ERASMUS DARWIN.

Towards the close of the last century Lichfield became the headquarters of one of those mutual admiration societies which from time to time exercise an important influence upon the fashion of literature. The leader of the coterie was the Reverend William Seward, a canon-residentiary of Lichfield, who by a somewhat curious arrangement occupied the palace of the nonresident bishop. Boswell talks of him as "a genteel, well-bred, dignified clergyman," and as he held several considerable pieces of preferment and left a handsome fortune behind him, the description is probably accurate enough. Johnson's opinion of Seward was less flattering. "Sir," said he to Boswell on their way from Lichfield to London in 1776, "his ambition is to be a fine talker, so he goes to Buxton and such places, where he may find companies to listen to him, and, sir, he is a valetudinarian, one of those who are always mending themselves." The Doctor added some remarks about a "hog in a stye," which it is hardly necessary to repeat. Seward had some pretensions to literature. He had edited, in conjunction with one Simpson, an edition of Beaumont and Fletcher, and he published some verses in Dodsley's collection which were greatly admired—by his family. The rest of the coterie were literary after the same fashion. Amongst those who composed it were "the ingenious Mr. Keir of West Bromwich, and the accomplished

Dr. Small of Birmingham;" Sir Brooke Boothby, who "so ably refuted" Mr. Burke on the French Revolution; Mr. Munday of Marketon, "whose 'Needwood Forest' is one of the most beautiful local poems that has been written;" the Rev. Archdeacon Vyse, "not only a man of learning but of Prioric talents in the metrical impromptu;" Mr. Robinson, "a choice spirit of Lichfield;" Day, the philosophical author of "Sandford and Merton;" Richard Lovell Edgeworth, then lately married to his first wife; and if last, not least, Anna Seward, to whose "lettered taste" the phrases quoted above are due. Amongst those who occasionally occupied places in Anna's drawing-room were Watt the engineer and his partner Boulton from Birmingham, Dr. Priestley, the eccentric Lord Monboddo, Sir Joseph Banks, and Dr. Parr-all, it will be remarked, good Whigs, and all men with some claim to the title of philosophers.

Of this society Erasmus Darwin was the object of reverential admiration, and his voluminous works in prose and verse the theme of their eternal applause. From the candid admissions of his friends and associates, it may be gathered, however, that it was the philosopher more than the man who was admired. To put the matter plainly, he was an ugly fellow, and his manners were clownish in the extreme. Anna Seward describes him as of "large and athletic frame," but Edgeworth is more candid. Darwin struck him as being "a large man, fat and rather clumsy." He was much pitted with the small-pox, and in conversation "stammered exceedingly." The portraits of him which are extant fully bear out this description, showing him to have possessed a coarse and heavy face with remarkably clumsy features, a nose of the thick

Hebrew type, and a mouth of peculiarly bitter and sarcastic expression. Wedgwood's well-known cameo, reproduced in Miss Meteyard's 'Life' of the illustrious potter, is obviously idealized beyond the point of recognition. Mrs. Schimmel-Penninck's less flattering description corresponds far more accurately with Rawlinson's uncompromising portrait. The mouth was indeed the index to Darwin's character. He was sneering, sarcastic and sceptical in no common degree. Anna Seward especially remarks, in that inverted style of which she was so fond, "extreme was his scepticism to human truth." She is also somewhat enthusiastic concerning his sarcastic wit, but it cannot be said that the specimens of his conversational powers which his admirers have preserved are likely to impress the modern reader very favourably. Thus, for example, his friend Mr. Robinson, the "choice spirit of Lichfield" before mentioned, had in conversation with him "thrown the bridle upon the neck of his fancy, and it was scampering over the churchyard and into the chancel" (by which we are to understand that he was talking blasphemy), upon which Darwin exclaimed, "Excellent! Mr. Robinson is not only a clever fellow, but a d-d clever fellow." On another occasion this same "choice spirit" delivered a mock eulogium upon swearing, ironically dilating on its power to animate dulness and to season wit. Darwin's remark. which appears to have excited great admiration amongst his friends, was:-" Christ says swear not at all; St. Paul tells us we may swear occasionally; Mr. Robinson advises us to swear incessantly. Let us compromise between these counsellors and swear by Non-en-ti-ties. I v. at swear by my Im-pu-dence and Mr. Robinson by h's Mo-dest-v." If these were the "terrific sarcasms"

at which the literati of Lichfield trembled, one is inclined to think that, like the conies, they must have been "a feeble folk." Sometimes Darwin appears to have mistaken rudeness for wit, and to have laboured under the not uncommon delusion that when you have called a man a fool you have annihilated him with an epigram. Thus on one occasion a lady who was visiting Lichfield waited upon him with a letter of introduction. Adapting her conversation to her company, as she imagined, she addressed him in the affected manner in favour with the Della Cruscan school. Divested of its absurdity of form, however, her question was simple enough. She wished to know what there was of interest in art, literature, or science in Lichfield. Darwin replied in not less stilted phrase with a recommendation to her to go to the bull-running at Tutbury. The lady was naturally somewhat disconcerted, but after a moment's pause she said: "I was recommended to a man of genius, and I find him insolent and illbred," with which she retired from Darwin's presence. Miss Seward is loud in her applause of the doctor's prompt and ready wit on this occasion; but it will probably be held that the lady had the best of the passage of arms.

