 to 100 feet in height; and when the sun shines they exhibit with great brilliancy all the colours of the rainbow. The business of separating the layers from the main body appears a dangerous employment particularly when it is necessary to split the rock from the summit. This is effected by fastening a small beam to the top, with ropes at each end, as represented in the sketch.

“Upon this beam, four, five, or six men, frequently stand, and with their iron crows and sledge hammers, flake off the slate from the sides in masses, six or seven feet in length, from two to eight in breadth.

“The various pieces of slate are shaped upon the spot, according to the purposes for which they are intended, such as gravestones, chimney-pieces, covering of houses, cisterns, rails, &c. The rude slates are first reduced to shape and size by a small edged tool, the slate being first laid upon the edge of an iron plate, fixed in an upright position; they are then taken to the scraper, who, with a small piece of thin steel takes off the rough parts and reduces the surface to a level; and are afterwards piled up in grosses for exportation. Formerly they were conveyed to the port at a very heavy expense, by means of carts, drawn along the ordinary road, but afterwards an iron rail-road was formed, which reaches from the quarry to Port Penrhyn, a distance of six miles. Upon this line are several inclined or sloping planes. The wagons are now made of iron, and each holds about half a ton; several of them can be drawn by one horse, so that six or eight horses now perform the work which formerly required sixty or eighty. At Port Penrhyn the slates are shipped, not only for all parts of Great Britain, but even for the United States of America.

“The expense of the inclined planes, and rail roads, connected with this quarry, and incurred by the late Lord Penrhyn, in diminishing the labour of conveying the slates, is said to have been upwards of £170,000.”