

CHAPTER XIV.

NOTES OF LIFE IN 1852-3.

THEN upward turned
 Our gaze to the far worlds that flashed and burned ;
 The tower-like tube is pointed to the skies,
 From the faint nebulae new worlds arise,
 The starry footsteps of the milky way
 Draw swiftly near us on the giant ray,
 While lunar steeps and outlined valleys shone
 In the new radiance like the sculptured stone.

THE year 1852 opened with varied scenes. My father attended the marriage of his youngest son on the 2d of January,¹ and on the 6th received the tidings of the death of his eldest born at Mussourie, who left a widow and two little girls. The pressure of this bereavement was very great, causing, as grief generally did, an increase of the nervous irritability of his temperament. Yet there was evidently, though not without a struggle, a recognition of His hand "whose trials blessed my wayward lot." It seems to have been about this time that the MS. of an epitaph on an English Jacobite by Lord Macaulay was given to him, which was carefully preserved and much admired, as his sympathies, like those of many in Scotland, ran counter to his principles when the old Jacobite romances were in question. He was dissatisfied, however, with the want of Christian resignation expressed in it, and he therefore wrote an imitation of it, endeavouring to rectify this fault. I do

¹ To Anne Catherine, second daughter of J. C. H. Inglis, Esq., of Cramond.

not know whether the original epitaph is in print or not, but I give it now, as the two productions are interesting to compare :—

EPITAPH ON AN ENGLISH JACOBITE.

BY LORD MACAULAY.

“ To my true king I offered without stain
 Courage and faith,—vain faith and courage vain ;
 For him I gave land, honours, wealth away,
 And one sweet hope that was more prized than they ;
 For him I languished in a foreign clime,
 Grey-haired with sorrow in my manhood's prime ;
 Heard in Laverno, Scargill's whispering breeze,
 And pined by Arno for my lovelier Tees,
 Beheld each night my home in fever'd sleep,
 Each morning started from the dream to weep ;
 Till God, who sore me tried—too sorely—gave
 The resting-place I craved—an early grave.
 Oh thou whom chance leads to this nameless stone,
 From that dear country which was once my own,
 By those white cliffs I never more must see,
 By that proud language which I spake like thee,
 Forget all feuds, and shed one English tear
 On English dust,—a broken heart lies here.”

EPITAPH ON A SCOTCH JACOBITE.

BY SIR DAVID BREWSTER.

“ To Scotland's king I knelt in homage true,
 My heart, my all, I gave—my sword I drew,
 For him I trod Culloden's bloody plain,
 And lost the name of father 'mong its slain.
 Chased from my hearth, I reach'd a foreign shore,
 My native mountains to behold no more—
 No more to listen to Tweed's silver stream—
 No more among its glades to love and dream,
 Save when in sleep the restless spirit roams
 Where Melrose crumbles, and where Gala foams
 To that bright fane where plighted vows were paid,
 Or that dark aisle where all I loved was laid ;
 And yet methought I've heard 'neath Terni's walls,
 The fever'd pulse of Foyers' wilder falls,

Or seen in Tiber's wave my Leader flow,
 And heard the southern breeze from Eildon blow.
 Childless and widowed—on Albano's shore
 I roamed an exile, till life's dream was o'er—
 Till God, whose trials blessed my wayward lot,
 Gave me the rest—the early grave—I sought :
 Showed me, o'er death's dark vale, the strifeless shore,
 With wife, and child, and king to part no more.
 O patriot wanderer, mark this ivy'd stone,
 Learn from its story what may be thine own :
 Should tyrants chase thee from thy hills of blue,
 And sever all the ties to nature true,
 The broken heart may heal in life's last hour,
 When hope shall still its throbs, and faith exert her power."

He afterwards went to London, whence he wrote as follows :—

" 166 PICCADILLY, *May 16, 1852.*

" Although I think I do not owe you a letter, I sit down to tell you of my movements. I am just waiting for Lyon Playfair to go to an interview with Prince Albert at three o'clock, on the subject of his great scheme of Industrial education, upon which I am to write an article next *North British Review*. When at the Palace yesterday, examining the diamond, I lunched with the Lords in Waiting, who have a separate table, viz., Lord Charles Fitzroy, Colonel Gordon, Lord Polwarth, Colonel Phipps, etc., of the Prince's household. It was very easy and agreeable. . . .

" I have just returned from an hour-and-a-half's interview with the Prince, who unfolded to me his plan of a great central Industrial Institution, to which the £500,000 obtained from the Exhibition is to be devoted. I have been much impressed with his sagacity and knowledge and great frankness. He told me of a letter which the Queen received from some Indian grandee, addressed to the Right Honble. Sir George Victoria, Queen of the East India Company !

