THE HARVEIAN ORATION, DELIVERED AT THE ROYAL COLLEGE OF PHYSICIANS, Friday, June 25th, 1880.

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[Concluded from page 118 of last number.]

ONE principal trait which strikes me in studying Harvey's character is his devotion to the one object of his life; from the time when as a student at Padua his attention was drawn to it, he seems to have been absorbed in his pursuit, and to have made all that occupied him serve to further it. During the time that he was physician to the King, we do not see him led away by the excitements, pleasures, and intrigues, which in those days, more than at present, occupied the minds of all connected with the Court. His mind was so absorbed in his studies, and so bent upon solving the great problem of his life, that he led the King to feel interest in it also; and it is said of Charles I., that he ended by becoming an amateur doctor, especially fond of physiological pursuits. It was in his presence that many of the vivisectional experiments were performed upon the royal deer, which the King was glad to sacrifice in the pursuit of science. Of course, the courtiers followed their sovereign's example; and, in consequence, were present at many of Harvey's experiments, and among them may have been some in whom a love of science was really kindled, as in the Marquis of Dorchester, who conceived a true affection for medicine, and late in life became a Fellow of the College of Physicians, and its munificent benefactor.

The chief incidents of Harvey's life are too well known for it to be needful for me to relate any of them again, and with his character we have all a very intimate acquaintance. The opinion we have formed of him may, I think, be summed up in the words of one of his most recent biographers, viz., my friend Dr. Da Costa of Philadelphia. "Harvey," he says, "illustrates in his person the finest traits of the intellect and heart of the profession. Not content with the known, but with an eye ever eager to read the unknown; reverencing the past only in so far as it may help to enlighten the future; patient of search, keen of thought, ingenious of surmise, but holding surmise only as the glimmer of a truth to be ascertained; bold of inference, yet trying that inference by every test alike of thought and experiment before it is proclaimed law; consummate in reasoning and in the art of clear expression—we have in *his* mind the best example of a scientific mind; and in the qualities of candour, perfect benevolence, serenity, self-sacrifice, and untiring devotion, he nobly upheld the character long generations of good men have given to his calling when most perfect."

Such a man as described above can hardly, I say, be termed heartless and devoid of all feeling by any vehement antivivisectionist, yet, to quote his own words, he writes: "I had frequent recourse to vivisection, employing a great variety of animals for this purpose." Again, we may notice that the character of Galen was one wholly opposed to that of heartlessness or thoughtlessness. We read of him as a man with a reverent mind, piously disposed by nature, and often referring in his writings to "the will and government of the Almighty." I will quote a little sentence out of one of his works on the use of the human body, which he himself calls "nothing less than a hymn of praise to the Creator." He says: "I hold true piety to consist, not in the sacrifice of bulls or the raising of incense, but in studying to know myself and to make known to others the wisdom, power, and goodness of God." These are the words of a man who tells us that his knowledge was obtained by the inspection of the bodies of living animals, who gives us minute particulars of the experiments that he made upon them, and the conclusions that he drew from these experiments.

It would obviously be improper for me to remark upon the moral character of those men who in our own time have practised vivisection with (as we shall all admit) great benefit to our art; but I am may, before closing this part of my subject, remark that the late Dr. Hope was perhaps one of the greatest vivisectionists of this century, and I think I need not say that his character as a religious man is as well known as is his character as a scientific one.* Those who are not well ac-

quainted with his life and work, so well known to all professional men, I would refer to the account of the numerous experiments that he performed upon donkeys, rabbits, etc., in the presence of some of our profession who may be here to-day. I am prevented by want of time from dwelling more at length upon this subject, and from mentioning many results obtained by vivisection which we know to be most valuable.

As is well known, Harvey spent some time at Oxford, before he was made Warden of Merton College. In company with the King and his followers, and during that residence, he was on intimate terms with Dr. G. Bathurst of Trinity College, brother of the then President; and by Dr. Bathurst he was materially assisted in the hatching of eggs for his experiments. It so happens that Trinity is the College at Oxford of which I have the happiness and privilege of being a member, and one may be excused the pardonable pride of being familiar with the rooms which he probably frequented, and in which his researches were prosecuted.