Besides being a wit, Darwin was a teetotaller, or almost one, and, as is not unfrequently the case with those who abstain from wine, he was utterly intolerant of its use by other people. On the other hand he was a great eater, especially of animal food, and of fruit both raw and cooked. If he drank wine at all, which he did but rarely, he confined himself to those pleasing compounds known as "made" wines—cowslip wine, currant wine, and what Mrs. Hoggarty of Castle Hoggarty was accustomed to call "Rosolio"—which

he diluted with water. It was perhaps as well that the ingenious doctor should refrain from more intoxicating beverages, for he does not seem to have been gifted with what is commonly described as a strong head. A story is told of an adventure of his which is hardly likely to impress the present generation as deeply as it impressed his own, with reverence for his habitual wisdom and temperance. It would seem that on a certain day in summer, whilst Darwin was living at Lichfield, a party was made up by some friends to sail down the Trent from Burton to Nottingham, and thence to Newark. A good luncheon was put on board, together with an abundant supply of wine, and Darwin took his fair share of both. Just before the boat reached Nottingham, he quietly dropped from it and swam to the shore. His friends hurried on to the town, where they found him in the market-place, making a speech to the crowd on the importance of ventilation. The local apothecary urged him to go to his house and provide himself with dry clothes; but to this invitation he turned a deaf ear, assigning for his eccentricities the highly philosophical reason that the internal heat caused by the wine he had taken, would amply suffice to counteract the cold caused by the external application of water. It is only fair to add, however, that this story rests mainly upon the statement of Miss Seward, whose veracity is anything but unimpeachable. Mr. Charles Darwin says, on the authority of one of his step-sons, that this half-tipsy freak was the result of a trick played upon him by some gentleman of the party.

In his family relations Darwin appears to have been not wholly unamiable, though it was perhaps hardly to be expected that so eminently philosophical a personage should find much room for commonplace affections in that portion of his anatomy which he was pleased to call his heart. His first wife, whom he married when he was twenty-six, was a Miss Howard of the Cathedral Close of Lichfield, the local influence of whose family was of unquestionable value from the professional point of view. She was little more than a child at the time of her marriage, and speedily fell into ill-health. After thirteen years of suffering she died, expressing rapturous adoration of her husband with her last breath. He remained a widower for some years, but about 1777, a certain Mrs. Pole, wife of Colonel Pole, came from Derby to Lichfield to consult him about the health of her children. A tender friendship sprang up between them, and when Mrs. Pole returned to her home, a complimentary correspondence began, which was continued for a considerable time. On Colonel Pole's death, his widow visited Lichfield, and as she was still young, wealthy, and agreeable, she soon had a crowd of suitors at her feet. Somewhat to the surprise of her friends, she rejected them all in favour of Darwin, whose greatest flatterers hardly venture to describe him otherwise than as a somewhat morose and certainly rather ill-favoured man of fifty. Despite remonstrance they were married, the bride making only one condition—that their future home should be at Derby instead of Lichfield. Thither they accordingly removed in 1781, and there a new family grew up around the philosophical doctor. His children by his first wife had been educated and launched upon the world, the high reputation which he enjoyed serving as an excellent introduction to their professional career. Their father's affection for them seems to have been, however, somewhat feeble, though not quite so wholly

extinct as Miss Seward tried to make out. On the strength of a hearsay report she ventured on a most cruel charge of selfishness and heartlessness on the occasion of his eldest son's death, which she was afterwards compelled to retract unreservedly. According to her story, the suicide of his unfortunate son produced no other remark from Darwin than the exclamation, "Poor insane coward!" after which he never mentioned his name, and devoted himself to the task of realizing his property. But though this tale is utterly unfounded, Mr. Charles Darwin is forced in his somewhat laudatory sketch of his grandfather's life, to admit that his own father, Dr. Robert Darwin, had been treated by him "somewhat harshly and imperiously, and not always justly." Mr. Darwin adds, "Though in after-years he felt the greatest interest in his son's success, and frequently wrote to him with affection, in my opinion the early impression on my father's mind was never quite obliterated."

