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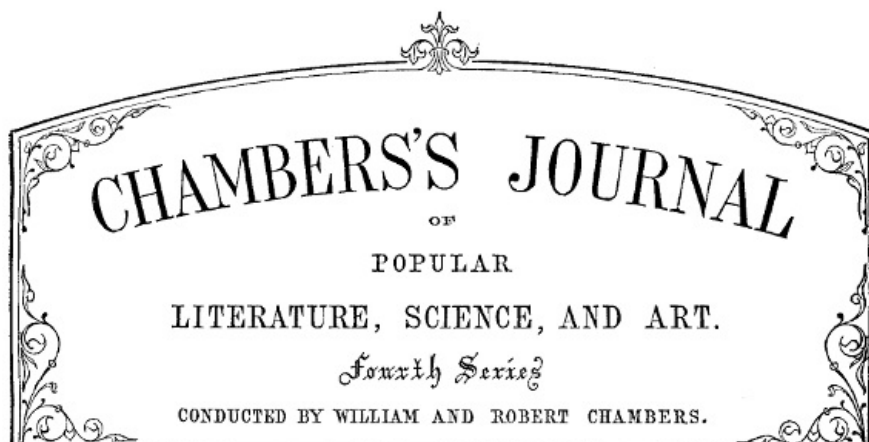
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**CHAMBERS'S JOURNAL  
OF  
POPULAR  
LITERATURE, SCIENCE, AND ART.**

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## A STRANGE FAMILY HISTORY.

FOR the following curious episode of family history we are indebted to a descendant of one of the chief personages involved; his story runs as follows.

Somewhat less than one hundred years ago, a large schooner, laden with oranges from Spain, and bound for Liverpool, was driven by stress of weather into the Solway Firth, and after beating about for some time, ran at last into the small port of Workington, on the Cumberland coast. For several previous days some of the crew had felt themselves strangely 'out of sorts,' as they termed it; were depressed and languid, and greatly inclined to sleep; but the excitement of the storm and the instinct of self-preservation had kept them to their duties on deck. No sooner, however, had the vessel been safely moored in the harbour than a reaction set in; the disease which had lurked within them proclaimed its power, and three of them betook themselves to their hammocks more dead than alive. The working-power of the ship being thus reduced and the storm continuing, the master determined to discharge and sell his cargo on the spot. This was done. But his men did not recover; he too was seized with the same disease; and before many days were past most of them were in the grave. Ere long several of the inhabitants of the village were similarly affected, and some died; by-and-by others were smitten down; and in less than three weeks after the arrival of the schooner it became evident that a fatal fever or plague had broken out amongst the inhabitants of the village.

The authorities of the township took alarm; and under the guidance of Squire Curwen of Workington Hall, all likely measures were taken to arrest or mitigate the fatal malady. Among other arrangements, a band of men was formed whose duties were to wait upon the sick, to visit such houses as were reported or supposed to contain victims of the malady, and to carry the dead to their last home.

Among the first who fell under this visitation was a man named John Pearson, who, with his wife and a daughter, lived in a cottage in the outskirts of the village. He was employed as a labourer in an iron foundry close by. For some weeks his widow and child escaped the contagion; but ere long it was observed that their cottage window was not opened; and a passer-by stopping to look at the house, thought he heard a feeble moan as from a young girl. He at once made known his fears to the proper parties, who sent two of the 'plague-band' to examine the case. On entering the abode it was seen that poor Mrs Pearson was a corpse; and her little girl, about ten years old, was lying on her bosom dreadfully ill, but able to cry: 'Mammy, mammy!' The poor child was removed to the fever hospital, and the mother to where her husband had been recently taken. How long the plague continued to ravage the village, I am not able to say; but as it is about the Pearson family, and not about the plague I am going to write, such information may be dispensed with.

The child, Isabella Pearson, did not die; she conquered the foe, and was left to pass through a more eventful life than that which generally falls to the lot of a poor girl. Although an orphan, she was not without friends; an only and elder sister was with relatives in Dublin, and her father's friends were well-to-do farmers in Westmoreland. Nor was she without powerful interest in the village of her birth: Lady Curwen, of the Hall, paid her marked attention, as she had done her mother, because that mother was of noble descent, as I shall now proceed to shew.

Isabella Pearson (mother of the child we have just spoken of), whose maiden name was Day, was a daughter of the Honourable Elkanah Day and of his wife Lady Letitia, daughter of the Earl of Annesley. How she came to marry John Pearson forms one of the many chapters in human history which come under the head of Romance in Real Life, or Scandal in High Life, in the newspaper literature of the day. Isabella's parents were among those parents who believe they are at liberty to dispose of their daughters in marriage just as they think fit, even when the man to whom the girl is to be given is an object of detestation to her. Heedless of their daughter's feelings in the matter, they had bargained with a man of their acquaintance, to whom they resolved that Isabella should give her hand—be her heart never so unwilling. The person in question was a distant relative of their noble house, had a considerable amount of property in Ireland, and was regarded, by the scheming mother especially, as a most desirable match for her daughter. But what if the young lady herself should be of a contrary opinion? In the instance before us the reader will be enabled to see.

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Captain Bernard O'Neil, the bridegroom elect, was nearly twice the age of Isabella Day; and although not an ill-looking man, was yet one whom no virtuous or noble-minded girl could look upon with respect, for he was known to be addicted to the vice of gambling, to be able to consume daily an enormous quantity of wine, and to be the slave of all sorts of debauchery. So habituated had O'Neil become to these degrading vices, that no sensible girl could hope to reclaim and reform him. The gratification of his propensities had been spread over so long a time that his entailed estate had become heavily burdened with debt, whilst his creditors, even his dependents, were clamorous for the money which he owed them.

Such being the man to whom the Honourable Elkanah Day and his noble wife had agreed to give their daughter, can it be wondered at that that daughter should not only be indisposed to comply with their wish, but should also be so disgusted and indignant at its expression as to give way to her feelings in words and acts which in themselves are incapable of justification? One day the captain had called at the house by appointment to arrange for the marriage, being anxious to have it consummated, that he might be helped out of a pressing embarrassment through the portion which he knew would be given to his bride. Isabella had been present at the interview. Her father and mother knew full well that she was far from being pleased with the match, but of

this they took little heed, believing that once married, their daughter would reconcile herself to her lot, even if she did not derive much felicity from the union. The girl herself knew that no language of hers, whether of anger, sorrow, or entreaty, would avail, especially with her mother, who was one of the most hot-headed and stubborn of women; so from the first her mind was made up rather to circumvent than to oppose them; to cheat them in the game they were playing, if she could not by fair-play win the right to give herself where she could love and be loved.

On the occasion referred to, it had been arranged that the marriage should take place in a fortnight; and when she was urged to make the necessary arrangements, instead of yielding a hearty compliance, as in a different case she would naturally have done, she gave a feeble assent and left the room. No sooner had she put the door between herself and the other parties, than the emotions which she had managed to keep under while in their presence began to rage within her, and with the hope of finding sympathy below-stairs which was denied her in her proper domain, she sought the company of the maids. Wrath is seldom discreet, and grief at times is not over-nice in selecting those before whom it vents itself. So without waiting to consider the rank of those whose company she had sought, or taking into consideration the consequences which might ensue on making known to them the circumstances in which she was involved, she gave expression to the feelings which were agitating her at that moment by exclaiming: 'So I am to be married in a fortnight, am I? And to that horrible O'Neil? Never, my honourable father; never, my lady mother! Never, no never! By God's aid, *never!* Rather than do so, I'll marry the first man who can be found willing to take me, and go with him to the ends of the earth!' Saying which, she fled from the kitchen into the garden at the rear of the house, and in the summer-house found relief in a flood of tears. All this occurred in Dublin.

Now the cook was one of those who heard the poor girl utter these passionate words. She was an old and esteemed servant of the family, and as such had more liberty and could use more freedom than servants in general. She had been in the family when Isabella, twenty years before, was born, had been her nurse, and was therefore greatly attached to her; and she felt more keenly the fate which the poor girl dreaded, than any others who were present. Indeed so afflicted was she on her account, that she sought her in the summer-house, and poured into her ear all the soothing and encouraging words she could think of. The girl's rage had abated, but she was in a condition of affliction and misery which was truly pitiable to behold. She was, however, still determined not to link her life to one whom she utterly detested, and besought her old and devoted friend to aid her in seeking in flight what she could not otherwise avoid. Whether the cook promised to do so, or what exact reply she made, I am not able to relate; but that very night an event took place which decided her fate, and gave to her after-life its direction and character. The cook was a native of Westmoreland, had been brought up in the neighbourhood of Farmer Pearson, whose son John was at that time a private in the Royal Guards stationed in Dublin. He and the cook were therefore old acquaintances, and when John had an hour to spare, he often spent it in her company. That very night he happened to pay her a visit. In course of conversation she told him about her grief arising out of the trouble of her young mistress, and added thereto the wild expression to which she had that day given utterance. This was done by the simple-minded woman without the least design either of aiding or injuring the young lady, nor had she at that moment the slenderest suspicion that her act would have any practical effect on the young soldier. But it was otherwise. He knew the girl by sight, and she knew him. Though they had not exchanged a word, nor been for even a moment in each other's company, yet they had on several occasions seen each other when he had been visiting his friend the cook. He was a fine open-hearted generous fellow, in the heyday of youth, fearless and brave. All his sympathies were aroused and drawn to the side of the suffering girl; and believing that he would be doing a truly manly act in rescuing her from what he regarded as worse than a thousand deaths, he told the cook that he was prepared to go with her to the ends of the earth, should she be willing to trust herself to his care and fidelity; and he got his friend to promise that she would make his readiness known to her young mistress. Though the promise was made, it is but fair to say that in giving it the cook had not the smallest idea that the poor girl would do aught else than laugh at the proposal as a good joke. But herein she was deceived. Isabella Day caught at the offer of John Pearson the Life Guardsman, with an eagerness and a joy beyond description; she begged of the cook to arrange a meeting; it was done; and the result was an elopement and a clandestine marriage!