I do not find any allusion in Harvey's writings to the state of medical studies or teaching during his connection with that University. Had he referred to this subject, we might have learnt from him more than we now know of what has been of late in certain quarters termed the "Lost School of Medicine" at Oxford. If such a school have been lost, will not those who miss it do well to amuse themselves by looking for it in such a distant time? inasmuch as statistics relating to the numbers of medical degrees conferred by Oxford since this year, and extending as far back as 1665, give no indication of such a bereavement. In truth, though there was a School of Anatomy at Oxford in the time of Willis, Lower, and Millington, there never was at Oxford a medical school in the present and ordinary sense. For example, we learn from certain statistics produced by our late Professor of Botany, Dr. Daubeney, at the British Association meeting at Nottingham in 1866, that in no decennial period during the two hundred years following the date above-mentioned did the average of M.B. degrees exceed *three*; and in the year 1857, my friend Professor C. Pearson, then Fellow of Oriel (now a member of the Legislative Assembly in Victoria), in a pamphlet upon Oxford in relation to medicine, stated that the number of medical degrees conferred at Oxford was then two a year for the previous twenty-five years. On the other hand, I was a few weeks ago told by Professor Rolleston that at the then approaching examination for medical degrees at Oxford they had ten candidates for the first M.B., with the prospect of sixteen more in the following examination—*i.e.*, in all, twenty-six—a striking contrast to the numbers above quoted. And no fewer than forty-six men, all having passed through the *complete course of Arts* before entering on medical study, are eligible this year to go in for the two medical examinations for the M.B. degree. These figures require no comment. A correspondent at Oxford observes: "I believe our numbers for the M.B. here are nearly equal or quite to those at Cambridge, though we have not sacrificed our Arts curriculum at all." I would here call attention to an interesting pamphlet lately published by Dr. Pye-Smith on "Medical Education, Apprenticeship, and Medical Degrees", in which many hints of importance on the subject of university training in connection with medicine are noticed. I would also here refer to two pamphlets which have lately been published on the relation between the University of Oxford and medicine, but which have only just been brought before my notice; viz., one of Dr. S. West, Medical Tutor to St. Bartholomew's Hospital, entitled "The Proposed Establishment of a Medical School in Oxford"; and one by Dr. Seymour Sharkey, Resident Assistant-Physician at St. Thomas's Hospital, on "The University of Oxford and Medical Education".

The expression "Lost School of Medicine" at Oxford, to which I have alluded, by whomsoever used, must be the outcome either of gross and culpable ignorance or of a calumnious spirit.* Anyone who knew Oxford thirty years ago, and is able to compare the state of physical and biological science, as it there and then existed, with that of the present time, will reflect upon the teaching operations and advantages offered by means of lecture-rooms, laboratories, museums, etc., and the degrees in physical and natural science conferred, and on the general progress and interest in such subjects which have of late been brought about at Oxford—an interest greatly quickened, if not originated entirely, by the endeavours of the present Regius Professor of Medicine, Dr. Acland.

Of late years, the University of Oxford has made great and carefully considered additions to the means of scientific education and research. Thirty years since, there were scarce any scientific laboratories, and any means of practical work for either professors or students. It is indeed surprising that Daubeney, Buckland, Baden Powell, Kidd, and Strickland,

* See his Memoirs, written by his wife.

* A correspondent, alluding to this matter, refers to "the abominable tissue of malignity and folly which has been woven together on this subject".

were able to maintain, by their personal dignity and character, the position of physical science as they did when there was a general decay of interest in scientific studies at Oxford.

Between 1845 and 1850, a determined effort was made to add to the classical and philosophical education of this great University the means also of studying material theories in the widest way.

As regards biology, under the auspices of one college, Christ Church, a large collection was formed by Dr. Acland, with Victor Carus, Dr. Melville, and others, as assistants, on the type of the Hunterian Physiological series. The University possessed no collection and no work-rooms, no apparatus of this kind. The museum, now so well known, was, under great difficulties, founded, and provided with laboratories for practical work in physics, in chemistry, anatomy, and certain parts of medicine. The physiological collection formed at Christ Church, together with the pathological collection which had been organised, and that of Van der Kolk, which had been removed from Holland, were placed there. A sanitary laboratory was commenced by Dr. Pöde, and carried on for some years by Mr. Donkin, who has just now removed to St. George's Hospital as Lecturer on Chemistry.

