

Literature, &c.

The British Magazines

THE CHEMIST'S DREAM.

Methought I was exploring the inner recesses of an extensive cave, whose windings past ages had never before echoed the tread of human foot. With ever fresh admiration and delight I was gazing at the thousand wonders which the flaming torch light revealed on every side, at each step of my progress, when a strange sound, as if the hum of many voices fell upon my ear. What such a sound could mean, in such a place was more than I could divine.

Curiosity led me in the direction whence it came. The buzz of conversation cheerful as it would seem, from the occasional bursts of merriment that were heard, grew more distinct: until the dark and narrow passage which I had been following, suddenly opened upon one of those magnificent rock parlours, of whose grandeur and beauty description can convey but faint ideas. A flood of light illuminated the arching roof with the vast columns of stalactite sparkling with crystal that supported it, and was reflected with imposing effect from the huge sheets of the same materials, of the purest white, that hung from the ceiling in graceful, but substantial drapery. I stood in one of Nature's noblest halls, but not alone.

A strange company had gathered there. 'Black spirits and white, blue spirits and grey' were before me. A festive occasion had assembled in joyous mood and in holiday attire, the first born of creation, the elements of things.

In dreams nothing ever surprises one. It seemed perfectly natural to see those fairy forms in that strange grotto: so, accosting without hesitation the one nearest to me, I apologized for my intrusion, and was about to withdraw. From my new acquaintance, however, I received so cordial a welcome, and so earnest an invitation to become a partaker in their festivities, that I could not deny myself the pleasure of accepting the hospitality so kindly offered.

I was soon informed that some of the leading characters among the elements, had resolved some weeks before, on having a general Picnic dinner party. Fifty-six family invitations had accordingly been sent out, one to each of the brotherhood; and preparations for the feast had been made upon the most extensive scale. Sea and land had been ransacked for delicacies, and every thing was put in requisition that could minister to the splendour of the entertainment, or to the enjoyment of the occasion.

At the hour I so unexpectedly came upon them, nearly all the guests with their families had assembled in the strange drawing room I have described, awaiting the summons to the banquet. Spacious as was that drawing room, it was nearly filled with these interesting children of nature; and here they were seen, not as in the chemist's laboratory, writing in the heated crucible, or pent up in glassy prisons peering out of gas-holders and Florence flasks, but arrayed in their native beauty, each free as air, and acting as impulse prompted. There were those present of every hue, of every dress, and every variety of appearance. The Metals, the Gases, the Salts, the Acids, the Oxides, the Alkalies, all were there. From the mine, from the shop of the artisan, from the mint, from the depths of ocean even, they had come; and a gayer assemblage, a more animating scene, my eyes had never beheld.

Many of the ladies of the party were most tastefully attired. Chlorine wore a most beautiful greenish yellow robe, that displayed her queen-like form to great advantage. The fair daughters of Chromium, particularly attracted my attention with their gay dresses of the liveliest golden yellow and orange red. Iodine had but just arrived, and was not yet disencumbered of an unpretending outer garment of steel grey, that enveloped her person; but the warmth of the apartment soon compelled her to throw this aside, when she appeared arrayed in a vesture of thin gauze, of the most splendid violet colour imaginable. Carbonic Acid was there, but not clad in the airy robes in which I expected to see her. The pressure of the iron hand of adversity had been upon her, and now her attire was plain, simply a dress of snowy white, the best which the straitened circumstances to which she had been reduced allowed her to assume. Quite a contrast to her was her mother Carbon, whom you would have supposed to be a widow in deep mourning, or a nun who had taken the black veil, so sable were her garments, so gloomy her countenance; had not her ear-rings of polished jet, and a circlet of diamonds that glittered on her brow, evinced that she had not yet altogether renounced the vanities of the world. The Belle of the room appeared to be Nitrous Acid, the graceful daughter of Nitrogen; airy in all her movements, with dress of deepest crimson, that corresponded well with a lip and cheek rivaling the ruby in their redness.

Among the Lady Metals, too, there were many of bright faces and resplendent charms; but I must pass on to a description of the gentlemen of the party. Sulphur wore a suit of modest yellow plush, while Phosphorus quite disconcerted some of the most decorous of the matrons present, by making his appearance in a pair of flesh coloured tights. Phosphuretted Hydrogen, or, as he is named, Will-o-the-Wisp, startled me by flitting by in a robe of living flame, the dress in which the gaseous youngster is said to haunt church yards, and

marshy places, playing his pranks upon poor benighted travellers.