With such a man, and such a society as that by which he was surrounded, Johnson could have but little sympathy. His leading characteristic, next to his genuine and unaffected warm-heartedness, was, as Mr. Carlyle has pointed out, a sincere and manly simplicity, which naturally rebelled against the mannerisms and affectations of Darwin's provincial coterie of admirers, and he must have felt besides an internal consciousness of genius, which would effectually remove him from association with "the ingenious Mr. Keir" and the philosophical Mr. Day. Politics and religion both interfered, moreover, to keep him out of the Darwinian clique. His own creed was simple enough, and might be summed up in the five words, "Fear God: honour the King." Theirs was much

more philosophical. Whether there was a God at all, was a matter about which they were by no means certain. On the whole they thought that it was perhaps as well to admit the existence of a "Great First Cause," but they knew very little about Him, and they troubled themselves still less. Instead of a religion, they had a neat philosophical system which explained everything and accounted for everything. Natural science was as yet in its infancy, but the philosophers of the eighteenth century imagined that they had explored all the secrets of nature when-to use the simile of Newton—they had but picked up a few shells on the seashore of Eternity. It is amusing, and at the same time humiliating, to read the dissertations of the early chemists, with their infantile babble about "fixed air," "phlogistic and anti-phlogistic substances," and the like, and then to turn from them to the self-satisfied speculations of the Darwinian school, who seem to have imagined that they had arrived at the end of all knowledge, when in truth they were only on its threshold. Johnson unquestionably realized the limitations of human attainment, and shrank from identifying himself with an imperfect science, which began by doubting all that he believed most firmly, and which, whilst denying the existence of a living and personal God, offered a handful of chemical products as a substitute for Him. Nor was his political faith less offended by the speculations of the philosophers whose cosmopolitanism was already leading them to sympathize with the enemies of their country, and who a few years later allied themselves with the forces which convulsed Europe. Whenever, therefore, he visited Lichfield, he avoided as much as possible the literary clique of which Darwin was the

centre. For Darwin himself, whom he met only once or twice, he entertained, according to Duppa—who in this matter repeats Anna Seward—a strong dislike. which on his part Darwin cordially returned. Nor did the dilettante science and philosophical liberalism of Miss Seward's tea-table possess any greater attractions for him. He went there now and again, but his strong sincerity and robust convictions affrighted the timid, trembling scepticism of the excessively refined lady who presided over it. Finding himself without a welcome, he remained amongst the friends of his youth, and we can perhaps hardly wonder at his choice. Miss Lucy Porter, his much-loved stepdaughter, who was not ashamed to help her friend by serving behind the counter of her little shop on market-days, is, on the whole, a more agreeable figure than Miss Anna Seward, engrossed in the composition of elaborate impromptus, to be let off for the edification of her clique at the first favourable opportunity. On her side Anna Seward fully returned Johnson's dislike, and almost contempt, and lost no opportunity of manifesting her hostility to him both before and after his death. Thus she repeatedly speaks of him by Churchill's nickname of "Pomposo;" she calls him "the arrogant Johnson;" asserts that he "liked only worshippers;" and after his death started a ridiculous and cruel story of an uncle who, she was wont to declare, had been hanged. His greatest offence in her eyes, next to his obstinate torvism, was that he did not share her reverence for Darwin. "It is curious," she remarks in one place, "that in Dr. Johnson's various letters to Mrs. Thrale, now Mrs. Piozzi, published by that lady after his death, many of them at different periods dated Lichfield, the name

of Darwin cannot be found, nor indeed that of any of the ingenious and lettered people who live there, whilst of its mere common-life characters there is frequent mention." 1

If, however, Johnson neglected and despised Darwin, Miss Seward fully made up for his want of appreciation. Speaking of his "Botanic Garden," which was first published in 1781, she says: "We are presented with a highly imaginative and splendidly descriptive poem, whose successive pictures alternately possess the sublimity of Michael Angelo, the correctness and elegance of Raphael, with the glow of Titian; whose landscapes have at times the strength of Salvator, and at others the softness of Claude; whose numbers are of stately grace and artful harmony; while its allusions to ancient and modern history and fable, and its interspersion of recent and extraordinary anecdotes" (amongst which, by the way, is the fable of the Upas tree), "render it extremely entertaining."

Anna's enthusiasm was shared by others. Prefixed to the poem, after the fashion of the seventeenth century, are a number of commendatory verses by different writers. Unfortunately, three of the five authors—the Rev. W. B. Stephens, Mr. R. Polwhele, and Mr.

¹ Yet Johnson had a very high opinion of Lichfield people. Under date 1776, Boswell writes: "He expatiated in praise of Lichfield and its inhabitants, who he said were 'the most sober, decent people in England, the genteelest in proportion to their wealth, and spoke the purest English.' I doubted as to the last article of this eulogy," adds Boswell, "for they had several provincial sounds, as there pronounced like fear instead of fair; once pronounced woonse instead of wunse or wonse. Johnson himself never got entirely free of these provincial accents. Garrick sometimes used to take him off, squeezing a lemon into a punch-bowl with uncouth gesticulations, looking round the company and calling out, 'Who's for poonsh?'"