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The day which ended the residence of Miss Day with her parents, ended her life of luxury and ease. They renounced her for ever. Her name was erased from the family register, and she was as completely severed from those she had left behind as if she had been buried in the family vault. The rage of her mother was fearful for a time; but Isabella was beyond its reach, and happy. Her husband was a fine-looking young fellow, tall, well-made, and handsome in feature and in form. He was also kind and gentle towards her; and whatever discrepancy existed between them before marriage, none was allowed to exist afterwards; for although he could not rise to her standard of refinement and elegance, nor give her the means of gratifying those tastes which her breeding and habits had fostered within her, yet they both had sense enough to know how to adapt themselves to each other; so their life, if not a luxurious one, was one of resignation and contentment. She followed him to those places to which his regiment was occasionally ordered; and when, in a year or two, he was invalided and discharged from the army, she retired with him to his native village of Burton-in-Kendal, and thence to Workington, where he found employment in the foundry at Beerpot. Two children were born to them, both girls; the elder of whom, as I have said, was on a visit to her relatives in Dublin; while the other daughter, Isabella, narrowly escaped death from the plague, at the time of her mother's decease, as I have narrated. I now resume my story at the period when she was left an orphan.

Lady Curwen, as has been intimated, undertook the necessary and, to her, pleasant task of befriending the desolate girl. She had been kind to her mother; indeed she thought it an honour rather than otherwise to be on friendly terms with her. She was a frequent visitor at the Hall, where she was received rather as a friend and equal than as a poor woman; for although she was in straitened circumstances, she was free from that cringing dependence which poverty is calculated to engender in those who are reared therein.

Her paternal relatives in Westmoreland also interested themselves in the orphan; so the bereaved child knew neither want nor scant. In a while she went to her uncle's homestead in Burton, where for a year or two she resided and thrived amain. But the sea and its surroundings had more charms for an ardent girl than the more sober associations of an inland life; she would rather scamper among the rocks and sea-weed of her native shore than ramble among the heather of her moorland home; and so, as time passed on, she began to yearn after the earlier associations of her life. And inheriting the recklessness and determination of her parents, she, unmindful of obligation and of self-interest, carried out a long-cherished project: she ran away! While her uncle and his family were at church one Sunday morning, she went to the stable, and taking thence a cart-horse with which she had become familiar, she got astride upon his back, and bidding adieu to the farm and all its belongings, she set off to the place of her birth, which she reached safe and sound, but not without having attracted considerable attention from the onlookers on the way. Taking the horse to the inn, at which her uncle happened to be known, and requesting that it might be cared for until it was called for, she bent her steps to the well-remembered homes of her old neighbours, by whom she was cordially received.

She was at this time a fine blooming girl of twelve or thirteen years of age, tall, stately, handsome, with a natural aristocratic bearing, but remarkably unsophisticated and simple. Her return, and the way in which it had been effected, soon reached the ears of her late mother's friend, Lady Curwen, by whose influence she soon secured a good place as housemaid; in which position I shall leave her while I recount a fragment of the history of her elder sister Letitia.

I have said that her family renounced for ever their runaway relative. But in course of time an elder sister of the offender, who was married to a gentleman named Weeks, and living in London, relented of her animosity by occasionally corresponding with her, and sending her now and again what enabled her to keep a few marks of her former life about her. The children, however, were not visited with the same hostility as was their mother; they were inquired about, and, through a cousin who was known to the girls as Councillor Lennon, an occasional letter of recognition was sent them. This courtesy led to Letitia being sent for to Dublin, where she resided under the care of Lord Annesley for a few years. But what is bred in the bone is certain sooner or later to make itself visible; it was so in the case of Letitia: a disposition for frolic and adventure was in her; she found it difficult to conform to the rules of life which now held her in, and in spite of all restraint and watchfulness, she went into forbidden paths, and became at last a self-made outcast from her high-bred friends. The way was this: falling in with the steward of an American ship lying in one of the docks, and taken with his charms as he with hers, she agreed to a marriage and a flight with him like those of her mother. The chief difficulty which presented itself was how to get to America with her intended husband; but where there is a will there is mostly a way; both existed in this case, and proved successful. She adopted male attire, applied for and obtained a position which had become open on board of her husband's ship, that of assistant steward or cook, in which capacity she served in company with her husband during the voyage to Charleston. There she arrived in safety; her husband left off going to sea; and the last time her sister Isabella heard of her, she was mistress of a large and flourishing inn in the above city.

Some time after Letitia's abscondment, Lord Annesley, yielding to Lady Curwen's entreaty, and perhaps to the voice of his own conscience as well, sent for Isabella, promising to give her the education and position of a lady, provided she would in all things conform to his wishes. The offer was a good and kind one, and presented temptation sufficient to induce an enthusiastic girl to yield thereto a ready compliance. The only means which Cumbrians had of reaching Ireland at that time was by the coal-vessels which regularly sailed from Workington to Dublin. In one of these Isabella Pearson set sail with visions of grandeur and greatness before her. But the winds and waves had well-nigh extinguished the lamp of hope which was burning so bright within her, for she had not been long on her voyage before a terrific storm broke upon the deeply-laden brig; it was impossible to make progress; it was hazardous to put back, for Redness Point, where many a noble ship had been wrecked and many a precious life lost, stood threateningly behind them. At last, however, the master of the brig made for the Scotch coast, and happily succeeded in gaining the port of Kirkcudbright. Here our heroine remained with the vessel nearly a week, when the weather permitting, the voyage was again attempted, and without further mishap accomplished.

Isabella Pearson was received into the mansion of her noble relative with becoming friendliness. I have heard her, in her old age, describe his lordship as being a fine-looking venerable man, with a head white through age, an eye beaming with kindness, and a heart brimful of love. He had had the misfortune to lose a leg, and like many of his lowlier brethren, had to be content with a wooden one. With him she spent a few happy months; and at length became as familiar with the ways of those in high rank as she had been with those of her own class. I cannot say how long this new life lasted; but it is certain that as time passed she began to feel her lot irksome, and to long for the less elegant, but to her more pleasurable life she had previously led. The fact is that, as in the case of her sister and her mother, Cupid, small and child-like though he seems, was far more powerful than wealth and fashion, and all other attractions of aristocratic life. While living as a domestic servant in Cumberland, she had fallen in with a young sailor, who had run away with her heart. When she set sail for Dublin she had a hope that nothing would happen to prevent

her from yielding to her wishes to become his wife; but she had not been long her relative's guest before she was forced to come to another conclusion; for she saw plainly that her worthy kinsman had set his heart upon fitting her to become something better than a common sailor's wife. A lady had been engaged as her governess and a time fixed for her arrival; but before the time came the inbred spirit of freedom had again asserted itself, and Isabella had bidden adieu for ever to Lord Annesley and all the good things which his kindness had gathered around her! A collier brig took her back to her native village, and soon after she became the wife of John Ruddock, able seaman.

No one can justify, though all may extenuate, the conduct of Isabella Pearson; nor can any one be pronounced harsh and unfeeling who may say: 'The suffering that might fall to her lot in after-life was the result of her folly and recklessness. On the other hand, it may be pleaded that her heart was her own, to give to whom she pleased; and as it had been sought for and gained by the young sailor, her happiness could only be secured by living with him; therefore she did right in preferring his lot to the wishes of her noble uncle. Be this as it may, she grievously erred in quitting him in so heartless a way after the tender care she had received at his hands. And this she afterwards acknowledged. After her marriage, her husband left the sea, and taking his young wife with him to Durham, he there found employment as a sail-maker, in which art he was proficient. A letter, professing repentance, was written to her uncle; but before it was posted the death of Lord Annesley was announced; which event put an end for ever to all hope for help or favour in that quarter. Soon after, a pressgang laid relentless hands upon poor Ruddock, and dragged him on board a ship of war; so once more our heroine was forced to seek her living in domestic servitude. But herein she was not able long to abide, for the birth of a daughter made such life for a while impracticable. Sad as was her lot, it soon became worse; for her poor husband was killed in an engagement off the coast of Spain, and with many other brave hearts found an early grave in the ocean's bed.

Isabella was now left with a young child to fight the world alone. Health and vigour, however, were her portion; and hearing that plenty of work for women was to be had at Cleator near Whitehaven, she repaired thither, and found a settlement and a living. While there, she was one day agreeably surprised by a visit from her kind friend Lady Curwen, who had driven from Workington Hall expressly to tell her that an advertisement applying for the heirs of John Pearson who worked in Beerpot Foundry, had that week appeared in the columns of a London newspaper, and urged her to attend to it. But she was illiterate, was unused to business habits, and being alone and helpless, put off the matter day by day, until at last she gave it up altogether. What might have come out of this, is of course unknown to the writer; but Isabella herself believed—I do not know why—that her aunt, Mrs Weeks, had died, and had bequeathed to her sister's children a considerable sum of money.

Time passed on, and her child grew, developing among other things a love of mischief; for one day, while her mother was at the mill where she wrought, she got to the box in which were kept her mother's cherished family documents and letters, and amused herself by setting them ablaze one by one at a lighted candle got for the purpose! Thus, in one half-hour, every document necessary to prove her mother's pedigree was destroyed, and with it all hope of bettering her position was thrown to the winds; so, when some years afterwards, Lady Curwen sent a messenger to tell her that the advertisement I have named had once more appeared in the public prints, she paid no attention to the information, satisfying herself simply with an expression of thanks to her kind benefactor!

She was, however, content with her lot. Her child was her chief comfort and joy. For her she toiled in the mill by day, and in her humble home at night; and as she grew in stature and in beauty, the mother's heart throbbed its gratitude and her eye beamed with admiration. But on one occasion she had nearly lost her. Playing one fine afternoon on the bank of the stream which drove the wheel belonging to the mill, her feet slipped, and she fell in. A man who happened to be a little in advance, had his eye drawn to an object on the water, which he at first took to be a quantity of loose hair; but another glance revealed to him the head of a little girl beneath the surface of the rapid stream. He ran and was just in time to lay hold of the hair as its possessor was falling over on to the wheel. Another moment, and Jane Ruddock (the drowning girl) would have been no more; in which case he who now pens these fragments of a strange history would not have been in existence—for that little girl became his mother.

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I have little more to add. Isabella Pearson, who, as I have shewn, became Isabella Ruddock, wife of a common sailor, once more entered the matrimonial lists; but she neither improved her position nor increased her happiness by so doing. Indeed her life, while her second husband lived, was embittered by his love of strong drink. But she survived him. She was a widow the second time when she became familiar to my youthful eye. Many a merry hour have I spent in her company. Often I have heard her relate the incidents which make up this story. She was a fine, tall, handsome woman while health remained with her; she had also a large womanly heart, a hot impetuous temper, and a remarkable simplicity and honesty of character. She died in 1849, weighed down with years and infirmities; but she ended her eventful life in much patience and peace.

