nomy, in 3 volumes octavo, in the German language, and continued, till the time of his death, to conduct the affairs of the Imperial Observatory at Vienna.

The Council have also to regret the loss of Mr. Frend, lately one of the Members of the Council of the Society.

William Frend was the son of George Frend, an alderman of Canterbury, in which city he was born, November 22, 1757. He received his education in his native place, at the King's School; and, after staying some time at St. Omer, was placed in a mercantile house at Quebec; but the breaking out of the disturbances in America destroyed his commercial prospects, and he returned to England. His wishes being directed towards the Church, he was placed at Christ's College, Cambridge, in 1775, and took the degree of B. A., with the honour of second wrangler, in 1780. After taking his degree, he almost immediately removed to Jesus College, of which he was elected fellow and tutor. In 1783 he was ordained, and afterwards obtained the living of Madingley, near Cambridge. In 1787, a change in his religious opinions took place, which ended in his adoption of the views of the Unitarians. The resignation of his living and the loss of the tutorship followed of course; but the laws of the University still allowed him to retain his fellowship. After some years of travel, he returned to Cambridge, and occupied himself further in the study of Hebrew and divinity. In 1793, a pamphlet, entitled *Peace and Union recommended to the Associated Bodies of Republicans and Anti-republicans*, was published by him, which contained distinct expressions of dislike to the doctrines and discipline of the Established Church. Immediately upon the publication of this pamphlet, both his college and various members of the senate commenced proceedings against Mr. Frend. The master and fellows of the former (by seven to four) "removed" him from residence in college, until proof of "good behaviour," and this sentence was confirmed by the visitor. Thirty-four members of the senate cited the author of the pamphlet before the Vice-chancellor (Dr. J. Milner), and a trial took place in his court, which lasted eight days. The result was, that a form of recantation was proposed to Mr. Frend, which he refused to sign; and sentence of "banishment" from the University was passed. This banishment is not expulsion, as persons unacquainted with the University generally believe, but a deprivation of the right to reside within the limits of the University; and, accordingly, though the sentence was confirmed on appeal, Mr. Frend continued to hold his fellowship till his marriage, and remained to the day of his death a Master of Arts, and a member of Jesus College. He retired of course from Cambridge, and came to London, where he maintained himself till 1806, by adding the profits of teaching and writing to the income derived from his fellowship. When the Rock Life Assurance was founded (1806), Mr. Frend, who had previously been consulted in the formation, was appointed actuary of that company, a post in which he remained until a severe illness compelled him (in 1826) to retire

from active life. His health, however, recovered, and he continued his mental employments with an activity very unusual at his age, until the beginning of the year 1840, when he was attacked by paralysis, under which he lingered with almost total loss of speech and motion, though with the smallest possible decay of mind or memory, until February 21 of the last year, when he closed a life which is regarded, even by those who differed from him, as a splendid example of honesty in the pursuit of truth, and of undaunted determination in the assertion of all that conscience required.

The losses and inconveniences which attended his banishment from college were not among the greatest risks which he ran. At a subsequent period, when the political struggle was at its height, and government prosecutions were frequently directed against the mere expression of opinion, Mr. Frend was one of the foremost among the despised minority which advocated emancipation and enfranchisement for all who were under religious or political disqualifications. At the time of certain of the prosecutions alluded to, it was currently said, that had the government succeeded in obtaining convictions, there was an intention of instituting several more; and Mr. Frend, it was stated, was to have been one of the defendants. This supposition cannot now be verified, even if it were true; but the rumour itself constitutes its object one of the leading opponents of the system which has since been so materially modified. With his political writings,* of which there were several, we have here nothing to do, any more than with those of a religious character. A true account of his scientific views cannot be easily given in a short space; nor can reasons for enlargement be better given than in the description itself of these views.