“Sir James Gordon has had a fall, which has injured his only knee, but he is getting better. I hope to be able to call at the Hospital.”

That this noble idea of a great centre of science and industry was perforce abandoned, greatly disappointed Brewster, who had long hoped and striven for kindred designs. In 1865 he still was hoping and proclaiming his hopes, although that far-seeing mind had passed away which had alone grasped the advantage of such a scheme as the proper result of the grand Industrial Exhibition of 1851. He wrote a pamphlet entitled *Scientific Education in our Schools*, from which the following is extracted:—

“With such means in our power, cheaply obtained, and easily applied, a large portion of scientific instruction would be instilled into the youth of our schools,—familiarizing them with the works of their Maker, and preparing them for the reception of that higher revelation with which the truths of science cannot fail to harmonize. The knowledge thus imparted will not be confined to the schoolroom. It will elevate the amusements of the holiday and the leisure hour. It will pass into the cottage, amusing and enlightening its inmates. It will find its way into the workshop, giving skill to the workman, and value to his work. It will insinuate itself into the servants’ hall, and even into the boudoir and the drawing-room, returning an usurious interest upon the liberality which introduced it into the school. Thus, diffused among our now popular constituencies, and appreciated by those above them, the truths of science may rise into the regions of legislation, wresting from the still reluctant statesman

a measure of secular, scientific, and compulsory education, by which the benighted and criminal population around us may be taught to fear God and honour the King.”

In August we went to Ireland, visiting *en route* the Duke of Argyll at Inverary Castle, Lord Murray at Strachur, and Mr. and Mrs. George Forbes at Rothesay. The month spent in the “Green Isle” was often recalled to with pleasure and interest by my father, as containing very varied aspects of Irish society and character, although it was clouded by a low feverish sort of influenza, which was the precursor of many such prostrating attacks. Two visits to Clondeboye, the seat of Lord Dufferin,—the one in going south, the other on returning,—he found particularly interesting, enjoying the combination of hereditary wit, exquisite music, and Irish patriotism of the better sort. A week at Birr Castle, Parsonstown, was almost an era in the life of the early telescope maker. It was a touching sight to see his delight and interest in that huge erection of genius, the six-foot mirror Telescope, and his affinities and sympathies with its architect, Lord Rosse, now, alas! called away from his labours. Our approach to the giant telescope for the first time by night can never be forgotten. Our hopes had been very faint of seeing what we came to see; and a tradition of Sir James South having been detained for six weeks without one clear night, grated unpleasantly on the ear. People who repose quietly in their arm-chairs after dinner, and go to bed at reasonable hours, have small idea of the excitement prevailing in an astronomer’s household as to the state of the weather. How anxiously we all watched the dark banks of cloud, and the tremulous fleecy vapour upon

the blue sky, and the rich crimson, gold, and green of the sun-setting! At last,

“When the sun fell, and all the land was dark,”

the welcome summons reached us from the observatory. But faintly indicated by the dim star-light and partially veiled moon, the immense structure loomed almost awfully in the obscurity. On one side, the open door and windows of the small observatory, which contains two transit instruments, gave out a gush of light and warmth; on the other side, the black and unenclosed scaffolding of the three-foot telescope stood out against the dark blue heavens. The tower-like telescope is suspended between two large piers or walls. Upon reaching the top of this building by a slender staircase, we were introduced into a small but apparently steady gallery. By means of a small windlass, however, we began to move gently through the air till we arrived at the mountain-like side of the telescope, about twenty feet distant from us, thus bridging a depth below of sixty feet; strong wooden beams, secured by iron slides, supporting the gallery from the wall which we had just left. So imperceptible is the motion, that one night a gentleman, unconscious of having left the solid landing-place, opened the gallery door, and walked sixteen or twenty feet with no other footing than a narrow unrailed beam, but, almost miraculously, he reached the other side in safety, although he fainted the next morning on being taken to see the escape he had made.

The six-foot concave mirror or speculum is made of tin mixed with copper, and polished to an exceeding brightness. In looking into the mouth of the telescope by what is called the front view, we saw the inverted

image formed by reflection from this mirror in tremulous and dazzling radiance, but it is not thus that ordinary observations are made; a second mirror of small size is placed at an angle of 45° , so as to reflect the image to the side of the instrument four or five feet from the mouth, where it is viewed through eye-pieces of different magnitudes. The evening, though lovely to unastronomical eyes, was not altogether favourable for observations; however, we saw

"The galaxy, that milky way,
Which nightly as a circling zone thou seest
Powdered with stars."

