

IMPRESSIONS OF THE CENTENARY CELEBRATIONS OF ANAESTHESIA IN GREAT BRITAIN *

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tendebatque manus ripae ulterioris amore.†

Virgil, *Aeneid*, VI. 314.

It has long been the custom that a body of persons, associated for a common purpose in a given locality, will not only have more or less continuous intercourse with similar bodies elsewhere, but will occasionally hold a special meeting and invite representations from these. Intercommunications of this order, among the English-speaking nations, at least, have gone on with increasing zealously and are numerous. In several instances they have led to great bonds of friendship. An excellent example of such goodwill is that of the famous James Russell Lowell, United States' Minister to England in the eighties. His last official words in England were: "While I came here as a far-off cousin, I feel that you are sending me away as something like a brother."

About a year ago the Association of Anaesthetists of Great Britain and Ireland issued invitations to many analogous organizations the world over, asking that individuals be sent to take part in their centenary celebrations in London October 30th, 31st and November 1st, 1946. During the various meetings of anaesthetists in connection with the Morton Centenary, taking place in the middle of October at Boston, when it was brought to the attention of the Board of Directors of the American Society of Anesthesiologists that I was going to London to represent the Canadian Anaesthetists' Society, then and there they asked me to be their representative as well. I deem it a great honour to be asked to appear on behalf of so many others of the same speciality.

In digression it might be said that the meetings in Boston were wholly successful. There were meetings of Dentists, of Anaesthetists and of Physicians and Surgeons generally; all in commemoration of the hundredth anniversary of the first public demonstration of surgical anaesthesia. Most particularly impressive was the "Morton Centennial Celebration at Charlton, Massachusetts, at his birthplace on the Morton Road, Route 20, Tuesday, October 15, 1946 in honor of Dr. William T. G. Morton, discoverer of ether anaesthesia." It was a

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† "Affectionate hands stretched forth to the farther shore."

beautifully bright sunny morning. The Spencer School Band played appropriately and well. A bronze plaque of Morton mounted on a stone monument was unveiled. The proceedings of this celebration were broadcast over the air and several suitable speeches were made by some leading dentists and by Doctors John S. Lundy and Sidney C. Wiggin. All this was sponsored by the dentists of America. But things have always been done well in and around Boston, the location of so many eminent men and women. One is reminded of that splendid little book by Ralph Waldo Emerson, *English Traits*, which he wrote after his visit to England at the time when Boston was the Yankee Athens in her days of efflorescence. Among the many, many fascinating thoughts in this treatise is that "the American is only the continuation of the English genius into new conditions, more or less propitious."

The flight from Dorval Airport on Saturday, October 26th, was very agreeable. The sky was clear that afternoon and it was alluring to look down upon the terrene things of eastern Canada and Newfoundland. Over the latter one sees the many rivers and lakes and imagines good fishing—very inviting. After a short stop at Gander, we arrived at Prestwick, Scotland, a little over ten hours later. It was then about 10 o'clock Sunday morning. Considerable delay at this lonely spot occasioned a rather late "landing" for London. The next day was devoted to getting in touch with acquaintances and to seeing the King's Pictures at the Royal Academy of Arts. The exhibition contained more than five hundred paintings from the royal collection, selected from all the palaces in which the collection is permanently kept. It was very comprehensively arranged and most impressive.

Early the next morning Doctor Boureau, anaesthetist from Paris, and I went to Brompton Hospital hoping to see Magill at work. He was not there but Mrs. Mansfield, one of his physician-anaesthetist associates, conducted the anaesthesia for a pneumonectomy in the Magill style. The procedure was very thorough. The pharynx was anaesthetized topically, the larynx by injection, and general anaesthesia was maintained with cyclopropane through an intratracheal cuffed-tube. Suction was done as indicated. After this I went to the Chelsea Hospital for women to see Dr. Louis Quinn, who was in residence there under Mr. Rivet. He had been an interne at St. Mary's Hospital, Montreal, before joining the Army. That afternoon I called on Mr. George E. Cowie, General Freight Agent of the Canadian National Railways in London and brother of a particular friend, Alfred H. Cowie of Montreal, and went with a letter of introduction to Mr. L. R. Newman, Manager of the Royal Bank of Canada in London. Each of these gentlemen did several kind deeds for me during the trip abroad. Next, armed with a personal and official letter from Doctor F. Cyril James, Principal and Vice-Chancellor of McGill University, I was led into that beautiful room

