May 5th, 1859.

Thomas Bell, Esq., President, in the Chair.

Henry Munroe, Esq., M.D., and Charles Prentis, Esq., were elected Fellows; and Professor J. F. Brandt, Professor A. H. R. Grisebach, Professor J. L. Lovén, and Mons. H. A. Weddell, were elected Foreign Members.


May 24th, 1859.

Anniversary Meeting.

Thomas Bell, Esq., President, in the Chair.

This day, the Anniversary of the birth of Linnaeus, and the day appointed by the Charter for the Election of Council and Officers, the President opened the business of the Meeting with the following Address:—

Gentlemen,
The year which has passed since I last had the pleasure of meeting you on our Anniversary, has not been unproductive in contributions of interest and value, in those sciences to which we are professedly more particularly addicted, as well as in every other walk of scientific research. It has not, indeed, been marked by any of those striking discoveries which at once revolutionize, so to speak, the department of science on which they bear; it is only at
remote intervals that we can reasonably expect any sudden and brilliant innovation which shall produce a marked and permanent impress on the character of any branch of knowledge, or confer a lasting and important service on mankind. A Bacon or a Newton, an Oersted or a Wheatstone, a Davy or a Daguerre, is an occasional phenomenon, whose existence and career seem to be especially appointed by Providence, for the purpose of effecting some great important change in the condition or pursuits of man.

The establishment of the inductive method (by which the whole face of philosophy, before chaotic, was reduced to order), the discovery of the law of gravitation, the invention of the electric telegraph, or the production of sun-pictures—these and similar results of genius, by which the advance of knowledge and the designs of Providence are carried forward by grand and unexpected impulses, are occurrences, the like of which we must not expect to have annually to record.

Nor are even the striking examples to which I have referred, influential as they are and original as may be the genius which finally applies them, usually isolated or sudden. The suggestions of previous experiment or discovery, the hints which are given from time to time by either fortuitous or anticipated phenomena, ordinarily afford the ground upon which the most important discoveries or improvements are made. The electric telegraph may be traced from the first intimation of the possibility of the transmission of the electric force to a distance, through successive occasional advances, to the happy hour when Oersted discovered the great truths of electro-magnetism, and Wheatstone applied the discovery to a purpose which is destined to affect, more than any other single practical application of science that was ever made, the condition, the destinies, and the welfare of mankind. In like manner the consecutive suggestions of Watt, of Davy, of Talbot, of Herschel, of Daguerre, of Niépce de St. Victor and others were required to bring to even its present state of advancement, the art of photography. The history of almost every scientific discovery of importance would afford similar illustrations, which will suggest themselves to your minds, and which it is unnecessary for me to enlarge upon.

Of the results of such successive developments as those to which I have referred, in those departments of science which are usually considered as of a more abstract character, and in those which are properly the subject of experimental processes, the late President of the Royal Society gave at their last Anniversary some very instructive examples in his lucid and interesting address, which
has doubtless been in the hands of most of the Fellows of this Society; and I hope that I shall not be considered as travelling much out of the record, if I recall at this time, when the Royal Society has so lately been deprived of his services, the great merits of one who would yield to no one of his predecessors in a zealous and unselfish devotion to the interests of science, in the employment of the prestige which his social and official position alike gave him in promoting its objects, and in the solid judgment, never within my experience surpassed, by which the affairs of the Royal Society were conducted by him, whether in Council or in private;—and in addition to these considerations, the Fellows of the Linnean Society would, with good reason, consider me as wanting in my duty to them, as well as to that excellent nobleman, if I were to omit a grateful allusion to the kind and friendly interest which he invariably manifested for the welfare of this Society, and the urbanity and consideration with which he ever received any suggestions for that mutual assistance and goodwill which he was always anxiously desirous to promote.