The University has laid down that the service it can render to the medical profession and to biological study is to provide every facility for scientific education, and to prepare men in the best way through this channel for the clinical schools of the metropolis; and though much has to be done, what has been done is beyond expectation. The interest in medicine in Oxford has never, as far as is known, been equal to what it now is. Dr. Rolleston's workrooms of anatomy already require extension. He has added vast stores to the series of human and comparative anatomy and histology in every direction. The chemical laboratory, though excessive twenty years ago, has lately been more than doubled, and new professorships in various scientific directions are sought for and will probably be obtained. The Radcliffe Library, transferred to the Museum, has had its grants more than trebled, and £300 yearly are spent there in scientific periodicals. This noble dome has become famous as the reading-room to the Bodleian, being open from ten in the morning till ten at night, for all true students of every country. Thus Radcliffe has acquired an altogether new life and usefulness, never before contemplated.

I may add, on the best authority, that, although it is the desire and intention, as far as may be, of the authorities at Oxford to encourage by fresh measures a general and liberal education in the case of all students in medicine, by requiring them to pass the final examination for the B.A. degree at least one year before coming up for the first M.B. examination, efforts are nevertheless being made to increase still more than before the opportunities and capacities for teaching subjects cognate to medicine. This is not the opportunity, nor have I time at my disposal, for enlarging further on the plans which I have the best warrant for alluding to as impending.

In testimony that the system which has now been in operation for some years in the Lost School of Medicine has not been inoperative or unsuccessful, I may allude to the fact that the medical graduates of Oxford enjoying posts of high trust in our hospitals and schools of the land are now, and for some years have been, very considerable in number.

Before closing my remarks on Harvey's teaching, let me allude to the general tone and spirit which is conspicuous in all his writings. Like Galen, like Newton, like blind Galileo, like Faraday, he was a firm believer in, and recogniser of, the hand of the Divine Architect in the structure of the outer world of nature. In many of his most important researches, he presses forcibly the consideration of an Infinite Mind as directing, controlling, co-ordinating—a Power which brings into play those wondrous physical laws and appliances which, when summed up and in action together, constitute what we call "life".

Search for truth, and illustration of Divine will and workmanship, and not public applause or personal advancement, appear to have guided him almost entirely in his proceedings; and he perceives, as he says, in the mysteries of nature, "a kind of image in relief of the Omnipotent Creator Himself," who works with "inimitable providence and intelligence, and most admirable order". Of course, in this he fully recognises design or purpose in all such things as can be understood, though he takes care to show that fanciful and hazy ideas of design, or so-called final or teleological causes, are not, of necessity, to guide us to conclusions, and that our first duty is to inquire whether the thing "be or not, before asking wherefore it is"; and though, as he says in one place, "Respect for our predecessors and for antiquity at large inclines us to defend these conclusions to the extent that love of truth will allow", yet he pins his faith to no man's sleeve, and silyly taunts those who philosophise by tradition, and are, for authority's sake, bound to see the physic of Galen, as he says, "kept in good repair", asserting that

the facts cognisable by the senses wait upon no opinions, and that the works of Nature bow to no authority, and even point out where Aristotle was mistaken. Had he lived now, he would, doubtless, have acquiesced in that teaching of evolution and adaptation in animal and vegetable life with which, originally started by Wolff in the middle of the last century, then taken up by Lamarck, we have become familiar under the name of Darwinism; not, of course, those extreme opinions on this subject by which some, indeed, out-Herod Herod.