In the middle of it was a double star—always a peculiar object of interest and study to my father—"twin suns," as they have been called, "moving in their mysteriously united beauty and brightness." We also saw the Dumb Bell Nebula, so called from a supposed resemblance in its form to that instrument; it is only a partially resolved one, however, even by the large instrument. We could not see the moon through the six-foot telescope, as she was not within the meridional range, which is limited by the two walls; the disadvantage of which is counterbalanced by the speed and steadiness with which it can be lowered or elevated. We accordingly repaired to the three-foot mirror telescope, which can be pointed to all quarters of the heavens: it is erected on another part of the beautiful demesne, and looks as if its huge black legs and arms must belong to a spider of the mammoth and mastodon period. The ladder of ascent was a very precarious one, and my father missed his footing in the imperfect light, narrowly escaping serious injury. It was the second accident of the kind which he had met with—the first having occurred, I believe,

about forty years before, when examining a large telescope belonging to Mr. Ramage of Aberdeen. Once ascended in safety, we gazed with wonder upon the lunar valleys, mountains, and caverns, so near and so distinct, that there seemed no obstacle to taking a quiet walk amidst their lights and shadows, their deep ravines, their volcanic cones and cavities. It is believed that if there were large buildings like a church, or a mill, or railway works, they could be clearly discerned; but there has been no change or furrow since human eyes were permitted to draw nigh its calm surface. Were there inhabitants, they must be independent of air and water, and must be scorched in light and heat one-half of each month, and frozen in cold and darkness the other.

Afterwards, my father sat up for several nights, as the weather, threatening at first, cleared up sufficiently to admit of his obtaining many interesting observations, which he thus describes in his *Life of Sir Isaac Newton*:—"We have enjoyed the great privilege of seeing and using this noble instrument, one of the most wonderful combinations of art and science which the world has yet seen. We have in the morning walked, again and again, and ever with new delight, along its mystic tube, and at midnight, with its distinguished architect, pondered over the marvellous sights which it discloses,—the satellites and belts and rings of Saturn; the old and new ring, which is advancing with its crest of waters to the body of the planet; the rocks and mountains and valleys, and extinct volcanoes of the moon; the crescent of Venus, with its mountainous outline; the systems of double and triple stars; the nebulae, and starry clusters of every variety of shape;

and those spiral nebular formations which baffle human comprehension, and constitute the greatest achievement in modern discovery." In the day-time he was always hovering around the wonderful instrument, examining its beauties and wondering at its perfections, and entering and walking through the mighty structure, which, with its huge black mouth, strongly resembled some mighty creature of a former age endowed with instinct beyond its centuries. He never tired of examining the works where the great speculum was cast, and of conversing with the workmen in the grounds, some of whom had assisted in the construction, and who were amusingly proud of "her," as they designated the telescope. It was a delight to him also to see the crowds of happy and wondering faces that gather round this scientific marvel—the whole grounds being thrown open both to townspeople and strangers every day after two o'clock; they are also permitted to examine the works, and to walk through the telescope.

Astronomy was not the only subject which interested my father at Parsonstown. Its Presbyterian pastor, the late Rev. Dr. Carlile, had given up a good living and a highly respectable congregation in Dublin for the purpose of becoming a missionary among the Roman Catholics of Birr. This self-denial being the spirit of the primitive church, was honoured of God, as self-denial ever is, and he was at this time carrying on most successful mission-work in Parsonstown.¹ It

¹ The work at Birr has languished considerably since the death of this self-denying missionary, but the school is still carried on, principally under the superintendence of Dr. Wallace, a medical man there, son of the Rev. John Wallace, previous to the Disruption minister of Abbey St. Bathans. He takes photographs of Birr Castle, the Telescope, etc., and by their sale helps the funds of the school.

was, alas! a "season of landlord-shooting," and the south and mid counties of Ireland were in a most turbulent state. The insecurity of life from day to day, even of kind and faithful landlords, and the many localities in these disturbed counties which were signalized as scenes of painful deeds, could not fail to impress the minds of strangers. Yet this man walked in peace and in favour through the streets where a few years before he had been stoned and persecuted. Truly the missionary's feet, though not shod in silver, were enabled to walk in ease over the difficult places like the feet of the hind upon the rocks. My father attended Dr. Carlile's preaching with great interest, and was taken by him to see his schools and missions, and also went with him through several convents in the town.