F. N. C. Mundy—are totally forgotten. Cowper and Hayley joined in laudation of the "sweet harmonist of Flora's Court," and assured him of his right to a high place amongst the poets. "We," says Cowper,—

We deem the bard whoe'er he be,
And howsoever known,
Who would not twine a wreath for thee,
Unworthy of his own.

Hayley, in a fanciful copy of verses, describes Nature as presenting Science with Darwin's poem, in which both see themselves reflected, upon which the Goddess exclaims,—

> Yes, in this mirrour of the bard, We both embellish'd shine, And grateful will unite to guard, An artist so divine!

This with delight two poets heard,
Time ratifies it daily,
Trust it, dear Darwin, on the word
Of Cowper and of Hayley.

The "Botanic Garden," concerning which these pretty things were said, is dead now beyond all hope of resurrection, and it would be utterly forgotten were it not for the immortal parody of its second part—the "Loves of the Plants"—which Canning, Gifford, and Frere contributed to the Anti-Jacobin under the title of the "Loves of the Triangles." As Mr. Hannay, a fine critic whose genius was wasted in journalism, has remarked, "Other poems live in spite of ridicule; Darwin's 'Loves of the Plants' in consequence of it. The Attic salt of his enemies has preserved his reputation." Turning back to it,

one wonders how such frigid, tawdry, turgid stuff could ever have found readers and admirers. Yet it was singularly successful in its day. The booksellers paid the author a great price for it-Mrs. Schimmel-Penninck says, for the copyright or for the edition, she is not sure which, ten shillings a line 2and brought it out in a sumptuous fashion, with costly botanical plates and illustrations after Fuseli. Cowper honoured it with a criticism in the Analytical Review, which mainly serves to prove that a great poet may be but a second-rate critic—especially when he praises a brother poet for excellences to which he himself makes no pretension. The distinctive merits of Cowper's poetry are its directness, simplicity, and naturalness. Darwin's poetry is the very reverse of all this, and accordingly we find Cowper praising the "fine writing of the 'Botanic Garden." "The descriptions are," he says, "luminous as language selected with the finest taste can make them, meeting the eye with a boldness of projection unattainable by any hand but that of a master." Cowper's accustomed fine sense of propriety seems, indeed, to have wholly deserted him in writing this review. He selects, for example, as a matter for special commendation, Darwin's expression "eyetipt horns" as applied to the snail, and declares that an ordinary writer would not have said so much in half a dozen laboured couplets-which may be true, but which, considering

² The "Botanic Garden" contains 4334 lines, which at this rate would make the copy money 2167*l*. Mr. Charles Darwin says that he has heard his father say that a thousand guineas were paid before publication for the part which was published last, i. e. for the "Economy of Vegetation," which contains rather more than one-half of the poem.

that the impression which it is designed to convey is utterly inaccurate, is wholly beside the question.

Mathias, "the nameless bard" of the Anti-Jacobin, and author of the "Pursuits of Literature," criticizes the "Botanic Garden" with much more justice. In the course of one of his voluminous notes he says :- "I wish men would peruse the treatise 'De Causis Corruptionis Eloquentiæ' before they attempt by prettiness, glittering words, points, conceits, and forced thoughts, to sacrifice propriety and just imagery to the rage of mere novelty. This will always be the case when writers in prose or verse (if I may be allowed to use Sancho's phrase a little metaphorically) 'want better bread than is made of wheat.' Modern ears are absolutely debauched by such poetry as Dr. Darwin's, which marks the decline of simplicity and true taste in this country. It is to England what Seneca's prose was to Rome. 'Abundant dulcibus vitiis.' Dryden and Pope are the standards of excellence in this species of writing in our language, and when young minds are rightly instituted in their works, they may without much danger read such glittering verses as Dr. Darwin's. They will then perceive the distortion of the sentiment and the harlotry of the ornaments. It would also be a happy thing for all naturalists, whether poets or writers in prose, if they would, in the words of a true poet, 'Look through Nature up to Nature's God.' Dr. Darwin is certainly a man of great fancy, but I will not cease to repeat that good writing and good poetry require something more."