I cannot, however, close this digression without referring with grateful satisfaction to the choice which the Royal Society has made of a successor to Lord Wrottesley, in the person of one who devoted the leisure hours of a long and laborious professional career to the successful cultivation of a branch of science allied to those which are considered as especially the objects of this Society; whilst by a marvellous power of acquiring and retaining knowledge, and by that incessant employment of the intervals of professional labour in which, as our great moralist has well declared, consists the true economy of time, he has stored his acute and capacious mind with a fund of knowledge as rich as it is varied. In the close relation in which we now happily stand to the Royal Society, the appointment of its President is matter of no small moment to us in our corporate capacity, in addition to the interest we must feel as competitors in the arena of scientific labour; and I am quite sure that we shall continue to enjoy in the conduct of the present President the advantages of that combined kindness and wisdom which characterized his predecessor.

If the events of the past year have not, however, as I have stated, been so influential or emphatic as some which have marked the period of their occurrence as an epoch in scientific history, the more silent and finally not less productive current of discovery is ever going on, and its recent results in every field of research have been such as to prove that the yearning after knowledge was never
more earnest, nor the love of the truths of nature ever more ardent and sincere than at the present time. In evidence of this steady progress I will refer you to the meetings of our own Society, and the results of those meetings in the papers already published, or about to be published, in our 'Transactions' or the 'Journal of Proceedings.' I believe that I may safely compare them with those of any former period for their variety and value. The botanical element of our functions still predominates as it has done; and, from the nature and comparative extent of the two pursuits, it must continue to predominate. Such indeed has been the number of papers in this department, considered by the Council as worthy of publication, that it has been found necessary to issue, within the year, two supplemental parts of the 'Journal of Proceedings'; a step, which, although requiring much consideration on account of the expense, is fully justified by the importance of the contents of the volume.

But while we have thus advanced in the quantity of valuable matter presented to us in our botanical department, a glance at the communications belonging to the other branch of our labours will show that in zoological science we have not been retrograding either in their number or value. There is, however, yet room for a more zealous movement amongst the zoologists of our body; and the complaint which I ventured to express on a former occasion is not yet rendered unnecessary or untimely. Many papers on zoological subjects are still read at the meetings of collateral societies, which, as it appears to me, would legitimately belong to us, and would merit a situation in our own publications, where some of them at least would be more in place than where they now appear.

In recurring thus to the 'Transactions' of the past year, I abstain from particularizing any of the papers as especially interesting or valuable, as selection would be invidious where all are good, and every student will be able to judge for himself of their respective value and importance. Some of the most interesting of them—and this refers to papers which have been read at the meetings of other societies as well as of our own—are on subjects still under controversy, the discussion of which belongs to another arena than that of the brief address which it is my duty to offer to you; for I have always thought that this is not the fit occasion for the enunciation of individual opinion or judgment, but rather for a simple sketch of the general working of the Society and the progress of science in connexion with it.

The primary and ostensible office of the Linnean Society is, un-
doubtedly, the promotion and record of discoveries or improvements in the science of Natural History, both in its systematic and physiological phase, by means which the Charter has provided,—in its meetings, its publications, its library, and its collections; but, as the recognized centre and head of these sciences in this country, it has always appeared to me that the Society might exercise certain collateral functions (having for their object the encouragement of this branch of knowledge, and its spread amongst the people) which are not wholly alien from that primary object, and which may legitimately come within the scope of its original design. To one of these I called attention on a former occasion, when I suggested that a relation might with advantage be established between the Society and the numerous respectable local institutions now existing in almost every county in England, having for their object the cultivation of the natural history and antiquities of the neighbourhood. But besides this, may there not be another, equally if not more efficacious means of promoting this object, in the aid and patronage which the Society might, indirectly perhaps, but not ineffectually, afford to that educational movement which appears to have decidedly taken place in this direction? Whether or not it be practicable for us as a body to take any ostensible part in this important work is at least doubtful, but certainly it behoves every Fellow of the Society in his individual and personal capacity,—I might almost say in fulfilment of his initiatory obligation, entered into when he joined the Society,—not to omit any opportunity of furthering this desirable end. It is very cheering to the mind of every one who fully apprehends the unspeakable value of these studies in forming the mind and ameliorating the tempers and affections of our youthful population, by exciting and fostering a love of Truth, and training them in the knowledge and admiration of the works of God, to see that there is a daily increasing appreciation of their importance. Nothing can more evidently manifest this encouraging feature of the educational tendencies of the present day, than the great demand for popular works on natural history, whether of a more systematic or biographical character,—whether general or limited to one special department. This demand is liberally supplied by the issue of numerous works, which, if they are not all characterized by perfect accuracy of detail, or philosophical views of generalization, or sound principles of arrangement, are yet calculated to excite and, in great measure, to satisfy the growing appetite for this department of knowledge. Such works as I refer to may be enumerated
by scores,—the least valuable of which would have been hailed in
my early days of boyish love for natural history, as the greatest
boon that could have been offered. Nor let it be supposed that
the results of such reading, elementary though it be, is of slight
import. The consequence may be very important, and some future
Cuvier or Owen may refer his earliest scientific tendencies to the
perusal of some of these educational works: "res parva, sed ini-
tium non parvae."