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## A LADY'S ASCENT OF THE BREITHORN.

FANCY the following tableau. Scene—Switzerland; time—August 1875, at a desolate rocky part of

the Surenen Pass. A group—Youthful grace and vigour; manly strength and endurance, &c. Foreground—Four heads eagerly bent over a huge bowl of *café* placed on a board, which is extended over four laps. Hands belonging to said heads ladling the mixture into their mouths with large wooden ladles with little curved handles, between convulsions of mirth. Background—The *châlet* of the Waldnacht Alp, from which the realistic artist should cause hideous odours to ascend in the form of dense vapour. At the door of it, the unwashed and scantily clad figure of a Swiss herdsman, fearful to behold, owner of *châlet*, and like Caliban himself, chattering an ominous jargon, and grinning at the English feeders. Right of background—Attendant guide, cheerful and pleased that he has at last secured some sustenance for his 'leddies,' who have been walking from eight A.M. to four P.M., and will yet have to go on till three-quarters of an hour after midnight. These tableaux, with minor variations, were frequent in our tour.

After many adventures and many jokes, after being lost in a pass from eight o'clock to ten, when the sun had set, and having to wander about for those two hours on the edge of a precipice guiltless of path, being finally rescued by a heaven-sent and most unexpected peasant with a lamp—after these things and their results, which were blackened complexions, dried skins, and dilapidated costumes, we arrived at Zermatt, where we settled down for a time. The object of the settling down was in one word—ascents.

Nothing much, according to the men, had yet been done, though we in our secret hearts hugged the proud thought that Pilatus had not defeated us, and that the Twelfth-cake-like snows of Titlis had been pressed by our tread; that the Aeggischhorn, though it had witnessed (N.B. at the end of a long day) the heat and perspiration which dimmed our few remaining charms, and had heard our smothered groans, had had in the end to feel our light weight upon its summit, and to bear us as we gazed with awe at its mighty circle of peaks. But what do these avail? In the eye of man they were mere preparation for mightier things.

After some debate, mingled with faint remonstrance on our part, when Monte Rosa was mentioned, the *Breithorn* was decided upon; and the manly spirits, which had become depressed by a few days' lounge, arose. Such is the enigma Man! The day was fixed, an extra guide (one Franz Biener—known as Weisshorn Biener) engaged on the night before we went up to the Riffel. After a few hours' disturbed sleep we were awoke at two; and dragging our weary and daily emaciating bodies from the beds where they had not been too comfortable, we dressed by the flickering light of a candle; and as we dressed, my friend and I cast fearful looks out at the Matterhorn, which fiercely pierced the dark sky, and seemed to say to me in the words of the poet:

Beware the pine-tree's withered branch;  
Beware the awful avalanche!

As I put the last finishing touches to my collar at the glass, my feminine pulses slightly quickened to the tune of—'This was the peasant's last good-night;' and though no voice far up the height replied 'Excelsior!' yet a voice came from outside which meant in downright English very much the same thing; and my reflections were quenched in the carousal down-stairs, which I hastened to join. An unfortunate and sleepy maid was ministering to the wants of my friends in the dimly lighted salon of the Riffel-haus. Outside, the guides were impatiently stamping about in the frosty night, and complaining of the length of our delay, insinuating that the sun would soon be up. The fact is the preparations of toilet on our part were complicated. The uninitiated may not know that the feminine clothing of the present time, elegant though some may think it, is not conducive to comfort in mountain climbing. A well-tied back *tablier* has a restrictive influence upon the free movement of the lower limbs, and only admits of a step of a certain length. In rock-work it is felt to be peculiarly irksome, and in soft snow it is trying to the temper.

Let the imaginative reader then, if he be able, picture two young women devoid of *tabliers*, and so at once removed from the pale of polite society. I tremble as I write with the fear that this avowal may remove from me and my companion that feminine sympathy so dear to our hearts. But I must descend a step lower. Freedom from *tablier* was not sufficiently radical. Our skirts must be carefully pinned up round our waists à la washerwoman, so that our progress be perfectly unimpeded; and armed with masks and spectacles we sallied forth into the darkness—a party of six. I shall not easily forget the delicious exhilaration we felt as we hastened along towards the Gorner glacier. The dark cold air touched our faces crisply, and feelingly persuaded us of the advantage of the sun's absence. {534}

The searching sensation of being about to commit a crime, attendant on nocturnal adventures, clung to us, and we were filled with a vague remorse, in which we felt at one with Eugene Aram. At the same time the ridiculousness of our position soon wrought upon us to such a degree that we profaned that wonderful silence with unholy bursts of laughter. Our festivity ceased when we reached the glacier, for there we broke up into line, we ladies being tenderly taken possession of each by a guide, who soon got us over a rough moraine. The glacier we found unpleasantly slippery; and it was exciting work, as at the point where we crossed it was very much crevassed, and steps had often to be cut. The nails on our marvellous boots answered admirably, and we sprang about with great sure-footedness and with exquisite enjoyment.

The leader of our party was in a rather dangerous plight, for he had had no nails put into his boots, and we felt quite anxious as through the dim light we noticed his uncertain movements. How he got across with the ice in so bad a condition, is a marvel! We had been on the glacier about an hour when the light began to creep up over the mountains, and we were in the midst of a scene of wonderful beauty. The Monte Rosa, the Lyekamm, Castor and Pollux, the *Breithorn*,

the Matterhorn, and many another shrouded in their utter whiteness stood round us in awful calm, closing us in upon a lake of tossed and heaving ice. The moonlight which streamed down upon us on one side, and the pale yellow light of the dawn on the other, lit up the scene with a weirdness which seemed not of our world. We saw each other's phantom-like figures gliding about, and felt that we were too real to be there—a place where only ghosts had any right to be. The feeling that pressed upon me was that I had suddenly intruded into nature's holiest of holies. It seemed as if some secret of a higher life than this was being sighed through the air, and that I, with all my earth-stains on me, could not rise to the understanding of that secret. Yet on that early morning in August, in the same world far away, the same London was going on in the same old way we knew so well. Cats were even then stealing along suburban walls; cocks were beginning to practise their crescendos, tired-out citizens were tossing in oppressive four-posters, dreaming tantalising dreams of cool sea-breezes not for them; while round all must be clinging that heavy breathed-out air, which of itself is a very *inferno* in contrast with the mountain ether.

By the time we had reached the upper plateau of the St Théodule glacier, it was light, and we were all roped together. The process of roping in this enlightened age I feel it to be unnecessary to describe. Thus we marched along that profound and frozen solitude tied together in a long line. The snow was as hard as a road, and the cold intense. Biener is an excellent guide, but his pace is very slow, and thus we got rather benumbed. We had, however, passed the Little Matterhorn on our left, and the Théodulhorn on our right, with the little rude *cabane* erected on the rocks at its foot—more than eleven thousand feet above the sea, and the highest habitation in Europe—and were beginning to trail our snake-like length up the snow-slopes on the west and south of the mountain, when my friend became so unmistakably ill that we came at once to a halt and a consultation. She (to her honour) much wished to go on, in spite of sickness, giddiness, faintness, and a livid complexion; but as that was out of the question, she was untied from the rope, and sent back with our ordinary guide (a first-rate fellow, one Johann von Aa) to the hut already mentioned.

When we reached the actual snow-fields of the Breithorn, I had to learn that the work of my day had scarcely begun. As the sun rose, the snow began to get very soft, and instead of going in to my knees, as I had expected, I literally waded in it up to my waist. With mighty efforts I lifted up my already wearied legs and plunged them into ever fresh pits of snow, where they frequently became so firmly imbedded that, struggle as I might, I could not move; and presented to the spectator the hapless object of half a woman masked and spectacled, striving and panting. From an æsthetic point of view I cannot say I felt myself a success; but from a moral point, I felt myself a very finger-post through the ages. Truly I had given up my all in the shape of appearance, and had offered myself up on that altar of adventure on which so many braves of my country have been sacrificed. The mode of rescue from the uncomfortable position indicated above was almost as bad as the plight itself. I feebly kicked; you can't kick boldly with your legs in tight pits; and the guide dragged at the rope which bound my waist, and then out I came like the cork out of a bottle. Two hours and a half of this sort of thing went on, varied by refreshments and occasional rests for breath-taking, but still it appeared to me that we were always at the same spot, and ever the glittering summit from afar mocked my helpless gasps. At last (ah! what an at last!) the final slope—really the final one—stretched right up before us. A party of men who were engaged in scientific experiments peered over at us; and with one last desperate effort I found myself landed amongst them at the top of the Breithorn, and thirteen thousand seven hundred feet above the sea. As we placed our feet upon the summit we groaned the groan of triumph, and gazed with awe around us upon the inexpressibly magnificent scene which spread itself out before us. A mighty circle of mountains stood in awful calm around us. Every fantastic line, every curious heaping, every wild wreck, every gleaming curve of glacier possible to mountains, seemed gathered together before us. Each peak had a proud originality of its own, which shewed through all the sameness of the uniform whiteness. But the spirit of these places is the most wonderful thing about them. The clamour, the struggle, the unrest, which make up to most of us the atmosphere of this world, seemed in these regions to have been left behind in a past state; and this in a way was illustrated by the scene itself. The contorted forms and tossed rocks spoke of struggle, gradual it may be, but still struggle. But in the sereneness surrounding those unearthly peaks there was a peace which seemed to have left struggle far behind—the repose of a wide knowledge gained only through sore fight and aspiration.

