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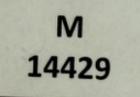


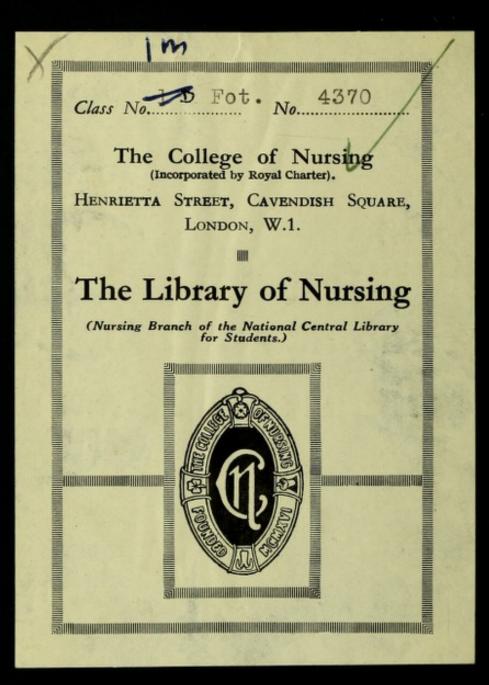
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# SCIENTIFIC ASSOCIATIONS

# HUNTERIAN SOCIETY'S ORATION 1869

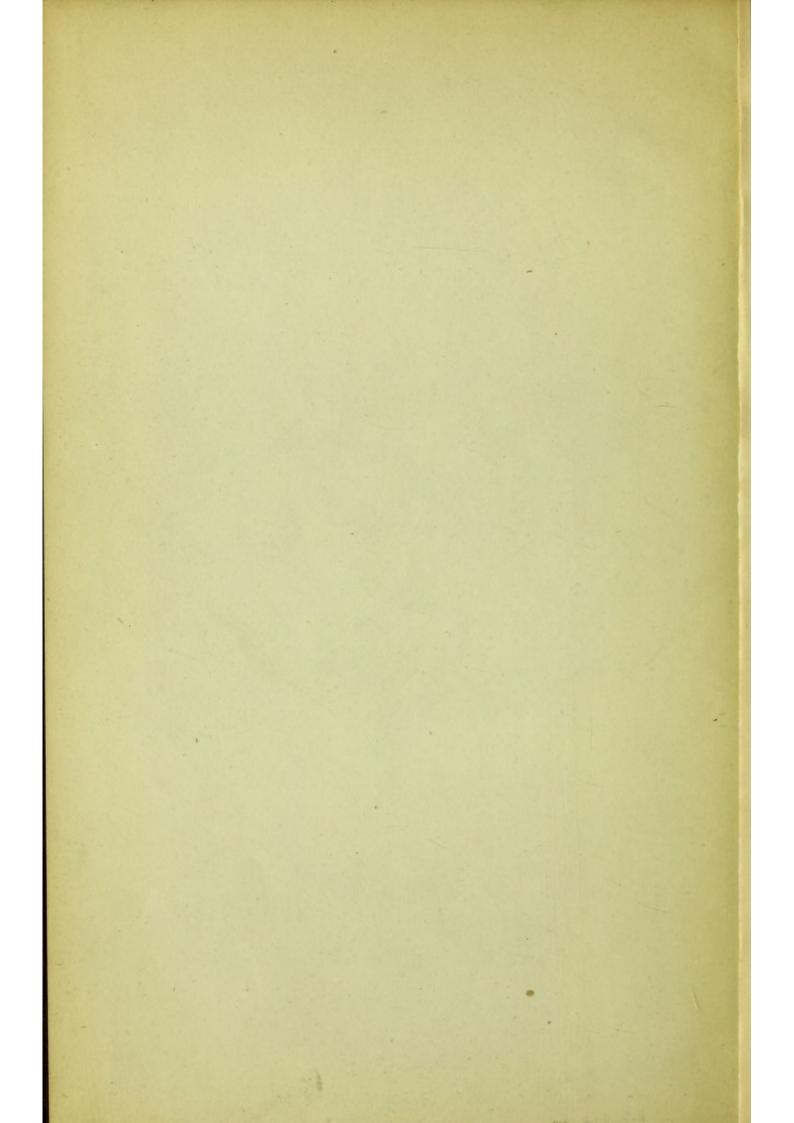
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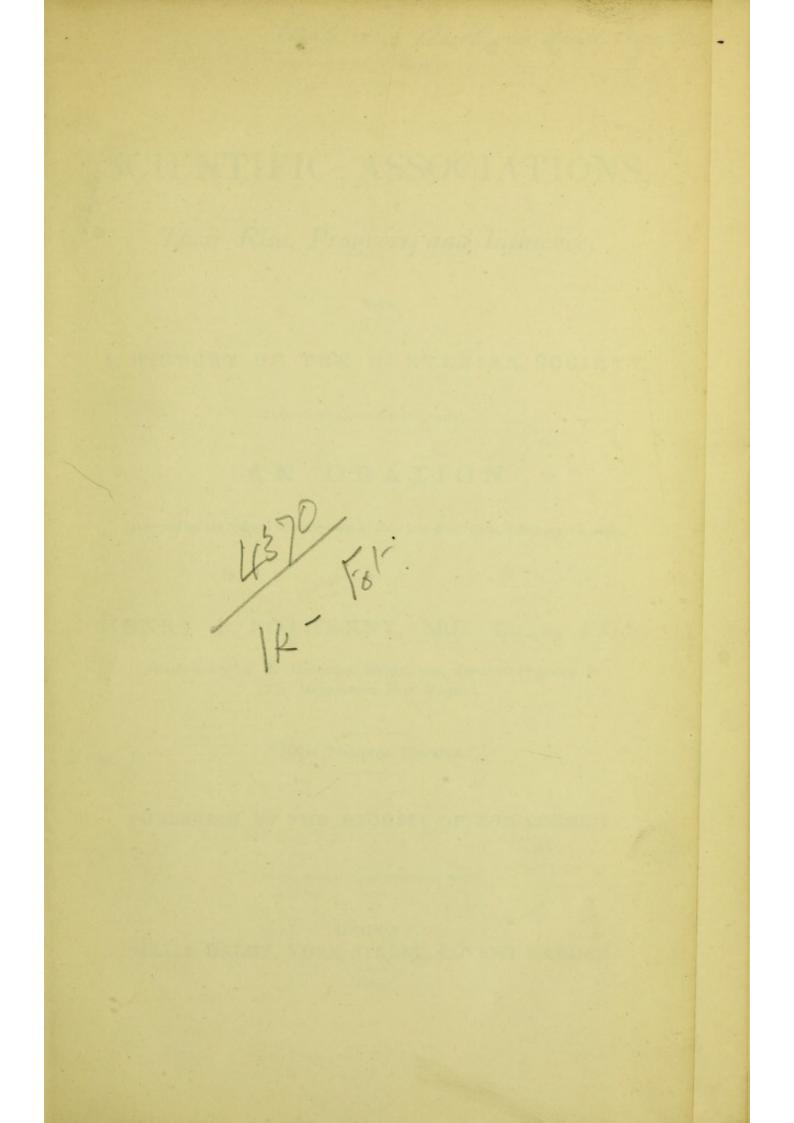


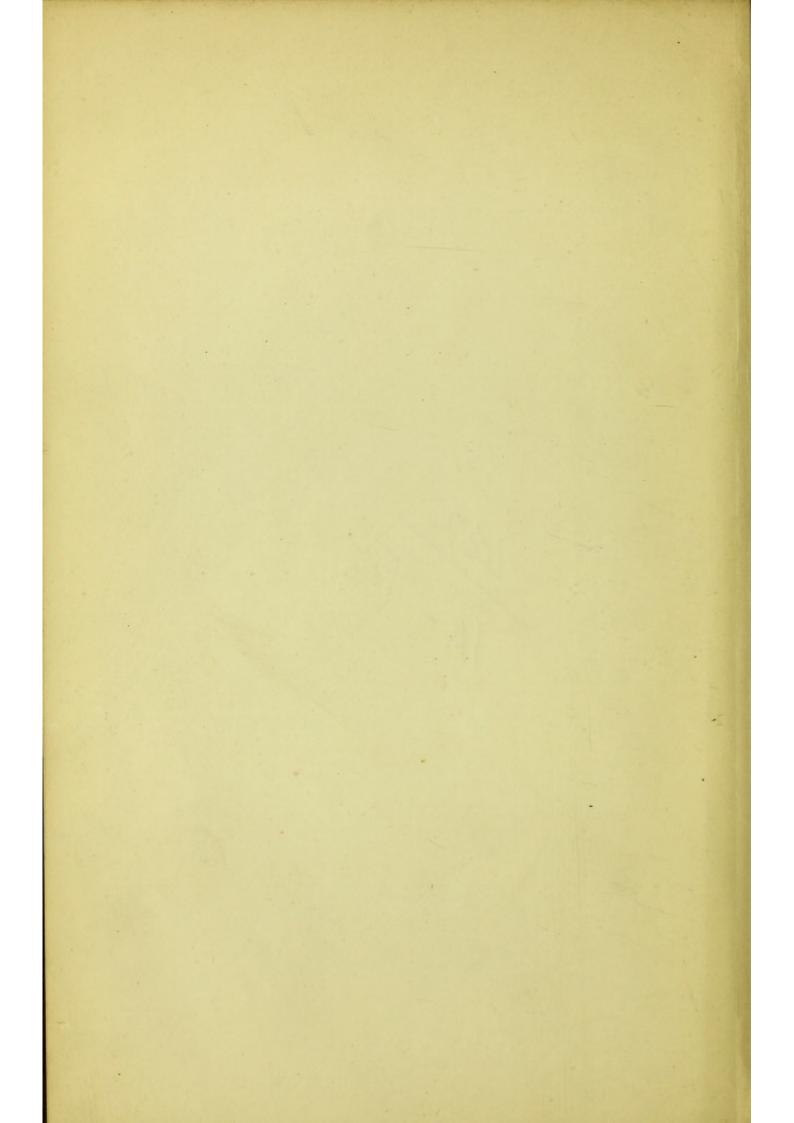












with the author's kind regards.

# SCIENTIFIC ASSOCIATIONS,

Their Rise, Progress, and Influence,

#### WITH

A HISTORY OF THE HUNTERIAN SOCIETY.