in Canada House to meet The High Commissioner for Canada, the Honourable Mr. Norman Robertson. He was courteous, generous with his time, left the impression that he is a deep thinker and asked me to return on Friday to meet the Minister of National Health and Welfare and Mrs. Claxton. Mr. Robertson is enriched "with a voice for such as understand"—*φωναεργα σὺπεριον* (Pindar, Ol. Ode, ii. 93). After this Doctor Ronald Jarman was joined at the Cancer Hospital, from whence he took me to see Charles King at his place of activity, where are made instruments of precision for anaesthesia. Charles King is a remarkable man and is thought of very highly by the anaesthetists of the Old Country. Perhaps there is no one who knows the history of anaesthesia as well as he does and it would seem that his is the best collection of books on anaesthesia. It would be difficult to find a man so unselfish. While here Dr. Frankis Evans came in and acquaintance was renewed. This busy and interesting day was brought to a delightful close with dinner at the home of the Jarmans, during which, and after, conversation sparkled, thoughts were exchanged and friendship made stronger.

The following morning it was a disappointment that Stanley Rowbotham was not at the Royal Free Hospital, but Victor Goldman presided over anaesthesia and demonstrated the use of curare with cyclopropane for abdominal surgery. Anaesthesia service in this institution seemed to be very efficient. With Goldman the latter part of the morning was spent at the Wellcome Historical Medical Museum. This is an amazing place from all points of view. From that of the anaesthetist, particularly so, and one could spend with great profit much more time there than was at my disposal. Then Goldman dropped me off at the Cadogan Hotel for luncheon with dear old friends, Dr. and Mrs. Z. Mennell. Quite naturally we turned the pages back and indulged ourselves reminiscently, both sadly and pleasingly, over people, places and happenings since the early twenties. Mrs. Mennell told me that Mrs. Boyle was living in London again and gave me her address. It was a very pleasant reunion and we met again at some of the other phases of the celebrations.

On the evening of the same day Dr. and Mrs. Jarman entertained at dinner at the Grosvenor House. It was an honour to be seated beside Mrs. A. J. Whitehead, the lady who had provided the tablet which would be unveiled later. After this most enjoyable repast we repaired to the Royal College of Surgeons for the unveiling of a Plaque by H.R.H. the Princess Royal, commemorating four pioneers in anaesthesia. Sir Alfred Webb-Johnson, Bart., President of the Royal College of Surgeons of England, was in attendance when, before a large audience, Her Royal Highness uncovered the centenary tablet whose inscription runs as follows:

THIS TABLET WAS ERECTED IN THE ROYAL COLLEGE OF SURGEONS OF ENGLAND BY THE ASSOCIATION OF ANAESTHETISTS OF GREAT BRITAIN AND IRELAND TO MARK THE CENTENARY OF THE FIRST OPERATION UNDER ANAESTHESIA IN THIS COUNTRY AND TO KEEP THE MEMORY OF FOUR BRITISH PIONEERS WHOSE NAMES WILL BE HELD IN HONOUR FROM GENERATION TO GENERATION:

HENRY HILL HICKMAN
JAMES YOUNG SIMPSON
JOHN SNOW
JOSEPH THOMAS CLOVER

Doctor A. D. Marston, President of the Association of Anaesthetists, delivered a speech describing the life and work of each of the four pioneers whose names are inscribed. The unveiling was followed by a reception given by the President and Council of the College. Several of us had the honour of being presented. H.R.H. the Princess Royal, with evident interest, asked me about Canada. At this occasion visitors were able to see the museum of historical anesthetic apparatus arranged by Mr. A. Charles King. Thus through most gracious Royal favour was disclosed the outward and visible sign of an everlasting remembrance touching upon some precious handiworks which shall live and prosper.