A short time of peaceful dream was allowed me, and that was rather marred by the intense glare of the light, and then we began the descent. In an evil moment of rest some little way down, I left hold of my alpenstock and leaned it against my shoulder. In a moment it was gone—down, down, sliding skittishly away, till my heart was pained by its final leap into a crevasse far away. As I looked, I imagined what a crash my skull would have come at the bottom of that crevasse. I afterwards found out that the alpenstock was not my own, as I then thought, but that I had inadvertently changed with one of our guides. Imagine my grief at the thought that I had lost the dear companion of my travels, that staff which had guided my wavering feet and upheld my tottering body through passes and up mountains, and which I intended to preserve until my death! My situation without it was rather perilous, and would have been more so had not the snow been very soft. But the guide took me entirely in charge, and lent me his axe, which I was certain I should recklessly lose after the same fashion. After a weary time, Biener the guide decided to *glissade* me. I was resigned. What else could I be? By that time I was very resigned. He took off his coat, and made me sit down upon it, then tied my skirts around me. A rope was attached round my waist, one end of which was grasped by Biener in front, and the other by my gentlemen friends behind. Then ensued a process in which my limbs were nearly severed from the body, and in which I suffered greatly. Biener rushed down the slope dragging me behind him;

while the gentlemen, unaccustomed to this sort of thing, and not being able to go fast enough, hung a good part of their weight on to the rope behind, and so almost bisected me. I never expected to be an individual whole again; halves were my fate. Never was creature in so miserable a plight. No Procrustean bed could have produced greater tortures than those I suffered as I sped down that miserable slope. I shouted all the French I could think of to Biener to stop him, and rid me from the hideous rope, which cut me like a knife; but the air would not carry my words, and on I skimmed and floundered. At last he heard my cries, and released me from the fetters. The fact was that the gentlemen were quite unable to keep up with Biener in the deep snow, with the dismal result, as seen above, of almost cutting through my waist. The lesson to be deduced from this is the simple maxim I commend to all my feminine readers: *Never*, under the most favourable circumstances, *glissade*.

When we reached the cabane where my friend was waiting for us, we were met by Johann, who told us with a long-face that the 'leddy' would not eat anything, and was very sick. We found, to our sorrow, that she had been in a miserable condition all day, and had suffered dreadfully from mountain sickness. She was so ill that it was impossible she could walk, and we were a long time in deciding what was to be done. Now, a helpless invalid, at a height of over eleven thousand feet above the sea, is not a being easy to legislate for. At last a litter was contrived. A chair was placed on some alpenstocks; and an American gentleman whom we met at the cabane being kind enough to lend us his porter, we found hands enough to carry her part of the way at least, to Zermatt; the Riffel-haus, where we were staying, being out of the question, on account of the Gorner glacier and its moraines and rocks, which would have to be passed to get there. Our party, sad to say, had then to separate, two of us going to Zermatt and two to the Riffel. The melancholy *chaise-à-porteur* procession wended its way to Zermatt; and with considerably damped spirits we went on to the Riffel, which we reached at about half-past six P.M. The ambulance party did not get to their destination till eight o'clock.

All that remains now to be told of this our adventure is the sad result. The next morning, on waking from sleep, I found that my ear adhered to the pillow; and when, with much trembling I approached the glass, a spectacle presented itself to me which I can never forget. As I gazed at the grotesque reflection of myself, I inwardly vowed that no mask of London make, elegantly worked as it might be, should ever cover my face again. A large flapping cover-all mask 'of the country' let me recommend to ladies who go up snow mountains. I was swollen; I was black; I was hideous! Half of the skin of one ear was hanging by a shred, and the ear itself was a blister; while all round my neck from ear to ear was a chain of blisters. Their state was so bad that the dressing of them by one of our party (a doctor) took half an hour, and I could scarcely turn my head. It required a good deal of courage to face *table-d'hôte* and the young ladies who were indulging in complexions and large portmanteaus. But I did! Would that I could say I enjoyed it. I did *not* enjoy it. The complexions of the scornful and the scorn itself, embittered that meal, usually attended with such joys. In my travelling afterwards, I became accustomed to the searching glance at my poor tattered skin and to the remark: 'I see you have been doing glacier-work.' And it was not until a month of English life had to some extent repaired me that I could look back with delight and triumph to the ascent of the Breithorn.

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## ECCENTRIC PEOPLE.

MR TIMBS, in his book upon *English Eccentrics and Eccentricities*, introduces us to a collection of funny people, with whom it is good company to pass an hour. To get away from the dull routine of conventionality for a while is at all times a relief, more especially when we fill the interval by watching some of our eccentric fellow-creatures who are good enough to divert us by their antics. Some are serious in their folly; some are mad; some we admire, while others again awake our pity; but one and all they are gifted with a force of will that merits attention.

A collection of dead-and-gone eccentrics now pass before us, recalling a few living ones that we know of, whose collected vagaries, if published, may in turn probably amuse our grandchildren. First, let us look at Beckford, a name not much remembered now, although it belonged to a man who was a marvel in his day. Gifted with extraordinary powers of mind and will, he did everything by turns, and nothing long. He wrote a book that created a sensation. No great marvel that, to people of our day, when the difficulty is to find some one who has not written a book; but Beckford wrote as no other author. *Vathek* was written at one sitting! It took him three days and two nights of hard labour, during which time he never undressed. We know of one instance somewhat similar. A reigning lady novelist told us once that she was pledged to her publisher to send him a three-volume novel by a certain date. Two days previous to the expiration of her contract, her novel had only reached the opening chapter of the third volume. On the evening of the first day she went to a ball, danced all night, returning home at the small-hours of morning, when, after taking off her ball-dress, and drinking some strong tea, she sat down to finish her task. All that day she wrote and on into the next night, never leaving her desk until she had written *finis*; when with trembling hands she despatched her manuscript in time to fulfil her engagement.

There are some natures that need the pressure of necessity, or self-imposed necessity, to goad them into action; their resolution once formed, no obstacle is suffered to come between them and its fulfilment. Beckford was one of these. He determined to build a house—the abbey at Fonthill, where he resided for twenty years—and swore by his favourite St Anthony that his Christmas-



dinner should be cooked in the abbey kitchen. Christmas approached, and the kitchen was in an unfinished condition. Every exertion that money could command was brought to the task, and Christmas morning saw the kitchen finished and the cooks installed. A splendid repast was prepared, and the dinner actually cooked, when lo! and behold, as the servants were carrying in the dishes through the long passages into the dining-room, a loud noise was heard, and the kitchen fell through with a crash! But what cared Beckford? He was rich; he could afford to build his kitchen over again; meantime he had humoured his whim and kept his vow to St Anthony; and we may add, made good his title to eccentricity, for which we applaud him, and pass on to watch some others.

What sorry figure is this that comes next? A poor neglected imbecile, living in squalid lodgings at Calais. It is scarcely possible to recognise in this unhappy being the once gay and elegant Beau Brummel, the glass of fashion and mould of form to the men and women of his generation, whom he ruled with the despotism of an autocrat. Yet this is the poor Beau and no other. He is holding a phantom reception. Having desired his attendant to arrange his apartment, set out the whist-tables, and light the candles—alas! only tallow—he is ready at eight o'clock to receive the guests, which the servant, previously instructed, now announces. First comes the Duchess of Devonshire. On hearing her name the Beau leaves his chair, and with the courtliest bow, the only reminiscence of his departed glory, he advances to the door and greets the phantom Duchess with all the honour that he would have given the beautiful Georgiana. He takes her hand and leads her to a seat, saying as he does so: 'Ah, my dear Duchess, how rejoiced I am to see you; so very amiable of you to come at this short notice. Pray bury yourself in this arm-chair. Do you know it was the gift to me of the Duchess of York, who was a very kind friend of mine; but poor thing, you know, she is no more!' At this point tears of idiotcy would fall from his eyes, and he would sink into the arm-chair himself, awaiting the arrival of other guests, who, being duly announced, were similarly greeted. With these ghosts of the past he would spend the evening until ten o'clock, when the servant telling each guest that his or her carriage was waiting, would carry his poor old master off to bed. We cannot wish him good-night without the payment of a sigh for the pantomime he has acted and the sad lesson it conveys.

And now we conjure up a droll figure, whose eccentricity borders on madness, the spendthrift squire of Halston, John Mytton. He is tormented with hiccup, and tries the novel cure of setting fire to himself in order to frighten it away. Applying a candle to his garment, being sparsely clad at the time, he is soon in flames. His life is only saved by the active exertions of some people who chance to be in the way at the time. He invites some friends once, and when the company are assembled in the drawing-room, he startles them all by riding into the room on a bear! The guests are panic-stricken: one mounts on a table, another on a chair; they all strive to make their escape from the ungracious animal, and its still more savage master, who is enjoying the misery of his guests with the laugh of a madman. Let us too leave him.

Ladies have a great field for the display of eccentricity, in their mode of costume. We know of one lady who has never altered her style of dress since she was eighteen. The consequence is that every ten years or so the fashions come round to her, and for a brief period she is *à la mode*. Never having made any concessions to the abominations of crinoline or false hair, she is at the present time more orthodox than she appeared five years ago. Every time she has had its eccentricities in this respect, and Mr Timbs shews us a certain Miss Banks, who died in 1818, and in plain terms looked a 'regular guy.' She was a lady of good position, being the sister of Sir Joseph Banks. Her costume consisted of a Barcelona quilted petticoat, which had a hole on each side, for the convenience of rummaging two immense pockets stuffed with books of all sizes, which did not add to the symmetry of her already large proportions. In this guise she went about, followed by a footman carrying a cane, as tall as his mistress, or her luggage when accompanying her on a journey. She was the originator of the words *Hightum*, *Tightum*, and *Scrub*, which so many ladies are fond of applying in the order of precedence to their wearing apparel. These words Miss Banks invented to distinguish three dresses she had made for herself at the same time, and all alike; the first for best, the second for occasional, and the third for daily wear.

While on feminine eccentricities we must record some that we have met with in our own day. So convinced is one elderly married lady of the peculating propensities of all lodging-house menials, that after each meal a curious scene takes place in her room. Every article, such as her tea-caddy, sugar-basin, jam-pot, &c., which she has had occasion to use during the meal, is placed on the table, on which stand a gum-bottle, a brush, and several long strips of paper. She then proceeds to gum up her property. A strip of paper is gummed round the opening to the tea-caddy; the pot of preserve is similarly secured, together with all else that is likely to attract that lawless fly the lodging-house servant! We know of another lady who for years has lived with only the light of gas or candle in her rooms. She imagines that air and daylight are injurious to her sight, and her rooms are little better than well-furnished tombs, into which no chink of light or breath of heaven is suffered to intrude.