# AN ORATION

Delivered on the Fiftieth Anniversary of the above Institution, February 10, 1869,

BY

# HENRY I. FOTHERBY, M.D. LOND., F.G.S.,

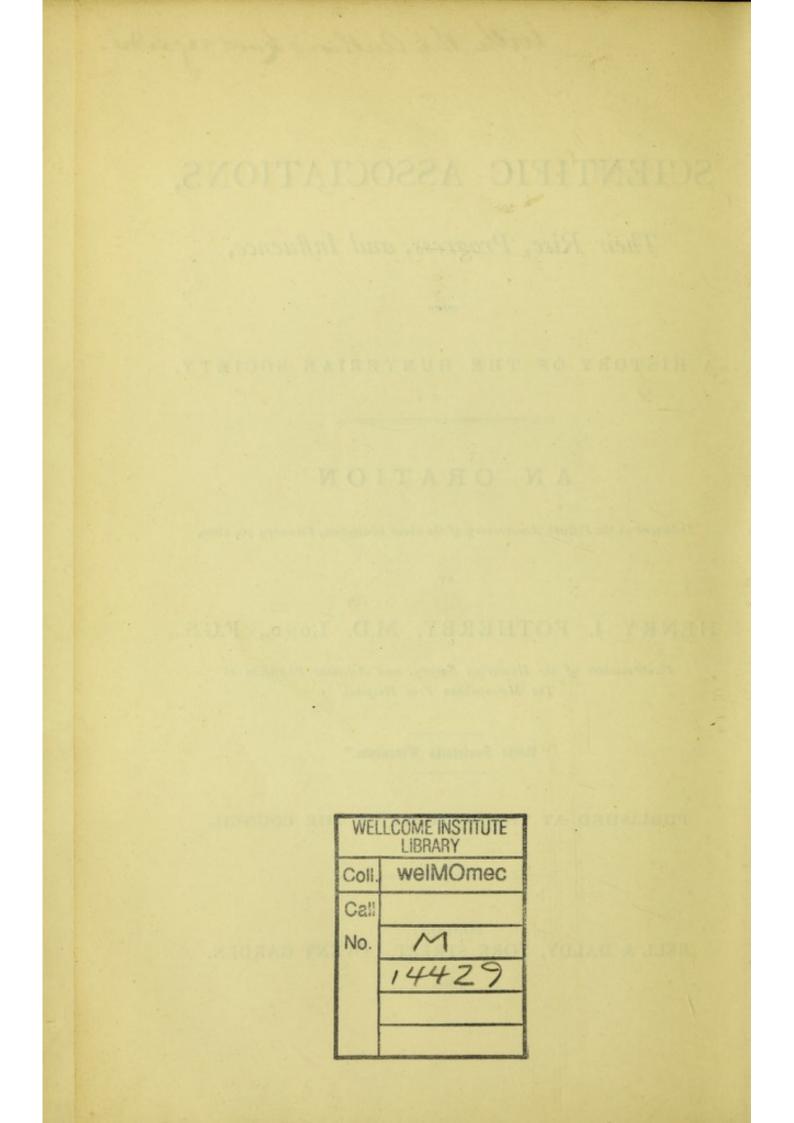
Vice-President of the Hunterian Society, and Assistant Physician to The Metropolitan Free Hospital.

"Ratio Societatis Vinculum."

### PUBLISHED AT THE REQUEST OF THE COUNCIL.

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1869.



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# THE PRESIDENT,

# COUNCIL, AND OTHER MEMBERS

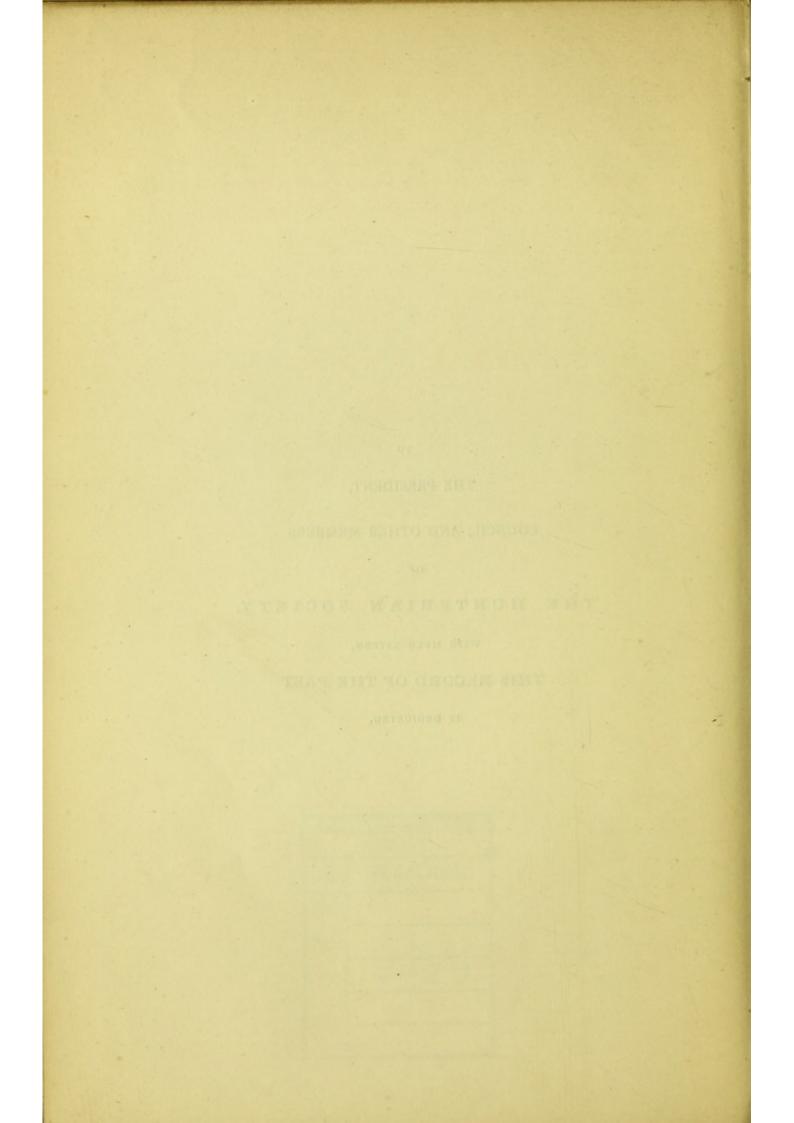
OF

## THE HUNTERIAN SOCIETY,

WITH MUCH ESTEEM,

## THIS RECORD OF THE PAST

IS DEDICATED.



# ORATION.

## MR. PRESIDENT AND GENTLEMEN,

As you are all aware, we this day celebrate, not only the Anniversary of the Hunterian Society, but the Jubilee of its existence. It seems meet, therefore, that we should devote to the Institution itself our especial consideration this evening; and I propose accordingly to give you some account of its foundation, history and progress to the present time; also making such general observations on these associations as the story suggests, and time will allow.

The narrative of the Society's history derives no interest from the halo of romance or antiquity; it claims no heathen divinity in the mist of ages, as the founder, no portents of Nature attended its birth; nor did an Oracle give it laws. No, the particulars form a plain, prosaic, nineteenth-century description, unadorned by any brilliant discovery, and uncoloured by any sensational episode. "Art is long," and fifty years is but a brief space of time; yet we have lived fast during this last half-century, and what

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similar period was ever so crowded with events, so fertile in inventions, so rich in discoveries, and so fraught with blessings to humanity !

But these advances in Art and Science are not the achievements of individuals existing, or of societies established during *this* century. All are alike the offspring of earlier movements, which have taken place in the world's history, at successive eras; and of which, one of the most important occurred during the life-time of the immortal genius, whose name this Society has taken for its title and watchword.

It will, therefore, be desirable to premise this particular history with some short details, respecting the rise and progress of Associations for the promotion of Art and Science, in order to appreciate the circumstances leading to their adoption, and the assistance their establishment has conferred on the several studies thus cultivated. It is indisputable, that they furnish most convenient and advantageous means for the promotion of science; and their universal existence in all periods of intellectual activity would alone prove this assertion. Indeed, their adoption is but the same instinct which leads the barbarian to unite with his fellow, for the mere purposes of support and defence. These ends being secured, the religious idea, as innate to humanity, appears to be the next cause of association; and very early do we find a class, society, or caste, set apart for the culture of religion, as the Druids, the Augurs, and the Levites. With them dwelt the influence and authority which wisdom and learning ever exercise over ignorance, and to them, in virtue of their supposed influence with the gods, was committed equally

the cure of souls and of bodies, and the formation of laws. In the classic systems of Greece and Rome this union of priest and physician was discontinued from the period of the Œsculapian institutions; but with the Gothic and other nations it was long maintained.\* In the early progress of mankind towards civilisation, industry could at first only effect rude manufactures; then followed barter - regular trades-wealth; and with increasing means and leisure, ART was created,simple at first, but ever improving, and developing by degrees -skilled manufactures. Thus, we find in the middle ages, the rise and growth of guilds, fraternities, and companies, for the promotion of these respective trade interests, which were as often held to consist in the guarding of a secret as in the promulgation of a discovery. Frequently, indeed, these unions had to serve another purpose, the defence of the commercial against the military or feudal power, which hitherto omnipotent, or dividing its empire with the church, became jealous of the growing strength of the new order. Hence the condition of chronic warfare, which existed between the free cities of Italy and the Netherlands, and the hereditary lords of the neighbouring soil. But intellect and liberty were on the one

<sup>\*</sup> Even in the fourteenth century, as Meryon states "Europe still teemed with physico-spiritual advisers, by whom all sorts of ridiculous inferences were drawn from hypothetical data. But the dawn of a brighter era was at hand, by slow degrees medicine was made a distinct calling, although the ecclesiastics retained a most tenacious hold on it, seeing that it enhanced their wealth and power." But as Sprengel has it, "Their insatiable avidity, and flagrant incompetency, at length led to the adoption of a decision in the University of Vienna that the hospitals should thenceforth be conducted by the laity for the better care of the sick poor."

side, despotic power and brutal ignorance on the other, so the issue, however delayed, was never doubtful.

Increase of wealth and power in the rising middle class produced yet further improvement in arts and manufactures, and the conveniences and refinements of life. In Italy, the cradle of Art as well as of Science, we find, that societies for the culture of metal works, carving, decoration, furniture making, etc., as well as for painting, existed as early as the thirteenth century in Florence, Bologna, and Venice. By the stimulus they afforded, invention was quickened, and fresh acquisitions were continually made during the following century, until the discovery of Printing gave a mighty impulse to all learning. Indeed, with this art, commences a new era in the history of intellect, and from this period SCIENCE may be considered to take its rise. The accumulated knowledge of past ages was thereby freely disseminated, a taste for physical researches was aroused, fresh enquiries and experiments were set on foot, and their results being published, retrogression or even halting was thenceforth impossible. The discovery struck a fatal blow at MYSTICISM, in all the forms by which it had chained the human intellect through former ages. Knowledge could no longer be confined to individuals, nor to a class, with whom alone, as heretofore, it should live and perish. An art once revealed could no more be lost in the grave of its discoverer, and no fragment of scientific truth, however small, once quarried from the rock, could ever again be buried in the sands of time.

During the latter part of the fifteenth and the sixteenth

centuries, numerous universities and academies arose in Italy. Some of these were for the cultivation of literature and philosophy—at others mathematics and medicine were more especially studied; while yet others professed physical science as their peculiar object.

Tiraboschi mentions 171 of these, but the major portion were of a frivolous, superficial, or grotesque character, the only records of whose short existence are their silly appellations and rules. One of the most famous was the "Academia della Crusca" (of the sieve) a secession in 1582 from the Academy of Florence. Another, established in Rome, in 1603, under the title of "I Lincei," for physical investigations, and of which Galileo was a member, showed more scope and earnestness of purpose, but hardly survived the death of its founder, Cesi, in 1630. A descendant of these societies, "the Arcadians," established in Rome, 1690, and with an appropriate allegorical constitution, exists to this day. Goëthe describes his initiation as a "shepherd," in 1788. Such a motley is characteristic of the Italian character, and could only flourish in a land of Carnivals.

During all this period, libraries of books were being extensively founded; but, besides printing, and, doubtless, as a consequence of its influence, another powerful agent arose to quicken the intellectual activity of the age. By the advent of Luther, the political and the religious world, and, indeed, the social one also, was rent in pieces, and a new class of societies, generated by the more solemn interests thus aroused, and striking deeper roots of thought, sprung up, flourished, and continued to multiply thenceforth. The cultivated mind of Melancthon, eventually, though after a considerable struggle, embraced the Aristotelian philosophy; and by his teaching in the Wittemburg, and other German Universities, and by his work, "Initia Doctrinæ Physicæ," he authorised and approved these researches. Indeed, the principles which encouraged untrammelled investigation, and liberty of judgement in religion, could hardly forbid equal freedom in secular studies.