The King of the metals, Gold, was arrayed in truly gorgeous apparel, though it must be confessed, there was a glitter and an air of haughtiness about him from which you would turn with pleasure to the mild sweet face of his royal sister Silver, who leaned upon his arm, a bright-eyed, unassuming creature of sterling worth.

Mercury was there, as lively and as versatile as ever—a most restless being; now, by the thermometer, noting the subterranean temperature; now by the barometer, predicting a storm in the regions over head, now arm and arm with this metal, then that; and they all, by the way, save stern old Iron, had hard work to shake him off. A strange character surely was he, a philosopher of uncommon powers of reflection, the veriest busy body in the world, well versed in the art of healing, a practical amalgamist, in short a complete factotum Potassium, though decidedly a brilliant looking fellow, manifested too much levity in his deportment to win respect, and was pronounced by those who knew him best to be rather soft. In gravity Platinum surpassed all the company; in natural brightness Tin was onshone by but few.

When Oxygen arrived, and his light elastic tread was heard, and his clear transparent countenance was seen among them a murmur of congratulation ran round the drawing room and involuntarily all assembled arose to do him homage. He was indeed a patriarch among them—literally a father to many of the younger guests. His arrival was the signal for adjournment to the banquetting room where of right, he took his seat at the end of the table.

Touching the apartment we had now entered, I can only say that it was grand beyond description. It was lighted up with the radiance of noon day, by an arch of flame intensely dazzling, produced by a curious apparatus which Galvanism, who excels in these matters, had contrived for the occasion, out of some materials with which his friends Zinc and Copper had furnished him. Festoons of evergreens and wreaths of roses encircled the alabaster columns, and made the whole look like a hall in Fairy land.

But I must describe the table and its paraphernalia. The preparation of the viands—I mean the baking, boiling, roasting, stewing, and the like, had been committed to Caloric, who has had long experience in that department. The nobler of the Metals had generously lent their costly services of plate, while Carbon united with Iron, to furnish the elegant steel cutlery used on the occasion. Alumina furnished the fine set of China that graced the table, and Silica and Potash, without solicitation, sent, as their joint contribution, cut glass pitchers and tumblers, of superior pattern and transparency.

As among these sons of Nature, there is no craving for artificial excitement, Oxygen and Hydrogen (who, by the way, have done more for the Cold Water Societies than Delevar or Father Mathew, were commissioned to provide the drinkables, and what beverage they furnished may easily be conjectured. Carbon with Oxygen and Hydrogen, found most of the vegetables; and Nitrogen, whose assistance here as commissary, was indispensable, joined them in procuring the meats, under which the variety—no appetite but would be cloyed with the profusion of good things—thus provided.

Through the liberality of the four who have been named, left for their associates to contribute still some individual offerings to the feast, deserve to be noticed. Thus the oysters Carbonate of Lime sent in their shells; the pyramids of ice cream for the dessert were produced by the daughter of Chlorine and Hydrogen, the bride of Sodium, who was out several hours in the snow, engaged in freezing them; and the almonds and peacher came from the conservatory of Hydrocyanic Acid, the druggist.

After grace had been said by Affinity, who is a sort of chaplain to the Elements, having officiated at the weddings of all the married ones of the company, a vigorous onset was made upon the good things before them. At first all were too much engaged for conversation; but the dessert appearing at last, as they cracked the nuts the jest was cracked too; the toast and song were called for, and with and innocent hilarity became the order of the day. Even Oxygen, who had presided with such an air of dignity, relaxed from his severity, and entertained the younger ones at the table with many a tale of his mischievous pranks in the time of his old father Chaos, when Time and himself were young. Strange tales they were too, of earthquakes with which Hydrogen and he would now and then frighten the Ichtyosari and Megasteria of the ancient world, and conflagrations comical, as of old Vulcan's tongs and anvil, kindling them before his eyes with the very bolt he was forging; this, however, he added, with a sly glance at his staid partner Nitrogen, who sat near, was before marriage had sobered down his spirits and tamed his impotency.