We next proceeded to visit Mr. King of Ballylin,—nearly related to Lord Rosse,—in King's County, where we witnessed a beautiful specimen of the life and residence of a genuine "old Irish country gentleman," the acquaintance with whose family we had made at Birr Castle. One of the daughters of this hospitable home, so fair and lovely among its stately beech trees, was for years a correspondent and a kind assistant to my father, having great, though unpretending, scientific acquirements, and, moreover, an exquisite gift of drawing, which she turned to good account in illustrating his scientific papers as well as her own charming books.¹

¹ Since writing the above, a melancholy event has caused the deepest sorrow to a large circle of attached relatives and friends, besides desolating one of the happiest of homes. By a most sad accident in the street of Parsonstown (a fall from a steam carriage), the above-mentioned lady met with an instantaneous death, which to her was, however, truly an entrance into life. She united in a singular degree great and varied talent with extreme simplicity, sweetness, and humility, and in every relation of life peculiarly "adorned" the Christianity which was her hope and joy. Of

These kind friends took us, among other sights of the neighbourhood, to Clonmacnoise, a collection of ruins on the banks of the Shannon. This scene deeply impressed itself upon my father's mind, and was often referred to by him. It included the remains of seven churches, two round towers (one of them, by a curious coincidence, being the exact size of Lord Rosse's telescope), two old ruined crosses and a "Holy Well," and presented plenty of materials for sketching, legendary stories, and antiquarianism; but a sadder and a stranger sight was there. Clonmacnoise was a "pilgrim station," and there groups of poor women, some literally clad in tatters, others in the picturesque red petticoat which marks the Galway peasant, were painfully stumbling over the rough ground on their knees, tying bits of ribbon to crosses, and vowing and performing vows to the Virgin and saints, in our own English language and within our own British realm. Our next move was to Dublin, by the way of Maynooth, where my father stopped to see a scientific *confrère*, one of the professors. We were kindly and hospitably entertained at luncheon, and shown through the noble pile of buildings with all its paraphernalia of an enlightened education for Irish priests, carried on at the expense of Great Britain. The recollections, however, of the pilgrim station of the day before, fully sanctioned, as we had

her it was said that she was "the gilder of every dark cloud" to those around her. She went on the morning of her death with her husband (the Hon. Captain Ward) to visit for the first time Lord Rosse's vault, where she herself was to be laid but a few days later. Afterwards, in walking about the burial ground, Captain Ward's foot struck on the plate of an old tomb, which they both silently saw bore by a strange coincidence her own maiden name of "Mary King." Mrs. Ward was the author of *Telescope Teachings*, a new edition of which had just been called for, also of *Microscope Teachings*, and of many articles in the *Intellectual Observer*.

ascertained, by the parish Roman Catholic priest, could not fail to intrude upon Scottish minds. From Dublin, with its striking contrast of wealth and misery, of squalid hovels and stately squares, we went again northward to attend the twenty-second meeting of the British Association at Belfast, where we entered on yet another phase of life in Ireland,—that of its princely merchants,—being entertained with Irish hospitality at Hopefield, the beautiful country villa of the late J. Sinclair, Esq., then thrown open to strangers attending the Association. The illness which had hovered round Sir David ever since he entered Ireland here assumed a very serious aspect, and he was scarcely able to attend any of the meetings. The sea voyage and Scotch air speedily re-established him, however, in nearly his usual health.

The Emperor of France bestowed on him in this year the decoration of the Legion of Honour. He was also chosen President of the Working Men's Educational Union,—a fitting position for one who has been called “the people's philosopher;” so much had he done to utilize science and to make it popular.

When in London in the spring of 1853, we have the following account of a few of the noted persons he was meeting day by day:—

“LONDON, *May* 1853.

“I had the good fortune to meet Mrs. Beecher Stowe at Mr. Rogers' on Tuesday. There was only a small party there,—Lord and Lady Hatherton, Lord Glenelg, and a few more, so that we saw her to advantage. After her visit to Mr. Rogers, she was engaged to visit the Bridgewater Gallery of Pictures, and I was invited to accompany the party. In the absence of Lord Ellesmere, who has gone with his family to America, as

a Commissioner to the Great Exhibition of New York, his brother, the Duke of Sutherland, accompanied by the Duchess, did the honours of the gallery to Mrs. B. Stowe. I thus saw a good deal of the lady. She looks young, with a short figure, but a highly intellectual expression of face, particularly in the eyes and forehead. She was quite at her ease, and seemed no way spoiled by the notice she received. The greatest compliment she has yet received is from this week's *Punch*, where the principal picture represents her and Diogenes, with the inscription, 'Diogenes has long sought in vain for an honest man, but having now found an honest woman, has extinguished his lamp in honour of Mrs. Beecher Stowe.'