The first society instituted for the investigation of physical science, as we are told by Weld, was at Naples, in the year 1560, under the title of the "Academia Secretorum Naturæ;" but the ecclesiastical powers which gave Galileo to the dungeon, closed its doors after a short existence.

In England, one learned society was established as early as 1572. This was the Society of Antiquaries, which continued until 1604, when it was dissolved by James, for some umbrage he had conceived against it.\* No academy, or similar institution, up to this time, appears to have existed either in France or Germany; † and numerous though they were in Italy, and much as they may have contributed to the cultivation of literature and philosophy, the inductive sciences received but very little advantage from their establishment. The intellectual world was not yet sufficiently advanced, but the time was approaching: at the end of this century, Tycho Brahe, Kepler, Galileo, and Lord Bacon, were all engaged in those labours which have immortalised their names, and proved the founda-

+ Hallam.

<sup>\*</sup> The present society was established in 1717, and incorporated 1751.

tions of science and inductive enquiry. From this time the taste for physical investigations steadily increased. "The Academia del Cimento," of Florence, established in 1657, is stated to have been the first association which cultivated science with *success*, and although it maintained only a few years' vigorous existence, it published some valuable transactions, including papers by Torricelli and others of note. Its principles will be understood from the fundamental rule as stated by Hallam, that "all that was required as an article of faith was the abjuration of all faith, and a resolution to enquire into truth without regard to any previous sect of philosophy."

France was somewhat later than England in the establishment of scientific societies. It is true, that the institution first founded as "the French Academy," received its charter in 1635, but by this it was enjoined "to meddle with nothing but the embellishment and improvement of the French language." It was afterwards incorporated with the Academy of Sciences, established in Paris, in 1666, and which, subsequently, under a new charter, received considerable powers and endowments.

Two unsuccessful attempts were made here under the patronage of James and Charles I. respectively, to establish a scientific association; the first, a "Royal Academy, or College of Honour," was proposed in 1617, and again in 1635 there was projected the "Museum Minervæ," which was to have, among other Professors, one for Physiology, Anatomy, and Medicine. But the civil troubles were pressing, and this idea was not carried out.

From the year 1645, however, a company of scientific men met from time to time, either at private houses, at Gresham

College, at Oxford, or elsewhere, as the varying fortunes of the civil war allowed, until its conclusion, when they were formally established in 1660, and incorporated by charter in July, 1662, as "The Royal Society." The early history of the great parent of all the scientific societies of England is of particular interest to us, from the part our profession took in its commencement, and it is remarked by Weld how large a number of the founders belonged to medicine. Although the College of Physicians was established in the year 1518, and lectures on Anatomy were instituted some twenty years later, and notwithstanding also the discovery of Harvey had caused no small excitement in the medical world, and many of the physicians of the day were earnest, intelligent men, and addicted to scientific pursuits, yet more than a century elapsed from the establishment of the Royal Society before any association for the especial cultivation of medicine was instituted in London. During all this time the papers on medicine form an integral part of the philosophical transactions; indeed, including those on Anatomy and Physiology, up to the year 1848 they amount to 1,020, or nearly a fifth of It must be confessed that the earlier papers on the whole list. medicine generally betray great credulity and superstition, and are cf little scientific value; "sympathetic powders," and other nostrums, "magnetic cures," "monstrous births," and "curious experiments," without object or meaning, form the staple of their character.

In 1664 several committees were appointed, among which were the Anatomical, and the Chemical, and these were to comprise all the physicians of the society. The meetings were at this time held at Gresham College, and here, in 1666, Lower's experiments on Transfusion were successfully repeated, and again in the year following. As an example of the state of philosophy, even among the learned, it appears that these experiments re-kindled the idea of an elixir of life.

Sir Isaac Newton was elected in 1671, and his papers began to appear (No. 80) shortly afterwards. It was in 1686, however, that the "Principia" were completed, and the entire work published at the expense of the Royal Society. Mr. Weld thus expresses his views upon the subject : "Fortunate, indeed, was it for science that such a body as the Royal Society existed, to whom Newton could make his scientific communications, otherwise it is very possible that the 'Principia' would never have seen the light." Likely enough, certainly, considering that on his election the author was excused the customary shilling a week which the Fellows contributed to the expenses. Time will not allow me to allude to the important communications which were given to the world by the Royal Society from this time to Sir Isaac's death, especially in Mathematics, Astronomy, Optics, and Meteorology. Before the end of the century the cities of Edinburgh and Dublin each possessed a Philosophical Institution, and Newton strongly recommended that societies, with a similar object, should be established in the provincial towns. Accordingly we find their existence at Bristol, Peterborough, and Spalding ; the "Gentleman's Society" of the latter published some interesting transactions, and maintained its existence until a few years ago.

Another important aid to the rapid and sound advance which

scientific investigations were now making, consisted in the improvements effected in philosophical instruments, both as regards their adaptation to the required object, and their superior and more delicate workmanship, in the making and polishing of lenses, the fitting of steel and brass work, &c. Much of this improvement was, no doubt, owing to the existence of a society, the Mathematical, not much known, but established in Spitalfields in 1717, and maintained until 1845, when it was merged in the the Astronomical Society. Principally consisting of tradesmen, and other practical persons, it possessed a good collection of instruments, which were lent to the members, and some of the rules were in quaint accordance with their studies, as for example, the number of members was limited to the square of seven. The Royal Society took advantage of these improvements, and gave a great impulse to Meteorology in 1725, by forwarding a supply of barometers and thermometers to several of their correspondents abroad, with a request for the adoption of regular observations.

The bad ventilation of jails, and the mortality occurring in them from fever, &c., led, in 1750, to the appointment of a committee of the Royal Society for investigating the subject. By the means adopted, in accordance with their recommendations, the deaths in Newgate diminished from seven and eight per per week to two in the month.

While the several departments of science were thus developing under the fostering care of the Royal Society, another class of associations had been growing up so as to become a marked feature in literary and scientific circles. I allude to the prevalence of Clubs, and Coffee House Societies. Certain clubs had indeed

existed much earlier; thus, in the fourth Henry's time, there was "la Court de bone Companie," there was the "Friday Street Club" of Sir W. Raleigh, and the famous "Mermaid," in Bread Street, of which Shakespeare, Beaumont, Fletcher, and others were members. Ben. Johnson patronised, and is said to have founded, "The Devil," in Fleet Street; and "The Civil Club," established 1669, in Water Lane, exists to this day. But in the first half of the eighteenth century these companionships were in their zenith, and it was customary for men of business, letters, and professions, all the world in fact, to make of these places a rendezvous. Dryden, Addison, Steele, Swift, Pope-and of our own profession, Arbuthnot, Garth, Mead, Radcliffe, and others, were well-known faces at the "Kit-Kat," "The Brothers," "Tom's," "Will's," and "Button's," westward, and "Garraway's" in the City; and at these, professional appointments were made and much business transacted. Dr. Cooke states in his life of Sir W. Blizard, that our first president was the last physician who could be seen (professionally) at a tavern.

Let us not regard these associations as merely frivolous or social, and as having no bearing upon science. Political and philosophical, not less than scientific ideas, were changing. Old things were passing away, and all was becompring new. The revolution had given freedom of expression, as well as of thought, on all subjects. Even the dress of men's ideas had changed. The euphemism of the Elizabethan diction, the pedantry of the Stuarts, the formal precision of the Commonwealth, and the heavy pomp of Clarendon, had successively yielded, and eventually merged in the graceful periods and smooth flowing style of Pope, 14

Addison, and Steele; and the influence of this was felt by men of science. The study of, and familiarity with, the best writers is of great importance to original thinkers and discoverers, if only to assist them in communicating their ideas. Had our great master himself been better versed in the classic literature of the age, much that is obscure in his language, and some passages in which, perhaps, the ideas were not well defined even to the author, would have been otherwise expressed. The taste for literature had become general. Circulating libraries, political clubs, and debating societies, by the middle of the century, were rising up and giving evidence of the intellectual activity of the age; to which, moreover, the writings of Locke, Reid, Stewart, Adam Smith, and others, gave depth and precision.

Soon after the death of Newton (1727), commenced that long train of wonderful discoveries in the several inductive sciences which has made the eighteenth century so conspicuous. Sloane, who was chosen president of the Royal Society on Sir Isaac's death, infused great vigour into its proceedings, and his taste for Botany especially favoured the cultivation of that science; which now also received additional impetus from the publication by Linnæus, in 1731, of his system. He visited England five years afterwards, but thirty years elapsed before his classification was generally received. Great additions were also made to the other departments of Natural History, from increased familiarity with foreign countries and their productions; but the load of material thus collected had to wait the many years' labour of Hunter and Cuvier, before it could be understood and scientifically arranged.

Yet it was in Chemistry, above all other sciences, that the change commenced, which ceased not until a complete revolution in its doctrines had been effected. Nor ought we, for the honour of our profession to forget, that having been hitherto studied only as subsidiary to medicine, the rank and importance of chemistry, as a distinct science, was first recognised and strongly advocated by Dr. Cullen, then regius professor of medicine at Glasgow. Franklin gave his first paper to the Royal Society, in 1746, and he was elected a Fellow ten years later; soon after which, the discoveries of Cavendish, Black, and Priestley, began to be published, and excite intense interest in the schools of Glasgow, Edinburgh, and London. But the intellectual movement in this country, inaugurated by the advent of Newton, quickened into activity by the Revolution, and steadily progressing up to this period, had so far no counterpart among the continental nations. The rise of science found no such genial home in Italy, as the growth of art had done in a previous age, for she was now enslaved, both politically and ecclesiastically, and the scientific associations set on foot, had either been suppressed, or perished for lack of innate vitality. The Academy of Berlin was established in 1710, but the German philosophy was immaterial, vague, and speculative, rather than directed to the practical aims which characterise the inductive sciences. The intellect of France, so long slumbering in the Delilah lap of an effete royalty, was, indeed, beginning to awaken; the wind was stirring in the loftier trees which should presently tear up the very ground in its stormfury, and lay the social edifice in ruins. Repressed and silent

at home, the great French philosophers had freely visited England, studied her habits of thought and speech, and caught an inextinguishable love of intellectual freedom; and thus it followed, that as the catastrophe approached, "in Paris the scientific assemblages were crowded to overflowing. The halls and amphitheatres in which the great truths of nature were expounded were no longer able to hold their audience, and in several instances it was found necessary to enlarge them. The sittings of the academy, instead of being confined to a few solitary scholars, were frequented by every one whose rank or influence enabled them to secure a place. Even women of fashion, forgetting their usual frivolity-hastened to hear discussions on the composition of a mineral, on the discovery of a new salt, on the structure of plants, on the organisation of animals, on the properties of the electric fluid." \* Reaumer's fertile and practical mind had been alternately busy with experiments on heat, modes of manufacturing glass, porcelain, iron, etc., and with investigations in Natural History and Physiology.