The origin of the "Botanic Garden" was somewhat curious. Towards the close of the eighteenth century the Linnæan system of botany began to make its way amongst scientific men, and Darwin was one

of the first to take it up. His zeal in the matter was, however, less contagious than might have been expected, and of all the coterie of Lichfield he succeeded in enlisting only two recruits for his botanical society. These were Sir Brooke Boothby, and a proctor of the Cathedral Close—one Jackson, whom Anna Seward calls a "turgid and solemn coxcomb," but of whom we know nothing more. The three formed the Botanic Society of Lichfield, and regularly published "Transactions" after a fashion which created an impression in other quarters that that sleepy little city was really a headquarters of scientific research. In process of time Darwin thought it desirable to establish a garden for experimental and scientific purposes, and for this he had a model ready to his hand. Mr Sneyd, of Belmont, father to two of Richard Lovell Edgeworth's wives, possessed a remarkably picturesque garden on his moorland property. It consisted of a deep glen amidst the rocks, through which a mountain stream made its way. This glen he caused to be cleared out and planted. while at the bottom he excavated a chain of small lakes communicating with each other and fed by the stream. These lakes covered an area of about five acres, though they were nowhere more than seventy feet wide, and at the end of the glen the water fell over a rocky cascade of some forty feet in height. On the model of this garden Darwin laid out "a little wild umbrageous valley," in the immediate neighbourhood of Lichfield. "It was," says Miss Seward, "irriguous from various springs, and swampy from their plenitude. A mossy fountain, of the purest and coldest water imaginable, had near a century back induced the inhabitants of Lichfield to build a

cold bath in the bosom of the vale. That, till the doctor took it into his possession, was the only mark of human industry which could be found in the tangled and sequestered scene. One of its native features had long excited the attention of the curious: a rock which in the central depth of the glen drops perpetually about three times in a minute. Aquatic plants border its top and branch from its fissures. No length of summer drought abates, no rains increase its humidity, no frost congeals its droppings," &c. To this paradise Miss Seward was accustomed to resort, and by her own account on her first visit she wrote an invocation beginning—

Oh come not here ye proud, whose breasts infold Th' insatiate wish of glory or of gold,

and extending over twenty-three couplets. The verses were presented to Darwin by the author, and elicited from him the declaration that they ought to form the exordium of a great work. "The Linnæan system," said he, "is unexplored poetic ground, and an happy subject for the muse. It affords fine scope for poetic landscape; it suggests metamorphoses of the Ovidian kind, though reversed. Ovid made men and women into flowers, plants, and trees. You should make flowers, plants, and trees into men and women. I will write the notes, which must be scientific, and you shall write the verse."

Miss Seward replied with engaging modesty that the subject was not a proper one for a "female pen," and begged him to undertake the work, which, after a due amount of pressing, he at length consented to do. The forty-six lines composed by Miss Seward, were, with some alterations, incorporated in the exordium of the first part of the "Botanic Garden," and published in the Gentleman's Magazine, and afterwards in the "Annual Register" with Darwin's name. As it was not until after his death that Miss Seward laid claim to these verses, and as the details she gives on other points are curiously inaccurate, it is possible that there may have been some mistake in the matter, and that these verses, as well as the remainder of the poem, may be Darwin's own property. The whole matter is, however, confused and inexplicable, and may probably be set down as one of Miss Seward's romances.

As a poem the "Botanic Garden" has been praised too highly, and laughed at with too little mercy. Its form lent itself readily to satire, and the genius of Canning and his colleagues of the Anti-Jacobin has made the "Loves of the Triangles" immortal. It may, however, be doubted whether they would have troubled themselves with the absurdities of the "Loves of the Plants," had not the author belonged to that school of English politicians who sympathized with the French Revolution, who clamoured for parliamentary reform, who applauded the secession of the American colonists, and whose zeal for liberty was so great as not unfrequently to degenerate into licentiousness. If Darwin had refrained from eulogizing Franklin, sneering at kings and praising the "new morality," he might, with impunity, have carried on his eternal personifications, and have published the eccentric notes by which he explains them. In that case, however, the poem would have passed into oblivion even sooner than it did. At its best it is about on a level with a fairly good Newdigate prize poem; at its worst it is dreary bathos. It is easy

to understand the indignation with which Gifford or Canning would receive a passage like the following from the second canto of the "Economy of Vegetation"), which may serve to illustrate the politics of the author:—

So, borne on sounding pinions to the West,
When tyrant Power had built his eagle-nest;
While from the eyry shriek'd the famish'd brood,
Clench'd their sharp claws and champ'd their beaks for blood,
Immortal Franklin watch'd the callow crew.
And stabb'd the struggling vampires ere they flew.

The patriot flame with quick contagion ran, Hill lighted hill and man electrised man; Her heroes slain, awhile Columbia mourn'd, And crown'd with laurels, Liberty return'd. The warrior, Liberty, with bending sails, Helm'd his bold course to fair Hibernia's vales; Firm as he steps along the shouting lands, Lo! Truth and Virtue range their radiant bands; Sad Superstition wails her empire torn, Art plies his oar and Commerce pours her horn.

