

TO MY YOUNGEST BOY.

BY HENRY HALLORAN.

Though the lark forget her measure,
Leaving me to sleep at leisure,
Thou, my little balmy treasure!
With thy chirping, wak'at me.

Though to bed I was not carried,
Shame to man not six years married,
O'er my books till *me* I tarried,
Thist! that ne'er forsak'at me.

Sleep with its wild necromancy
Gave me pleasant dreams to fancy,
Of old loves, of Kate and Nancy,—
Old loves which deride me.

By lone brooks I seem'd to wander,—
Over changing flowers ponder,
Growing every moment fonder
Of the Lov'd beside me.

Then o'er British hill-tops climbing
I could hear the distant chiming
Of old bells my native clime in,
Dear land of my childhood.

Then across the flashing ocean
Pass'd I, with a bird-like motion,
Till I came, with young emotion,
To Australia's wildwood.

Then a shadowy sorrow moving
O'er the visions, *Lov'd* and *Loving*,
Death's realities was proving
To the young-heart broken.

Faces cold with hateful pity
Lowering through a swarming city,
Listened to each mournful ditty,
Early sorrow's token.

In a dark and lonely corner
Sat the boy, a deeper mourner,
Than he cared to shew the scorner
Of his stainless honor.

Poesy then sought him kindly,
Who had else wept all too blindly,
Bidding him be not unkindly,
She became his donor.

Acres wide and lucra hoarded,—
Treasures of the base and sordid,—
Not with *these* was he rewarded,
But with wealth more glorious.

Visions of celestial brightness
Filled his brain with fairy lightness;
Truth with her undying whiteness,
Mercy unceremonious:

Hope with eyes all radiant beaming,
Love of his warm transports dreaming,—
Freedom every ill redeeming,—
These did not despise him.

Self-respect and honest daring
Gave him manhood's conscious bearing,
Life's sweet gift to seek a share in,
Winning one to prize him.

Then he dwelt in cot most sunny,
Like a miser with his money,
Or a bee amidst her honey,
Or a pearl its shell in.

One fair girl, all grace and sweetness,
Filling all with peace and neatness,
Gave to every joy completeness,
In his happy dwelling.

Three fair boys with graceful tresses,—
Sight a father's heart which blesses—
Came to him with young caresses,
His best life renewing.

Of these scenes shame-unencumbered,
And of other joys unnumbered,
I was dreaming as I slumbered,
The wild *Past* reviewing.

Mowbray, 1847.

TO EVENING.

Is there one sacred hour which man enjoys
Above the rest, 'tis that which evening brings;
When ev'ry care is laid aside that cloy
The mind—and when the day retiring wings
Its flight to other lands, and gaily flings
O'er all the sunny beams of cheerful light—
Here, then, his vesper the Christian sings,
Ere he retires to the shades of night.

Sweet evening! to thee some sacred charm belongs—
Not one alone—but many charms combined:
With thee the child of fancy oft prolongs
His stay—leaving his sorrows all behind—
With ev'ntide ascend his purest songs,
The aspirations of a prayerful mind.

Bush, February, 1847.

TO A SMILE.

O what are marble beauties, stern and cold,
Without thy sweet and winning influence,
To make them loved, admired, worshipped, extolled,
And sung throughout the world of wit and sense,
In magic strains of purest eloquence!
But half thy magic powers were never told—
Nor can the world's unnumbered scrolls unfold
The magnitude of thy beneficence.

How frequently at morn, and noon, and twilight hour,
And silent midnight, have men striven to gain
Thy countenance—deservedly in vain!
Yet, O, how universal thy reflective power!
When lovely women stoop to smile on men,
Who can resist the power to smile again?

Bush, February, 1847.

Hints on Husband Catching; or a Manual for Marriageable Misses. By the Hon. —, Author of "Hints on the Nature and Management of Duns." London: Newby, 1846.