As regards final causes as a guide or help in physiological research, much was said, in a very masterly manner, by Dr. Acland in his Harveian Lecture for the year 1865.* I do not propose here to dwell upon the subject. I quite agree with many, such as Dr. Daremberg, the most recent of the medical historians, that we cannot base our biology on preconceived notions of the utility of structure; but it does not follow that we must resist the "avertment of our senses", and shut our eyes to the plain and obvious instances of design and mental purpose which surround us in wondrous and countless multitudes, and which, as it appears to me, no sane man can ignore. It is impossible to say how far our Harvey was guided to his results by considering the use and purpose of the valves in the veins. Let the principle of Design (*i. e.*, of a Designer) hold its proper position, and be received as apart from scientific research, and let there be, to use an expression which fell from the present excellent Bishop of Carlisle, a "scientific frontier" in this matter. The old "*à priori*", or inferential, and the more recent inductive reasoning have different functions and spheres of action,† and need not clash. Let us, if practicable, make an "*Eirenicon*". I am induced to say this as, no doubt, great harm arises from extreme doctrinaires on both sides vilifying those who do not see through their own spectacles. What possible good can come from the vehement and repulsive way in which observers like Herr Hückel assail the theologian? And again, what good can arise from that most untrue and insulting statement which a certain foreign ecclesiastic is reported in the *Times* as having last week made in a public address in London, viz., that "in our day, in order to get rid of the idea of God, hypotheses had been devised making one species the outcome of another," etc.?

As regards the doctrines of evolution, selection, survival of the fittest, and adaptation, etc.—doctrines widely and deeply affecting all physical science at the present time—I for one would, in all humility, agree with the Right Hon. Mr. Justice Fry, who observes that "no new difficulty whatever is introduced by Mr. Darwin's demand: there is something to rejoice at in the extension to the lower animals of the realms of morality and religion;‡ and again also with Professor Asa Gray, when he observes: "We are sharers not only of animal but of vegetable life, sharers with the highest brute animals in common instincts and feelings and affections. It seems to me that there is a sort of meanness in the wish to ignore the tie. I fancy that human beings may be more humane when they realise that, as their dependent associates live a life in which man has a share, so they have rights which man is bound to respect." As Dryden has it:—

"From harmony, from heavenly harmony,
This universal frame began;
From harmony to harmony,
Through all the compass of the notes it ran,
The diapason closing full in man."

I can see no difficulty in considering protoplasm or slimy bathybius (if such a substance really exist, which appears doubtful) as the physical basis of life, in looking upon the living structure in plants and animals as the same. The hypothesis of natural selection, first set forth by Wells, and then developed by Wallace and Darwin, is, at any rate, a most probable and very workable one, and may account for the numberless varieties which we observe; species being evolved from species. But then it must be held that this process and progression have been from the first foreseen and arranged as much as is the progress in the growth of the heart of the foetus through the cardiac types of the various

* Harvey left directions that the oration should be given in Latin. This was the first year in which the oration was properly given in English. It had been given partly in Latin and partly in English by Dr. R. Lee, whose oration was never published.

† On the relative value of the two philosophies of the ages of the old world, the following remarks are noteworthy: "Cicero brings everything, as much as possible, to a practical standard. If the question arise between the study of morals and politics, and that of physics or metaphysics, he decides in favour of the former, on the grounds that the latter transcends the capacities of the human intellect; that in morals and politics we are under obligations from which in physics we are free; that we are bound to tear ourselves from those abstract studies at the call of duty to our country or our fellow-creatures, even if we were able to count the stars, or measure the magnitude of the universe." The above passage I quote from Browne's *History of Roman Classical Literature*.

‡ See article in the *Contemporary Review* for December 1879, on the Utility to Flowers of their Beauty, bearing on one part of Darwin's argument. I would here also draw attention to a pamphlet by the same gentleman on *Darwinism and Theology*, 1872 (reprinted from the *Spectator*, September 1872).

series of animal life until that of man—the most consummate of creatures, to use an expression of Harvey—is arrived at. Quite as much intelligence and intention is implied under the supposition of gradual evolution, as if each process of development and growth were the result of incessant immediate creative acts. There is, in reality, no more dethronement of the Deity in one case than in the other; though irreverence and agnosticism, so termed, may use the argument as a tool for their own purposes. A Divine plan in nature and in man exists in either case. As Sir Edmund Beckett has tersely put it, “The first living thing of any kind, and the first egg or other seed that ever grew, wants accounting for just as much as the first tiger’s claw, or elephant, or man.” The difficulties in the one case, if such there be, exist in the other; only, so to say, at a stage anterior or farther back. As Asa Gray remarks, “The throwing back of design ever so in time does not harm it, nor deprive it of its ever present and ever efficient character.” And as the late and revered Canon Mozley observed, quoted by the same author, “If design has once operated in *rerum natura*, as in the production of a first life-germ, how can it stop operating, and undesigned formation succeed it? It cannot; and nature having once existed, the test of the amount of that intention is not the commencement but the end; not the first low organism, but the climax and consummation of the whole.” I do not propose to occupy further time with this subject—one, however, which as physiologists and physicians we cannot in these days set aside.