There are few circumstances which have a more powerful tend-
cy to promote the love of such pursuits than the ready access
of the masses of the people to the most beautiful and interesting
natural objects, and their exhibition in a form at once pleasing and
instructive. In this respect, as well as in its more important
phase as illustrative of the progress of botanical science and its
application to practical purposes, there is no existing fact which
claims greater attention or excites deeper interest than the noble
gardens at Kew. The statistics of this great Government estab-
lishment are so important, and involve so many considerations
which are of public moment, as well as such advantages to the
scientific student, that a brief account of the progress recently
made in its different departments, cannot fail to be interesting to
the Fellows of the Linnean Society.

At a time when the public mind is fully awake to the great
importance of affording to the people the means of rational and
healthful enjoyment, and when the efforts of all who are earnest
on the great subject of popular education are directed to the best
means of instruction in those sciences which are at once econo-
mically useful and intellectually improving, the ready and free
access to such sources of mental enjoyment and practical informa-
tion as are here combined on a scale of unexampled magnificence,
must be a subject of the deepest interest, and the success of the
establishment a cause of hearty congratulation.

The vast number, the extreme beauty and the healthy and
flourishing condition, no less than the intrinsic value of the living
vegetation within the precincts of the garden, especially in those
parts of it to which the steps of the public are ordinarily directed
—the admirable arrangement of the grounds and the charming
walks—combined with the facility with which access is attained
to such attractions, render it no matter of surprise that even at
such a distance from the metropolis, the gardens are frequented
by visitors whose annual numbers are no longer to be counted by
hundreds or by thousands, but by hundreds of thousands. The number of persons who visited the gardens during the last year amounted to no less than 405,876; which, contrasted with the comparatively small number of 9174 in the year 1841—since which time, with one or two exceptions, every succeeding year has surpassed that which preceded it—shows an increase both in the attractions of the place, and in the public appreciation of its beauties and advantages, which are highly gratifying and suggestive. A perusal of the annual reports from Sir William Hooker to the Government, will show the most satisfactory and regular progress in every department and phase of the establishment.

The Arboretum, now the finest in Europe, contains all the most important species of hardy trees, in the most healthy and flourishing condition, which may be examined and studied by every one who is interested in Arboriculture or in the Botany of Trees. The Queen’s garden has received a liberal addition of 14 acres to its extent; a large lake of 4½ acres is in progress of construction; and the whole of this portion of the gardens is advancing rapidly to as nearly a perfect state as an energetic application of art and science can render it.