The following morning, Thursday, October 31st, several of us went to Westminster Hospital where we saw Doctor Geoffrey Organe and others of the staff of anaesthetists at work. It was good to meet, listen to and see in the flesh, Organe whom we had seen and heard before in those British films on anaesthesia. It was good to see how masterfully and unobtrusively he goes about his work. He is an excellent teacher and while holding forth at the head of the table, he seems to be well aware of all that is going on.

causa tamen positi fuerat cognominis illis
quod praestant oculis omnia tuta suis.*
Ovid, *Fasti*, V. 133.

In particular some of us saw Organe conducting an anaesthesia for gastrectomy under bilateral posterior intercostal block 6-11 (8 ml. each rib—nupercaine 1/2,000, procaine 1/400, adrenaline 1/300,000). Papaveretum (pantopon) 1/3 and scopolamine 1/150 had been given an hour before the time of going to the theatre and pentothal 0.5 Gm. was administered just before the blocking was begun. When this was finished nitrous oxide, 5 L. p.m. with oxygen 1 L. p.m. was used with the expiratory valve opened. He was prepared for all eventualities so that momentarily he could have changed or added drugs and altered the method in several ways. As it was, up to the time of my leaving, the anaes-

* "The reason for the epithet applied to them is that they guard all things by their eyes."

thesia and the relaxation were both entirely satisfactory. It was very agreeable to hear him express views about the choice of drugs and methods similar to those one hears expressed in Montreal.

Sir Francis Shipway, who used to be anaesthetist to Guy's Hospital and who retired a year or two before the war, had sent a letter saying that although he was not attending the celebrations he would come up to London and wanted me to have luncheon with him. Accordingly, on leaving Organe and his associates, Sir Francis was met at Manetta's restaurant where we partook bountifully of conversation and good food. Much had passed since last we had parted

Yet his voice,
Still it was sweet; still from his eye the thought
Flash'd lightning-like, nor lingered on the way,
Waiting for words.

Samuel Rogers, *Bologna*.

It would have been good to have enjoyed his bright company for a longer time but it was necessary to attend the General Meeting of the Association of Anaesthetists. During its proceedings newly-created John Snow medals were presented to Col. H. W. Featherstone, O. B. E., Maj. L. G. Morrison, M. C., and Sqd./Ldr. A. E. Pask, O. B. E. The official citations were read amid great enthusiasm. At this meeting too, the President, Dr. Marston, was invested with the chain of office—a gorgeous presidential collar of the Association. After a cup of tea, we broke off to meet again for “Dinner in the Great Hall of Lincoln's Inn, by kind permission of the Masters of the Bench.”

nunc dicenda bona sunt bona verba die.*

Ovid, *Fasti*, 1.72

A delectable three-course dinner and well-chosen wines were served at the fully occupied tables in this historic temple, whose mural paintings are as old as is anaesthesia. Then was proclaimed ceremoniously by the Sarjeant-announcer, in stentorian voice, the toasts, one after another. The first done was “the King” in peerless English fashion. Then Sir Alfred Webb-Johnson proposed “the Association” of Anaesthetists of Great Britain and Ireland. He pronounced an excellent eulogy upon the accomplishments of the Association and drew attention to the ever-growing importance of our specialty. Sir Alfred's words were imbued with superb grace. The President, Doctor Marston, replied to this toast in inimitably suitable manner. The toast to “the Guests” was proposed by Doctor John Gillies of Edinburgh with dignity and in very complimentary terms. Gillies, with his Scotch attributes, makes a good impression in manliness of character and through pleasantness of conversation. The first reply to this toast was made by Doctor Charles Hill. With piquant esoteric raileries, and with

* “Now must good words be spoken on a good day.”