An author who instructs men first how to manage duns, and then teaches ladies how to become husband-trappers, can be no ordinary person, and in sooth the author of this work possesses no common mind or attainments. Almost all really witty writers excel in the serious: not like Liston, who fancied tragedy his forte, they really are more pathetic than those who make the lachrymose style their peculiar study. Of modern writers, who more humorous, more witty, than the author of *Ingoldsby Legends*, and who more truly pathetic when he touched the sadder chords of his lyre. Thomas Hood, again, was what is termed a jocose writer—his puns and jokes were proverbial—and he of all men was most captivating when most sad. "Eugene Aram's Dream," "The Bridge of Sighs," and "The Song of the Shirt," will bear witness to this faculty. Both these writers are now no more; and, as if fate denied a successor to their peculiar powers of mind, the author of the present work—whom we do not hesitate to say would have arisen brightly when the star of poor Hood's life set—is dead also! The writer's former work bore evidences of rash impetuosity which experience would have dispelled. He would have discovered, too, that even wit should be only second to truth. But how tempting is it to be rash when a really witty speech is playing like electricity on the tongue! *Hints on the Nature and Management of Duns* came under our notice some time since, but it was easy to detect in its composition the finish of the scholar lit up by the imagination of the poet. The present work possesses the same character, but it is sterner and more truthful. Though occasional exaggerations occur, there are in this little book such burning anathemas breathed against the vices and follies of society, that it is like a Minerva speaking in the disguise of a Momus. It comes in a grotesque habilliment, when, lo! the dignity and eloquence of a sage speak forth from its garb of fun.

To understand the author's purpose, we quote a portion of

THE DEDICATION.

Fair Ladies:—At first sight and to an unreflecting mind, the title of my treatise might perchance appear a somewhat indelicate one. Marriage, in its more exalted attributes, is an institution so important—I might almost say, so solemn—that it would seem a profane mockery for a worldling, like myself, to lay down rules for your guidance in selecting—and entrapping—partners for that "holy estate."

The importance attached to the institution of marriage is not at all an exaggerated one. To select *one* from the mass of mortals with whom you are henceforth to share the good and ill of life in common; *one* whose tastes, pleasures, interests, and affections are to be yours, whether your twin-journey be along the pleasant and flowery valley of existence, or up its steep and precipitous paths; *one* whose morning and evening prayers are to ascend with your own to God; *one* whose unclosing eyes are to greet the morning sun when yours do; *one* who is to eat at the same table, to drink of the same cup, and to be, in a word, like the "lamb" which Nathan's beautiful parable described as "lying on the poor man's bosom;" and all this not for a few years only, but "till death" do "you part"—to select a partner like this ought indeed, to be a grave, almost an awful task, and not the theme for the satirist's or the jester's pen.

And yet, ladies, I feel emboldened to dedicate my "Hints" to you, and to approach, with the cap and bells of Momus, a subject which *ought* to be too sacred for anything less pure than a seraph's wing to touch! And why? Because, my fair readers, *you* have not been taught to look upon marriage in so solemn a light; *you* have not been impressed with such grave ideas of that tremendous undertaking: you, in short, would yawn with *ennui* at the serious dissertation, while you may welcome with a smile the more congenial jest.

But in one sense I err when I assert that matrimony is not an object of vast importance in your eyes: almost from the cradle you are trained up by your ambitious mothers to consider marriage the aim of your existence, the "one thing needful," of life: its "Open sesame" to wealth, distinction, and luxuries of every description.

Matrimony, then, is to be to you the signal of emancipation. A "married woman" may do what she likes, and as long as she keeps within the limits of decorum—that is to say, as long as she is not actually an adulteress—she may flirt, dress, and enjoy herself to an unlimited extent. No wonder, then, poor girls, that with such prospects, maternally and insidiously held out to your attention, you are soon convinced how desirable a consummation lies within the circle of "the plain gold ring." No wonder, then, that you eagerly take your places in the ranks of matrons expectant, and arm yourselves at all points for conquest. For this you study coquetry—so admirably called by George Sand—whom I may quote without offence, as your delicacy now-a-days never recoils from a French novel—"the puerile and immodest amusement of exciting desires;" for this you suffer each ball-room booby to clasp your waists and breathe upon your cheeks in the waltz; for this you attempt—you have not the Parisian art of accomplishing it—the polka; for this you leave uncovered the swan-like neck, and the ivory shoulders, and benevolently display to us as much of your beautiful busts as you dare to show with a due regard to the "Society for the Suppression of Vice." How can you then take it amiss, if, in addition to the valuable precepts of your admirable mothers, a humble bachelor, of some little experience perhaps in the ways of this wicked world, should take it upon himself to give you a few useful and unpretending "Hints" towards the furtherance of your dearest projects?