Naturally anxious to discover any particulars of Harvey’s life which have not been adduced as illustrations of his character, I have made search in various directions, as no doubt all previous Harveian orators have done.

I fail to discover any positive indication in Harvey’s writings of his own theological views, excepting in his will, which is most religious in tone. I find also but little indication of his political opinions. It does not appear why he parted from the service of his beloved and respected master the King.

There is an incident, however, in connection with the subject, which I found related in the Clarendon State Papers (vol. i, p. 574), and which is amusing: a letter dated May 1636, at Cologne, in which the Earl Marshal (Arundel and Surrey) speaks of a visit to the Jesuits’ fine new church and college in that place, where he says, “They used me with all civility”; and goes on to observe, “I found in the college little Dr. Harvey, who means to convert them”. Whether the good fathers were amenable to Harvey’s assaults, the deponent sayeth not. In other letters in these papers he is alluded to. Thus, in one dated at Ratisbon, he is spoken of as “honest little Harvey”, “whom the Earl is sending to Italy about some pictures for His Majesty”.

Another reference to Harvey I have met with, but which I have never seen mentioned in any regular notice of him. It is well known that, at the battle of Edgehill, Harvey withdrew, as Aubrey tells us, along with the Prince and Duke of York, who had been commended to his care, under a hedge, and took out of his pocket a book and read.* But he had not read very long ere a bullet from a great gun grazed on the ground near him, which made him resume his station. Aubrey says nothing more of this passage in Harvey’s life; but I find it related in Wood’s *Fæsti Oxonienses* (vol. iv, p. 46), that Adrian Scrope, Esq., a most valiant person, did most loyally attend His Majesty at the fight of Edgehill, where, receiving several wounds, he was stripped and left among the dead as a dead person there, but brought off by his son, and recovered by immortal Dr. Will. Harvey, who was there, but withdrew under a hedge with the Prince and Duke while the battle was at its highest. It is reported that Adrian Scrope received nineteen wounds in one battle in defence of His Majesty’s cause.

This retirement of Harvey recalls to memory the history of Pliny the elder, his presence of mind and philosophic spirit in circumstances of bodily danger.†

* The incident is charmingly depicted by my friend Mr. W. Yeames, R.A., in his picture exhibited at the Royal Academy in 1871.

† Letters of Pliny the younger to Tacitus describe the death of Pliny the elder (Ep. vi. 16-20)—“He was at Mesenium, in command of fleet. On August 24th, at 4 p.m., after bathing, etc., and whilst studying, a cloud of unusual size and shape was pointed out to him by his sister; he ascended eminence to see what it might be, but was too distant. Therefore he left, with note-book in hand, in a galley, asking his nephew (Pliny the younger) to accompany him, but who did not do so. He launched quadrigæ to assist the inhabitants in getting away. He himself steered to point of danger, dictating as he went along his observations, etc. Soon ashes fell on deck and stones and pumice stone; the reflux of sea and fragments of volcano presented obstacles to progress; he hesitated whether to go on: finally, decided to steer for villa of Pomponianus—Fortune favours the brave; steer for the villa of Pomponianus. This was at Stabiae, divided from coast near Vesuvius by an arm of sea. His friend there was consoled by Pliny, who, to show his unconcern, bathed and supped with cheerfulness. Meanwhile, from many parts of volcano were flames, which were heightened by darkness of the night. He retired to rest, and snored. Soon the court from which the chamber opened was choked by cinders, pumice, etc. He was awakened, and went Pomponianus. Consultation whether to go or not. Repeated

The contemplation of Harvey’s work and method of thought leads me to call to mind the names of those who have been conspicuous for their efforts after his example, in the way of direct observation and philosophical experiment, many of whom have been brought under our notice in an interesting article on the College of Physicians recently published in the *Quarterly Review*,* and were amongst the early founders of the Royal Society. Such were Glisson, Willis, Wharton, Millington, Lower, Needham, Langreish, Sir William Watson, Baker, Wells, Marcet, Young, Woollaston, Prout, Latham, Arnott, Blackall, Marshall Hall, and Bence Jones (whose personal kindness and services to myself in earlier life I am ever bound to hold in grateful remembrance), Robert Lee, etc.; and many others of the present day, as Lionel Beale, Brown-Séquard, Burdon Sanderson, Ringer, Pavy, Ferrer, Hughlings Jackson, etc.