Every one is too well acquainted with the magnificent Palm-house, and the other receptacles for plants requiring heat and protection, to render any particular description necessary; it is sufficient to say that here also continual improvements are going on. But gratifying as are the advances which are taking place in this more obvious and popular province, the scientific botanist is perhaps more interested in the unrivalled herbarium, which, with its accumulated treasures, has for some years past constituted a focus of attraction, not to the botanist of this country only, but to the students of the science from all parts of Europe and from America. The list of those who have considered it worth their while to take up their temporary abode at Kew for this especial purpose, includes many of the most distinguished names amongst the botanists of various parts of Germany, of Denmark, of Sweden, of Russia, of France, and of different states of the American Union, as well as the most eminent cultivators of the science in the United Kingdom; and the standard works which have been either wholly or in part completed from this source are too numerous to be now particularized. The rescue of the available portion of the accumulated mass of herbaria which had lain for years in the cellars of the India House, and were fast going to destruction, which has been effected in consequence of remonstrances from Kew, and their de-
posit amongst the treasures of that great emporium, is another feature in the recent arrangements made under the superintendence, and emanating from the zeal of Sir William Hooker, which cannot fail to be of the greatest advantage to the Indian botanist.

But if there be one department in the Kew establishment which is more generally interesting than another, it is, in my opinion, the Museum of Economic Botany. This beautiful repository of the various applications of vegetable matters to the uses of mankind, is, I believe, unrivalled in any other country. Its interest is not confined to the man of science—it belongs to the physician, the chemist, the manufacturer, the artisan in every grade and of every calling, to the artist and the scholar, the soldier and the man of law. The energy and intelligence with which this curious and beautiful collection has been built up and arranged reflects the highest honour upon Sir William and Dr. Hooker, as well as upon those who, under their able direction, have worthily carried out their plans and arrangements; and under such management it cannot but continue to prosper.

It is not only at Kew, however, that the means of study have been augmented during the past year. The lamented death of Mr. Brown has occasioned the deposit in the National Emporium of his unrivalled collection of fossil woods, many of which are unique, and the whole of them of the highest interest and value. They were bequeathed to the British Museum, on the condition that they should be considered as part of the Botanical collection in that place. A large number of drawings of Australian plants and animals, from the pencil of Ferdinand Bauer, is another boon to that department, by the bequest of the same distinguished benefactor. These are drawn from the life; and it is unnecessary to say, to those who are acquainted with the productions of this matchless artist, that nothing of the kind exists more accurate and beautiful than are the whole of this fine collection.

Whilst speaking of the British Museum, and referring also to the late Keeper of the Botanical department, I am reminded of a fact, which I should not be acting in accordance either with your feelings or my own if I were to pass over without an expression of sincere gratification,—I allude to the appointment of one to whom we, as a Society, owe a debt which we can never hope in any degree to liquidate, our excellent Secretary, as the successor of Robert Brown. That appointment is as deserved on his part as it is an act of justice on the part of the Trustees; and I am sure that you will all unite with me in affectionate and earnest
wishes that Mr. Bennett may long continue to exercise the functions of an office which every one felt to be so justly his due.

I will now return to the more direct affairs of the Linnean Society itself. Here, as is usual, we have to approach the subject with mingled feelings of congratulation and regret. Whilst we have cause for great satisfaction in the progress which has been made in science under the auspices of the Society, the increase in the number of our members, the favourable condition of our finances, enabling us to provide for not only the continuance, but the increase of our publications, whilst we see fresh volunteers in the peaceful array of Science enlisting under our banners, there is another and a gloomy phase to which our attention is painfully enforced. The loss which we sustain from time to time by death, as it is always a subject of deep regret, and one on which it is painful to dwell, presents on the present occasion a more than usually sad aspect. Our obituary includes two of the most distinguished men who have ever adorned our Society—Robert Brown on our home list, and Alexander von Humboldt on that of our foreign members, are names which it is an honour to this Society and to any other to which they belonged, to have had enrolled amongst its members. The first scientific societies and academies in Europe numbered them amongst their most honoured associates; and their mutual esteem and their high estimation of each other's talents and labours reflected equal honour upon both. To the scientific world the loss is indeed great; and in our own sphere, although, with the rest of the world, we lament the extinction of such a splendid light as Humboldt, yet as a few only of our number enjoyed the happiness of his intimate friendship, our feelings of personal and affectionate sorrow are more awakened by the removal of him with whom we were in the constant habit of familiar and delightful intercourse.