I have no space to chronicle more of these freaks of Oxygen's early youth, nor of any of the sayings and doings of others of the party on this memorable night, else would I give the marvellous story of Nickel had to relate of a falling out he once had with the Man in the Moon, and of a journey he was consequently under the necessity of making in hot haste to the earth for refuge. I would tell too of the drolleries of Nitrous Oxide, that drollest funniest, queerest, craziest, youngest, and how Phosphorus made a flaming speech, and Potash a caustic one; and how Mercury pro-

posed as a toast, 'the Medical Profession,'—to whom we say 'use us but do not abuse us' I must speak however of a curious little by scene I chanced to witness; it was a flirtation that Platinum was carrying on with Hydrogen, whom much to my surprise I found seated among the metals, and quite at home among them too. There was quite a contrast between Platinum, grey, heavy and dull as he was, and the light and buoyant creature by his side; but there soon seemed to be evidence of some natural attraction. Platinum grew warm in his attentions, and ere long quite a flame was kindled between them.

So passed the evening, all went on 'merry as a marriage bell,' with nothing to mar the good humour that prevailed; till, in an evil hour, Sulphuretted Hydrogen, a disagreeable fellow, against whose appearance at the banquet most of the company had protested, entered the apartment with a very offensive air. In an instant the whole family of Metals, to whom he is particularly obnoxious, obviously changed colour. Lead fairly grew black in the face with indignation; Arsenic and Antimony seemed to be jaunted with rage; Ammonia, to whom his presence recalled very unpleasant associations, in trying to avoid him precipitated several oxides to the floor; while Chlorine, with more self command than the rest, advanced with a firm step to repel the intruder, looking as she were about to annihilate him on the spot.

How the scene might have terminated I know not; for just at that moment a strange sound of awful import, like the tramping of a mighty host, came to ears, I felt sure it was an 'earthquake's voice,' and that now my fate was sealed! My knees tottered under me; the arching grotto and the festive board gradually vanished before my eyes, which opened upon the class as they were leaving the laboratory of our worthy professor of chemistry; where, it seemed, much to my confusion, I had fallen asleep during the lecture, and,

Dreamed a dream in the midst of my slumber.

WHERE IS THE BRITON'S HOME.

BY SIR E. B. LYTTON.

Where is the Briton's home?

Where the free step can roam,

Where the free sun can glow,

Where a free air can blow,

Where a free ship can bear

Hope and strength—everywhere

Wave upon wave can roll—

East and West—pole to pole—

Where a free step can roam—

There is the Briton's home!

Where is the Briton's home?

Where the brave heart can come,

Where labour wins a soil,

Where a stout heart can toil;

Where, in the desert blow,

Any far seed is sown;

Where gold or fame is won,

Where never sets the sun;

Where a brave heart can come—

There is the Briton's home!

Where is the Briton's home?

Where the mind's light can come;

Where our God's holy word

Breaks on the savage herd;

Where a new flock is won

To the bright Shepherd One;

Where the church bell can toll,

Where soul can comfort soul,

Where holy faith can come—

There is the Briton's home!

Where is the Briton's home?

Where man's great law can come,

Where the great truth can speak,

Where the slave's chain can break,

Where the white's scourge can cease,

Where the black dwells in peace;

Where, from his angel-hall,

God sees us brothers all:

Where light and freedom come—

There is the Briton's home!

From Hogg's Instructor.
GEYSERS.

Iceland which is situated in the north western corner of the map of Europe, and in latitude which renders its climate particularly frigid and sterile, possesses several of the most remarkable natural phenomena. It is indeed almost totally a volcanic formation, with great lava plains lying on its surface, and great fissures cracking and rending these up into broken sections. The volcano of Mount Hecla is one of the most active burning mountains in the whole world, and pours forth most tremendous eruptions of flame and lava, and the Yokuls, although they only send forth the fire which smoulders below their yawning craters after a cycle of years, nevertheless exert a strange influence on the internal geological character of the island.

It never has been ascertained from what cause the spontaneous combustion of burning mountains is sustained, but that these causes may be very active is apparent from the fact, that the latent fire of the Icelandic volcanoes

produces great streams of boiling water, which issue from the earth at considerable distances from the volcanic vents. It is supposed that sodium and potassium, two chemical substances which possess the wonderful property of burning in water, must enter largely into the composition of the igneous fluid; but, speculation apart, the Geysers or boiling streams, furnish plenty of cause for wonder and reflection.