Long had the giant form on Gallia's plains Inglorious slept, unconscious of his chains; Round his large limbs were wound a thousand strings By the weak hands of Confessors and Kings! O'er his closed eyes a triple veil was bound, And steely rivets lock'd him in the ground; While stern Bastille with iron cage enthralls His folded limbs and hems in marble walls. -Touch'd by the patriot flame, he rent, amazed, The flimsy bonds, and round and round him gazed; Starts up from earth above the admiring throng, Lifts his colossal form and towers along; High o'er his foes his hundred arms he rears, Plowshares his swords and pruning hooks his spears; Calls to the good and brave with voice that rolls Like Heaven's own thunder round the echoing poles: Gives to the winds his banner broad unfurl'd, And gathers in its shade the living world!

A passage such as this, published while all Europe

was trembling beneath the shock of the French Revolution, naturally aroused the wrath of English constitutionalists, and when they found, two or three pages back, such lines as the following, a burlesque suggested itself as a matter of course:—

Gnomes! as you now dissect with hammers fine The granite rock, the noduled flint calcine; Grind with strong arm the circling chertz betwixt Your pure Kaolins and Petuntzes mixt; O'er each red saggar's burning cave preside, The keen-eyed fire nymphs blazing by your side.

The poetic taste of the time was in truth at a miserably low ebb, and those who professed to be its arbiters seem to have been at least as ignorant as their pupils. Witness the criticism of Horace Walpole: "The 'Triumph of Flora,' beginning at the fifty-ninth line, is most beautifully and enchantingly imagined; and the twelve verses that by miracle describe and comprehend the creation of the universe out of chaos, are in my opinion the most sublime passages in any author or in any of the few languages with which I am acquainted." These are certainly big words, and when we remember what English literature can boast in the matter of sublimity, we look with some curiosity to discover what it is which so enraptured the critic of Strawberry Hill. It will perhaps excite some amusement in the reader's mind to discover that the sublimest passage in literature in his opinion was the following:

"Let there be light!" proclaim'd the Almighty Lord. Astonish'd Chaos heard the potent word; Through all his realms the kindling ether runs, And the mass starts into a million suns; Earths round each sun with quick explosions burst, And second planets issue from the first;

Bend as they journey with projectile force, In bright ellipses their reluctant course; Orbs wheel in orbs, round centres centres roll, And form self-balanced one revolving whole. Onward they move amid their bright abode, Space without bound, the Bosom of their God!

In its way this passage may be admitted to be not without force, but it is the force of rhetoric rather than of poetry, and, curiously enough, it may be paralleled in half a dozen places in the volume. And as the really striking passages are few and far between, whilst page after page is filled with technicalities and personifications, it is easy to understand why the great popularity of the poem rapidly passed away. Darwin failed as a poet, not from any deficiency of learning, or through any want of power to master the technical mysteries of the poetic art, but because he started on a false Maria Edgeworth says that he had an idea that poetry consists in "painting to the ear," by which not very lucid phrase she apparently intended to say that the poet's task is to do by words what the painter does with his colours and canvas. If Darwin ever expressed himself to this effect it needs no elaborate argument to prove that he knew but half the domain of the poet, and that of that loftier part of his mission which deals with human passion and human affection he had no idea whatever. Now, as a very acute critic has remarked of another didactic poet, "no poetry can maintain its ground unless it deal with either the heart or the intellect," and it cannot be said that the 'Botanic Garden,' laborious and learned though it be, touches either the one or the other. Science and fiction are jumbled together, but the admixture is, to use a Darwinian metaphor, mechanical and not chemical. The poetical machinery is at best a clumsy and laborious

allegory, so enigmatical in character as to render necessary a constant reference to the notes; absurd in itself, and beyond conception wearisome through its repetitions. As another writer has observed: "Darwin had the eye and the ear of a poet, and the creative mind; but his writings have served to show that these are of little avail without the heart, and the heart was wanting in him."

One other point appears to call for remark. Darwin's theories of versification were very singular. Miss Seward mentions that he "ever maintained a preference of Akenside's blank verse to Milton's;" he had also a contempt for sonnets, especially for those of Milton, though it might have been thought that those on "The Late Massacre in Piedmont," "On his Blindness," and "On his Deceased Wife," were majestic enough in rhythm and cadence, even for a poet who placed those qualities in the first place; and finally, he fancied he could improve upon the versification of Pope by exceeding him in polish and by making every line as sonorous as possible—a process which, when applied to mean and commonplace matters, has a curiously ludicrous effect. No better illustration of his failure in this respect could be afforded than the passage descriptive of Brindley's labours in connexion with internal navigation, a passage which, we may remark by the way, Miss Seward describes as "supremely happy:"-

So with strong arm, immortal Brindley leads
His long canals and parts the velvet meads;
Winding in lucid lines the watery mass
Mines the firm rock or loads the deep morass;
With rising locks a thousand hills alarms;
Flings o'er a thousand streams its silver arms;
Feeds the long vale, the nodding woodland laves,
And Plenty, Arts and Commerce freight the waves.