Mr Timbs introduces us to a lady equally eccentric in her ideas about water. Lady Lewson of Clerkenwell objected totally to washing either her house or her person. She considered water to be the root of all malady, in the unnecessary way people expose themselves to the chills caught by frequent ablution! And as for health—was she not a living instance that a morning tub is all nonsense, for she was one hundred and sixteen years old when she died! For the greater part of her life she never dipped her face into water, using hog's-lard instead, to soften her skin. Although large and well furnished, her house, like her person, was never washed and but rarely swept.

We remember an amusing instance of French respect for cold water, in the speech of a French

gentleman, married to an English lady of our acquaintance who used to indulge in a bath morning and evening; a custom so astounding to her husband that he exclaimed in our hearing: 'She does not use water—she *abuses* it.'

Eccentricity often displays itself in an inordinate affection for animals and a singular manner of treating them. An instance of this was the late Earl of Bridgewater, who now comes before us with his family of performing dogs. He lived in Paris during the last century, where the circumstances we narrate took place. He was a miserable-looking little man, unable to walk without the support of two lackeys. He had an immense fortune, which he spent in gratifying every caprice. Was a book lent him? It was regarded as the representative of its owner, and returned in the earl's landau, occupying the place of honour and attended by four footmen in costly livery, who handed it to the astonished owner. His carriage was frequently to be seen filled with dogs, his special pets. On the feet of these dogs he bestowed as much attention as though they were unfortunate human beings; he ordered them boots, for which he paid as dearly as for his own. Not caring to entertain his own kind at his table, few people dined with him. Still, covers were daily laid for a dozen, served by suitable attendants. At this table he received, and dined with no less than twelve favourite dogs, who seemed to comprehend the compliment paid them, as they occupied their chairs with decorum, each with its white napkin tied round its neck. They were so trained, that should any, by an instinct of appetite, transgress any rule of good-manners, he was banished from the table, and degraded to an antechamber, where he picked his bone in mortification; his place remaining empty until he had earned his master's pardon.

There are some whose eccentricity takes the form of hatred of society. Of this number was the Honourable Henry Cavendish, a man of great learning and enormous fortune, who earned the title of 'Woman-hating Cavendish,' as he would never see a woman if he could avoid it. If a female servant was unlucky enough to shew herself, she was instantly dismissed. He was compelled to employ a housekeeper, but all their communications were carried on by correspondence. His ideas of dining were restricted to legs of mutton only. On one occasion when his housekeeper suggested that one leg of mutton would not be sufficient for a party invited, he met the difficulty by ordering *two!*

A number of eccentricities are displayed by people in their burial bequests. A certain Dr Fidge, a physician of the old school, converted a favourite boat into a coffin, which he kept under his bed for many years in readiness. When death drew near, he begged his nurse to pull his legs straight and place him as a dead man, as it would *save her trouble afterwards*, saying which he comfortably departed. Job Orton, a publican of the Bell Inn, Kidderminster, had his tombstone with epitaph erected in the parish church. His coffin was also built and ready for him; but until he was ready for it he used it as a wine-bin. Major Peter Laballiere of Box Hill, Dorking, selected a spot for his burial, which he directed should be without church rites, and *head downwards*; in order that, 'as the world was in his opinion topsy-turvy, he might come right end up at last!' But a certain Jack Fuller caps even the major, for he left directions that he was to be buried in a *pyramidal* mausoleum in Brightling churchyard, Sussex; giving as his reason for selecting to be embalmed in stone *above* ground, his unwillingness to be eaten by his relatives—a process he considered inevitable if buried in the ordinary manner, for 'The worms,' he declares, 'would eat me; the ducks would eat the worms; and my relations would eat the ducks.'

Of all eccentricities, those displayed by misers are the most notable and repulsive. To dwell upon them at any length is neither pleasant nor interesting; it is only where parsimony and genius are allied that one pauses to examine the specimen. Let us now take a brief survey of Nollekens the sculptor, in whom these opposites were met. Descended from a miserly stock, he did not fall short of his ancestry in his love of money, and it first became apparent in a filthy mode of living while a student at Rome. He married a woman even more parsimonious than himself, and their housekeeping was pitiful. Hatred of light is an observable trait with most misers; and over their coals and candles the Nollekens were scrupulously economical; the former, Nollekens counted with his own hands. The candles were never lighted at the commencement of the evening; and if a knock were heard at the door, it was not answered until repeated, in case the first should prove a runaway, and the candle be wasted! A flat candlestick served them for ordinary purposes, and by carefully extinguishing them when company went, they made a pair of moulds last a whole year!

Before his marriage, Nollekens had an unfortunate little servant called Bronze, whose appetite he so feared that he placed her on board-wages, and gave her only just enough money to furnish him with food each day, which he took care to consume. Bronze with rare patience, for which we cannot account, continued to serve after her master was married, and declared that never had she seen a jack-towel in their house and never had she washed with soap! Mrs Nollekens never went to any but a second-hand shop for their wearing apparel and shoes, and their charity was of the same second-hand nature, as when Mrs Nollekens directed the maid to give the 'bone with little or no meat on it' to two starving men who applied for relief. If a present of a leveret was sent them, they made it serve two dinners for four people. The sculptor grew more generous before death, his parsimonious partner having gone first, as though he strove by sundry spasmodic gifts to atone for the avarice of a life. If these details are as unsavoury to some as to ourselves, we only justify their narration on the ground stated, that the qualities they set forth were found existing in a genius.

Did time permit we should like to linger over those notable eccentrics, Porson, Horne Tooke, Peter Pindar (Dr Wolcot), and others; but we can only give a characteristic anecdote or two. Porson, the cleverest and most erratic of creatures, was the victim of abstraction to an extent that rendered him forgetful at times to eat. 'Will you not stay and dine,' asked Rogers the poet.

'Thank you; no; I dined *yesterday!*' he replied. Dr Parr asked him before a large assembly what he thought about the introduction of moral and physical evil into the world. 'Why, doctor,' said Porson, 'I think we should have done very well without them.' And it makes us laugh to hear an ignorant person, who was anxious to get into conversation with him, ask, if Captain Cook was killed in his *first* voyage. 'I believe he was,' answers Porson; 'though he did not mind it much, but immediately entered on a second!'

Tooke began life with a joke, telling every one that he was the son of a Turkey merchant; by which name he defined his father's trade of poulterer. His ready wit was never at a loss; and it is to him we are indebted for the following well-known joke. 'Now, young man,' said an uncle to him one day, giving him good advice, 'as you are settled in town I would advise you to take a wife.' 'With all my heart, sir,' replied Tooke; 'whose wife shall I take?'

Peter Pindar boasted that he was the only man that ever outwitted a publisher. Being a popular writer, his works brought him a good income. His publisher wishing to purchase the copyright and print a collected edition, made him an offer in cash. In order, however, to drive a good bargain, Pindar feigned to be in very bad health, declaring he could not live long; and every time the publisher came to see him he acted the invalid to such perfection that he got a handsome *annuity*, which, to the disgust of the publisher, he lived to enjoy until the unconscionable age of eighty-one.

We leave a number of our eccentric friends with regret. There was Curtis, whom we do not care to accompany in his search after the horrible and his passion for convicts and executions. There was Dr Fordyce, whose eccentricity in the matter of food is a study; he lived for years on one meal a day only, but a meal so enormous that we wonder, as we read the quantities, how he ever lived to repeat it daily for twenty years. We can only now recommend those who have been interested so far, to supply our deficiencies by going to the source from whence we have gathered the matter for this brief notice.

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## SNAKE-INCUBATION.

THE Zoological Gardens of London, always attractive, now and then acquire even additional interest by the arrival of some new inmate, or the occurrence of some rare event among those already established there. Last year the Prince of Wales's Indian collection of animals, the year before the snake-eating snake, drew extra crowds; and of late the anaconda from Brazil has rendered herself popular by bringing forth a family of snakelings; though, owing to the effects of her long journey and close imprisonment, her young ones were dead. A few years ago the largest snake in the Gardens was an African python, that deposited above one hundred eggs in a nest of moss which had been supplied to her; and as some writers about snakes had told us that the python incubates her eggs, and that only this kind exhibits any such maternal instinct, she also drew crowds of the curious.

The pythoness whose proceedings we are about to relate, having deposited her eggs, arranged them in a level mass and then coiled herself around and over them; sometimes they could be just discovered between her coils, and sometimes she covered them entirely. Heat combined with moisture are essential to the development of snakes' eggs; and in the choice of a spot in which to deposit them, the maternal instinct of the animal in a state of freedom is evident. It is generally among decaying vegetation where heat is generated, or in some moist soft herbage where the sun's rays can penetrate. To regulate the temperature in a close cage and keep the moss precisely in a condition to suit snake requirements, was by no means easy, and our pythoness seemed far from satisfied. The fact, however, was established beyond doubt, that she was hatching her eggs by the warmth of her own body.

But a most untoward disaster happened one night in the overflowing of the tank among her eggs, completely saturating them; and it was not surprising therefore, that no young pythons appeared. The enormous reptile remained coiled around and over her addled eggs for above seven weeks, after which they were taken from her. She had, and with good reason, been exceedingly irritable and even savage during this time of trial, as it was mid-winter, the season when under other circumstances she, like her companions, would have been half torpid. But her maternal affection was undeniable, and this alone was worth witnessing; since some authors would have had us believe that snakes (and particularly non-venomous ones) manifest entire indifference regarding their eggs and young. The python's eggs being, as usual, in one long string, the keeper had no little trouble in getting them from under her.

Being aquatic in their habits, and on that account requiring much water, anacondas are difficult to keep in captivity. The one lately arrived among us was no sooner released from its travelling box than it took to the tank with which its cage is furnished, and remained in it for hours and even days together. But not there, poor thing, can its swimming powers be displayed, since in close coils it completely fills it. Notwithstanding these drawbacks of London life, the Gardens can now boast of three of these valuable snakes; one of which has been a resident since 1869; while those in Paris have not survived any length of time.