subtle esthetic witticisms he held us in firm fascination. His style made me think of Mr. Winston Churchill: "Le style, c'est l'homme meme" (Buffon). The next and last call for silence was for attention to my reply. In this I delivered the felicitations from the anaesthetists of the United States of America and of Canada, and said that on landing I felt as did George Ticknor after he had been in Spain and Portugal for a long time and arriving in England; "As I once more placed my foot upon soil to which I feel some sort of relationship, I could have almost fallen down and embraced it as Caesar did." Occasion was taken gently to suggest that although we have more power than our ancestors, we may not be sure that we have more light. The possession of more tools might even be a hindrance to earnest thinking and not likely to enhance our enjoyment of beauty. Without advocating that we should attempt to walk in our fathers' footsteps, we might in this most strenuous or iron ages, take time off to profit from some Virgilian thoughts of Wordsworth:

Love had he found in huts where poor men lie;
His daily teachers had been woods and rills,
The silence that is in the starry sky,
The sleep that is among the lonely hills.

The Feast of Brougham Castle.

While we commemorate specific events, we shall never forget to mention with veneration the names of those four chemical philosophers, Priestley, Lavoisier, Davy and Faraday. Anaesthesia had its beginnings in the good works of these men. They lived in an age famous for names which oblige thought. *Thought alone, and its quick elements cannot die.* Attention was drawn to the Three Year Diploma Course in anaesthesia, conducted by the department of Anaesthesia at McGill University. In support of specialization, I quoted Sir James Paget from his presidential address at the International Medical Congress held in London in August 1881: "The fault of specialism is not in narrowness, but in the shallowness and the belief in self-sufficiency with which it is apt to be associated. If the field of any specialty in science be narrow, it can be dug deeply. In science, as in mining, a very narrow shaft, if only it be carried deep enough, may reach the richest stores of wealth and find use for all the appliances of scientific art. . . ." Increasingly those who have to do with the teaching of anaesthesia emphasize the importance of special knowledge in the so-called basic sciences. We do well to heed Cicero's apposite words:

"Ita illi ipsi doctrinae studiis et sapientiae dediti ad hominum utilitatem suam prudentiam intellegentiamque potissimum conferunt; . . ."

De officiis, 1, XLIV, 156.

Which means: "The principal thing done, therefore, by those very devotees of the pursuits of learning and science is to apply their own practical wisdom and insight to the service of humanity."

Among those sitting at the head table, besides the ones already mentioned, were: Lord Moran, President of the Royal College of Physicians of England; Sir Hugh Lett, President of the British Medical Association; Doctor C. T. Parsons, Master of the Society of Apothecaries; and Captain Loy, Naval Attaché to the Consulate of the United States of America in England.

All the following morning, Friday, November 1st, was spent with Jarman at the Cancer Hospital. The excellence of the work done at this institution, in all its departments, is so well known the world over that it would be superfluous for me to make much comment. It was very pleasing to witness the efficiency and high standards of the department of anaesthesia. Leaving this place I went to Manetta's restaurant for luncheon with Mildred Boyle, widow of the late H. E. G. Boyle who used to be anaesthetist to St. Bartholemew's Hospital. Boyle had contributed considerably to the literature of clinical anaesthesia, and his improved anaesthetic apparatus is still used in several places. We had a good chat and recounted many pleasant occasions of the past, particularly those when she came to Canada with her husband in the summer of 1921, and when we went to England in 1926. This was the time when a number of anaesthetists of the United States and of Canada, with their wives, visited several places in the British Isles and on the Continent. That was the event of the first meeting of the old Canadian Society of Anaesthetists at Niagara Falls at which Dr. Boyle represented the anaesthetists of the other side.