Following these prosaic verses comes a long prose description of a monument which Darwin suggested as an appropriate adornment to the Cathedral of Lichfield, while at the foot of the page is a note dilating upon the scandal of leaving so great a man unhonoured. The incongruity of all this with the purpose of poetry hardly requires to be pointed out, but the explanation of its appearance is simple enough. Darwin was an enthusiastic admirer of Brindley and his engineering schemes, and took a very practical interest in their execution. At one time he even went so far as to contemplate the construction at his own cost of a small canal to connect Lichfield with the Grand Trunk Canal at Fradley Heath, which, according to his grandson, was to have been only a foot deep and to have borne only boats of four or five tons burden, which could be dragged by a man. That scheme was abandoned, but the existing canal was in a great measure due to his initiative.

Thirteen years after the publication of the "Botanic Garden," Darwin produced his "Zoonomia; or, the Laws of Organic Life," a work in which speculation and empiricism are curiously mingled. He seems to have been perpetually engaged in contemplation of the mysteries of generation and reproduction, but it cannot be said that his guesses are invariably happy. Thus, in one place he maintains that man was originally an oyster, sprung into being by chance, and that by time alone he became first an amphibious and then a terrestrial animal. In the "Zoonomia," he threw over all speculations of this kind. The design of his book was to reform the system of medicine, by putting forth a new science of life. Henceforward, the origin of humanity was to be traced to "filaments." He does

recognize a God, though in his posthumous poem, 'The Temple of Nature,' he makes patronizing reference to the Great First Cause; and his creed at the "Botanic Garden" and "Zoonomia" period may best be judged by what we learn from his contemporaries. Schimmel-Penninck, in the interesting fragment of autobiography which was published by her family a few years ago, allows us to see with tolerable clearness what his views really were. It is hardly necessary to say that he laughed at the idea of Christianity. On one occasion some person expressed a hope that he would one day accept it, and in reply he said: "Before I do, you Christians must be all agreed. This morning I received two parcels, one containing a work of Dr. Priestley's, proving that there is no spirit, the other a work by Berkeley, proving that there is no matter. What am I to believe among you all?" From such a man it is obvious that the religious sense was in some way absent, and he certainly lost no opportunity of proving that it was. Consulted on one occasion by the friends of a devout young lady in very delicate health, he recommended them to "toss her religious books into the fire, except Quarles's 'Emblems,' which may make her laugh." He further lost no opportunity of declaring himself a materialist in the grosser sense of the term. He often used to say, we learn from Mrs. Schimmel-Penninck, that "man is an eating animal, a drinking animal, and a sleeping animal, and one placed in a material world, which alone furnishes all that the human animal can desire. He is gifted, besides, with knowing faculties, practically to explore and apply the resources of the world to his use. These are realities. All else is nothing. Conscience and sentiment are but mere figments of the imagination. Man

has but five gates of knowledge, the five senses. He can know nothing but through them; all else is a vain fancy; and as for the being of a God, the existence of a soul, or a world to come, who can know anything about them? Depend upon it, my dear madam, these are only the bugbears by which men of sense govern fools; nothing is real that is not an object of sense." ³

It is hardly necessary in this place to vindicate the spiritual nature of man. A doctrine so universally implanted in the human mind is not likely to be destroyed because a handful of "philosophers," whose vanity is at least equal to their attainments, choose to invent a new God for themselves. Nor can it be said that Dr. Darwin's new theories were much to be preferred to the old. His notion, as developed in the "Zoonomia," is that all life originates in sensitive filaments. "Give me," he says, "a fibre susceptible of irritation, and I will make a tree, a dog, a horse, a man." Elsewhere he says ("Zoonomia," vol. i. 493): "I conceive the primordium or rudiment of the embryon, as secreted from the blood of the parent, to consist in a single living filament as a muscular fibre which I suppose to be the extremity of a nerve of locomotion, as a fibre of the retina is the extremity of a nerve of sensation; as for instance one of the fibrils which compose the mouth of an absorbent vessel. I suppose this living filament of whatever form it may be, whether sphere, cube, or cylinder, to be endued with the capacity of being excited into action by certain kinds of stimulus. By the stimulus of the surrounding

³ Mr. Darwin disputes Mrs. Schimmel-Penninck's accuracy in this as in other matters. It may be that, writing as she did after the lapse of many years, she may have fallen into some errors of detail, but of her general truthfulness it is impossible to entertain a doubt.