It generally happens that in recording the career of our departed members, we have little to say on their opinions, but only to specify the manner in which they carried them into practice; and small space may serve for great results. In the present instance we have to point out the singularities of thought which made Mr. Frend the last, we should suppose, of the *learned* Anti-Newtonians, and a noted oppugner of all that distinguishes algebra from arithmetic. Opposition to the theory of gravitation must in future be left to those whose mechanics do not distinguish velocity from force; and the rejection of the distinctive principles of algebra to those who would teach like philosophers what they have learnt like schoolboys, without going through any intermediate stage. But the subject of the present Memoir stands in neither of these predicaments; and it would be highly interesting in itself, and no less than due to expiring tenets, to specify the probable influences under which such a mind as that of Mr. Frend directed him to stand quite alone among men of his philosophical acquirements; especially when it is considered that, up to the age of thirty-six,

* The titles of these will be found in the *Gentleman's Magazine* for May 1841 (pp. 541–543).

he had been a successful teacher of those scientific doctrines which he afterwards opposed, both by serious argument and ridicule.*

Undoubtedly the prime mover of this curious change was the alteration which took place in his doctrinal views of religion. Having been led to conclude that he had been betrayed by authority into the belief of propositions both inexplicable and false, the tendency to think that the inexplicable must be false, or at least to regard the former with strong suspicion, was a necessary ingredient of his future reflections on all subjects. The manner in which several leading doctrines of physics and mathematics had been handled by names of celebrity, was highly calculated to call out this disposition. The doctrine of attraction,—a mysterious connexion between matter and matter, with no existence but in its results; the theory of quantities less than nothing, a phrase which, arithmetically considered, is a simple contradiction of terms, were adopted at the time when Mr. Frend taught, in a most positive and substantive sense, by the majority of investigators and all elementary writers.

It was in vain that Newton, obviously hoping for some further elucidation of his great regulator, concluded the *Principia* with a caution that he had *not yet* (*nondum*) found out the source of gravitation; his successors and commentators, with one voice, pronounced him the discoverer of the final mechanical cause of the planetary motions; and popular writers, who seldom refuse to say B when their leaders have said A, added that Newton had found out *why* water runs down hill. With respect to algebra, the matter was still worse. Euler asserted downright that a penniless man, fifty crowns in debt, has fifty crowns less than nothing; and offered proof. He assumes that a gift of fifty crowns would make this man richer; and supposing him to employ the gift in the payment of his debts, then concludes that he *had* less than nothing, because, being now richer than before, he *has* only nothing. Others admitted the negative and impossible quantities as mysteries, and, reversing Mr. Frend's process, brought them forward as auxiliaries to the mysteries of the orthodox forms of Christianity; a practice not extinct in our own day, even after all that was inexplicable about impossible quantities has disappeared. At the time when Mr. Frend first thought on the subject, the assertion of mystery was the escape from the confession of incompleteness; the great mass of readers followed with implicit confidence, while, of those who thought for themselves, an enormous majority was too sensible of the value of the results of algebra to abandon it on account of difficulties. Some few rejected the peculiar doctrines of algebra altogether; among whom those of most note were, in succession,

* In a magazine which lasted for a few months of 1803, *The Gentleman's Monthly Miscellany*, of which Mr. Frend was editor, or co-editor, is an article by him, entitled "Pantagruel's Decision of the Question about Nothing," in which the manner of Rabelais is so well caught, that any one on a first perusal would think it likely to be an actual adaptation or parody, until a search through the writings of Rabelais satisfied him that it was simple imitation. It is a satire against some parts of algebra.

Robert Simson, Baron Maseres, and Mr. Frend. Most of those who were independent of authority united in blaming the method of the elementary writings, and were content to hope that a palpable guide to truth would not always be without rational connexion with undeniable axioms. Woodhouse, the restorer of thought on first principles at Cambridge, in a letter to Baron Maseres, preserved among Mr. Frend's papers, and dated November 16, 1801, distinctly lays it down that, in these matters, it is not the principles which prove the conclusions, but the truth of the conclusions which proves that there must, somewhere or other, be principles. "Whether or not," says he, "I have found a logic, by the rules of which operations with imaginary quantities are conducted, is not now the question; but surely this is evident, that, since they lead to right conclusions, they *must have a logic.*" And he goes on thus: "Till the doctrines of negative and imaginary quantities are better taught than they are at present taught in the University of Cambridge, I agree with you that they had better *not* be taught; and the plan of our system of mathematical education, much as it is praised, needs, in my opinion, considerable alteration and reform; and perhaps you think that our late mathematical publications will not much increase the love or improve the taste for luminous and strict deduction." As concerns the mystics, then, there is no need to object to Mr. Frend's entire abandonment of their principles, but the reverse; for it may be asserted that most of those who thought about first principles did the same. Those who imposed on matter, in the name of Newton, a primary power of attracting other matter, with those who could, on their own definitions, be made to say that *a command to subtract* 2, *repeated as many times as there are units in a command to subtract* 3, *gives a command to add* 6, ought to have been surprised that they found so little opposition.