Will you not be grateful for the advice so disinterestedly offered? And should that advice enable you to attain your objects—not of affection, that is *mauvais ton*, but of ambition—will you not eternally bless your humble monitor?

The writer's philippic against "worldly mothers" is a terse, manly, energetic, declamation, and strikes us at once from its being, alas! only too truthful. There is a long chapter on those cankers of society, which Mrs. Trollope and writers of her class make the stock commodity of their novels. We have only room for a fragment of the said

WORLDLY MOTHER.

The worldly mother is, in truth, one of the most detestable fungi that spring up from the rich corruption of society. Like the unnatural and idolatrous Jews, who passed their children through the fire to Moloch, the worldly mother sacrifices her offspring to the Moloch of worldly advantage, and worldly dress. He would be a strange gardener who tended, cultivated, and watered the *weeds*, to promote their growth and their luxuriance; while he carefully eradicated from the garden entrusted to him every sweet and blooming flower, every valuable and salutary herb.

And yet this is the method pursued by the worldly mother. She has, as it were, the garden of her child's heart placed under her care by God: it ought to be her task and her delight to bring to light and encourage the flowers, of purity, innocence and Christian virtue, of which, even in our fallen state, the beneficent hand of God has mercifully dropped the seeds into our natures; while her most anxious and minute attention should be directed to root out the noxious weeds of pride, worldliness, and ambition from the precious soil.

Oh ye coquettes of England! ye modern land syrens of society, whose deceiving voices a cargo of wax would not shut out from the ears of your hearers did they emulate never so well the example of Ulysses' crew—read, mark, and inwardly digest the following burning protest against your entire class:—

WHAT A COQUETTE IS.

The coquette's glory is in the number of her slaves; the husband-hunting spinster requires *one* to be her serf. The coquette aims at catching her "thousands and tens of thousands;" the husband hunting spinster aims at the plumpest bird of the covey, and if she brings *him* down, she cares not if the others escape uninjured. The coquette values the *sex* not the *individual*; the husband-hunting spinster likes best, of all men, that one whom she can allure to the altar. In a word, round the coquette's dazzling light swarm a thousand flies, the *ephemeridæ* of life, while the husband hunting spinster prefers the one *golden-winged* moth, which, after a few stupid whirls, falls consumed by her own charms. And yet there is scarcely a being more depraved than the thorough-bred and thorough-paced coquette. Like an Atheist, who goes to mass, she adopts the paraphernalia of a creed to which she is an infidel. The languishing glances of her eyes are a mockery; she plays with the senses—like a salamander with the flames—because she knows *she* is proof against their delirium; and she stands unmoved on the brink of the precipice, gazing down in the dizzy depths of passion with the eye of a philosopher and the callousness of an anchorite! Chastity is not her safeguard, for no woman can be *really* chaste whose occupation is to stimulate the senses. Virtue is not her *egis*, for no woman can be *really* virtuous, whose want of inclination (and not whose principle) is the safeguard of her honor.

The coquette prostitutes the noblest attributes of human nature. The sanctity of the church, the tranquility of the domestic circle, the chamber of grief, and the bed of death, witness her meretricious manoeuvres. The minister of God in his pulpit, the gray-headed father in the bosom of his family, the husband weeping over his dying wife, and the son closing the eyes of his departed mother, have been marked as the prey of the coquette. The gayest of the gay in the ball-room, her witty and brilliant phrases intoxicate her victims, and her perfidious lips can distil the honey of spiritual consolation and the balm of tender sympathy to the mourner and the grief-stricken, who are almost tempted to ask, while they listen to the syren's accents, "Is this an angel that has come among us!" Like the worldly mother, whom we have described, the coquette is a despicable being; but unlike the mother, she has not even the excuse of promoting the worldly welfare of those near and dear to her, for there is nothing dear to the coquette.