One still more remarkable characteristic of the anaconda is that, like the sea-snakes (*Hydrophidæ*), but unlike the python, it produces its young alive. We have long been accustomed to think that only vipers produce live young—and hence their name—and that all the non-venomous snakes lay eggs. But snakes, so far as those in captivity are concerned, are continually

doing what is not expected of them. Zoological Gardens afford valuable opportunities to students for acquiring knowledge of the form, size, habits, &c. of animals, and an occasional insight into their modes of life unattainable otherwise. This is especially the case regarding the Ophidians; creatures which in their native haunts are so retiring, inaccessible, and mostly nocturnal, that less has been known of them than of almost any other tribe of creatures. Regarding the subject in question, several very important zoological facts have recently been established at the Gardens, and we may add, to the surprise of the naturalist world in England. In 1862 (the same year in which the pythoness laid her hundred eggs), the then but slightly known non-venomous English snake *Coronella lævis* gave birth to a family of six live young ones in a cage in London; and several other harmless snakes in the London ophidarium have also afforded cause for surprise, not only in producing live young, but in manifesting a very decided care for them. Some New-world species have been examples of this; as, for instance, the 'garter-snake,' the 'chicken-snake,' and the 'yellow boa' of Jamaica (*Chilobothrus inornatus*), the latter on several occasions, and sometimes depositing eggs *at the same time*, but the eggs proving bad.

Mr Philip Henry Gosse, when in Jamaica nearly thirty years ago, gave much careful attention to the habits of this 'yellow boa,' a snake which sometimes attains eight or ten feet in length and is extremely active. He records a great deal of highly interesting matter concerning the *chilobothrus*; and, as a careful and conscientious observer, his testimony is of much value. That this snake when at liberty lays eggs, was well known, nests with eggs in them being often found. In one case a 'yellow boa' was seen issuing from a narrow passage in a bank, which when dug into was found to lead to a cavity lined with leaves and soft trash, and containing eggs. This hole had been excavated, because the dry crumbled earth was discharged at the entrance, where it lay in a heap. The passage was only just large enough to admit the snake, and the soft rubbish within must have been carried there. We cannot positively assert that the snake constructed this skilful hiding-place for herself, but if she did, she must have forced out the earth as the burrowing snakes do, or by the muscular undulations of her body; and she must have conveyed the leaves there in her mouth. Snakes do, we know, sometimes make nests by coiling themselves round and round to form a hollow. Under either circumstance maternal instinct is undeniable; and if *chilobothrus* merely discovered and appropriated the nest of some other creature, her intelligence is still worth recording.

We knew an instance where a snake in captivity exhibited restlessness and uneasiness, crawling about the cage as if in search of something. Those who had the care of it suspected she was with eggs, and placed some sand in the cage. This appeared to satisfy her, and the eggs were deposited. Mr Gosse had a Jamaica boa in the same condition. For a long time it manifested discomfort and restlessness, being savage and in every way objectionable, till at length it produced a family of young ones. Knowing it was the habit of this snake to incubate its eggs, Mr Gosse was greatly surprised at the event; and the startling question occurred to him, that when circumstances are unfavourable for the deposition of eggs, could a snake retain them until the young are hatched?

Mr Gosse's surmises have been entirely confirmed both by similar occurrences at the Zoological Gardens and by other writers, who in the subsequent interval have also given careful attention to the habits of Ophidians, and have produced valuable scientific works on the subject. It is now an ascertained fact that not *chilobothrus* only but several other oviparous species may at pleasure be rendered viviparous by retarding the deposition of their eggs when circumstances are unfavourable for them! In fact we find that we must almost discard those old distinctions of *oviparous*, *viviparous*, and *ovoviviparous*; which German authors tell us are not founded on any other ground than a greater or less development of the fetus in the egg at the time of laying; or on the nature of the exterior covering of the egg; which is thicker and leathery in those which take some time in hatching, and slighter and membranous in those which are hatched either before or on deposition.

In serpents the eggs differ from those of birds by undergoing a sort of incubation from the very first, so that whenever examined, the embryo more or less advanced will be found. In the case of the pythoness of 1862, an egg was examined on the fifteenth day of incubation, and found to contain a living embryo; a noteworthy fact, as the python incubates for fifty-six days before hatching her eggs. Observations with the eggs of *chilobothrus* are attended by the same results—namely the fetus in a certain stage of development is discovered whenever a gravid snake is killed and examined. The young ones of the boa in the London collection were perfectly developed and active, climbing all over their cage as soon as they saw daylight. One family consisted of thirty-three; another of eight; and another of fourteen. The activity and daring of the snakelings were amazing, affording ample proof of their perfect development. They were always on the defensive, shewing fight on the slightest molestation. When the keeper put his hand into the nest among them they seized upon it and held on so tightly with their teeth, that on raising his hand they hung to it, wriggling and undulating like a waving golden tassel. I ventured to take up one of these aggressive little reptiles, but could scarcely hold it, from its energetic wriggings and contortions. It constricted my fingers tightly enough to prove its singular instincts, and bit me savagely with its sharp little teeth; but my glove being on, I permitted this, glad of so good an opportunity for making personal observations.

It was said of the python that notwithstanding her care and vigilance so long as she was incubating, when her snakelings were born she took no notice of them. This may not always be the case. Vipers we know are extremely watchful over their young; other snakes are often seen accompanied by a young brood; and in the Jamaica boa maternal affection is exhibited in no slight degree. A lady visiting the Gardens compassionated one of these young families on the

gravelly floor of their cage, and brought a quantity of cotton wool, which was placed in one corner. She was rewarded by seeing the luxury fully appreciated, mother and little ones all huddling into it immediately.

That these non-venomous snakes thus produce their young under *abnormal* conditions is further confirmed by the varying size and appearance of the offspring, and by their being more or less enveloped in the shell-covering. Some are born quite coiled in the ruptured shell, others with portions of it clinging about them, and others again entirely free. Sometimes they are, as it were, imbedded in the coriaceous covering. This was conspicuously the case with the anaconda's progeny, but her young ones had every appearance of having been a long while dead. The first of the six was freer from the shell than the others, and about a foot and a half in length.

Snake-life is altogether marvellous. The power which some snake mothers possess of retarding the deposition of their eggs, and we have reason to believe, sometimes even the young when circumstances are unpropitious for her to produce them, seems to us specially curious. *Chilobothrus* is known to have had both eggs and a living brood. So has *Coronella lævis*. Of the latter, some German ophiologists state that it is 'always viviparous;' others 'occasionally' so. In her native Hampshire woods she has been seen with a young brood about her; but there seems no satisfactory evidence of any eggs having been found. Time and careful notings only can substantiate this and many other singular facts regarding these 'wise' and 'subtle' creatures, hitherto surrounded by prejudice and but little studied. We, not well versed in Ophidian biographies, might have expected the anaconda to lay eggs because her cousin the pythonesse did so; and we might have also speculated upon her incubating them, as the python did. But she has produced a perfectly developed though dead family of six, instead; a circumstance of so much interest to naturalists, that the loss of the young ones is to be regretted though not wondered at. Captured from her native lagoons, and shut out from the light of day in a box just large enough to contain her, this 'good swimmer' arrives alive; thus proving her amazing powers of endurance; but she has had no fitting place in which to deposit her young, and they died unborn. Still it is a noteworthy fact in the annals of zoology. At first, from the result of observation, the incubation of the python was 'suspected;' then it became confirmed; and the birth of young coronellas also. From this it is evident that we cease to declare that only *vipers* produce live young; or, according to the original signification of the word, a boa, a coronella, and several other non-venomous snakes would be 'vipers!'

Again, it is remarkable that these peculiarities of reproduction are not confined to particular families and genera; because some coronellas lay eggs, some incubate them, and others bring forth a live brood. So also, while some of the *Boaidæ* lay eggs, the anaconda is completely viviparous.

We would venture to urge upon those lovers of nature who dwell 'remote from towns' the value of careful observation and a noting down of what appears unusual, even of the habits of the much persecuted snake.

C. H.

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## PLAYTIME AT OXFORD.

'WHAT is to be done this afternoon?' is a question invariably asked by scores of undergraduates, either at the well-supplied breakfast-table (for whatever men do not learn at Oxford, they at least learn to eat a good breakfast), or by those victims of procrastination who leave everything to the last moment, just as the scout is bringing up the more modest luncheon.

There are certain rules at the university—social rules I mean—which, though unwritten, are not to be broken save under severe penalties, such as being entered among that class of undergraduates yclept 'smugs.' Of these unwritten laws, one of the best and most universal enacts, that a great part of the afternoon shall be spent outside the college, presumably in active and healthy exercise, even if it be but a sharp constitutional. Not that this is a hardship, or that the answers to the question, 'What's to be done?' and the modes of spending these two or three hours, are monotonous or circumscribed. Far from it. Many places may be more full of life and amusement than Oxford in the morning and evening; but few, I am sure, can surpass the bill of amusement which Alma Mater presents to us after lunch.

Every taste can find appropriate satisfaction, save perhaps the taste for picturesque scenery, in which the neighbourhood of Oxford, to use a 'varsity term, 'does not come out strong.' Still, if I may believe report (never believe an undergraduate when he tells you a tale of a fellow he knew), Cambridge is rather worse off. We have Shotover and Bagley Wood to set against their Gog Magog Hills. Be that as it may, simple walking does not find many advocates, except on Sunday, or as a stop-gap on some off-day when rackets and the river begin to pall, as every amusement seems to do by the end of term. I have even heard a member of an eight-oar say after six weeks' daily attendance at the river, that 'he really felt he'd had almost enough of it.' And it *is* rather an objection to rowing, that as soon as your blisters have hardened and you feel indifferent about the cushion on your chair, the act of pulling your own weight and a trifle over begins to have a certain sameness.

To return to walking. Much of that otherwise tame exercise is involved in going to witness sports of various kinds. Almost every day in winter there is either a football match or a racket match, or

the trial eights or some college sports to be inspected; or we may look in at the fives-courts or at the gymnasium, and see Tompkins vaulting the high-horse, which he does not do so well as at lunch; or to the dog-fancier's in — Street, and look over Jenkins's bull-pup. Not that there is any rattling going on of course, or such a thing as a badger in the county; but these are lazy ways of getting through the time, and except occasionally, none of our party is reduced to them. No; for Brown votes for rackets: a game active enough, I can vouch. It looks so easy to hit the ball with the great battledore-shaped racket—until you try: perhaps as easy as battledore and shuttlecock, now ousted by lawn-tennis. So just descend into the black-lined arena, and you will discover that the small sphere you aim at finds out all sorts of impossible angles, and dodges you in a way that no fellow can stand; so that rackets is rather dispiriting to a beginner. Having only once got up the ball in the course of an hour, and having sharply struck myself on the side of the head with my own racket, to say nothing of the curious attraction of the ball to my shoulder-blades, I determined that that should be my last as well as first visit to a racket court, charming as the game doubtless is when well played. So Brown will not ask me to make up his four for Holywell. There are also one or two tennis courts in Oxford; but I do not think that the favourite game of the Merry Monarch is very generally played except on grass.