fluid in which it is received from the male, it may bend into a ring and thus form the beginning of a tube. This living ring may now embrace or absorb a nutritive particle of the fluid in which it swims, and by drawing it into its pores, or joining it by compression to its extremities, may increase its own length or crassitude, and by degrees the living ring may become a living tube. With this new organization or accretion of parts, new kinds of irritability may commence." And so on. Enough has probably been quoted, however, to show the nature of the philosophy which this materialistic leader professed. We need not attempt a discussion of its value. Voltaire, in a famous passage of not very decent sarcasm, has said all that is necessary on this subject. Nor need we trouble ourselves very much about some other speculations of the same kind in which Darwin indulged. He may be found, for example, speaking with approbation of a philosopher-unnamed, but presumably himself—who thought it not impossible that the first insects were the anthers or stigmas of flowers, which had by some means loosed themselves from the parent plant. From these he imagines that other insects may have been formed in the course of a long period of time, some acquiring wings, others fins, and others claws from their ceaseless efforts to procure food or to protect themselves from injury. "None of these changes," he adds, "are more incomprehensible than the transformation of tadpoles into frogs, or caterpillars into butterflies."

In spite of all the apparent philosophy of these speculations it may be doubted whether Darwin possessed a really scientific mind. The ideas upon which his "Botanic Garden" is based were derived entirely from a study of the Linnæan system, and—not to speak

profanely—that immortal work itself is apt to remind the reader of those histories of England in rhyme which enterprising schoolmistresses indite with the object of assisting the feeble memories of their pupils. The religious and moral reflections of these latter specimens of "goody" literature have their counterpart in the outbursts of rather dreary scepticismreligious and political—in which the "Botanic Garden" abounds. Nor is much more to be said for the imagined identity of animal and vegetable life, which Darwin appears to conceive to have been completely made out. That Nature is a great and harmonious whole was known long before the philosophers of the eighteenth century began to speculate concerning her operations. A hundred and fifty years before, one Francis Bacon, enlarging upon an idea which was familiar enough to the students of the Platonic philosophy, had worked upon these lines, and it is impossible to think the theories of development and evolution, as propounded in the passages quoted above, either a legitimate deduction from or a worthy completion of the Baconian idea. In these speculative matters, as in the practical work of his profession, it is to be feared that Erasmus Darwin must be pronounced an empiric after all. The present generation can only judge him by his books, and it must be admitted that they do not afford the reader a very high idea of his genius as a physician. He is, it is true, accredited with many wonderful cures. He jumped into celebrity, for example, at Lichfield, by the treatment of one Mr. Ings, who had been given over as dying by the local practitioner. Darwin reversed the treatment, and saved the patient. Another case was that of a lady who was suffering from internal hæmorrhage. It

is related by Miss Seward, with a very circumstantial account of her own offer to allow the doctor to take from her sufficient blood for the operation of transfusion. Darwin found that the London physicians had been treating her with stimulants—wine, brandy, and so forth-and keeping her upon the strongest food, in its most concentrated form, with the natural result of increasing the hæmorrhage. He adopted a milk diet, with abstinence from wine and everything that was likely to set up inflammatory action, and he succeeded in effecting a cure. The ulceration, from which the bleeding had arisen, had time to heal, and nature to reassert itself. For the rest his practice would seem to have been pretty much that of his contemporaries, though he was certainly in advance of the majority of them on questions of sanitary science, such as ventilation, drainage, and pure water. He appears to have even anticipated the modern practice with regard to the administration of stimulants in cases of fever, but his remedies seem to the non-professional reader of "Zoonomia" somewhat startling in their severity. He was a great believer in the value of bleeding, and his lancet was constantly in requisition. Even in his own case he used it repeatedly for the relief of angina pectoris—a disease which would be treated by modern physicians with the strongest stimulants. Miss Seward gives a long and circumstantial account of the manner of his death, and of his personal appearance during the latter part of his life. Some of the details have been repudiated by his family, but sufficient is left unchallenged to prove that the frequent bleedings to which he had subjected himself had seriously injured his constitution. According to her story he was actually entreating his wife and

daughter to bleed him at the very moment of his death. That part of the tale may fairly be dismissed as another example of Miss Seward's too fertile imagination. All that is necessary to record in this place is that he died somewhat suddenly on the 18th of April, 1802, in his seventy-first year, at Breadsall Priory, near Derby, where he had been living during the last two years of his life.

His wife placed over his tomb, in Breadsall Church, a tablet recording "the rare union of talents, which so eminently distinguished him as a Physician, a Poet, and a Philosopher," of which she believed that his writings would remain "a public and unfading testimony." The latest of his admirers, Herr Krause, offers an interesting comment on this anticipation in the excellent monograph on Darwin's scientific writings, which has recently been introduced to English readers by Mr. W. S. Dallas. "Erasmus Darwin's system," he says, "was in itself a most significant first step in the path of knowledge, which his grandson has opened up for us, but to wish to revive it at the present day, as has actually been seriously attempted, shows a weakness of thought and a mental anachronism which no one can envy."

THE END.