We have heard of these women, smitten at last by a real passion, becoming fond, devoted, and exemplary wives; but woe to the man who would be fool enough to take one of these serpents to his bosom. She might nestle there for a time, but she would *sting* at last. Her waist has been clasped by the debauchee—her eyes have drooped not beneath the gaze of the libertine; her dress, her manner, her gestures have been employed to excite the brutal instincts of the profligate and the man of pleasure. A courtesan in all but the one step, which she *dares not* take, because it involves the loss of reputation, and of the dazzling triumphs of society, she is without the courtesan's plea of necessity for her vileness.

The whole of this passage is indeed eloquent, and mirrors in a terrible but true light the nature of those half women, half monsters, that Circe warns us of in vain. In juxtaposition to the Coquette, let us place the Rake. He is a male coquette, but he absolutely partakes of the sweets, which the coquette does not. He is not so despicable, because, more real. His life, though bad enough, at all events is not one continued act of hypocrisy. It is vicious, degrading, and in every respect unjustifiable, but it is vice without a mask. Coquetry, on the contrary, is a sting in the seemingly pure and innocent. It is a bird of beautiful plumage and sweet voice with the venomous powers of the serpent. The rake, however, you perceive at once, is a dangerous animal, and you shun him accordingly. Here he is with his honors thick upon him:—

WHAT A RAKE IS.

The "rake" is, or ought to be, case-hardened to all female attractions and seductions. He has bought his experience, dearly perhaps, but yet he *has* bought it, and the scenes he has witnessed, the ordeals he has passed through, and the profligacies in which he has been an actor, would, one should at first be inclined to think, render him the least likely being in the world to be caught by the virtuous and moral pleasures of the conjugal fireside. To the man who has hovered from lip to lip, like the bee from rose to rose, sipping from each and all, but settling upon none, the matrimonial honey of *one* pair of lips—however genuine "*Hymettus*" it might be—would, you might suppose, soon become insipid. The "*Don Juan*," who, like *Jocande*, has courted and vanquished "*la brune et la blonde*," would, you must fancy, feel but little inclination to be transmogrified into a Mr. "Job Candle." The "rake," from his very "rakishness," *must* entertain a bad opinion of women; he has seen the manoeuvres and artifices of the sex, he has watched their small stratagems and their petty perfidies; he knows thoroughly "the *ressorts de la pendule*." The rake has melted in his arms; the ingenuous-looking maid has sacrificed her "ingenuousness" to him for a ten-pound note, a diamond ring, or a new dress; and the wife of his "friend" has pressed her lips to his.

The "rake," then, of all bachelors in the world, would, to all appearances, be a target impenetrable to all spinsters' and cupid's arrows—to all, at least, aimed in an *honorable* way. And yet "rakes" are caught every day; and these "free lances" of gallantry are constantly drilled and disciplined into the "regulars" of matrimony! The reasons of this are various. Perhaps the "rake" becomes tired of these transitory connexions which generally leave behind them no remembrance but unpleasant ones—perhaps his fortune is dilapidated, and he takes a wife as the "means" and her fortune as the "end"—perhaps, in a caprice of taste, he has a mind to try a plain domestic joint, after all the knick-knackeries of "made dishes and French cookery." Whatever the cause, the fact is certain, "rakes" do marry in equal, if not greater proportion, to others of the *genus* bachelor. My spinster readers have doubtless heard the saying, "a reformed rake makes the best husband;" and upon mature reflection I am inclined to agree with this popular *dictum*. If the "rake" be really "reformed," there is no earthly reason why he should not be a pattern of conjugality. He will be less likely to go astray from the domestic fireside, because his experience in the days of his "rakehood" will already have taught