"LONDON, *May 28, 1853.*

"On the 26th I breakfasted with Dr. Milman, where we had a brilliant intellectual party,—Macaulay, Hallam, Dr. Hawtry, head-master of Eton, and the ex-President of the United States, Van Buren, who was astonished at the conversation, which Macaulay generally guides,—the subject happened to turn on some subjects connected with Mental Philosophy, on which I was at home, and I got my full share in the discussion, in opposition to Macaulay's speculations."

"ATHENÆUM, *June 25, 1853.*

"I went next day, and took Lady and Miss Becher with me, to the Reformatory School at Westminster, where there was a meeting of the trustees, on the occasion of seventeen of the reformed persons going out to America. Lord Shaftesbury and several gentlemen made interesting speeches. This school, called the place of reformation, is open to thieves of all kinds

(males, I believe, only) who choose to come, and they may go when they please. They receive only a certain number, perhaps thirty or forty, and there have been 3000 applications."

The following extracts are from his letters to Mrs. James Brewster at different times :—

"ST. LEONARD'S COLLEGE, *January 15, 1851.*

"MY DEAREST CATHERINE,— . . . Since Saturday I have been working night and day at my article on the 'Life, Writings, and Travels of Sir Charles Lyell,' which I would put off to another quarter, had I not promised him to write it now. I have, however, got the greater part of it written, and, what you will scarcely think possible, the half of it printed, though I began it only on Saturday. . . ."

"ST. LEONARD'S COLLEGE, *April 17, 1853.*

". . . It is a long time since I had the pleasure of writing to you. My time has been so completely engrossed in adding about 200 pages to a new edition of my Treatise on Optics, that I have been obliged to leave numbers of letters unanswered, and I have this moment finished my quarterly labours for the *North British Review*. Maria and I have been deeply afflicted by the account of poor dear Ella¹ in your letter of to-day. We trust, however, that your fears have been premature, and that she will yet rally and be a blessing to her husband and her family. I at least have ground to hope for the best, as at M.'s birth I saw her dear mother apparently die, and yet as by a miracle she recovered and continued for a quarter of a century to be an orna-

¹ The late Mrs. Henry King.

ment and blessing to her family. I feel such interest in dear Ella, and such sympathy with her husband, that I must beg of you to write me a single line on the receipt of this, which I hope will contain the intelligence of her being safe. . . .

“I go to London on public University business, with a deputation consisting of Professors Ferrier, Buist, and Brown, to try and get payment of a debt long due by the Government to the University. I was delighted to hear that you had got for your brother James an appointment to the Artillery. Do impress him with the necessity of devoting all his time and energy to the work of preparing for his examination.”

“44 ST. JAMES'S PLACE, LONDON, *May 12, 1853.*

“I would have written to you long before this, but I have been so much occupied with the University business for which I came here, that I have found it difficult to get a quiet half hour. I dare scarcely allude to poor dear Ella, whom we selfishly grudge to the many friends with whom she is now rejoicing,—wearying no doubt for a meeting with those she has left behind.”

“THE ATHENÆUM, *June 12, 1854.*

“. . . I can hardly think that an account of my proceedings can interest you at present, but as I have nothing better to tell you, I shall give you an account of the two principal affairs in which I have had a part—viz., the great ball given by Lord Breadalbane to the Queen, and the opening of the Crystal Palace on Saturday. At the former there were a thousand persons—all the royal personages in London, together with the King of Portugal, and his brother the Duke of

Oporto, the one about seventeen, and the other about thirteen years of age. Without my knowing the reason, the King of Portugal came up to me, shook hands, and told me that he had read several of my works, and was very fond of optics. I found him very intelligent, and have since heard that he has a great knowledge of natural history. Lady K. told me that she saw Prince Albert point me out, and tell him to go to me.

“I went to the Crystal Palace with Lord and Lady Kintore, for whom I got an invitation to a grand breakfast given by Mr. Scott Russell, the resident director of the Palace, at his charming residence of Westwood Lodge, near the Palace. By his means we got into the Peers' Gallery by a private entrance. I had an invitation from the director to take part in the ceremony, but preferred going with the Kintores. It is impossible to describe the opening scene in a few words. There were about 30,000 persons present. The vocal and instrumental band consisted of 1600 persons, and the music was particularly grand. After it was over we lunched at Westwood Lodge. . . . Give my love to your mamma, Chatty, and Netta, and with kisses to dear Louisa and Juliet, believe me, my dearest Catherine, your affectionate father,
D. BREWSTER.”