But the circumstance relative to Mr. Frend's ultimate views which is peculiar to himself, and which cannot be remembered without surprise, is, that in clearing the trammels of mystery he had to force so thick an enclosure, that he left behind him not only the mysterious explanation, but the very facts which were professed to be explained, and which, it may be thought, could have admitted of no doubt. It seems to any one who reads his writings, that he means that Newton had done nothing out of mathematics, and that the *results* of algebra are all delusion. That the planets, attraction or no attraction, move about the sun, and are disturbed, precisely as it would be if there were attraction; that the truth of an equation, though produced by aid of impossible quantities, may be verified by numerical computation — may be made purely experimental realities, and would, to most minds as well acquainted with the subject as that of Mr. Frend, remain true, even though attraction were the atheism which some formerly called it, and the doctrine of negative quantities were a part of the black art. Nor would it have been wonderful if he had rejected incomplete explanations in elementary writing, the object of which is to teach clear results of clear principles. But there was more than this: sometimes, though rarely,

he seemed to have a power of admitting the facts as facts; but for the most part, when they were presented to him in conversation, his mind did not appear capable of dwelling on them long enough to decide whether an answer was required or not; they seemed to slip like water through a sieve. In this there was neither affectation nor evasion; it was a peculiar state of mind with regard to what could be contemplated as a scientific truth, and may be partly explained.

Mr. Frend had an admiration of simplicity, and an indisposition to arrive at complex results, which was perhaps a consequence of the desire to have no secret in philosophy. Next to the abandonment of all that was difficult to explain, followed the practical rejection of every thing in which the mind could not hold the full explanation at once before itself, in all its parts. The simple theory of numbers, that is, of integer numbers, was therefore naturally a favourite study; and this branch of mathematics is well known to be an extremely powerful stimulant of that disposition which leads to its pursuit. Legendre has said that it almost always becomes a species of passion with those who give themselves to it at all. With Mr. Frend it went still farther; an equation with a fractional root, even if commensurable, was a pseudo-equation; and $x^2 + y^2 = 1$, x and y being rational fractions, was an illegitimate child of $x^2 + y^2 = z^2$, x, y, and z being integers. In this particular Mr. Frend differed greatly from another remarkable person, his own most intimate friend, Baron Maseres, whose leading idea it seems to have been to calculate more decimal places than any one would want, and to reprint the works of all who had done the same thing.

There was also another peculiar circumstance which no doubt had considerable effect. Mr. Frend had studied Hebrew thoroughly, and was, in the opinion of learned Jews, better versed in that language than any English Christian of his day. No one who became acquainted with him could long avoid noticing the interest which he took in every matter directly or indirectly concerning the history and progress of Christianity. This knowledge of their language, history, and customs, with a community of opinion on the nature of the Deity, led him much into the acquaintance of his *elder brethren*, as he frequently termed them, of the Jewish race; and he would have held any biography of himself very imperfect which omitted to note how strongly he felt toward their persuasion. It seldom happens that any person devotes himself so keenly to any history without imbibing some opinion of the superiority of its subjects; and Mr. Frend carried to the very verge of paradox, or it may be a little beyond, the notion that the mathematical and astronomical science of ancient Judea was substantially equal at least to that of any period of modern Europe, not excepting the present. Their lunar calendar was as good as if it had been made from modern observations, and much better adapted to represent a long period than any other; as much of pure mathematics as any one ought to admit flourished among them in the time of Solomon. It is needless to say, that not a vestige of historical evidence was ever produced in favour of these opinions, nor did we ever hear of any