The reception that afternoon at Canada House was well attended and among the many distinguished individuals present to meet Canada's Minister of National Health and Welfare and Mrs. Claxton, were Lord Addison, Secretary of State for the Dominions and Leader of the House of Lords, and Lady Addison; Sir Wilson Jamieson, Chief of the Ministry of Health of the United Kingdom; Dr. T. C. Rontley of the Canadian Medical Association and Dr. Amsley, Chief of the Health Department at Ottawa. At half past seven that evening there was a meeting of the Anaesthetic Section of the Royal Society of Medicine. A reception was held by Sir Gordon Gordon-Taylor, immediate Past-President of the Society. The attendance was prodigious and later this large audience heard Doctor Stanley Rowbotham read his presidential address on "A Hundred Years of Anesthesia." This was well illustrated with lantern slides and delivered in a most attractive manner. A vote of appreciation proposed and seconded by Doctors E. A. Underwood and I. W. Magill, respectively, was carried with acclamation and the proceedings came to a close. Later, several of us went to the home of Dr. and Mrs. Rowbotham where we got to know more of one another while being entertained very copiously.

The centenary celebrations of the first administration of ether in Great Britain were now over. The next morning I proceeded to Cambridge principally to see my nephew, Charles Bourne, who is studying

law there. Twenty years ago my wife and I were taken to Cambridge by Sir Francis and Lady Shipway. Charles is at St. John's College and made arrangements for me to occupy the suite of rooms set apart for guests. Once more in this distinctly singular place, it is good to see that the few visible changes are accomplishments such as the additional library and the extensions of the Cavendish Laboratories. These do not interfere with the Cambridge of old, the Cambridge of Caius who in the middle of the sixteenth century had a dispute with Doctor Key of Oxford as to the relative antiquity of the two universities. "To some astonishing legend of Key's, he replied that Cambridge was founded in the year 3538 B.C. by one Cantaber, a Spanish prince, alleging many weighty statements on behalf of his accurate chronology. His *History of Cambridge* contains more trustworthy information than this, but he was singularly prone to the acceptance of spurious etymologies and vain traditions." (Cambridge and its Colleges by A. H. Thompson, St. John's College.) John Caius was a student at the old Gonville Hall of Cambridge and later studied Medicine at Padua. He did well as a physician in London, was President of the Royal College of Physicians in 1555, and returned to Cambridge to refound Gonville. "He gave that impetus to medical study which has since made Caius pre-eminently a doctor's college."

Cambridge of old! the Cambridge of Erasmus who lived at Queens' College some five years and left in 1514 seriously discontented but with the consciousness that he had inaugurated a new era in learning. He was pleased with little else than erudition and those who were well-informed, such as Thomas Linacre, John Colet and Sir Thomas More.

At the first meeting of Erasmus and More, their conversation began as:

E. Aut tu es Morus aut nullus,
M. Aut tu es Erasmus aut diabolus.

Characteristic of Erasmus is that for his seal he had depicted an effigy of the god, Terminus, around which were written the words, "concedo nulli." There at Cambridge in the antechapel of Trinity College, stands the statue of Newton, by Roubiliac, which bears the inscription from Lucretius; "Qui genus humanum ingenio superavit." His portrait, by Ritz, occupies the place of honour in the Hall. Bacon's portrait is one of the three at the end of the Hall. In 1845 his statue was placed, side by side with that of Newton, in the antechapel. The Cantabrigian may well be proud of many others of enduring fame, like: William Harvey, one of the great glories of Caius, discoverer of the circulation of the blood; Samuel Pepys, whose precious library is at Magdalene under the inscription "Bibliotheca Pepysiana"; Charles Robert Darwin of Christ's College, whose revolutionary thoughts of *The Origin of Species* continue to gain acceptance; William Wilberforce,

who cultivated his humanitarianism while at St. John's College, and of whom Byron sings:

"O Wilberforce! thou man of black renown,
Whose merit none enough can sing or say,
Thou hast struck one immense Colossus down,
Thou moral Washington of Africa."