Duhamel, with an equally discursive genius, contributed largely to the Academy of Sciences, especially on vegetable and animal physiology, and chemistry. Sixty of his papers were published in the transactions. But, beyond all others, did the discoveries of Lavoisier advance our knowledge on these important subjects. He, perhaps, more than any of his great contemporaries, had the power of observation and

\* Buckle's History of Civilisation.

generalisation combined. His contributions to the Academy's Memoirs, between the years 1772 and 1788, amount to no less than sixty, and since when brought to the scaffold, in 1794, he was but fifty-one, in all probability the world has suffered an enormous loss from that detestable crime. The influence upon the scientific world, and the solid gain to society, resulting from the labours of these profound chemists, was greater than what had followed from the discoveries of Newton, inasmuch as the subject concerned all material nature around us, and our personal relation to it. Not only was the true composition of air and water first ascertained, the various gases and their properties distinguished, the Stahlian doctrine of phlogiston abolished, and the real nature of oxidation recognised, but the physiology and the chemical changes of respiration, and the true principles of life and health became understood, and the foundation was laid for our modern hygienic and sanitary regulations. Indeed, the dream of ages, and the object for which so many able lives had been wearily, vainly spent, was now accomplished; but the elixir of life, the philosopher's stone, was revealed in a far different form from what the alchemist had selfishly suggested; the discovery brought prolonged life to the race more than to the individual, and the multiplied wealth and happiness consisted in the general advancement of the common weal, instead of the solitary aggrandisement of a cunning adept.

It is an interesting and important fact that these discoveries should be coincident with the life of John Hunter, and that while he was labouring to read the great riddle of life from one

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point of view, it was being earnestly scanned from another which would prove in the event to be equally important to its comprehension. Hunter was elected F.R.S. in 1767; he had then only contributed a portion of a paper, and it was not until 1772 that he gave his first entire communication, on the *post mortem* solution of the stomach. Between this date and his death, twenty-one of his papers are found in the Transactions. The interest of the Royal Society in anatomy and physiology, is further illustrated by the fact that between 1785 and 1830, the Transactions contain 110 papers by Sir Edward Home, profusely illustrated by splendid plates, which cost the society some thousands of pounds, and which he was subsequently allowed to use in his publication of lectures.

As already stated, the Royal Society was for near sixty years in existence, before any offshoot for the special cultivation of a department of science was established; the first being the "Mathematical Society," in 1717; and the *last* is a new Mathematical Society, lately established. I will briefly mention the others as they were successively founded.

"The Society of Arts" commenced in 1753. Again in 1780-81 and 82, the chemical communications to the Royal Society having been very numerous, a separate "Chemical Society" was formed, composed of the leading chemists. "The Linnæan" followed in 1788. "The Royal Institution" was established in 1805, and in the year following had the good fortune to secure for its laboratory the services of Davy, then a young man of twenty-three. "The London Institution" was founded in 1805, and incorporated in 1807, in which year also "The Geological " originated, and the circumstances of the commencement of the latter ought to be especially interesting to members of the Hunterian Society. It was in 1807 that Dr. Babington invited to his house a number of gentlemen distinguished in mineralogical researches, and induced them to subscribe in order to enable Count Bournon to publish his monograph on Carbonate of Lime;—this object being attained, other meetings followed, and from these beginnings sprang the Geological Society. In 1809 an association was established for the cultivation of Animal and Physiological Chemistry;—Brodie, Babington, Cavendish, Davy, and Home, joined; it took the form rather of a club, but did not exist long.

Astronomy, as the oldest of the physical sciences, and the one on which the highest cultivation has been bestowed, from the earliest ages down to the present day, might well be expected to be the first to occupy the undivided attention of a separate society. But, although several such proposals were made, it was not until 1820 that "The Royal Astronomical Society" was established, the immediate cause being the accumulation of important observations which the Royal Society was unable to publish; and which, therefore, were in danger of being lost to science.\*

"The Royal Asiatic Society" dates from 1823; "The Zoological" commenced in 1826; "The Geographical," and "The British Association," both in 1831;" "The Entomological" in 1833; "The Statistical" in 1834; "The Electrical" in 1837;

\* Weld.

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"The Microscopical" in 1840; "The Ethnological" in 1843; "The Meteorological" in 1850; "The Association for the Promotion of Social Science" in 1857; "The Anthropological" in 1863.

The above is a goodly list of societies, in addition to those earlier mentioned, at present existing in London, excluding as I have done several, which are only associations for publishing books and memoirs, as "The Ray," and "The Palæontographical." This multiplicity, however, is the natural result of the ever increasing amount of knowledge in the special sciences; an addition which necessitates the almost undivided attention of the student, whose object is deep or original investigation in any particular department.

Purely medical societies are of a comparatively modern origin. During the last century they were very few, and generally short lived, their place being supplied by the Royal Society, which freely received medical papers. The last which I have found published in its Transactions, comprising the symptoms and treatment of a case, is one of sarcocele in a Negro, in 1783. This date corresponds with the establishment, by Hunter, Fordyce, and others, of a "Society for the Improvement of Medical and Chirurgical Knowledge." It continued in existence about twenty years or more, and published three volumes of Transactions, the last being in 1812. Although the present "Royal Medical and Chirurgical Society" was founded in 1805, there does not appear to have been any connection between the two institutions, and most probably the earlier one was more of a private nature. Edinburgh had preceded London, by establishing a

medical society as early as 1731, but eight years afterwards it was remodelled so as to include philosophy and literature, and was then named "The Philosophical Society of Edinburgh;" again in 1783 the title was changed, and it became "The Royal Society of Edinburgh." In 1737, however, another medical association was founded in the Northern capital, "The Royal Medical Society," which has continued to the present time. "The Royal Physical" followed in 1771, and Edinburgh now possesses eight medical societies,-our namesake, the Hunterian, established in 1824, being one of these. Of the other Scottish medical associations "The Aberdeen Medico-Chirurgical," dating from 1789, appears to be the oldest. Dublin numbers about half-a-dozen such societies, but they all seem to have been founded within the present century. In London, Guy's Hospital had the honour of establishing the earliest, in 1771, and at its "Physical Society" vaccination was first publicly discussed. Two years later "The Medical Society of London" was started, many members of Guy's Physical being among its founders. The Middlesex Hospital, in 1774, and St. Bartholomew's, in 1796, successively followed with their local societies; the former of these has had interruptions in its continuity, but is now in active existence. The latter commenced in the high and palmy days of Abernethy and Macartney, and the early vigour of Lawrence, and has published a long and important series of papers; it was at first called the "Medical and Philosophical Society of St. Bartholomew's," but on the death of Abernethy his name was substituted for its designation. All the other great Metropolitan hospitals have, within the last fifty

years, established similar associations; but these, from their constitution, are naturally more or less limited in their operations to the individual school they represent. The honour of seniority as the third general Medical Society of London, must, therefore, be conceded to the Institution whose foundation we commemorate this evening, and I therefore proceed to

## THE HISTORY OF THE HUNTERIAN SOCIETY.

It was in the autumn of 1818 that Mr. Armiger, asistant-surgeon to the London Hospital, expressed to Dr. (then Mr.) Cooke, of Great Prescott Street, Goodman's Fields, his regret that there did not exist any medical society in the eastern part of the metropolis. Of the two already established, the "Medical Society of London," was located in Bolt Court, Fleet Street, and the "Medical and Chirurgical" held its meetings still further westward. With these were associated most of the distinguished physicians and surgeons of the day, and the former society had already nearly attained its jubilee.

Mr. Armiger's suggestion, in consequence of his ill health and existing engagements, was taken up by Dr. Cooke, who spoke upon the subject to several professional friends, and eventually called a meeting at his own house, on November 11th. The attendance was very small, and the feeling not encouraging, but, before separating, it was resolved to proceed. Another meeting was held on the 18th, and a third on the 24th, when Sir W. Blizard's approval of the movement was communicated, and Messrs. Cooke and Knight were deputed to confer with him upon the means of carrying out the proposition; and the same gentlemen canvassed the medical men of the city and eastern districts for their support.

Further meetings were held at the house of Mr. J. C. Knight, of New Basinghall Street, Dr. Robinson taking the chair; and it was, at length, determined to inaugurate the Society.

On January 20th, 1819, a general meeting of medical practitioners was convened, at the King's Head, Poultry, when Dr. Hamilton took the chair; nineteen names are given as of those present, and after much discussion, resolutions were adopted, expressive of the advantages of medical societies in general, and of the convenience of having one in the eastern part of London. A committee\* was then appointed to give effect to these views.

At the next meeting (February 3), also at the King's Head, twenty-four gentlemen were present. A report from the provisional committee was adopted, comprising fourteen resolutions, as a basis of the Society, and as fundamental laws for its government; these are substantially the same as those now in force. A paper was then handed round for signatures, and twenty names were appended for membership.<sup>†</sup>

The Society, thus constituted, met again, on February 11th, and Sir William Blizard, having been nominated president, took the chair. Drs. Hamilton and Meyer, Messrs. Vaux and Leese were elected vice-presidents, and a council of twelve were chosen, as indicated in the note below. Dr. Conquest and Mr. Armiger were appointed secretaries. The question of the Society's title

<sup>\*</sup> The names of the Committee were Drs. Conquest, Gordon, Robinson, Messrs. Bell, Knight, Maples, Tyrrell, and Cooke (Secretary.)

<sup>†</sup> A list of these will be interesting, as also of several other gentlemen,

created some discussion; "The London Medical and Physical" had been chosen, but at the president's suggestion it was changed for "The Hunterian Society;" while for a motto, the words "Ratio Societatis Vinculum" were adopted.

A tavern life was now no longer decorous, and a committee being appointed, succeeded after two other meetings were held, in obtaining a home, at the rooms of the London Orphan Asylum, No. 10, St. Mary Axe; where accordingly the Society met, March 31, Dr. Robinson in the chair, and measures were discussed for further recruiting the interest.

On April 21st, the business of the Society commenced, and the president, on taking the chair, passed a warm eulogy on the laws and principles under which the Institution started. Four papers were then read; the first by Dr. Cooke, "On the value of a solution of muriate of soda, in distilled water, as a substitute for spirit of wine, in the preservation of wet anatomical preparations." The other papers were by Dr. Robinson and Mr. Leese, and a second by Dr. Cooke closed the evening.

probably not present at this particular meeting, but who were identified with the original movement, and whose names occur early on the roll of members:

*L. Leese.	G. P. Maples.	T. L. Blundell.	W. Buchanan.
J. C. Knight.	Henry Greenwood.	*G. Edwards.	*H. R. Salmon.
T. J. Armiger.	J. T. Conquest.	C. Meeres.	John Dunston.
J. Simpson.	*B. C. Pierce.	John Martin.	J. Lewis.
R. Dunglison.	*J.W.K. Parkinson.	*Wm. Kingdon.	*Wm. Cooke.

\*James Hamilton. G. C. Collyer.
\*Thomas Bell. W. D. Cordell.
\*Thomas Addison. John Miles.
\*Thomas Callaway. Wm. Warner.
Wm. Brennand. \*Wm. Blizard.

Z. Newington. Be J. Evans Beale. \*J. Thos. Robinson. \*G. John Roberts. B.

Benj. Robinson. \*J. A. Gordon. \*G. Vaux. B. Travers.

Those marked with an asterisk were subsequently chosen to form the Council.

Meetings were thenceforth held every fortnight, almost without interruption, till the end of the year, communications being furnished by Messrs. Callaway, Dunglison, Hamilton, and Kingdon; besides others from the contributors at the first sitting. By the end of the first year, fifty-three names of ordinary members had been entered in the Society's books.

Mr. Armiger's health declining, Dr. Cooke resumed his place as secretary. The meetings during the second year were only suspended from July 12th to October 4th, and the minutes record a larger number of papers, and great general activity. Fresh lodgings now become necessary, and on March 7th, 1821, the new rooms, at No. 18, Aldermanbury, were opened. As the first president sustained so important a part in the Society's early history, I will mention a few particulars of his life, drawn from the excellent memoir by Dr. Cooke, which was read at one of the meetings, in 1835.