modern Jew who had carried his notions of the learning of his ancestors to such a length. Among modern nations, Mr. Frend had a peculiar respect for the Chinese, and was impressed with the opinion (not by any means peculiar to himself) that their government and social state is a model. The rudiments of science which he found among these nations, the ancient Hebrews and the modern Chinese, were easily magnified by his temperament, which was both sanguine and contemplative, into as much of astronomy and arithmetic as he had been able to save from the pollution of attraction and negative quantities; consequently, these countries were the depositories of real science, uncorrupted by sophistry. For the ancient Greeks and their writings he had an open contempt: they were children who had learned of the Jews, and spoiled their masters' doctrines: the good was due to their teachers, the bad was their own. All this time, and in the midst of such strange singularities of opinion as were never long absent from his mind, there was an eagerness to see the good of every thing actually present, which made his approbation very easy to gain. No one who talked with him could soon fathom the wide difference of sentiment between the two; for whatever might be the subject, there was a side on which it could be favourably viewed; and for that side Mr. Frend's mind, or that part of it which regulated his first expressions, had the quality (we must not say the attraction) of a magnet. His persuasion of the rapid advances which his contemporaries were making in morals, arts, and even sciences (however corrupted), was a spring of comfort to his age which never ran dry; and his interest in every thing new, which promised improvement to any class of mankind, in any one of those particulars, was, even after he was unable to speak or move, a commanding instinct, which he could not have disobeyed if he would. This unvarying effort to detect good in whatever came before him was essentially linked to his religious feelings, the source of his daily comfort, by the view which he never ceased to take of the ultimate consequences of Christianity; which he looked upon as the gradual restorer of mankind to a state of perfect goodness and knowledge. Every advance in art, learning, or science,—every amelioration of social evils,—every improvement in the law,—every evidence, however slight, of disposition to act, think, or hope, for the better, brought before him his cherished prospect of the final state of mankind, and was, in his opinion, only a step towards it. The consequence was, that any one who would wish to describe his age, must simply invert each and all of the characteristics which Horace* makes significative of the advanced periods of life.

* "Multa senem circumveniunt incommoda; vel quòd
Quærit, et inventis miser abstinet, ac timet uti,
Vel quòd res omnes timidè gelidèque ministrat
Dilator, spe longus, iners, avidusque futuri,
Difficilis, querulus, laudator temporis acti
Se puero, censor castigatorque minorum."

Mr. Frend's scientific writings were particularly distinguished by simplicity and earnestness. The greater part of the whole consists in short pamphlets, or communications to periodical publications; and many proofs might be given, both of the extreme importance he attached to truth, and of his conviction that error, even in matters of science, is a noxious weed in the field of morals. His principal distinct writings on subjects of science are his *Algebra* (Part i. 1796, Part ii. 1799), and his *Evening Amusements* (1804–1822). The latter was an astronomical elementary work of a new character, which had great success; and the earlier numbers went through several editions. It embraces a metonic cycle, and therefore describes the places of the moon, in a manner which would make it useful for a considerable time to come, in the elementary instruction for which it was intended. This present year is that which answers to 1804, so that the opportunity to repeat the process of instruction, so far as the moon is concerned, has just commenced. The phenomena of the different months are described, and to each month is usually attached a short religious reflection, an account of some astronomical process or discovery, a hit at the Newtonian philosophy, or some such preface. We do not see much acquaintance with the new doctrines of physics, which had then excited attention for some years; but it must be remembered that a man, who took his degree at Cambridge in 1780, had very little training in experimental deduction apart from mathematics.

Mr. Frend's scientific peculiarities strongly illustrate what those who have carefully considered the reading of that time will perhaps think to be the natural consequence of it, upon an exceedingly honest, clear, and decided mind, placed in circumstances favourable to the developement of opposition. The Cambridge student was isolated from experimental physics by the habits of his university, and from the progress of mathematics by its adherence to the fluxional notation. In essentials, the academic system was nearer to what it might have been at the death of Newton than those who now see its state could readily imagine to be possible: the theory of gravitation was taken wholly and solely from the *Principia*; no Englishman had made the smallest addition to it; and Clairaut, D'Alembert, &c. were only known by name as *French philosophers*, the most odious appellation of the time. One question might be asked which would, perhaps, add some force to the preceding remarks, if reasons for an answer were sought:—How came the men of science, who were bred at our English universities, to let Priestley, whose life was one turmoil of controversy, and who visibly must have written four pages a-day, or thereabouts, of theological discussion during his whole experimental career, run off with such a splendid portion of the first-fruits of real chemistry?