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him that the fruits of unlicensed love are "bitter in the mouth;" and he will be more apt to treat his wife with consideration and attention because he recollects the neglected and insulted wives, whom the brutality or carelessness of their "liege lords" has, "long, long ago," thrown in his Lothario arms. It is true the "rake" may turn out rather a "jealous" husband; but jealousy, you know, is the proof of love; and if his experience in woman's frailty does render him in some degree suspicious of his own wife, that same experience will have pointed out to him the rocks upon which other husbands have struck, with loss of the cargo of conjugal honor—and have taught him the safe channel through which he can steer in safety from the breakers. But, spinsters, the great risk in marrying a "rake" is the chance of his not being a "reformed" one—and then, indeed, too often the consequences are most harrowing! As the veteran who has lost a leg in the service of his country, is said at times to feel, even in his *janbe de bois*, the smart of the wound, for which his fleshy "supporter" was amputated, so sometimes the rake, who has professedly, and to all appearance, become a "new man," feels certain unaccountable and irresistible twitchings of the "old Adam," which twitchings are omens of anything but tranquility to the household gods of married life.

Though we do not quite agree with the principle involved in the following extract, wherein the author pronounces a second marriage unjustified by sentiment and affection, yet it is worth quoting. We do not feel certain whether the memory of the departed may not be embalmed as unfadingly, although another sun rises to cheer and brighten your domestic world. Affection for the dead does not preclude affection for the living, for an all-wise Creator has implanted in us faculties which make every excess of grief its own tomb, and, though the shade of the departed dwelt with us, it is not obliterated by the presence of another filling the same position. Experience, however, is better than theory in such matters, and we leave those who have the advantage of the first to pronounce whether the author is right in his opinions upon.

SECOND MARRIAGES.

And here I will digress for a moment, from the worldly instructions which I have been inculcating. In my eyes a second marriage—on whichever side—is that worst of all sacrileges, a sacrilege of the heart; the being you have loved is no more; never shall that voice be heard again which once gladdened your heart with its melody; never more shall that hand which once pressed yours in affection, repose in your tender grasp; never shall those worshipped eyes meet yours again with a glance of ineffable sympathy. The tie is dissolved; the links are broken asunder; the golden bowl is broken, and the accents which fell upon your ear in touching love, are hushed for ever in an endless slumber. The one who bore life's bitter cross with you, whose caresses consoled your hours of disappointment, and whose angel care smoothed the pillow on your couch of sickness; the one whose tears greeted your departure, and whose smiles welcomed your return; the rose in your dreary path, the one gushing spring on the arena of your existence, has vanished; and the churchyard mound, the wild flowers that spring there, and the plaintive robin that sings his melancholy winter song over the spot—are all that earth has left to recall the memory of the dead.

Angry words may perchance have passed between you; coldness may have for a time checked the bounding heart, and frozen up the gush of affection; but still the heart longed to bound, and beneath those icy fetters the warm stream of love was deeply flowing. Death has swallowed up all the little animosities, all the petty differences and discussions which prevailed between you, and a treaty of eternal peace has been signed over the grave.

How truly says Emile Souvestre—"The slightest separation extinguishes resentment in a generous heart; but to transform that resentment into tenderness, it requires that greatest absence of all, that absence which we know to be without hope, and from which there is no return!"

We may be told of a happier meeting in realms above; we may be bid to look upon the bliss which has passed as a mere mortal dream, to be realized in ten thousandfold bliss during an eternity in heaven; but these consolations in the first agony of grief fall coldly upon the ear, which has listened to that dread formula of "dust to dust," to the ominous and gloomy rattle of the earth upon the coffin. Our "household gods" are "shivered;" we return to the lonely hearth, where the lost one once sat to greet us; we gaze at the vacant seat, the glove forgotten on the table, the little relics of the departed; and, oh! how bitterly recur to our bleeding hearts each word of unkindness, each hour of neglect, which that departed one endured from us, and which we would now give worlds to recall!