Don Juan, c. XIV. st. 82;

John Harvard, the founder of that great American University, who, in company with a row of Pilgrim Fathers, was produced by Emmanuel College; Sir Robert Walpole, whose portrait hangs at the end of the Hall of King's College; Horace Walpole, his son, also of King's, who coined the word "serendipity"; William Thomson, afterwards Lord Kelvin, of Peterhouse College, who did his great work in Glasgow and had on three occasions declined the Chair of Experimental Physics at the Cavendish Laboratory; Sir Humphry Davy Rolleston, Bart., G.C.V.O., K.C.B., M.D., Honorary Fellow of St. John's College, Emeritus Professor of Physic, who died in 1944; Sir Arthur Quiller-Couch, King Edward VII Professor of English Literature, an Oxonian, who died in 1944; Alfred North Whitehead, the present occupant of the Chair of Philosophy of Harvard University, was of Trinity; Macaulay and Thackeray, both of Trinity College, everybody knows; and the poets, Spenser (Pembroke), Marlowe, Fletcher (these two of Corpus Christi), Milton (Christ's), Dryden, Cowley (these of Trinity), Gray (Pembroke), Coleridge (Jesus), Byron, Tennyson (these of Trinity), Wordsworth (St. John's) and Rupert Brooke (King's). The Muses have favoured this University of Colleges—it may be that they are embodied in the wild life of nearby meadows:

Better than all measures
Of delightful sound,
Better than all treasures
That in books are found
Thy skill to poet were, thou scorner of the ground!
Teach me half the gladness
That thy brain must know,
Such harmonious madness
From my lips would flow
The world should listen then—as I am listening now,
To a Skylark by Shelley.

Thus, vagrantly pondering, did my Johnian nephew and I walk about; and, continuing, we visited the department of pharmacology and that of physiology. In one, classes were in action, in the other experiments were going on. We then went to the laboratory of biochemistry and were lucky enough to have an interview with Professor A. C. Chibnall, Fellow of Clare, who is a famous authority on nutrition. He

was very courteous, we chatted freely and he told me that although the food situation was rather grim, it was so chiefly from an aesthetic point of view for he was sure that they were getting enough for sustenance. We next went to the Cavendish Laboratory where Mr. Appleyard, one of the research scholars, kindly acted as a cicerone. What a wonderful institution! truly it is the Mecca for physicists. The fascinating story is told by Alexander Wood, Fellow of Emmanuel College, University Lecturer in Experimental Physics, in fifty-nine pages printed at the University Press of Cambridge in 1946 and entitled, *The Cavendish Laboratory*. The Chancellor of the University, the seventh Duke of Devonshire, whose family name of Cavendish had been linked with science in the person of the great Henry Cavendish, founded this Laboratory in 1871 and the first occupant of the newly-created chair was James Clerk Maxwell. He surrounded himself with able associates and laid a strong foundation before he died in 1879. The next Professor was Lord Rayleigh. "So far as his own research was concerned, his idea was to choose a subject of research which could be planned on a large scale so that a number of workers might form a team and share the work. For this purpose he chose the redetermination of electrical standards." Rayleigh's values were adopted by an international conference. Although the commercial electrical units were fixed under the names of international ohm, ampere and volt, "perhaps not one in a thousand of those who now use them in their daily work have any notion of how and by whom these units were determined." In five years he had accomplished a great deal, his own personal output of original papers amounting to sixty. "They show an immense catholicity, greater probably than anyone can ever again achieve." Through his efforts and those of his associates, when he left it, the Laboratory was firmly established as a place of learning and research. Rayleigh had been elected Professor at the Royal Institution. J. J. Thomson was his successor at twenty-eight years of age. Under his leadership there was continual progress. "Meantime, the number of research workers was increasing and the pressure on the accommodation of the Laboratory was again beginning to cause discomfort. In 1903 Rayleigh was awarded the Nobel Prize, and made it known that he wished to devote the money—some £7,000—to the uses of the University. In January 1904 he wrote to J. J. asking for suggestions, and decided to assign £5,000 to the building of an extension of the Cavendish Laboratory and the remainder to the University Library." The extension was formally opened by Lord Rayleigh in June 1908, being the occasion of his installation as Chancellor of the University. Thomson's own work was recognized by the Nobel Prize in 1906 and by a knighthood in 1909. All along, others were very active in this laboratory, in particular it is sufficient perhaps to notice the brilliant work of C. T. R. Wilson on clouds, of W. C. D. Whetham on electrolysis, of Rutherford on uranium radiation, of O. W. Richardson on thermionics