Nor are those to be passed over who by their observation at the bedside have worked out pathological and clinical problems, and, in their trials of the operations of remedial agents, have been no less philosophically employed than those above enumerated [and which of us is not daily carrying out Harvey’s method in some degree in all we do?] Such pre-eminently were Sydenham, Baker, Mayerne, Dover, Gooch, Bright, Addison, Billing, the lamented Murchison (so lately removed from us), Sir Charles Locock, Sir William Jenner, and Sir George Burrows; and last, but not least, the classical and venerable Sir Thomas Watson, the Nestor and glory of our profession, and, as the late Dr. Latham once said to me, “the greatest physician of the age”, whose writings, equal to those of Goldsmith or Addison, at once charm and instruct us, and who, *plenus annis, honore, et amore*, still, we are thankful to say, lives and works among us.

Here let me beg you to realise the loss which our College and the world at large have sustained in the death of Dr. Alfred Swaine Taylor, who but quite recently was removed from among us at a ripe age, *felix opportunitate mortis*. We shall all agree, I think, in feeling that by his death we are deprived of one who had one of the highest and widest reputations (and this he fairly earned by the singular exactness of his experiments and the clearness of his methods), especially on the subjects to which his energy was chiefly devoted—toxicology and medical jurisprudence, upon which subjects he has left behind him some valuable writings. While medical science has been enriched by his labours, we must remember that the legal profession also owes him a large debt of gratitude, for his work on *Medical Jurisprudence* has become a text-book for the criminal lawyer. Engaged as he was for many years (indeed, for nearly half a century) in the most difficult inquiries connected with medical jurisprudence, it is the highest praise to say of him that there is no instance where his services were not for the vindication of truth and justice. His authority and technical knowledge were never perverted from their proper objects. Innocence could as confidently rely upon him for its vindication as crime dreaded the patient unravelling and explaining of its nefarious and often murderous operations. Those who enjoyed his more intimate acquaintance must feel that they have lost an instructive companion and a genial friend, and one whose accomplishments made his society valuable to all who take an interest in the progress of science. This College will gladly acknowledge that it owes a lasting tribute of honour and respect to the memory of Dr. Alfred Swaine Taylor as one of its worthiest Fellows. On whom will his mantle fall?

I must now fulfil the pleasing task imposed by the positive direction of Harvey, given to anyone undertaking the duty of the day; viz., the “Commemoration of all the benefactors of the said College by name, and what in particular they have had done for the benefit of the said College, with an exhortation to others to imitate those benefactors, and to contribute their endeavours for the advancement of the Society, according to the example of those benefactors, and with an exhortation to the Fellows and Members of the said College to search and study out the secrets of nature by way of experiment, and also, for the honour of the profession, to continue in love and affection among themselves, without which neither the dignity of the College can be preserved, nor yet particular men receive that benefit by their admission to the College that they might expect, ever remembering that ‘Concordiâ res parvæ crescent, discordiâ magnæ dilabuntur.’”

For a great many years after its foundation, as I am told by our ex-

shocks of earthquake. Half burnt pumice in air menaced danger. Decided to go into open fields. Tied cushions on their heads. Although now day elsewhere, the darkness here was most dense. Walked to coast, but could not embark. He spread linen cloth and lay upon it, asking for draughts of water. Then flames and sulphurous smell put his companions to flight. He arose by assistance of two slaves and fell down dead, suffocated, as I imagine, by the dense vapour and the functions of his stomach being disordered, which were naturally weak, and liable to obstructions and difficulty of digestion. On third day his body was recovered entire.”