Cold and heartless, then, must that man—or woman—be, who throws off with the mourning the memory of the mourned, and fills that vacant seat with the form of a stranger.

We have now quoted more than is sufficient to prove the author's powers of writing, his vigour, his sarcasm and power. The comic portion is chiefly to be found in certain verses which form the termination to each chapter. They present nothing very particular except great facility of versification; but they are far beneath his prose.

A melancholy interest is attached to the work from the fact which we before mentioned, a fact of which we are glad to be made aware, for we should else have encouraged and aided the author on in his literary pilgrimage; but we are saved so solemn a mockery by the knowledge of his death.—*Atlas*.

BRITISH ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE.

The first general meeting of the association was held last night, and the expectation of Prince Albert's presence collected a very full audience in the Victoria Rooms. The room selected for the meeting will hold 600 or 700 persons, and was crowded to excess; a number of ladies formed part of the company. The apartment is a handsome one, and the reason of its being below stairs is, that the house is built upon the side of a hill; if there were an approach at the back from the lower ground, the peculiarity would disappear; but, as it is, it is a house with the door at the top. Through the courtesy of Mr. Klitz, the proprietor, and master of the ceremonies for this occasion, ample accommodation was provided for the representatives of the press. At half-past 8 o'clock His Royal Highness arrived; he looked extremely well; he was in plain evening dress, wearing a black coat and trousers, and white waistcoat and neckerchief. He took his seat on the platform on the right of the chair. Next to the Prince were Lieutenant-Colonel Sabine (the General Secretary); Viscount Palmerston, M.P.; the Marquis of Northampton, the Bishop of Norwich, the Speaker of the House of Commons, and the Mayor of Southampton. It was said that the Bishop of Oxford was

too unwell to attend. The Marquis of Winchester, the Dean of Westminster, Mr. Tite, and a whole host of scientific persons were present.

The company rose to receive the Prince. His Royal Highness having taken his seat, they sat down; and the chair was taken by

Sir J. F. W. Herschel, Bart., the retiring President, who congratulated the meeting on a presence which gave a dignity and sanction to its proceedings such as on no former occasion the society had received (Cheers.) For the honor thus conferred he felt the warmest emotions of grateful respect; it was a recognition of the glorious cause in which they were embarked—a cause in which were involved the glory of England, and the prosperity of every inhabitant of this country, from the Queen upon her throne, God bless her! (cheers), down to the lowest inhabitant of a cottage. For himself, in returning on this occasion to a town associated with the reminiscences of his younger days, he could not but see, as in every town in England, a great change, a start forward into civic and commercial activity, which would make it, as of old, a link of communication between England and her distant colonies,—one of the poles of that electric circuit with which Great Britain must animate and might convulse the world. The itinerant character of the association brought it the more in contact with that great phenomenon,—the immensity of our national progress, the intense activity pervading everything in England at this moment, with the fact that it was every year more and more placed under the guidance of that science which it was the society's office to promote and to diffuse. Believing firmly that the resources of science were inexhaustible, and that its scope extended to ameliorations of every description, he could look forward to the future, not only without gloom and foreboding, but with the temperate exultations which Providence permitted to such as desired no aggrandizement but that which was in unison with its own grand and beneficent designs. With regard to his own year of presidency, he would just remind the audience that that year had given them the discovery of a new planet, and the prospect of another; they saw it as Columbus saw America, from the shores of Spain. In the subdivision of a member of our system, we had also beheld one of the recognized ingredients of that system separated into two, each pursuing an independent orbit round the sun. After passing a high eulogium upon the new President, Sir John then resigned the chair to