But to both these great men is due the tribute of our sincere and profound regret. On the one hand, the Prince of Botanists, the man of universal information, of a rare and solid wisdom, the firm and constant friend, the kind and genial companion, the honest and upright man;—on the other, the profound philosopher, the universal genius, comprehending within the vast grasp of his mind such an extent and variety of knowledge, such an instinctive perception of the truths of nature, as have rarely, if ever, fallen to the lot of any man before him,—such are the two men whom, as during this life they were the objects of our veneration and love, we now, with a corresponding earnestness, deplore.
Any attempt on my part to do justice to this subject would be wholly futile, in anticipation of the memorial which you will presently hear from our esteemed Secretary, whose facile pen displays even more than its wonted eloquence when employed on the character of those whom he has loved and respected; but there are one or two circumstances, to a knowledge of which I have had incidental access, either connected with the career of Mr. Brown, or in which I have been personally concerned, which I will beg your permission to mention.

When a great man has departed from amongst us, and we are enabled to take, as it were, a bird's-eye view of his whole career, and contemplate all that he has achieved in the sphere of action, whatever that may be, in which he had distinguished himself;—when, especially, there has been some one line of discovery in which he has stood out from the ranks of his fellows, and with which his name has become identified,—it is interesting to look back into the distance and discern the one event, in itself probably trivial, which formed the starting-point of his journey, and had given a colour and a character to the subsequent history of his life and fame.

A simple letter which now lies before me constituted such a turning-point in the life and prospects of him whom we all deplore, and who gave a tone and impress to the science which he pursued with such untiring zeal, with such bright and clear intelligence, and with such enduring results. In a letter from Correa da Serra, who was at that time a frequent visitor to the library of Sir Joseph Banks, addressed to that distinguished patron of science, the future President of Botanicorum is recommended to conduct the Botanical investigations belonging to the proposed voyage of discovery to New South Wales, then about to be undertaken under the command of Flinders, and which was destined to lay the foundation of a future fame coextensive with the regions in which his transcendent labours could be appreciated. This remarkable letter forms an item in the important mass of materials now consigned to my temporary keeping, which I trust may hereafter form the basis of a life of the distinguished President of the Royal Society, to whom I have just referred. It will be readily imagined that, in the load of correspondence of which the greater part of these documents consists, some records might be found which would illustrate the intimate relation in which these two celebrated men stood to each other, and the influence which the talents and judgment and knowledge of Robert Brown must have exercised upon his respected patron and friend. An indirect indication of
this influence is afforded by some letters from Sir Joseph Banks, with reference to the unhappy voyage of Tuckey to the Congo, which, as it refers to an incident in my own life, and to my first introduction to my late revered friend, I trust that I shall be excused for relating. Many of you are aware that there was offered to me in the year 1815 the appointment of Naturalist to that ill-fated expedition. I sought an interview with Sir Joseph Banks, to whom I was referred for information, and with whom rested that appointment. Sir Joseph Banks being absent, I had a long conversation with Mr. Brown, then his librarian; and he, with his accustomed kindness, laid before me the difficulties, the dangers, and the improbabilities of success, which presented at that time such formidable discouragements to those who were to form the expedition, and which were in great measure the cause of my declining the appointment. Now, on looking over the voluminous correspondence which I have mentioned, it struck me as highly probable that I should find some allusion to the circumstances of the expedition; and I find, in several letters from Sir Joseph Banks to the Government, representations which coincide entirely, as far as my memory serves me, with many of the dissuasive reasons which Mr. Brown had urged upon me.

I will not trouble you longer upon these painful subjects, which will presently be presented to you more at large. Happily there are other and more cheerful matters to which it is my duty to recur; there is the white as well as the black side of the shield.

Of the presents which have been made to our library and collections, besides an unusual number of valuable books of the ordinary description, there are some which demand especial notice. A large collection of desiderata has been presented by Mr. Bennett, of books which had belonged to the late Mr. Brown, to the extent of about 300 items, many of them of particular value to us; and we have just received from our respected Fellow, Mr. Cuming, the gift of all the works, not already in our possession, from his large collection of conchological publications, perhaps altogether the most complete in the world—those presented to us amounting to about 200 volumes. These munificent donations will fill up many hiatus in our library, and render it very complete in those departments to which the works particularly belong.