* See number for October 1879, p. 351.

cellent and zealous treasurer, Dr. Farre, the Oration was always called the oration or speech "in commemoration of our benefactors"; so that, as we say at the University of Oxford, this is, in fact, our "Commemoration Day".

The names of all benefactors and their good deeds, and the results achieved by Fellows and Members of the College, have been so often mentioned in this place, that it would not become me to occupy much time in alluding to them.

Imprints, let us recall the name of the learned Linacre, our first president, who, inasmuch as it was at his suggestion that Henry the Eighth founded our College, may be considered our greatest benefactor and the establisher of our medical republic, and whose private collection of books became the germ of our first library, the chief part of which was destroyed by the great fire in A.D. 1666. After Linacre come the profound scholar Caius, the first teacher of anatomy in England; Cakdwell and Lord Lumley, the founders of the surgery lectureship; Gilbert, the father of English experimental philosophy, the results of whose scientific experiments were so influential on the mind of Galileo, and whose work has been so highly praised by Bacon and Hallam, and who enriched our College by the gift of his library and instruments, etc.

Following, we have Harvey himself, who, in addition to other good actions towards us, built us a library and a museum containing his books and instruments, and after his death, the exact place of which we do not know, bequeathed to us "bookes and household stuffe, pictures and apparell", including his "best Persia carpet" and "blue imbroyed cushion", "one pair of brass and irons with fireshovell and tongues of brass"; his preparations of the blood-vessels and nerves, which we possess, being given to us, in 1823, by the Earl of Winchelsea.

After Harvey, we have the names of Goulston, who founded the lectureship which bears his name, and for which, "if possible, a body was to be procured";* of the munificent and erudite Hamey, who, as Dr. Munk, in the College Roll, observes, vied "with his contemporary Dr. Harvey in the frequency, and rivals him in the extent, of his benefactions to the institution", opportunely rescuing the College from Parliamentary confiscation, and among other things doubling the premium to the Harveian Orators,

"Whose antimonial cup we now possess";

of the Marquis of Dorchester, who bequeathed valuable treasures to our library; of Croone, who established the lecture with which his name is associated, and also provided for a sermon in conjunction with the lecture (to the discontinuation of which I am not able to find any historical allusion); of Edward Brown, the persevering traveller; of Hall, a liberal benefactor to the College; of Bailie, who during his life gave us all his anatomical preparations; of Dr. Arthur Farre,† who has given us his portrait, and has so recently and so munificently added to our library.

Our treasurer informs me that he is daily expecting the bequest of Dr. Lambert (a Fellow of the College, who died in 1877) of £1,000.

Need I mention the numerous donors of the various valuable paintings and other works of art in our rooms, of which a complete list is published in Dr. Munk's Roll, including the portrait by J. Keenan of Sir George Smith Gibbes, a Fellow of the College (1798), and the Harveian Orator in 1817, presented to us by his grandson, Mr. Heneage Gibbes, a Licentiate of the College, which has just been varnished and cleaned?

I will here say that we, this very day, become possessed of two most valuable gifts from my highly esteemed and valued friend Mr. George Richmond, R.A., of whom with regard to myself I may say, as Harvey said of a patient of his: "He's my most particular friend, and I'm his most attentive physician."‡ Of these, one is the portrait of Sir William Butts, one of the physicians to our founder Henry VIII (mentioned by Shakespeare), painted in oils by that artist from the original Holbein in the possession of Mr. W. H. Pole Carew, of Antony House, in Cornwall, who graciously consented, at my request, to permit the picture to be made;§ the other is a crayon drawing of Dr. Mayo, our former president, from the year 1857 to 1862, taken shortly before his death in 1871.

Owing to circumstances, our College, like many other institutions

* It was after one of the Goulstonian Lectures that Dr. Ent was knighted by Charles II. (See Munk's Roll, i, page 224.)

† Dr. A. Farre's gift consisted of about one thousand volumes, among which will be found the collection which Dr. Farre was for many years occupied in forming, of various original essays on the early development of the embryo and fetus in various animals, by German and other investigators. These are arranged so that they might be bound up into volumes. There are also some curious old books on midwifery, and some valuable illustrated books on pre-historic remains.

‡ Fui enim ipsi medicus assiduus, ille mihi amicus necessitudine conjunctissimus.