Sir R. J. Murchison, who afterwards rose and said,—Gentlemen of the British Association, deeply conscious as I am of my inferiority to my eminent predecessor in the chair of the British Association in all that respects the higher branches of physical science, I still hope that my ardent devotion to your cause from your very cradle, from your very institution, may plead in my favor, and may be held by you as some guarantee for the zealous execution of my office. Give me leave to assure you, that I consider the being placed in this position as a mark of approbation on your part, which is to me the highest honor that could have been conferred upon me through life,—an honor the more cherished because it has been conferred upon me in a county with which I have long been connected by family ties, and in which I made my first essay as a geologist. (Cheers.) Those feelings are strongly enhanced when I look around, and see that this association has for the first time been honored with the presence of Royalty. (Loud cheers.) You cannot conceive the gratification it gives me, when I know that his Royal Highness, the consort of our beloved Sovereign (cheers), comes fresh from the mines of Cornwall, and has been making himself so good a geologist, that in addition to all those other numerous branches of science with which his Royal Highness is already acquainted, we shall see him here attending our sections in a few days; for we know him to be—what I now inform his Royal Highness of—the one and only honorary member of the British Association for the Advancement of Science. (Loud cheers, during which his Royal Highness bowed his acknowledgments to the President.) But when gentlemen trust to memory they are very discursive, and on these occasions it is necessary to keep precisely to the point, and therefore I must now trouble you with my sermon (a laugh); I must put on my spectacles (laughter) and read to you a discourse, which I have prepared with as much care as is in my power.

The President then proceeded to read his inaugural address. After observing that the origin, progress, and many of the objects of this their "Parliament of Science" had been sufficiently explained on former occasions, he proceeded to dwell on the recent progress and present state of various branches of science. The discourse was of great length, and will hardly admit of abridgment: one or two of the most interesting portions of it will convey an idea of its nature. Sir Roderick said,—A request from the Association to Professor Bunsen, of Marburg, and our countryman, Dr. Lyon Playfair, coupled with a contribution of small amount towards the expenses involved in the undertaking, has produced a report on the conditions and products of iron furnaces, which is of the greatest value in a commercial view to one of the most important of our manufactures, and possesses, at the same time, a very high interest to chymical science in some of the views which it develops. On the one hand, it exhibits an entirely new theory of the reduction, by cyanogen gas as the chief agent, of iron from the ore: on the other, it shows that, in addition to a vast saving of fuel, about 2cwt. of sal ammoniac may daily be collected at the single establishment of Alfreton, where the experiments were made; thus leading us to infer, that in the iron furnaces of Britain there may be obtained from vapour which now passes away an enormous quantity of this valuable substance which would materially lessen the dependence of our agriculturists on foreign guano. It is, indeed, most gratifying to observe, that in pursuing this inquiry into the gaseous contents of a blazing furnace of great height, our associates traced out, foot by foot, the most recondite chymical processes, and described the fiery products with the same accuracy as if their researches had been made on the table of a laboratory. * * * * *

"When our associate Conybeare reported to us, at our second meeting, on the actual state and ulterior prospects of what he well termed, the 'archæology of the globe,' he dwelt with justice on the numerous researches in different countries which had clearly established the history of a descent, as it were, into the bowels of the earth—which led us, in a word, downwards through those newer deposits that connect high

antiquity with our own period, into those strata which support our great British coal-field. Beyond this, however, the perspective was dark and doubtful.

"Res altâ terrâ et caligine mersas."

Now, however, we have dispersed this gloom, and by researches first carried out to a distinct classification in the British Isles, and thence extended to Russia and America, geologists have shown that the records of succession, as indicated by the entombment of fossil animals, are as well developed in these very ancient or palæozoic strata as in any of the overlying or more recently-formed deposits. After toiling many years in this department of the science, in conjunction with Sedgwick, Lonsdale, De Vorneuil, Keyserling, and other of my fellow-laborers, I have arrived at the conclusion that we have reached the very genesis of animal life upon the globe, and that no further 'vestigia retrorsum' will be found beneath that protozoic or lower Silurian group, in the great inferior mass of which no vertebrated animal has yet been detected amid the countless profusion of the lower order of marine animals entombed in it. But, however this may be, it is certain that, in the last few years, all Central and Eastern Europe, and even parts of Siberia, have been brought into accordance with British strata, whilst our kinsmen of the Far West have so ably developed the structure of their respective states, that our countryman, Lyell, has informed us that the excellent map which accompanies his work upon North America is simply the grouping together of data prepared by native state geologists, which he has paralleled with our well-known British types. If then the astronomer has, to a vast extent, expounded the mechanism of the heavens; if lately, through the great telescope of our associate the Earl of Rosse, he has assigned a fixity and order to bodies which were previously viewed as mere nebulae floating in space, and has also inferred that the surface-cavities in our nearest neighbour of the planetary system are analogous to the volcanic apertures and depressions of the earth; the geologist, contributing data of another order to the great storehouse of natural knowledge, has determined, by absolute and tangible proofs, the precise manner in which our planet has been successively enveloped in divers cerements, each teeming with peculiar forms of distinct life, and has marked the revolutions which have interfered with these successive creations, from the earliest dawn of living things to the limits of the historic era. In short, the fundamental steps gained in geology since the early days of the British Association are so remarkable and so numerous, that the time has now come for a second report upon the progress of this science, which may, I trust, be prepared for an approaching, if not for the next meeting. * * * * *