The other work of Mr. Frend, his *Elements of Algebra*, will lead every one who peruses it to think, with sincere regret, of his having preferred rejection to amendment; and will be a lesson to

writers yet to come, that they should let that stand which appears to lead to truth, whatever warning they may think it necessary to give that the reason why it does so lead is imperfectly understood. It is, on the points which it treats, the clearest book in our language. Something of this is due to the rejection of difficulty; something to the use of no problems except those which can be answered in integers; but there remains enough to shew that a work from such a writer, which should have taken algebra as it stood, distinguishing the part of which the logic was then complete from that of which the principles remained insufficiently understood, would have been the most valuable present which could have been made to the elementary student, and would, perhaps, have greatly accelerated the transition to the present state of the science, in which none need find a mystery. In all probability, the attack of Mr. Frend did materially influence this result. Among his papers is preserved a letter to him from M. Buée, a Frenchman residing in England, dated June 21, 1801, containing the form in which the perusal of Mr. Frend's work made the writer put together his own views of the subject; and admirably expressed. Of course it cannot be said how much suggestion was derived from the necessity of replying to specific objections: what is certain is, that in a few years from that time, this same M. Buée was, though in an imperfect manner, what Dr. Peacock calls the first formal maintainer of that exposition which removes the long standing difficulty.

Finally, whatever may be our opinion on the peculiarities of Mr. Frend's views, we must remember with high satisfaction that he was, during the last years of his life, one of our fellows; and, also, that no narrow idea of the necessity of conformity of opinion prevented a man of his intellectual station from being called to the Council of the Society. The sincere regret with which the Council announces the loss which our Body has sustained is materially lessened by the reflection that his extensive learning, practical wisdom in the affairs of life, chivalrous assertion of all that he thought true, and extraordinary benevolence of feeling, were permitted a long and useful career, terminated only by natural decay, and followed by the love of many, and the respect of all.

It is well known to many of the Members of this Society that an enlarged and improved Catalogue of the Stars, arranged after the manner of the Catalogue of this Society, has been a long time in progress, under the auspices of the British Association. That work is now nearly completed, and ready for the press, and will contain above 8000 stars. To each star will be annexed not only the annual precession, but also the secular variation of such precession, and the proper motion when it can be ascertained. The usual constants for determining the apparent positions of the stars at any required epoch, will also be given. This work

cannot fail of being a valuable addition to the resources of the astronomer.

The Members may be interested in learning that the Standard Scale of this Society has been reported to Her Majesty's Government, as one of the best means of regaining an accurate determination of the Standard Yard that was destroyed in the conflagration of the two Houses of Parliament: and that an indirect overture has been made for the acquisition of it, should the Government eventually consider it desirable. The Council apprehend that the Members would readily accede to any arrangement in this respect, which would promote the object that the Government has in view, and at the same time not be injurious to the interests of the Society.

The British Association having appointed a Committee to consider the propriety of revising and re-arranging the constellations in the heavens, Sir John Herschel has drawn up an interesting paper on this subject, which has been read before the Society, and printed in the forthcoming volume of the *Memoirs*. As it was considered desirable that an early and extensive circulation of his views on this subject should take place, the Council ordered an additional number of copies of this paper to be printed, which have been generally distributed, with a view of drawing the attention of astronomers to this branch of the science. Sir John's revision has been confined to the southern hemisphere, where the greatest confusion prevails in the nomenclature of the stars and in the distribution of the constellations: and if the reform, which is here suggested in the south, should meet the approbation of astronomers, it may become a matter of consideration, whether the principle may not be extended into the northern hemisphere, which has been sadly confused by modern innovations.

Since the last Anniversary, Her Majesty's Government has put the Society in possession of two rooms on the basement story of the present building; which have been cleaned out and appropriated for the erection of any apparatus that may be required for pendulum experiments, or for prosecuting any other investigations that may be carried on in such apartments.

It had long been a subject of regret that the immense magazine of facts contained in the Annals of the Royal Observatory from the time of Bradley's appointment, downwards, till a very recent epoch, should remain in a great degree unavailable for astronomical use. Our illustrious associate Bessel, in his *Fundamenta Astronomiæ*, corrections to the solar tables, and finally by his *Tabulæ Regiomontanæ*, rendered this vast labyrinth permeable, and extracted and exhibited in a finished shape much of its valuable contents. Some years ago, the British Association proposed to the Government the reduction of all the Greenwich *planetary* observations under the gratuitous superintendence and responsibility of the present Astronomer Royal, and at his own suggestion. That work is now completed, and it is understood that the funds required for printing the results will be furnished by the Board of Admiralty.

The planetary places are compared with the best existing tables, and the difference in heliocentric longitude and latitude given exactly as in the recent volumes of the *Greenwich Observations*, with a term which takes into account the errors of the solar tables, should any sensible errors be therein found. It need not be said to the members of this meeting that every care has been taken, by duplicate computations and frequent comparisons, to attain all practicable accuracy. The geometer who undertakes the revision of the theory of a planet will now have no labour which could be spared, and will be freed from every difficulty which is not inherent in the problem itself; so that we may feel tolerable confidence a few years will see us in possession of tables very far indeed advanced towards perfection.