and of H. A. Wilson on the conductivity of flames. "This period of research was brought to an end by the outbreak of war in 1914, and in a sense the war was the end of an era. It marked the end of Thomson's tenure of the Cavendish Professorship, but it ended also the period of glass and sealing wax and string, the period when important work could be done with very simple and inexpensive apparatus. In subsequent research, although simplicity could be preserved in certain directions, it became more and more true that the apparatus required was on a much larger scale, much more expensive to buy or to build and much less capable of being operated by one person." In the meantime, Ernest Rutherford, who had been a Research Student in Cambridge from New Zealand and had been recommended by J. J. Thomson for the Professorship of Physics at McGill University, where he went in 1898, became interested in radioactivity and in 1904 there appeared his first edition of *Radioactivity*. His *Radioactive Transformations* was published in September 1906 and in December he was offered the Physics Chair at Manchester. He accepted it "to be nearer the centre of things." When, in 1919, J. J. Thomson resigned the Cavendish Professorship (he was Master of Trinity until his death in 1940), Rutherford succeeded him. In a surprisingly short time Rutherford had gathered round him "a really impressive body of younger workers whose researches he directed and co-ordinated, whose loyalty and affection he captured and to whom he referred usually as 'the boys.'" Numerous publications appeared and in 1930 the situation was summed up comprehensively in the book on *Radiations from Radioactive Substances* by Rutherford, Chadwick and Ellis, "but the rate of production of new results had in no way slackened, and in the year 1931-2 no fewer than sixty-four original papers were produced by Rutherford and his fellow workers." In 1933 the Royal Society Mond Laboratory was completed further to enhance the work on the properties of liquid helium at very low temperatures. Then, in 1936, the late Lord Austin gave £250,000 with which to build and endow a very much needed addition to the Laboratory, "and Rutherford at once threw himself with his usual enthusiasm into the planning of the new building. Unfortunately he was not to see its completion. He died suddenly after an operation on the 14th of October 1937, at the age of 66." Wood's little book goes on to tell that "In the *Universities' Handbook* for 1938, twenty-one Professors of Physics in British Universities and twenty-two Professors in Dominion Universities, India, etc. had passed through the Cavendish either under Thomson or under Rutherford." This does not account for the very many who were associated, one way or another, with the Cavendish Laboratory from a large number of foreign Universities. The most obvious of Rutherford's personal qualities "has been variously described as 'volcanic energy,' 'tireless vitality,' 'intense enthusiasm' and 'immense capacity for work.' To this must be added the warmth and affection of his nature which enable him to maintain

close personal relations with all his 'boys,' communicating to them something of his own gaiety, enthusiasm and interest." Lord Rutherford was succeeded by Sir Lawrence Bragg (Trinity), whose first task was concerned with Lord Austin's gift. The building was no sooner roofed in than it "was required for the use of a government department, and has only just become available for its primary purpose." It would seem that the physicists of Cambridge appreciate abundantly, with Marcus Aurelius Antoninus. (The Mediations), that "that which is not in the interest of the hive cannot be in the interest of the bee."

Τὸ τῷ σμήνει μὴ συμφέρον οἰδὲ τῇ
μελίσση συμφέρεται.

VI, 54.

(To be concluded in July issue)

ERRATUM

Due to an error of the authors, the following was omitted from the paper "A New Method for Recording the Effect of Various Agents upon the Caliber of the Human Bronchial Tree," which appeared in *Anesthesiology* 9: 142-159 (Mar.) 1948:

The work described in this paper was done under contract between the Medical Division of the Chemical Corps, United States Army and the University of Pennsylvania. Under the terms of the contract, the Chemical Corps neither restricts nor is responsible for the opinions or conclusions of the authors.