At the time the Hunterian Society was projected, Sir W. Blizard was already in his seventy-sixth year, having been born in 1743. He was a pupil of Pott, and the Hunters, and he also studied at the London Hospital, where he was appointed assistant-surgeon, in 1780; he maintained his hospital appointments more than fifty years, resigning office only the year before his death. He served an assistantship in Crutched Friars, and afterwards connected himself with Dr. Maclaurin, a Scotch physician, well known at the time, as a teacher of anatomy. They lectured together, first at a small place in Thames Street, and afterwards in Mark Lane; and in the year 1785 they founded the school at the London Hospital, which was the first regular medical school connected with a great hospital; and, in fact, he chiefly supplied the funds, some thousands of pounds sterling, for building it.

Sir William occupied, in succession, all the offices of honour in the College of Surgeons, and was twice president; being also a Fellow of the Royal, the Antiquarian, and other learned societies. He was a cool, good operator, and introduced several improvements in the practice of surgery. His bodily and mental vigour must have been very great, for he amputated the thigh when he was eighty-four years of age, and on his sight failing, from cataract, in his ninety-second year, Mr. Lawrence operated, by extraction, with perfect success;—venæsection was not then out of fashion, and a few hours after the operation, he was bled to eight ounces.

Our first president was a poet, and frequently wrote verses on public occasions. His last published piece was a soliloquy on sight, written when he was ninety-three! He was also like many other leading practitioners of that and earlier times, an ardent politician and writer. Beside being a most kind-hearted, charitable, Christian man, and considerate towards others, he was very courteous, gentlemanly in his bearing, of cheerful address, a good companion, and rather jocular. With these personal qualities, and a warm, earnest, persevering temperament, the Hunterian Society was fortunate in securing so skilled a leader for conducting its earlier operations; and we need not wonder that in his favour, the law which limited each president to two years' tenure of office, was put in abeyance, and he was elected for a third year's presidency.

In 1825, the council of the Society having determined to institute an annual oration, Sir William was the first selected for that honourable office, which he discharged in the February following.

He was a thorough city man, having practised the greater part of his life in Devonshire Square, while he died in St. Helen's Place, August 28th, 1835. We may truly speak of him as,—

> All bearing, all attempting, till he falls; And when he falls writes "Vici" on his shield.

One more circumstance in the life of our first president, I feel pleasure in stating. He was one of the founders of the Institution, within whose walls we meet to-night. He not only aided in the establishment of the London Institution, but "he was for many years a vice-president. He took an active part in the management, and was uniformly one of its steadiest friends and supporters. Though he was then in his ninety-third year, he presided at the annual meeting shortly preceding his death." His attendance at our own Society was most punctual. The number and value of his communications was great, and they were not confined to the fruits of his personal observation and experience, but included the results of collateral investigations.

Speaking, Sir, in presence of the contemporary and friend of Sir W. Blizard, his history strangely links us with generations long passed away, even with the dawn of modern science, and the social revolutions of more than a century!

#### "There is given

Unto the things of Earth which Time hath bent, A spirit's feeling, and where he hath leant His hand, but broke his Scythe, there is a power And magic." Dr. Robinson succeeded Sir W. Blizard in the presidentship, and on his taking office (1822) the annual dinner was established; an institution ever since religiously observed. But, business was at first combined with pleasure, and for some years the Report was read before the banquet. The Oration also was at that time given on the same day, and whether this combined mental and bodily feast was found to produce indigestion, is not recorded, but at all events the practice was changed.

The Annual Reports of this period speak of regular increase of members, and augmented funds. The Report was first printed in 1825, in which year the list of ordinary members amounted to seventy-nine, and of corresponding members there were thirty-three. It may be remarked here, that the institution of the latter class has been a failure in the Society's operations. It was expected that this free membership would secure in return, an occasional communication from the recipient, but the title appears to be understood as *lucus a non lucendo*,—corresponding members do not correspond.

Until the year 1847, the office of president was regularly held for two years, and the third in succession was the elder Dr. Babington, who, after his term of office, 1824-5, remained until his death a most active and warm-hearted member of the Society. He contributed freely, and his scientific abilities, and kind, social qualities, endeared him much to his fellow-members. During his presidency, at the close of one of the meetings, he stated, that he had in his laboratory, which was close by, an experiment in progress, to which he invited the members' attention. They accordingly repaired thither, and found the experiment to consist in a supply of tea and coffee, etc., for their use. This kind hospitality the Doctor continued to afford until his removal from the neighbourhood, after which, the practice was maintained by the Society itself.

Nearly ten years elapsed before any serious loss was sustained by death, among the leading members. It came, at length, in the demise of Dr. Robinson, of the London Hospital, who had filled from the first the office of treasurer, was the second president, and in the February preceding his death had given the Oration; being throughout a very active contributor, and constant attendant. On October 1, 1828, he had spoken on the subject of Empyema, and, while preparing to leave home, in order to attend the following meeting, on the 15th, he suddenly expired. Information of the event was conveyed to the Society during its sitting, when, immediately after deep expressions of sorrow, the meeting adjourned. In the Report for 1829, the council expressed "a hope, that the deep interest he had devoted, from the commencement of the Society, to the hour of his death, would secure him a lasting name in its history." Like "Old Mortality," I retrace these letters of a fading epitaph.

Dr. B. G. Babington succeeded Dr. Robinson in the important office of treasurer; and as the changes in this department have been few, it will here be convenient to mention those which have subsequently occurred. Dr. Babington held the office until 1839, and was followed by our esteemed, and now venerable friend, Dr. Cooke, who then resigned his post of secretary, which, in conjunction with Dr. Conquest, he had filled from the

year 1820. The energetic zeal and ability with which he had so long discharged his old duties, were equally conspicuous in the management of the new department; whilst his kindness and liberality have still further distinguished the thirty years during which he has held the treasurership, and in the progress of which he has also filled the presidential chair. His prolonged, consistent course, has, indeed, proved his acceptance of the principles laid down by no less a philosopher than Robert Boyle, in these words :-- " the things for which I hold life valuable, are the satisfactions which accrue from the improvement of knowledge, and the exercise of piety." The members of this Society are all deeply sensible of the great obligations due to their founder, and, while thankfully acknowledging his past services, fervently hope, that Providence, which has enabled him to conduct his offspring to the jubilee of its existence, may still spare him, in a green old age, to rejoice over its matured strength and increasing prosperity. May he find that, "Like a morning dream, life becomes more bright the longer we live, and the reason of everything appears more clear. What has puzzled us before seems less mysterious, and the crooked paths look straighter as we approach the end."-(Richter).

The importance of forming a good medical Library very early engaged the attention of the council. Several donations, and some small purchases had already been made, when in 1822 the sum of  $\pounds_{50}$  was voted for its formal commencement; the first book ordered being, very appropriately, "The Works of John Hunter." In successive years the subject was assiduously prosecuted by the council, on the principle of "giving a preference to

rare and standard works, of permanent and established merit, and not usually found in the private library;" further donations of books were also solicited, and the request was generously responded to by the members. In 1830 the catalogue was first ordered to be printed, and in 1834 the increasing size of the Library led to the appointment of an honorary librarian, besides the paid custodian, in whose charge the books had hitherto remained. Dr. Bull was selected for the office, which he continued to fill during ten years, being succeeded by Dr. Munk, who held it for three years. Mr. John Birkett next followed, and tended his ever-growing charge for another decade. In 1843 "a committee was appointed to enquire in what standard works, either French, English, or Latin, the Library was most deficient;" and on the report and recommendations of this committee, a considerable number of volumes was forthwith added. The Library sub-committee has since become a permanent institution for assisting the librarian in his duties.

The successive appointments of Mr. N. Ward, Dr. S. Ward, and Dr. Fowler, closes the list of librarians. It is well, indeed, in the formation of a standard library, when the continued assistance can be secured of a gentleman, who is not only a great lover of books, but also well acquainted with the special literature concerned; the services rendered by such a one are exceedingly valuable, and the more to be commended, inasmuch as the time and trouble bestowed are not easily recognised. I may be pardoned for reminding the members of their especial indebtedness, at the present time, to our indefatigable librarian, under whose care a new edition of the catalogue has been for some months in preparation, and the first copy of which I now place before you, as this day issued by the press.

The Library has continued steadily to increase, and now approaches the number of 3,000 volumes. From an examination I have made of the various sums expended, it appears to have cost altogether, including binding, and custody, not less than  $\pounds 3,000$ . Besides being well stored with the earlier and standard writings, in medicine and surgery, and a large number of volumes in the collateral sciences, modern views and discoveries are well represented, and valuable monographs, atlases, and folios of plates are still being added to those already possessed. These details respecting the Library, have led us in advance of the general history of the Institution, and to this we must now return.

The successive occupancy of the chair, by Mr. B. Travers, during 1826-7, and by Dr. Billing, 1828-9, closes the first decade, and the most distinctive portion of the Society's history; and during these years, the zeal and activity of most of the original members were remarkable. Conspicuous, however, as constantly furnishing papers and joining in the debates, I would mention the names of Blizard, Callaway, Conquest, Cooke, Dunglison,\* Hamilton, Kingdon, Leese, Pierce, and Robinson : among others, joining at various intervals afterwards, should be

<sup>\*</sup> As these sheets are passing through the press I cannot resist paying a tribute to the memory of one of the most valuable of the original members of the Society, which is supplied by "The Times," of April 21st,—its New York correspondent writes: "Robley Dunglison, M.D., well known in Europe and America as an author of Medical and Physiological works, died in Philadelphia, April 1, aged 71. He was born at Keswick, England, in 1798, was educated and began the practice of medicine in London, but in 1824 emigrated to the United States

noted, Dr. W. Babington, and Messrs. Gossett and Langstaff, elected in 1821:-Drs. Billing, Gordon, and Mr. Winstone, in 1822:-Drs. Ashwell and B. G. Babington, in 1823:-Dr. F. Ramsbotham, Mr. Key, and Mr. Law, in 1824:-Drs. Davies, Senr., and Waller, in 1825:-Messrs. Luke and Mackmurdo, in 1826:-Dr. Whiting in 1828. Somewhat later, yet still within the first fifteen years, the society was joined by Sir A. Cooper, Messrs. B. Cooper, Cock, John Adams, Curling, Hilton, and Drs. Bright, Lever, and Little.

It is an interesting study to peruse the Minutes of our early transactions. Short as the interval has been we find on several subjects great changes of opinion have occurred. Some views, then propounded as novelties, have long become settled truths; other doctrines, then in vogue, are now no longer heard of. New ideas, brought forth before their time, were quietly shelved, to be afterwards resuscitated, and again, other subjects were then stoutly contested, which we have not yet been able to determine. To enter into any detailed examination of the work which the society has performed, is quite impossible upon this occasion, but I will give a few brief notes, made in looking over the minutes, and these chiefly from the earlier meetings.

at the solicitation of ex-president Thomas Jefferson to accept a Professorship in the University of Virginia. In 1836 he removed to Philadelphia, and accepted a chair in Jefferson College, one of the leading medical schools in the city, a post that he filled most acceptably until his retirement from its active duties a few years ago. His works are extensive and numerous, enjoying a high reputation as text books. He was a member and correspondent of numerous literary and scientific societies both in Europe and America. Of late years he took great interest in the instruction of the blind, and published a dictionary for their use. His death was somewhat unexpected, being caused by heart disease and dropsy."

D

Small Pox and Vaccination were for several years frequent topics of discussion, e.g.: whether vaccination conferred perfect immunity, or what degree of protection. One paper, in 1819, was entitled "Alleged cases of Small Pox after Vaccination, proved to be aggravated cases of Varicella." The opinion that varicella and variola were but modifications of the same disease, was entertained by several members.