I shall not part from Brown yet, but shall accompany him to Holywell and get a hand in the fives-court. It is a hot game, but not a graceful one, like rackets. It is all very well to poise your racket overhead, sway backwards and send the whizzing ball against the wall. But it is quite another thing to flounder after it with outstretched hands, which seem monstrous in their hot clumsy gloves, and missing it by a hair's-breadth, 'vainly beat the air.' Say what you like against it, there is no better exercise, though I should not think of bringing a certain young lady to witness my performances there, any more than I should of asking her to come to hear me viva-voce'd in the schools.

But I have wandered from the subject to the fair sex. To return to Jones, who is going to scull as far as Sandford in the fairy outrigger in which he is proud to disport himself. With some reason too, for the equal dip of the sculls in an outriggered skiff is hard to attain, and the art of turning those craft in any reasonable space is known only to a few of the initiated. I have always found that when I steered 'by the bank,'

E'en for a calm unfit,  
I'd steer too near the sands to boast my wit,

as Dryden says; though I am not quite sure that he exactly means that. Others of our luncheon-party are bound by college patriotism to go down to the barges and undergo their day's training for the Torpids. These are of the stalwart sort; but they will not have a very pleasant time of it, nor will Jones in his skiff, for the wind is rather strong, and the water even on the lower river must be pretty rough; so two of our company, not of the stalwart kind, are going to the Freshman's river to engage one of those sailing-vessels called at Oxford a 'centre-board.' The wind is blowing fairly up stream; but they will have some trouble at a certain corner called 'Blackjack;' and I shall not be surprised if their new flannels are somewhat shrunken by to-morrow. Still they can swim; and if they can't, they ought to.

Besides the Rugby votaries of football, the Association and other clubs play in the parks. The practice of the former is the most interesting to watch; and though this pastime is, not without some reason, deemed by many to be silly and even barbarous, it seems to be generally largely patronised by spectators.

We must not neglect the new running ground with its comfortable pavilion, where, if we do not wish to take a trot ourselves, we may read *The Field*, and watch through the window the training of the crack whose performances it records. And talking of running, there is or was a Hare and Hounds Club, which numbered some distinguished runners among its members; and one college at least had lately, and perhaps still has, a pack of beagles. If a man be of very solitary habits and much inclined to hide him from his kind, there is jack-fishing in many parts of the river, engaged in which contemplative recreation he may moralise to his heart's content. There is a Gun-club too; to say nothing of the hunters, hacks, and pony-carts which may be obtained for a consideration. I don't know whether the hunters are screws, for I've never tried one, and for the same reason I don't know whether they are dear or cheap; on the whole, however, I should be inclined to say *not* cheap. Then there is a bicycling club, whose members perform immense distances in wonderful times, and who talk of going to Aylesbury or to Banbury and back, as outsiders do of Cowley and Cuddesden. And if you are one of the country's defenders, are there not drills in St John's Gardens, or parades in the Broad, and evolutions of all kinds in the parks? harder work than the road-making lately fashionable at Hinksey, near which, I believe, are the rifle butts. Playing at labourers has gone out, I believe.

But the summer term is the term for fun. Woful is the man who is in the schools in the bright days of June, when the sun at length gets through the Oxford fogs. The summer term is, technically speaking, two terms, for there are four terms in the 'varsity year, though no 'varsity man ever yet knew the distinctive names of them; and so the summer terms are twice as jolly as the other two, though only equal to one in length. Ah me! I shall soon have cause to sigh for the days that are no more. Then cricket and lawn-tennis, the eight-oar races, the lazy punt and nimble canoe, cider-cup and skittles at Godstow, bathing at Parsons, archery and croquet, and cousins and sisters, and the occasional flower-show, will recur amongst the standing-orders of the past!

Every afternoon, when it is fine, the cricket-grounds, most of which are at Cowley, present a

lively scene. The practising nets are occupied by batsmen, the sound of whose strokes on the much-enduring leather is like the tap, tap, tapping at the hollow beech-tree, or at the garden-gate, according to the taste of the listener. If you go in front of the nets, keep your eyes and ears open, or you may get knocked down by a stray ball—a danger kept constantly in your mind by frequent cries of 'Head!' which cause many to anticipate the bump in store for one. A man does not look to advantage at the moment when he becomes conscious of a descending cricket-ball in close proximity to the back of his head. In the centre of the ground a college match is being played; and in the tiny structure often graced by the title of Pavilion much beer is being consumed. At the further end, a couple of games of lawn-tennis are being briskly kept up. Altogether, the college ground is not a bad place in which to spend the afternoon, even though you may not be A1 at cricket.

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As to the river, every visitor to Oxford in the summer term has seen that, and its varied and variegated load of eight-oars, four-oars, dingies, whiffs, skiffs, cockle-shells, pairs, punts, and coal-barges. For my own part I prefer the Cherwell and the cushioned punt. It is not a bad plan to get on shore in the Botanical Gardens, and stroll up the High as far as Cooper's, wherein to consume strawberry ices. I do not much affect the archery and croquet, nor yet the flower-shows; very good in their way, I daresay, but you can enjoy them at home, where a racket court, or even a skiff, is not always handy, and where skittles are apt to be voted low, and the secrets of cider-cup hidden from the butler's ken. So make your hay while the sun shines. And almost as fast as the skittles fall before the practised hurler, fly the nine weeks of the summer term, which comes to most men but three times in their lives; and if enjoyed again, must be so generally only at the expense of a disastrous 'plough,' a catastrophe which necessitates extra reading and perhaps a change of residence.

So the curtain falls upon the glories of the final tableau, the Commemoration, a tableau which has sadly wanted its proper amount of blue-fire lately. Even the Long Walk is beginning to fail as an avenue, and there are some gaps in the foliage, I think. All work and no play makes Jack a dull boy: but even though he *does* work, and 'reads' when he ought, Jack need not be dull withal at dear old Oxford.

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## THE MONTH:

### SCIENCE AND ARTS.

WHILE the President of the Royal Society is travelling in America, studying, in company with Professor Asa Gray, the peculiar vegetation at the foot of the Rocky Mountains—while Dr Tyndall is solacing himself with a quiet holiday in his own house on the Bel Alp—while spectroscopists are rejoicing in the new 'grating' constructed by Professor Rutherford, which multiplies to an extraordinary degree their power of observation—while physicists and naturalists are betaking themselves to inland villages or to remote bays on the sea—while amateurs are looking at the one hundred and seven photographs of the Arctic expedition recently published by the Admiralty—while artists, engravers, and printers are at work on the voyage of the *Challenger*—while readers are acquainting themselves with Mr Darwin's new book, *The Different Forms of Flowers on Plants of the same Species*—while the British Association are reckoning up the profit and loss of their meeting at Plymouth—while the promoters of the Ordnance Survey of Palestine are appealing for funds to finish their work—while geographers and adventurers are soliciting means for the exploration of Africa—while Europe is trying to prevent immigration of the Colorado beetle—while Mr Varley is attempting by telephone to carry music from Her Majesty's Theatre to the 'other side of the water'—while the Treasury are considering whether they will ask parliament to vote three million pounds for the building of the much wanted new public offices—while Mr Berthollet is pointing out 'the possibility of producing temperatures really approaching three thousand degrees'—while Mr Rarchaert is shewing that his locomotive, combining the two essentials of adherence and flexibility, will travel safely round curves of two hundred and fifty metres radius—while Mr Cornet, chief engineer of mines in Belgium, is endeavouring to prove that compressed air can be used in mines; and while the Social Science Council are settling their programme for amendment of law, repression of crime, promotion of education, improvement of health, furtherance of economy and trade, and diffusion of art—while all this is going on, science, art, and philosophy progress in a way that implies force within as well as without.

Where steam is employed, especially on board ship, it not unfrequently happens that a sudden occasion arises for exercise of the utmost power of the engines, and that to this gain extreme power for the short time required is of more importance than economy of coal. The method hitherto adopted to effect this object is to drive more air through the fire, or to throw a jet of steam into the chimney.

Mr Bertin, a French marine engineer, has proved that the best method is to throw jets of slightly compressed air into the base of the chimney by means of a centrifugal ventilator, or at higher pressure by employing a blowing-machine working with a piston. Under the transitory action of these jets of air the combustion in the furnace is doubled, and the ship, like a warrior in extremity, may make efforts impossible in ordinary circumstances. The increase in the consumption of coal is not more than twenty per cent.; and the method having been tried on board one of the national frigates, *La Résolue*, has proved so effectual, that its adoption is only a

question of time. Mr Bertin has described his method and the principles on which it is based in a paper to be published in the *Bulletin* of the Société d'Encouragement pour l'Industrie Nationale.

The same Society have just recognised the merits of an English chemist, Mr Walter Weldon, by conferring on him their Lavoisier medal—*grande médaille d'honneur*—for his discoveries and improvements in the art of manufacturing chlorine. Formerly all the manganese used in the process was wasted, and manganese became scarcer and dearer. Waste is an opprobrium in chemical operations. Mr Weldon shewed a way by which the manganese could be reoxydised over and over again indefinitely; and at once an offensive part of the process was got rid of, and the price of chlorine fell thirty per cent. This of course cheapened all the articles, and they are numerous, in the production of which chlorine plays a part; and Mr Weldon's method has been adopted wherever chemicals are manufactured on a great scale. Mr Lamy, who drew up the statement of the grounds on which the medal was awarded, said: 'If we have not the good fortune to designate a Frenchman for your suffrages, at least we have the satisfaction to present an inventor belonging to a friendly nation, the first among all for the development and the potency of its chemical industry.'