A very interesting addition has been recently made to our collection of Linnean MSS. by the presentation of many original letters of Linnaeus formerly belonging to my old friend Dr. Maton,
for many years a respected Vice-President of the Society; to whose niece, Miss Wray of Ryde, we are indebted for this most acceptable present.

In the Botanical collections we have received from Mr. James Salter the whole of the Herbarium of British Plants of our lamented Fellow, Dr. Bell Salter of Ryde; which, in addition to its being perhaps one of the most complete British Herbaria ever formed, possesses a peculiar value from its containing the typical specimens of his species in the genera *Rosa, Rubus, Saxifraga* and others, to which, as is well known, he had paid especial attention. A complete set of specimens from the great Javan Herbarium of our venerable and distinguished Fellow, Dr. Horsfield, has also recently been presented to us, by which our already extensive and highly valuable Indian collections will be greatly increased in interest and importance. These have already passed through the hands of our Foreign Member, Professor Miquel of Amsterdam, now engaged on a Flora of Java, by whom they have been named.

Before I conclude, it may perhaps be expected that I should allude to a subject which has excited a good deal of anxiety, and, at one time, some alarm in the minds of the Fellows of the Societies which meet in this mansion—I mean the proposed erection of buildings for various objects connected with Science and Art on the area of the ground belonging to this place. It was of course to be expected, and greatly to be desired, that so advantageous a site should not be left unoccupied whilst there were so many Societies and Institutions connected with intellectual pursuits which were wholly unprovided with an independent local habitation, or were but inconveniently and uncertainly placed. Some have to obtain accommodation for themselves and at their own expense; and even those which enjoy the privilege of meeting in apartments provided by the Government, are wholly severed from those kindred institutions, a near approximation of which would be so mutually beneficial. It will be recollected that the movement which some years since originated in the anxiety of a number of Fellows of the Royal and other Societies to obtain a juxtaposition of the Chartered Societies which represented departments of Science, terminated in our obtaining from the Government the present advantageous position for the three bodies now occupying Burlington House. Still the plan was but imperfect, and we have always anticipated the probable appropriation of the whole site to the great object of bringing into one
focus all the principal institutions connected with Literature, Science, and Art, with a grandeur and completeness worthy of the nation.

Still it was matter of serious concern in what manner it should be carried out. Whether the whole space should be appropriated to this "holy alliance," or whether they should be locally associated with offices of mere Government business,—whether the nature and position of the buildings should be so arranged as to allow the present noble erection to remain, and thus its present occupants to retain their place within it undisturbed, or whether it would be necessary, in carrying out the final plans of the architect, to level with the ground a building so handsome, so substantial, and so well adapted to its present purpose. Supposing the latter alternative to be decided upon, there sprung up the important question whether the new buildings were to be completed and ready for our permanent occupation before we should have to quit the tenure of our present abode. Although it is not in my power to enter into any detail on the plan and arrangements of the architects appointed by the Government, I have great satisfaction in being able to state confidently that there is every disposition on their part to meet our wishes in the most effective and liberal manner. There will be no disturbance of the Societies in these present apartments until the new ones are fit for their reception. Our own accommodation will, there is every reason to anticipate, be even more complete than at present; and I trust that our proximity to the Royal Society, from which both have derived so much comfort, and I trust mutual accommodation and advantage, will still be provided for.

Gentlemen, I will not detain you longer. With an increasing revenue, with enlarged means of carrying out our mission, with a list of Fellows more numerous, and I trust and believe more energetic in the cause of Science than ever, I feel that I have a right to conclude this address with the feeling of deep gratitude for the past, of sincere congratulation on our present condition, and of the brightest hope for our future prospects.

OBITUARY NOTICES.

The Secretary then read the following notices of deceased Fellows, Foreign Members, and Associates:

William John Broderip, Esq., was born in Bristol, November 21st, 1789. His father was an eminent medical practitioner in