Much attention was paid during this period to Therapeutics, and the actions of both new and older medicines caused prolonged discussions. This was the case with Hydrocyanic Acid, Digitalis, Nux Vomica, Croton Oil, and Quinine. Respecting the last, Dr. Babington enquired one evening as to what extent members present had used it; he presumed that though it was a powerful remedy, yet it could be safely administered. His opinion was confirmed, after subsequent discussions. This was in 1824, and the same year Iodine was introduced to the society, but its chariot was not at first triumphant, many members gave bad reports of it, and the medicine was nearly condemned. One case was mentioned of "a lusty lady who had only used the iodine as an outward application, but had become greatly reduced in bulk, and appeared sinking into the grave." It was said that Dr. Coindet, who had first introduced it, had candidly withdrawn its claims, and that when it apparently succeeded in the removal of glandular swellings, it evolved disease in some internal part in a direct ratio In October, 1828, Dr. Cooke enquired respecting the virtues of Ergot of Rye, "now recommended as a means to excite uterine contraction, and expected by some practitioners to supercede the forceps," &c.

Drs. Waller, Ashwell, and others, gave a good report of the new medicine.

On the subject of Auscultation there is a passing remark by Dr. Robinson in 1821, "that percussion is an important means in detecting pulmonary affections;" but on January 8, 1823, the stethescope is first mentioned, and with no great admiration. It is curious to mark, however, the gradual change during the following years, in the mode of detailing cases of chest affection at the meetings, as the instrument came into general use. Prominent among these are the communications of Dr. Davies, Senr., who joined the society in November, 1825, and who gave a most valuable series of papers in the following years, embodying the new principles of diagnosis. Several of these had reference to the practice of paracentesis thoracis, which operation was much practised about this time, not only in empyema, but in more recent effusions within the pleura.

Concurrent with this advance, we find a little lingering interest in the marvellous. In 1822 a member adverted to the structure of the "Mermaid," then exhibiting in London, stating that "Its external appearance much resembled the description of the animal which had been considered as fabulous, bearing, in many points, a resemblance to the human subject." Again, in 1825, a case of cure by the miracle-monger, Prince Hohenlohe, is narrated with some appearance of credence.\*

\* A superstitious belief was rife at this time in the miraculous efficacy of the Prince's prayers for the sick, when assisted by strong faith and prayer on the part of the patient and his or her friends. It may be easily imagined what class of cases resorted to him, and the marvellous cures which followed !

D 2

A very different paper from this last was read in the same year, by Dr. (then Mr.) Waller, "on Transfusion," which had been recently employed in six cases, of which five were successful. At another meeting, during a discussion on Diabetes, Mr. Langstaff recommended the employment of large doses of opium as very beneficial. In 1826, Dr. Hodgkin read two very elaborate and interesting papers, on Disease of the Aortic Valves, which created much discussion; and in December of this year, Dr. Barry attended two meetings which were devoted to an examination of his views on the Circulation and on Absorption. Dr. Babington, in 1827, described cases typical of the two varieties of Delirium Tremens, in its acute and chronic form, and discriminated their differences, and appropriate treatment.

An important invention was first exhibited, at a meeting of this Society, on March 18th, 1829. Dr. B. G. Babington then brought forward an instrument he had contrived for viewing the parts about the glottis and larynx, and which he termed a "Glottiscope." This instrument, as Dr. Mackenzie acknowledges, closely resembled the Laryngoscope now in use, and in regard to *priority*, Dr. Babington must be considered as the inventor. Yet the instrument appeared to excite very little interest at the time, and was not alluded to in the Annual Report.

The operation of Lithotrity, at that time hardly established, was brought before the Society, in 1829, by Mr. Key, who exhibited the improved instrument, and gave the details of a case. In the year following, the important question of the origin of Tubercle was discussed, in a paper which asserted that bad and deficient food would suffice to effect this condition.

An epidemic of Puerperal Peritonitis in 1830, led to a paper

on the subject, by Dr. Whitehead, in which he characterized the disease as an Erysipelas of the peritoneum. Another paper advocating similar views was read in 1835; and a more elaborate one in 1839, insisted on its identity with erysipelas, and its contagious character.

The last paper I shall mention was a very interesting one, by Dr. Hodgkin, in 1834, on the pathology of Pneumonia; whether the parenchyma of the lung, or the lining membrane of the cells, is the seat of inflammation; the author believed the lining membrane; also that inflammation is of two kinds, plastic and nonplastic, with intermediate varieties and requiring different treatment.

The practice of "Burking," during 1831 was an important subject of interest, and the Society petitioned Parliament for some effectual enactment on the subject of Anatomy. The first advent of the Cholera also led to special meetings and investigations respecting that disease.

The Society now entered upon the second phase of its existence. In the course of 1834, the rooms it had occupied for fourteen years were wanted for other purposes, and suitable accommodation, being offered by the managers of the Congregational Library, at No. 4, Blomfield Street, the establishment was removed thither, and enjoyed during thirty-three years, a most comfortable and convenient home.

This change had one good effect; the list of members, which for some time had been stationary, again increased, and with some fluctuations, continued to do so for several years. These additions, from 1835 to 1837, included Drs. Barlow, Bennett, Daldy, Hughes, Oldham, and Messrs. Solly and Walne; who all proved zealous and continuous workers for the Society, and have since occupied the most important positions in its management; and therefore, we may well believe that some share of the improvement was due to their zeal and influence.

It was in the year 1834, that Dr. Conquest resigned the secretarial duties to which he had been appointed on the institution of the Society, Mr. Ebenezer Smith succeeding to the vacant desk. Members who are conversant with the working of a Society, and know what proportion of the labour falls to this branch of the executive, will appreciate the value of so many years' service. The list of secretaries, however, is long, and for this and other reasons, I shall summarize the names of the subsequent holders of this office in an appendix.\*

With an increasing roll of members the Society's resources were augmented, and beyond the liberal disbursements constantly made on behalf of the Library, several hundred pounds surplus were, at various times, invested in the public funds.

The quiet and unobtrusive course which our Institution continued to preserve, at length, provoked observations. From the Annual Report published in 1846, we learn that some strictures had appeared respecting the non-publication of the minutes of meetings. The council defended their practice by adverting to the fact, as stated in the first printed Report, that "the *chief design* in forming the Association was the extension of scientific and practical knowledge, *by free and candid communication* and discussion" among its own members, and "that there were

See pages 57-59.

many subjects, well suited for private discussion, yet, but ill adapted for a public periodical." And they stated their belief that a contrary procedure would "check communications, and shackle discussion, and be the means of introducing an element totally at variance with the general principles of the Society." Indeed, an examination of the original constitution and early history of the Association will show, that it was founded more for the purpose of private and social discussion, and mutual information, than for the publicity which characterizes other kindred societies. And, which ever system may, on the whole be preferable, there is no doubt that the one adopted confers advantages, not possessed by societies whose proceedings are public property.

Having already given several illustrations of the early transactions of our Association, I would now briefly state, that the communications and discussions of later years, have embraced every topic of medical and surgical interest and enquiry. The great names of a past generation on the Society's roll, have been succeeded by worthy successors, who have carried forward the objects for which it was instituted. Numerous and important papers have been read on the diseases and the pathology of the Nervous system, and some distinct advance has been effected in our knowledge of these, and the same may be said of the affections of the Heart and Lungs. Very interesting communications have been received also, on diseases of the Stomach, Liver, and Kidney.

Ovarian disease, and its removal, the use of the clamp, and other improvements in the operation, have all received early notice and free discussion. Perhaps no subject has, on the whole, received so much attention, and such able exposition as that of Obstetrics, and Uterine pathology generally; for the Society has, throughout, counted among its members several of the best authorities and practitioners in that department. Important papers on the Modern Treatment of disease; on Scurvy; Cholera; Diphtheria; Malarious disease, in its various forms, and its relation to Phthisis; Scarlatina; its connection with Erysipelas; the effects of Railway Collisions; the effects of Tobacco Smoking; Hospital Construction, at home—and abroad; all these and many others will be remembered by those who heard them, as very valuable contributions.

Numerous communications and discussions have, at various times, been given on diseases of the Skin, and this field of increasing interest has lately occupied much attention.

The extensive subject of Syphilis has, throughout, been zealously cultivated; as to its natural history, laws of transmission, pathology, and treatment; and the changes of doctrine on all these points, are well illustrated in the transactions.

In surgery, Hernia, and other surgical affections of the abdomen, have been discussed most frequently; next to these, diseases of the Rectum; the operation of Colotomy, and the several conditions leading to its performance; diseases of the Joints and Excision; injuries to the Head; wounded Arteries and Aneurism, have been subjects repeatedly occupying the meetings.

Ophthalmology did not, during the Society's early existence, receive much attention, but this neglect has been amply atoned for in more recent times, and the improvements, both of the German and English schools, have been fully illustrated.

But the sum of this Society's labours cannot be exhibited

by any abstract, however extended. In virtue of its original and uniform character, its value has consisted rather in the practical information, intelligence, and social feeling diffused amongst its members, through "unreserved oral communications, ingenuous enquiry, and liberal discussion,"\* than in any great discoveries, novel doctrines, or elaborate theories it might propound; and the success of this not less important aim of existence has been *felt* in the experience of the members, rather than *written* in the minutes of its proceedings. It has been, and may it ever so continue, to the practitioner, what *clinical* teaching is to the student,—invaluable.

Beyond these details of its operations, the records of the Society, for the past twenty years, present no important event, no particular change or circumstance in its condition worthy of notice, save one. It has pursued the even tenour of its way under successive presidents, the management has been conducted with perfect harmony and good feeling, and the greatest cordiality and active sympathy has existed between its members, among whom nothing in the shape of "a party" or "clique" has has ever been known. The number of members is at this moment somewhat higher than ever previously, and the successive "Abstracts of the Papers and Proceedings of the Society" fully bear out the tone of congratulation which the Annual Reports assume.

The last important change in the Society's position occurred in the year 1866, when the requirements of a railway company

\* Vide Annual Report for 1826.

compelled us to seek a new habitation. From the increased value of property, and our comparatively moderate income, this circumstance threatened the very existence of the interest. But the curse proved a blessing, through the great zeal and energy of some of the members, who were also proprietors of the London Institution, and among whom I must especially mention Dr. Daldy. Overtures were made by the Society for accommodation in this building, and were met in a liberal and enlightened spirit by the committee of management; who recognising the fact that the general interests of art and science are promoted by the protection and culture of any of its departments, cordially and successfully supported the application at a general meeting of proprietors, and made arrangements for receiving our Society within its walls. Accordingly, on the 10th October, the first meeting of the session was held in the new abode, and, as all the members will readily acknowledge, every consideration was then, and has ever since, been manifested for their comfort and convenience. A valuable personal offer, which merits our especial thanks, has also been volunteered by Professor Wanklyn of the London Institution; that gentleman having expressed his willingness to afford his own services, and the use of the laboratory, in aid of any chemical investigation the Society may undertake.