In the vicinity of the volcanic mountains the ground seems to be cavernous, or rather it really is so, for the traveller hears the tread of his foot produce a hollow echo, and the rushing of subterranean waters rises sometimes on his ear; steam also issuing from the orifices in the ground. The Geysers are not periodical eruptions like the volcanoes. Instead of the fire, smoke, molten lava, scoria, and lapille, which are hurled from the depths of the mountain, a constant rush of hot steam and boiling water is maintained, which spouts up into the air in jets, and runs away in streams. The greatest of these remarkable springs is at Haukadal, a considerable distance from tri-peaked Hecla, where about a dozen of distinct spots takes place, throwing their hot white vapor high into the sky, and rendering the same visible for miles distant. It may be as well to remark, that *geysa* is a derivative from the Icelandic verb *geysa*, which signifies to rage or burst wildly forth.

The Great Geyser at Haukadal is the largest in Iceland: it is surrounded by a hollow circular mound, which it has formed by its own action during the many centuries in which it has been in existence. This mound is a large basin, about one hundred and fifty feet in circumference, which is ordinarily filled to the depth of four or five feet, with clear pure boiling water. In the centre of the great basin there is a vent or funnel, about ten feet in diameter, which gradually contracts and descends to about eighty feet into the bowels of the earth. The inside of the basin presents a most beautiful and smooth appearance, being covered also with whitish siliceous incrustations, which have been acted upon, and rendered an excellent coating by the boiling water. From the basin open two channels, which allow of the constant flow of this highly impregnated mineral water, which, wimpling through a turly soil, and acting on the moss and grasses, produces several of the most beautiful specimens of incrustation, causing the moss plants as well as the stunted trees, to appear like white stones, with all the niceties of their vegetable character preserved.

The eruptions of the Geysers are quite irregular, no chronic calculation of their action can be given. The Great Geyser has been observed to throw out its jets at periods within six hours, and to cast its waters one hundred and fifty feet high. This water falls in drizzling showers of soft, cool rain, beneath which travellers have stood, without inconvenience, save from the wet. Beautiful prismatic appearances take place when the springs are in motion, the sunbeams forming rainbow halos in their passage through the vapours. Many of the geysers have ceased to act within these last sixty years. During the dreadful earthquake of 1784, which shook Iceland to its very heart, and tore up its bosom with many gashes and openings, thirty-five new geysers burst forth. They have since expended their strength, however, and are now inactive.

The other most remarkable boiling streams in Iceland, in addition to the Great Geyser, are the Little Geyser, the Strocker and the Little Strocker—the two last deriving their name from a verb *strocka*, to agitate or move violently.

The Icelanders, who are a very primitive, simple people, possessing few natural incentives to advancement, are yet almost as superstitious as were their Runic fathers, and these phenomena appear to them the results of supernatural agency, and assuredly the geysers would almost seem to confirm their superstitions by a secret intelligence. If stones are thrown into these springs, their guardian gnomes immediately become angry, and roar, and then they belch forth boiling water and steam. The intrusion of stones immediately causes an agitation in the fountains, and, after such, the water will fly considerably higher than it does naturally, throwing the stones violently forth. Sometimes the quantity of vapour emitted from these geysers is so great that, in its ascension, it rolls out, forming a vast, dense cloud that eclipses the mid-day sun; and the deep hollow roaring of their eruptions, like subterranean artillery, rises impressively upon the ears of the stranger during the stillness of the night.

There are, in addition to the erupting geysers, others more passive, which produce water, at a temperature of two hundred degrees of Fahrenheit, and these waters are used by the people of Iceland for washing; and other domestic purposes, and near to these are also banks of hot sulphur and clay, which produce the efflorescence of alum. In some parts of the island there are hot springs of water, below the beds of rivers whose strata of water are very cold, but yet, so powerful is the hot spring, that it forces itself through the volume of the river, and bubbles up on its surface, flowing on and preserving its heat, for a considerable way, with the current of the river

BURGOYNE'S SURRENDER.

Part of an Article in Blackwood's Magazine.

It was at Fort Edward that the disasters of the expedition began to present themselves to the British general as formidable. A detach-