If this be true, there is a chance for another ingenious chemist for the Council General of Guadeloupe offer a reward of one hundred thousand francs to the inventor of a new method of extracting the juice of the sugar-cane, or of manufacturing sugar. {543}

Hitherto it has been thought that to produce a good black dye the co-operation of a metallic substance or of a chlorate, or both combined, was indispensable. The question arose: Were those ingredients really indispensable? Mr Rosenstiehl first shewed that the metal might be dispensed with, and recently, as may be seen in the *Annales de Chimie et de Physique*, Mr Coquillion has proved that the chlorate is not required, for in the one case as in the other, the use of 'nascent' or active oxygen will effect the desired object. We are informed that the fact observed by the French chemist 'is an elegant demonstration of the action of active oxygen upon aniline salts; that it will perhaps enable us to obtain blacks derived from aniline in a state of greater purity, and to hasten the moment when we shall know their elementary composition; a question which, in view of its great interest, has been proposed for a prize by the Industrial Society of Mulhausen.'

Mr Cornet, whose name has been mentioned above, in a mathematical discussion of the question, says that compressed air would be largely used in mining operations 'were it possible to keep the temperature of the air from rising during compression much above that of the atmosphere, and from falling during expansion to the temperature of freezing water.' And he thinks that he has found 'the means for attaining this end in the use of water-spray, which could be introduced into the cylinder of the compressor, and into that of the machine using the air in the mine.' The practical details are not yet made known; but if they succeed, 'the use of compressed air in mines will soon become general, and the problem of mining at any depth will be solved.'

One part of the method devised by Mr Cornet had been previously thought of; for in 1875 an air-compressor was working in the St Gothard tunnel, of which it was said: 'The heat produced by compression is reduced by the circulation of cold water in the walls of the cylinder, in the interior of the piston and its rod; and an injection of water-spray at the two extremities of the cylinder completes the cooling.' When the compressors were at work they supplied to the tunnel fifteen cubic mètres of air per minute.

When messages were first sent by telegraph, many persons were exceedingly puzzled to understand how they were sent; and now the telephone has come to disturb them with another puzzle. But scientific men have long known that 'galvanic music,' as it is called, was discovered forty years ago, that an electro-magnet on being suddenly magnetised or demagnetised gives out audible sounds, and that many notices of the curious fact were printed in English and foreign journals. Professor Graham Bell, whose experiments have been already mentioned in these pages (*ante* 208, 415), succeeded in making the sounds, which were commonly very faint, audible to a large number of persons. This was accomplished, as he explains, 'by interposing a tense membrane between the electro-magnet and its armature. The armature in this case consisted of a piece of clock-spring glued to the membrane. This form of apparatus,' he continues, 'I have found invaluable in all my experiments. The instrument was connected with a parlour organ, the reeds of which were so arranged as to open and close the circuit during their vibration. When the organ was played, the music was loudly reproduced by the telephonic receiver in a distant room. When chords were played upon the organ, the various notes composing the chords were emitted simultaneously by the armature of the receiver.'

'The simultaneous production of musical notes of different pitch by the electric current,' continues Professor Bell, 'was foreseen by me as early as 1870, and demonstrated during the year 1873. Elisha Gray of Chicago, and Paul La Cour of Copenhagen, lay claim to the same discovery. The fact that sounds of different pitch can be simultaneously produced upon any part of a telegraphic circuit is of great practical importance; for the duration of a musical note can be made to signify the dot or dash of the Morse alphabet; and thus a number of telegraphic messages may be sent simultaneously over the same wire without confusion, by making signals of a definite pitch for each message.'

By instalments of news from the Pacific we hear of the tremendous earthquake that occurred last May; but for precise details we shall have to wait until reports are published in the scientific journals of the United States. Meanwhile, we learn that the great volcano of Kilauea in Hawaii began to be restless on the first of the month; a few days later huge columns of lava were thrown up, vehement jets of steam burst forth from a long range of fissures, and all the startling phenomena of a mighty eruption, including drifts of Pele's hair, were observed. This evidence of



disturbance deep down in the earth was corroborated by an earthquake, which about half-past eight on the evening of the 9th terrified and devastated the coast of Peru, and occasioned greater ruin than the similar calamity in 1868. Iquique is said to be completely destroyed, and other towns and cities along two hundred miles of coast suffered more or less severely. As usual, the commotion of the land produced a commotion of the water, and the sea rolling great waves upon the shore, intensified the havoc. The waves varied in height from ten to sixty feet; and we are told that 'four miles of the embankment of the railway were swept away;' and that 'locomotives, cars, and rails were hurled about by the sea like so many playthings.'

Also, as is usual in such catastrophes, the earthquake wave was propagated; and between four and five of the morning of the 10th, it (that is the sea) rushed upon the Hawaiian Islands in waves varying from three to thirty-six feet in height. Thus in eight hours the resistless oscillation had traversed the five thousand miles which separate the islands from the South American continent.

From this brief sketch it is obvious that there is much in this calamitous visitation to interest the physicist and geologist as well as the philanthropist. Information will in all probability be communicated from other places until the remotest points at which the disturbance was felt shall have been ascertained.

As relating to this subject we remark that the hair of Pele—a Hawaiian goddess—above mentioned can be produced artificially in a blast furnace. It has been described in former pages of this *Journal* as 'slag cotton.'

We learn by a communication from Hawaii to the American Journal of Science and Arts that a grand outburst occurred in February last, but ceased quite suddenly, to the disappointment of visitors who came expecting to see a volcanic display. As the vessel was steaming away, they saw in deep water, a mile off Kealakekua, the place where Captain Cook was killed, a remarkable heaving and bubbling, intermingled with jets of steam, and throwing up of pumice and light scoria. This commotion was still going on five weeks afterwards. It was occasioned by a subterranean lava-stream which, after rending the mountain slopes with deep fissures, found an outlet under the sea.

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The Weather Review published by the United States Signal Service contains details of the wave which may be accepted as trustworthy. 'About 8.50 P.M. of May 9, heavy earthquake shocks were felt over the region between Arica and Mexillones (border of Peru and Bolivia). The oceanic wave which immediately followed was of great violence along the adjoining South American coast, and was felt also as far north as California, the rise at Anaheim being twelve feet in a few minutes. At Callao, Peru, the wave was felt at 11 P.M.; at San Francisco was perceptible at 6.18 A.M. May 10, with increase to a maximum of fourteen inches at 8.20. It reached the Sandwich Islands, eastern Hawaii, at Hilo, at 4 A.M.; and the great wave, thirty-six feet high, came in at 4.45. At Honolulu it was first felt at 4.45, and was followed by the great wave at five o'clock.'

In a subsequent communication it is stated that thirty-six hours after the inrush of the great wave at Hilo, the rising and falling still continued, 'the incoming and outflowing wave occupying about an hour, the latter leaving the channels nearly bare.'

Our American cousins are not disposed to accept their plague of locusts as an inevitable calamity, for the Entomological Commission appointed by the government at Washington have published two numbers of a *Bulletin*, with woodcuts, giving information on the natural history of the devouring insects and on the various methods proposed for their destruction. It is shewn that by systematic endeavours before the creatures get their wings they may be destroyed on a great scale, for then it is possible to drive them in enormous 'schools' or flocks as easily as sheep. Millions fall into long straight ditches dug as traps and there perish; millions more are crushed by rollers; hogs and poultry devour them greedily; and a number of ingenious machines stand ready to catch the winged locusts in the air or to capture them as they crawl. One of these machines produces a powerful upward blast which sucks up the crawlers from the ground, and drives them into a receptacle where they are smashed to a pulp. American ingenuity is roused by the swarming inroad, and it will be interesting to watch the struggle. Meanwhile the States adjacent to the Rocky Mountains are anxiously asking which is to conquer, man or locust?

Concerning the Colorado beetle, Mr Riley, State Entomologist for Missouri, reports that the eastward progress of the insect 'was at the average rate of eighty-eight miles a year, and that it has now invaded nearly a million and a half square miles, or more than one-third the area of the United States. It does not thrive where the thermometer reaches one hundred degrees Fahrenheit, and hence it may never extend its range very far south of the territory now occupied; but its northern spread is not limited; and it may push to the northernmost limit of the potato-growing country.'

Special associations for special objects are a characteristic of the present century, so it seems quite natural that there should be a 'Society of Americanists,' whose object is to gather information about America. They meet once in two years; their next meeting is to be held next month at Luxemburg; and we learn from their programme that their inquiries are to apply to the times anterior to the discovery of America by Columbus. Thus the picture-writing of the Mexicans, their civil legislation under the Aztecs as compared with that of the Peruvians under the Incas; the inscriptions in the ancient cities of Central America, the ancient use of copper, the works of the mysterious mound-builders, the comparison of the Eskimo language with the languages of Southern America; traditions of the Deluge especially in Mexico; the discovery of Brazil, and other ethnographical and palæographical subjects. If this scheme be wisely and diligently followed out, there is reason to hope that some light will be thrown into the obscurity of early American history.

A description of the great river Amazons and of the vast region watered by its affluents, by Mr R. Reyes, is published in the *Bulletin* of the Société de Géographie, at Paris. He calls it the American Mediterranean, and shews that by itself and its feeders, the noble stream borders the territories of Bolivia, Peru, Ecuador, Colombia, Venezuela, and Brazil. Ships of the largest class can navigate to a distance of three thousand miles from the sea, and ascend some of the tributaries from two to nine hundred miles, through a country rich and fertile almost beyond description. The forests produce four hundred different kinds of wood, mostly of excellent quality, as may be seen in the Museum at Rio Janeiro; and fruits, drugs, and minerals abound.

A tourist wishful to take a holiday in the tropics may now embark in the West Indies, cross to the mainland, steam up the Magdalena to the city of Purification in the Colombian State Tolima. Thence by a land-journey of three days he reaches the steamers on the affluents of the Amazons, and ends his voyage of four thousand miles on the great Brazilian river.

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**TO THE READERS OF *CHAMBERS'S JOURNAL*.**

Next month will be commenced a Romance, in Three Parts, by 'ALASTER GRÈME,' entitled  
FROM DAWN TO SUNSET,  
to run through several months of this *Journal*.

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In January 1878 will appear the first chapters of a Novel, by JOHN BERWICK HARWOOD, entitled  
HELENA, LADY HARROWGATE.

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Encouraged by the still increasing popularity of *Chambers's Journal*, the Conductors will spare no effort to maintain its attractiveness.

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Transcriber's Note—The following changes have been made to this text:

Page 534: Masterhorn to Matterhorn.

\*\*\* END OF THE PROJECT GUTENBERG EBOOK CHAMBERS'S JOURNAL OF POPULAR  
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