By this association both institutions will be strengthened, this noble building will acquire an enlarged employment of its capabilities, and the interests of humanity and of science will be simultaneously advanced. Recollecting that the London Institution, not less than the Hunterian Society, was deeply indebted to our first president for its establishment, and that to the close of his life they equally shared his affectionate interest and zealous efforts; their present relationship, could he behold it, would doubtless be most grateful to his spirit, and one is tempted for a moment to repeat the surmise of the heathen poet:

> "Nonne credideres mentem, quæ nunc quoque cælum Astraque pervolitat, delapsam cœlitus illuc Unde abiit remeare, suasque revisere sedes ? "

But leaving such disquisitions, our review of the past will impress us with the more important conviction of the good this Society's labours have already effected in the advancement of medical science, and the mitigation of disease and suffering; while the position it has now achieved, instead of tempting us to rest from our labour, must only serve as a standpoint for surveying the rich prospects of future triumphs, the age is opening to our view, and thus

" Urge us on,

With unremitting labour to pursue Those sacred stores, that wait the ripening soul In Truth's exhaustless bosom !"

I have now almost concluded my proposed survey of the rise and progress of Institutions for the advancement of Art and Science; and superficial and imperfect as the account necessarily is, it will show how the varied intellectual phases of successive eras have been embodied in the societies which have arisen during those periods. Especial attention has been drawn to the great development of natural science

during the past century, and the associations therewith connected; and although these still continue to increase as science makes fresh conquests, a new series of institutions has arisen since the formation of the Hunterian Society, which, I think, may be fairly said to characterize the present age. From the commencement of "The Harveian" in 1831, to "The Clinical" in 1868, more than a dozen medical societies of repute have been established in London; and while some of these, like the older ones, cultivate the whole body of medicine, it has greatly facilitated original enquiry and improvement, that the larger portion of them were formed for the prosecution of special departments, as "The Medico-Psychological," in 1841; "The Pathological," in 1846; and "The Obstetrical," in 1858. Another feature which characterizes these new societies is the great attention now paid to Etiology, and the prevention of Disease, as illustrated in the labours of "The Epidemiological," founded 1850; and "The Association of the Medical Officers of Health," 1856. It is not improbable that the medicine of the coming period will rather be devoted to the causes and prevention of disease, than to its cure; and there are indications that we may be already on the threshold of grand discoveries in this branch of science, discoveries which will be equivalent in the field of medicine to those of Newton in physics, by which we may not only recognise the secondary causes of diseases, but deduce the general laws under which these become active, and their correlation with the conditions and laws of health.

However this may be, the character of the movement is obvious. Besides the associations I have just named, we have institutions for the idiot, the paralytic, epileptic, the scrofulous, the lame, the blind, the deaf, the teeth tormented, the diseased in throat, lungs, hearts, uterine system, bladder, rectum, skin, and probably for others of the remaining organs; and in addition to these direct succours to human infirmities, the public health is further assisted by Social Science Associations; lectures, pamphlets, reviews, &c., on sanitary science, and by various other means to the same end. A consideration of all this organized and associated effort, leads to the suggestion that the present period may be fairly termed the age of HUMANITARIAN SCIENCE.\*

Turning, at length, from these historical details, and impressed as we all are with the value and importance of scientific institutions, let us now examine a little into the exact character of the advantages such a Society as our own Hunterian presents. They are both *scientific* and *social*. In the scientific aspect, for instance, we are benefitted by the greatly extended area thus furnished, in which we can gather our facts, frame our theories, and form our conclusions upon any subject of investigation.

Again, allowing that all observers are equally qualified by

<sup>\*</sup> In a very able paper read by Professor Leone Levi, at the last meeting of the British Association, entitled "On the Progress of Learned Societies, illustrative of the Advancement of Science in the United Kingdom during the last Thirty Years," and of which paper I was not aware until this oration was in the press, he comes to the following among other conclusions—"That during the last thirty years there has been a large increase in the number and membership of learned societies in the United Kingdom, a fact indicative of a decided advancement of Science." He estimates that 15 out of every 10,000 of the population are directly

nature, education, and experience (which is not the case), for the formation of just conclusions, all are not *similarly* qualified; there are diversities of gifts, even with the same spirit. One man naturally, or by education reasons by Induction, another is more gifted to seize great principles by Deduction. This one has a better capacity for observing, selecting, and recording facts and figures, and can thus contribute important materials for enquiry, but he does not so readily apprehend the general principles to which these lead. That one is deficient, in patient detail and accuracy, yet gifted with ideas of which other workers must prove the truth or error. And it is, perhaps, in labour of the latter kind, the intelligent accumulation of facts and experience, that the value of these societies especially consists. Powerful, inventive minds dwell apart, and work alone, but they

occupied in the cultivation or promotion of science, that there are upwards of 120 learned societies, having an aggregate of 60,000 members, and he gives the following statistics of the progress of these societies during this period :

	Increase per cent.	Decrease per cent.
"The Royal Societies of London and Edinburgh, and Royal	per cente	
Irish Academies	-	9
"Mathematical and Physical Science-Statistical, Mathemati-		
cal, Astronomical, Chemical, Meteorological, and Geological	179	-
"Biological and Natural History-Ethnological, Anthro-		
pological, Entomological, Zoological, Linnean, Horticul-		
tural, Botanical, and Agricultural	48	
"Geography and Archæology-Geological, Antiquarian,		
Archæological, Historic, Architectural	373	-
"Applied Science-Society of Arts, Engineers, Architects,		
Pharmaceutical, Medical, Actuaries, United Service -	453	-
"Miscellaneous Sciences-Royal Asiatic, Philological, Mi-		
croscopical, Numismatic	82	-
"Scientific and Philosophic Institutions	149	_
"British and National Associations	486	_
"Total average increase	172	_"

must bring their conceptions to the test of *proof*, which can only be procured by such an accumulation of facts as no single observer can furnish; and therefore, without the aid of the latter, the suggestions of the former would prove of little value to the advancement of science.

"Thoughts are but Dreams till their effects be tried."

Take for example, Goëthe's conception of the whole plant being virtually existent in the flower; it was a poetical idea which susequent observation proved to be well founded. But how frequently are such conceptions otherwise. It is stated, that out of the many hundred analogies propounded by Oken, in his "Physiophilosphy," there are hardly twenty that are sound. And would not that grand suggestion of the homologies of the skeleton, have been buried with the numerous Idols which he had feigned to himself, had it not been patiently worked out, and placed on a scientific basis by the labours of an Owen !

Although these considerations apply to individuals as well as to societies, yet they have an important bearing upon the latter, for if theories and suggestions were more generally submitted to the criticism of a meeting, before they were published in the form of a book, much labour and outlay now expended in the formal refutation of crude and unsound ideas, would be saved.

Again, there are differences of temperament, educational tendency, or natural bias, the resulting errors of which, are corrected by personal discussion. One man is slow and hesitating in reasoning, or careless and inexact in detail. Another is hasty, and enthusiastic, while prejudiced in favour of, or against, one particular set of views. Often, too, it occurs, that points of importance are elicited during a discussion, previously unrecognised, either by the author or his auditors. Thus mind, brought into collision with mind, strikes out new views and trains of enquiry; and, in the event, a propounder finds his opinions either confirmed, modified, or corrected, as the case may be. His fellow members, too, return to their desk or daily round with fresh vigour, and with a power of observation and analysis increased, beyond what the mere subject of discussion involved :

> "Man with his fellow man more closely bound, The world without begirts and cramps him round; But in that world within, the widening soul, The unpausing wheels in swifter orbits roll; There how the innate powers of mental life, Are shaped and quickened by the friendly strife."

It is rarely that one set of views is *wholly right*, or another system of belief is *altogether wrong*; and the strong partisan of a creed, be it in science, philosophy, politics, or religion, has much to learn of those from whom he differs, and ever something to modify or expunge from his own views. Truth, though clear and pure as the light, is yet like it compounded of several coloured rays—all play their part—all are necessary, and it is only by the harmonious blending of the whole, that perfect uncoloured vision is obtained.

Again, these societies confer an especial privilege upon the private practitioner, by the exhibition of specimens of pathology, the zeal of our associates, especially those who are hospital teachers, supplies for examination and discussion. Under the difficulty of private *post mortem* examinations, this practice greatly assists in maintaining a familiarity with morbid changes of structure.

One other advantage available was alluded to by my predecessor, in this place last year, although in this Institution it has not yet been sufficiently utilized. I allude to the facilities afforded, either by committee or otherwise, for the collection of data upon any special subject of interest or enquiry.

But there is another aspect in which medical societies may be viewed, viz .- their social and ethical influence. Morally regarded, our professional life, under the corroding effect of incessant anxiety and responsibility, and the withering influence of advancing years, seems to require some element that will stimulate its flagging current, and preserve its freshness and buoyancy. In student days, our Alma Mater was the bond of brotherhood and the spur of honour, which called forth our feelings of love and chivalry; so in after life, amid the toil and cares of practice, we need something in the place of this, and such a resource these associations supply. The bickerings, the petty jealousies, the envyings, and ill-feelings among us are, alas! so notorious, even to the laity, as to have passed into a proverb; it ought not, need not, so to be; we are fellow soldiers, fighting the battle of humanity against disease and death, enduring the toils and pains of warfare, whilst our share of casualties equals that of the regular military service. Very recently, one of that noble corps the Medical Officers of Health, fell at his post on our right; and now another of the same

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devoted band succumbs, fever smitten, on our left; \* each one dying for his country as truly as ever soldier at the cannon's mouth, and equally worthy of its gratitude and praise.

> "Hic manus ob patriam pugnando vulnera passi : Quique pii Vates et Phœbo digna locuti, Inventas aut qui vitam excoluere per Artes, Quique sui memores alios fecere merendo."

Let us then close our ranks, cultivate brotherly love and esteem, and root out from our breasts all those unworthy feelings which are so apt to spring up, even with good men, in a state of isolation, or confinement to one narrow round of thought, feeling, and personal interest. If the medical men of a district or locality would avail themselves more freely of the opportunity for intercommunion which such a Society as this affords, I am very sure there would be a large addition to the sum of personal happiness, and mutual professional esteem, thereby secured, and I would venture to suggest that additional arrangements might be adopted, so that more use should be made of this social element of our Institution. One or two evenings in the session, say one in the Christmas week, might well be given up to a "Conversational meeting," not a "Conversazione" in the conventional sense of the word, but a meeting for friendly intercourse; and, without doubt, the improved personal

<sup>\*</sup> Dr. Hillier, F.R.C.P., Medical Officer of Health for St. Pancras, died, after a short illness, November 7, 1868, aged 37; and Mr. Thomas Orton, M.R.C.S., Medical Officer of Health for Stepney, died of fever, January 30, 1869.

acquaintance hence resulting, would afford much pleasure, and greatly promote this important object.

One more suggestion I would offer under this head, namely that on the occurrence of any doubt or difficulty respecting professional conduct, intercourse, or usage, a member might seek the advice and assistance of his fellow-members in their collective capacity, as a Court of Honour. The Society's laws already provide for criminal cases, and might well be extended to civil causes and enquiries.

While thus detailing the benefits these institutions confer, we must not forget that, like all inferior good, they bear within some seeds of evil that will germinate if not carefully eradicated. Unless the earnest love of truth predominate over self-esteem, personal discussions are apt to intensify prejudices, and opposition of views to issue in personal pique and wounded vanity; especially when some mistake has been exposed, or a pet theory mercilessly demolished. Some temperaments are less tolerant of opposition than others, but the best aid and corrective next to moral self-control, is a thorough course of mental training, which, invaluable in youth, is a most profitable exercise and recreation in after life, and had John Hunter better subjected himself to this discipline, the terrible scene in the board-room of St. George's Hospital (October 16th, 1793) might not have occurred, and his life have been preserved for additional years of labour, and to yet greater achievements in science.