§ The original Holbein was exhibited at the National Portrait Gallery some years ago, and afterwards at the Winter Loan Exhibition of "Old Masters" in the Royal Academy, and again in 1880.

at the present time, is suffering from what our Treasurer would probably term decided impecuniosity—the landed estates belonging to our College being just now much less productive than they should be. So much is this the case that, not being able to replenish our chest by giving the opportunity to Fellows and others of placing their coats of arms on our walls, or to improve our finances by the creation of honorary Fellows, as formerly have been done,* we have been this year obliged to forego our ordinary evening *conversazione*. So far, indeed, are we from having the "Convivium Harveianum", or dinner, which originally, and in accordance with Harvey's will, when the College was smaller (*dulcis comitum catus*), followed the oration.

I am sure I express the desire of all present that this may be the last year in which the omission of a *conversazione* may occur. May I venture, in closing my allusions to past benefactors, to hope that others among our Fellows and members and our well-wishers may be found generously imitating their good example in benefiting the College, and urging on others whom they can influence, the same generosity.

With such names of past and present times on our roll as I have a little time ago enumerated, and with many others which I could enumerate if time permitted, as remarkable for general culture and for proficiency in fine arts, in literature,† and in physics, and with such a history as we possess, may I not say that our College holds a proud and distinguished position?

Let us not forget that this position, by virtue of its dignity, is also most responsible one; and that each and all of us, being integral parts of the whole, share the responsibility; that we are one and all bound to maintain the character of true seekers into the secrets of nature, for the interests of sorrowing and suffering humanity.

We do not, as a body of physicians, profess or arrogate to ourselves any special theory of disease. In these days, the Fellows of the College do not cite physicians before them for impugning the infallibility of Galen, as in Dr. Geyne's time, who, on his humble recantation, was admitted a Fellow (1560) in the time of Elizabeth.‡

We claim no Ariadne's Clue, no Delphic Sword, to help us in the discovery of any theory of disease of universal and necessary application. We are not more solidists than humorists—not more for the Sorbonne than for Montpellier; and, however precise or scientific the teachings of physiology and chemistry and other cognate studies, on which we rely, may be, yet so complex, so inscrutable a matter is life, so intricate and subtle the influences by which its processes are disturbed and perverted, that we are compelled to acknowledge the practice of medicine to be but a conjectural art.

This being so, we must ever strive to follow rational indications in our competition with disease and death—not giving ourselves over to what has been termed by Sydenham "the luxury of guess-work", but, "joining hands with nature", show ourselves to be guided by observation and experience resting upon a well-trained and an ascertained power of analysis and comparison.

Our pathology and our physiology are ever emerging into brighter light, and as yet there is much which is not settled. To give one or two instances: our theories of contagion and germ-influence are yet very inchoate; our theories of fevers—to take a salient example in pathology—are still unsettled, the contest is being waged on Indian soil. Our physiology of necessity is still progressive; and even quite recently Dr. Brown-Séquard has been upsetting, by important researches, certain hitherto accepted facts connected with the nervous system. There is some truth in the observation of Kölliker's, that the life of a physiological fact was but of three days' duration. Physic is becoming daily more preventive, expectant, and eclectic in its character; and, though we have such certain arms of precision—if the term be admissible—as digitalis, opium, and other invaluable remedies, and a few, very few, resources which have somewhat of a specific nature, we must confess that he is the wisest man who knows the extent of his own ignorance, and when he may be prudently passive. As Dr. Latham on one occasion observed to me, "The art of physic consists not in the use of many remedies, but in the right use of a few."

My watch admonishes me that I have already exceeded the time allotted to me, and I fear I may have somewhat tired your patience. It only remains for me to thank you, gentlemen, for your kind attention to this my very imperfect performance; asking you to join with me in the wish so dear to us all—

"Floreat, vigeat Collegium.
Sit perpetuum."

* See Dr. Munk's "Roll of the College," vol. i, page 202, and iii, page 326.

† Need I call to mind the names of Freind, Prujean, Mead, Garth, Akeneside, Brocklesby, Halford, etc.?

‡ Who also could require the College to give the licence to practise without any "interruption, molestation, or suite".