But this work, laborious as it has been, yields in importance to that which has been subsequently undertaken by the Astronomer Royal (also gratuitously), the reduction of all the Greenwich observations of the moon, from Bradley downwards, together with a comparison of the observed places with those deduced from Plana's theory. Considerable progress has already been made. The R. A. and N. P. D. of the moon's bright limb, with the corresponding mean solar time, are computed; MSS. tables, consisting of an extension of Damoiseau's tables for 1824, modified by the introduction of Plana's co-efficients and new terms, are nearly ready. The skeleton forms are prepared, and some steps in the computations taken. The liberality of Her Majesty's Government has enabled the Astronomer Royal to employ fourteen calculators on the work, which is consequently advancing with all possible speed and economy. Let us hope that no pause will be made until a new set of lunar tables of home manufacture are produced, which shall define the place of our hitherto incorrigible satellite with the accuracy of the best observations, and sufficiently for the nicest purposes of geography. Your Council feel that you will heartily join with them in their respect for the talents, disinterested activity, and *official* piety of the Astronomer Royal, and in thanks to the Government for its discriminating and liberal patronage of our science.

The Council are glad to have it in their power to report to the meeting, that the difficulties which seemed to lie in the way of successful completion of the Cavendish experiment have been removed, by new precautions against the radiation of heat from the large balls. Though many experiments may, in the early investigations, have been apparently wasted, yet in reality much good must result from the new light thus thrown upon the details of the operation itself, and on the torsion-balance, which is the principal instrument employed. Considering the nature of the quantity required, the results begin to assume a degree of accordance with each other which promises a very accurate determination of that great element of the solar system, the mean density of the earth. The slight discrepancies which still remain, and which appear to shew that some-

thing depends on the substance employed, and more on unknown circumstances connected with the torsion-balance itself, are not such as to throw any reasonable doubt on the density obtained being true within less than a hundredth part of the whole. So much can safely be said at the present time; and it is not improbable that a still smaller limit of error may be substituted for the one just named. Mr. Baily's final report may be soon expected, and in the meantime some detail of the history of the experiment is actually in the hands of the Secretaries, and will shortly be read at an ordinary meeting of the Society. The work itself will form the fourteenth volume of the *Memoirs*, and a portion of the tables is already in the hands of the printer.

The Council have the satisfaction of announcing that the thirteenth volume of the *Memoirs* will be ready, perhaps, before the completion of the twelfth; Mr. Baily, having been lately engaged in reprinting, at his own expense, the catalogues of Ptolemy, Ulugh Beigh, Tycho Brahé, Halley, and Hevelius, in the type and form of our *Memoirs*, has offered the whole to the Council, to form the volume in question. As might have been expected, these catalogues have undergone such a revision and comparison as will materially increase their utility, and make these integrant portions of the history of astronomy familiar to the observer of our own day, who now looks upon them as difficulties, and refers to them (if, indeed, he have so much as the means of doing so at all) as little as he can help. The outlay saved to the Society by the manner in which this volume comes to us, though deserving and obtaining our warm acknowledgments, is the least part of the benefit; nor could the Council have omitted one word of the preceding testimony, if the manuscript, being, as it is, such as would gladly have been received, had been presented in the usual manner.

The whole of the volume is printed, excepting the preface, of which a circumstance well known to the Society at large has delayed the execution. And here, though it may be unusual to refer to the incidents of private life, yet the Council are sure that this meeting would feel disappointed if some opportunity were not given to the members of the Society to congratulate each other, and Mr. Baily, upon his most welcome and providential escape from the consequences of one of those accidents to which the inhabitants of crowded cities are daily exposed: an accident which, as all present remember, almost removed all hope of recovery, and made it seem next to impossible that life, if spared, should have been again occupied in the promotion of knowledge, and least of all in active research. Seeing him once more among us, in perfect health of mind and body, and remembering how much more probable it lately appeared that we should now be commemorating his innumerable services to the Society than anticipating their continuance, the Council drop the subject with the expression of their earnest hope that a life preserved against all expectation may be preserved beyond all expectation, and that a distinguished career may yet