But whether we are working in societies or individually, it is now more than ever important that we pursue our investigations with a clear, unbiassed mind, earnestly seeking Truth. The

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great question, to which all our enquiries more or less directly tend, is still, as of old, the science of Life. And, although the labours of the past century have given us a wonderful acquaintance with its phenomena, laws, and immediate causes, yet the search mounts still higher; and, while ultimate causes are demanded, the controversy becomes sharp and keen. The old cry that such knowledge is too vast, or the enquiry impious, will no longer avail-we must not, we cannot impose barriers; but, be our religious belief what it may, let us rest assured that true faith can never suffer permanently by the discoveries of science. During the transitional stage of undetermined theories, there will be doubt and perplexity; and it may be, that even, ultimately, some readjustment may be necessary in the claims of what is now known as Orthodoxy. But, meantime, good feeling and philosophy alike demand that no immature, unwarranted conclusions be received as clear, ascertained truth, and propounded to the multitude in popular lectures on Biology.

The primitive doctrine of the vital principle represents it as a completely separable, and entirely distinct agent or existence, which, added to organized matter, constitutes a living being. This view is presented to us in the earliest records of our race, and has continued under various modifications to form the basis of all religious creeds. Hunter's belief in the existence of a vital force, as an entity and cause of organic phenomena, was equally pronounced, although his views of its connection with matter pointed to a more intimate union; the *materia vitæ diffusa*, as it was termed. But this view, equally with the more ancient and general doctrine, is now on its trial, although

the refutation has yet to be given by those who deny it, and claim that a peculiar form or motion in matter, determined by chemical laws and affinities, is the sum and substance of what we term Life.\*

Dr. Bence Jones fairly puts the question as it now stands, in these words: "The general ideas regarding the union of ponderable matter and force in the biological sciences, have not as yet got beyond the second or Hunterian stage; and there are many who think that the first stage, which consists in the complete separability between matter and vital force, still represents the whole truth."† The fact that nucleated or spheroid protoplasms constitute the basis of all forms of life, and that life is maintained and extended by matter, *chemically* the same, does not warrant the assumption lately made, that the formation of these protoplasms is a nere chemical process, nor the confident

† Although the Hunterian views are said to form the second or intermediate stage of opinion, viz.:—The *incomplete separability* of matter and force, or life; the third, or modern idea, being the *complete inseparability* of matter and force (the word life being no longer applicable); yet I doubt whether Hunter's views virtually differed from the old doctrine; his expression, "the *materia vitæ diffusa*, of which every part of an animal has its portion," was a convenient one in discussing the vitality of the blood; and such statements as "Life, then, appears to be something superadded to this peculiar modification of matter—mere composition of matter does not give life, for the dead body has all the composition it ever had—Organization and life do not depend the least on each other "—imply the idea of a *complete* separability. Most probably his opinions were not fully settled, and varied under different aspects of the subject.

<sup>\*</sup> The term vital principle, force, or life, is used in a general sense, without distinguishing it from mind, and soul, or spirit; for although the first is chiefly the subject of discussion, the phenomena of mind are equally claimed as explicable upon the principles of materialism, and however some of this school may limit the application of such views, others repudiate all alleged spiritual agencies and existences, and appear in so doing to be only pressing these doctrines to their legitimate and consistent conclusion.

enquiry why we should not agree "that all the acts manifested by living beings from the humble infusoria to the highest intelligent man, were properties of the matter, as the properties of water were of the gases?" This is, indeed, to have Nature cry :—

> "Thou makest thine appeal to me: I bring to life, I bring to death: The spirit does but mean the breath."

Such assertions, in my humble judgment, are only warrantable when, from the chemical elements of tissue, the philosopher can build up a similar tissue, or a single cell of which such tissue is composed, and until that be done, the vitalist has a right to consider and term it an organism plus life.\*

Another learned professor of great authority declares that,

<sup>\*</sup> I venture to append in support of this opinion the views of an original observer and distinguished physiologist, that will carry, perhaps, equal weight with those above quoted. Dr. L. Beale in his recent lectures (Medical Times and Gazette, November, 1868), says : "While in all living things, chemical and physical actions occur, there are other actions, as essential as they are peculiar to life, which, so far from being of this nature, are opposed to, and are capable of overcoming, physical and chemical attractions; and I think the evidence which I shall adduce will convince you that the non-living matter is the seat of the physical and chemical phenomena occurring in living beings, but that the vital actions occur in the living matter only." And in another lecture he refers to "the vague generalisations of those who persist in authoritatively declaring the dogma, that the changes occurring in cell growth are merely mechanical and chemical; although they are unable to produce, by any means at their disposal, a particle of fibrine, a piece of cartilage, or even a fragment of coral. They avoid the difficulty as regards the germinal matter by ignoring its existence, and attribute to 'a molecular machinery' which the mind cannot conceive, and which cannot be rendered evident to the senses, all those wonderful phenomena which are really due to vital power."

"In the eye of science the animal body is just as much the product of molecular force as the stalk and ear of corn, or as the crystal of salt or sugar. . . . avowing nakedly what many scientific thinkers more or less distinctly believe. The formation of a crystal, a plant, or an animal, is in their eyes a purely mechanical problem, which differs from the problems of ordinary mechanics, in the smallness of the masses and the complexity of the processes involved."\* This view is illustrated by a description, and a comparison of the phenomena of crystallization with those of the germination of a grain of corn. But again I submit, that molecular force, minus life (hitherto so termed) has never yet produced one grain of corn, and that the analogy, or rather the identity, thus sought to be established, exists in appearance only. Indeed, the old specific distinctions, between organic and inorganic processes, are not at this moment substantially impaired by any of the discoveries respecting the molecular action of organic growth, which improved scientific means have enabled us to effect.

No, there is much yet to be known and effected before the ultimate laws and principles of the cosmogony can be laid down, and, meanwhile, premature assertions on this great question can but provoke useless discussion, and impede the acquirement of truth. There is an immense, untraversed field still open before us, deep as earth's centre, and high as the stars, for steady, persevering investigation, and experiment. By

\* Professor Tyndall, at the British Association Annual Meeting, 1868.

these means we may be led, but somehow, in due time, doubtless we shall be led, to see within THE VEIL.

> "Let knowledge grow from more to more, But more of reverence in us dwell; That mind and soul, according well, May make one music as before, But vaster!"

> > THE END.

# APPENDIX.

## LIST OF OFFICERS OF THE HUNTERIAN SOCIETY SINCE ITS INSTITUTION, 1819.

#### Presidents.

Elected.

#### Elected.

1819. Sir William Blizard, F.R.S. 1822. Benjamin Robinson, M.D. 1824. William Babington, M.D., F.R.S. 1826. Benjamin Travers, Esq., F.R.S. 1828. A. Billing, M.D., F.R.S. 1830. Thomas Callaway, Esq. 1832. Charles Aston Key, Esq. 1834. B. Guy Babington, M.D., F.R.S. 1836. Bransby B. Cooper, Esq., F.R.S. 1838. John Whiting, M.D. 1839. John Scott, Esq. 1841, William Cooke, M.D. 1843. James Luke, Esq. 1845. Richard Bright, M.D., F.R.S. 1847. G. W. Mackmurdo, Esq., F.R.S. r848. F. H. Ramsbotham, M.D. 1849. Edward Cock, Esq. 1850. H. Marshall Hughes, M.D.

## 1851. John Adams, Esq. 1852. Henry Greenwood, M.D. 1853. John Hilton, Esq., F.R.S. 1854. J. C. W. Lever, M.D. 1855. T. B. Curling, Esq., F.R.S. 1856. G. H. Barlow, M.D. 1857. S. Solly, Esq., F.R.S. 1858. W. J. Little, M.D. 1859. D. Henry Walne, Esq. 1860. James Risdon Bennett, M.D. 1861. George Critchett, Esq. 1863. Thomas Mee Daldy, M.D. 1865. Alfred Smee, Esq., F.R.S. 1866. Stephen H. Ward, M.D. 1867. John Jackson, Esq. 1868. Thomas. B. Peacock, M.D. 1869. Jonathan Hutchinson, Esq.

#### Treasurers.

Elected.

1819. Benjamin Robinson, M.D. 1829. B. G. Babington, M.D., F.R.S. William Cooke, M.D. 1839.

#### Orators.

1826. Sir W. Blizard, F.R.S.	1850. George Critchett, Esq.
1827. W. Babington, M.D., F.R.S.	1851. J. C. W. Lever, M.D.
1828. Benjamin Robinson, M.D.	1852. W. J. Little, M.D.
1829. Benjamin Travers, Esq., F.R.S.	1853. T. Mee Daldy, M.D.
1830. J. T. Conquest, M.D., F.L.S.	1854. G. Owen Rees, M.D., F.R.S.
1831. C. A. Key, Esq.	1855. Joseph Ridge, M.D.
1832. Archibald Billing, M.D., F.R.S.	1856. Thomas Callaway, Esq., Junr.
1836. B. B. Cooper, Esq., F.R.S.	1857. Henry Oldham, M.D.
1837. B.G. Babington, M.D., F.R.S.	1858. William Munk, M.D.
1838. William Coulson, Esq.	1859. Alfred Smee, Esq., F.R.S.
1839. William Cooke, M.D.	1860. Stephen H. Ward, M.D.
1840. Thomas Bell, Esq., F.R.S.	1861. W.W.Gull, M.D., D.C.L., F.R.S.
1841. S. Ashwell, M.D.	1862. Thomas B. Peacock, M.D.
1842. S. Solly, Esq., F.R.S.	1863. Robert Barnes, M.D.
1843. F. H. Ramsbotham, M.D.	1864. John Jackson, Esq.
1844. John Hilton, Esq., F.R.S.	1865. Jonathan Hutchinson, Esq.
1845. J. Thomson, M.D., F.L.S.	1866. D. de Berdt Hovell, Esq.
1846. John Adams, Esq.	1867. W. Sedgwick Saunders, M.D.
1847. G. H. Barlow, M.D.	1868. J. Braxton Hicks, M.D., F.R.S.
1848. T. B. Curling, Esq., F.R.S.	1869. Henry I. Fotherby, M.D., F.G.S.
1849. J. R. Bennett, M.D.	White annipolit Railwards are seen

#### Librarians.

Elected.	Elected.
1834. Thomas Bull, M.D.	1857. Nathaniel Ward, Esq.
1844. William Munk, M.D.	1862. Stephen H. Ward, M.D.
1847. John Birkett, Esq., F.L.S.	1866. Robert Fowler, M.D.

#### Secretaries.

Elected.			R	esigned.
1819. J. T. Conquest, M.D., F.L.S.	-	-	-	1834.
1819. Thomas J. Armiger, Esq.	-	-	-	1820.
1820. William Cooke, M.D	-	-	-	1839.
1834. Ebenezer Pye-Smith, Esq	-	-	-	1837.
1837. H. M. Hughes, M.D	-	-	-	1843.
1839. Miles Beale, Esq	-	-	-	1842.
1843. T. Mee Daldy, M.D		-	-	1846.
1843. Edmund Lloyd Birkett, M.D.	-	-	-	1849.
1846. Stephen H. Ward, M.D	-	-	-	1847.
1847. Edward Lloyd, M.D	-	-		1849.
1849. W. F. Cleveland, Esq	-	-	-	1852.
1851. S. O. Habershon, M.D	-	-	-	1854.
1852. J. S. Ramskill, M.D	-	-	-	1857.
1854. S. W. Devenish, M.B	-	-	-	1846.
1857. Henry I. Fotherby, M.D., F.G.S.	-	-	-	1868.
1865. William Allingham, Esq	-	-	-	1869.
1868. John J. Phillips, M.D	-	-	-	
1869. James Edward Adams, Esq.	-	-	-	



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