"When M. Quetelet remarks, 'that the phases of the smallest insect are bound up with the phases of the plant that nourishes it; that plant itself being in its gradual development the product, in some sort, of all anterior modifications of the soil and atmosphere,' he compels the admission that the study which should embrace all periodical phenomena, both diurnal and annual, would of itself form a science as extended as instructive. Referring you to M. Quetelet's report for an explanation of the dependence of the vegetable and animal kingdoms on the meteorology and physics of the globe, and hoping that the simultaneous observations he inculcates will be followed up in Britain, I am glad to be able to announce that the outline of a memoir on physical geography was some months ago put into my hands by Mr. Cooley, which, in a great degree coinciding with the system of M. Quetelet, has ultimately a very different object. M. Quetelet chiefly aims at investigating the dependence of organized bodies on inorganic matter, by observing the periodical phenomena of the former. Mr. Cooley seeks to obtain an acquaintance with the same phenomena for the sake of learning and registering comparative climate as an element of scientific agriculture. Speaking to you in a county which is so mainly dependent on the produce of the soil, I cannot have a more favorable opportunity for inculcating the value of the suggestions of this British geographer. The complete establishment of all Islands; i. e., the registration of the mean and extremes of the temperature of the air and of the earth; the amount of conduction, radiation, moisture, and magnetism; the succession of various phases of vegetation, &c. (with their several local corrections for elevation and aspect), must certainly prove conducive to the interests of science, and are likely to promote some material interests of our country."

The oration concluded with a complimentary welcome of the foreign visitors; and Sir Roderick sat down amidst great applause.

Lord Palmerston then rose, and said,—Although, gentlemen, upon the present occasion, there are assembled in this room a great number of persons eminent for their attainments in science, yet there are also many who, like myself, are only humble admirers of the attainments of others, professing to possess no knowledge themselves of the matters in which those distinguished individuals have attained their eminence. I trust it will not be deemed presumption on my part, if, being one of this, perhaps the most numerous part of those here assembled, I venture to propose to you that we return our thanks to our distinguished President of this day, for the admirable discourse with which he has explained to us the objects of the meeting. (Cheers.) It would be presumption indeed in me, gentlemen, if I were to endeavour to point out particularly to your attention the many claims which our worthy President has established to the gratitude and to the admiration of his fellow countrymen. It would be impossible for any body more adequately to point out to you those claims than he has himself just done, by a discourse which shows however eminent he is in that particular department of knowledge to which he has more particularly directed his attention, he is equally versed in all those departments of intellect and science in which mankind have excelled; that he has directed his attention to the progress which other scientific men had made, and that he is as capable of explaining to you the results of the researches of others, as of himself contributing a valuable addition to the stock of human knowledge. (Hear, hear.) It must be gratifying indeed to us that the present meeting of this association should be presided over by so competent a chief; and, however important may be the many other ranges of science over which he has cast his rapid glance, yet there surely can be none more interesting than that particular department in which he has so successfully laboured,—that department by which he and others have been enabled to interrogate our mother earth, to extort from her the knowledge of what has