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OUR FOUNDERS AND BENEFACTORS*

BY

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In bringing our Founders and Benefactors to your notice—and it is the early benefactors I am concerned with in particular—I do so with no little trepidation. Historical documents so rarely enshrine those traits of character, demeanour, and bearing which are so essential if a lively picture is to be presented and if the recital is to be more than a mere catalogue of benefactions and achievement.

This is a difficulty I can scarcely surmount. Not that there is any lack of material; indeed, Professor A. F. Pollard, perhaps the greatest student of the period, has written: "The materials for sixteenth-century history are so vast that no one can hope to master them all in the allotted span of human life."

However much Fellows will wish to emphasize the fact that our College is a Royal foundation, all will agree that its inception was due to Thomas Linacre, one of the King's physicians. Many are the references to him and his friends in the State Papers of Henry VIII, published by the authority of His Majesty's Commission in 1830-52; but, so far as I have been able to ascertain, only one Life of Thomas Linacre has been written. The author of the biography was Dr. John Noble Johnson, a Fellow of this College, Goulstonian Lecturer, Censor and Physician to the Westminster Hospital.

Linacre's Student Days

Thomas Linacre, so far as can be ascertained, was born in Canterbury in the year 1460. He attended the school of the Monastery of Christchurch, Canterbury, then presided over by his kinsman, William Tilly of Selling. It is curious that Canterbury should have provided the early education of both our Founder, Thomas Linacre, and of our most illustrious Fellow, William Harvey; for in 1588, the year of the Armada, Harvey was entered at the King's School, the direct scion of the Christchurch Monastery School. There are good grounds for believing that this was the first school to be founded in England. When Augustine and his followers established Christian churches in England, they did not, as modern missionaries do, carry on the services of the Church in the vernacular tongue of the country, but employed the language that had been used in Rome for the last five hundred years. To make themselves understood the Latin missionaries had to come with the Latin service book in one hand and a Latin grammar in the other. Those whom they wished to convert could not profitably go to church till they had first gone to school to learn the language. So the grammar school became the necessary anteroom or vestibule to the church.

Prior Selling was one of the more famous of the priors of Canterbury and was principally responsible for the completion of the great central tower of the cathedral. It was from him that Linacre learnt his first Greek, and it would

have been difficult to find a more appropriate tutor. Much is known and more is conjectured about schoolboy life in Tudor times. Whatever the boys learned or did not learn at school, it is quite clear that they acquired a fair knowledge of Latin. Grammar was regarded as the doorway to all knowledge, and the liberal arts could be approached only through the study of parts of speech—*qui nescit partes in vanum tendit ad artes*. The grammars of Donatus and Priscian usually provided the pathway to knowledge, and they have been described as the schoolmasters of Europe for a thousand years. But Priscian was being superseded by Alexander of Villedieu, the composer of a hexameter poem in 2,645 lines dealing with accidence, syntax, and prosody, the learning of which by heart must have been an intolerable nightmare to schoolboys. So widespread was the use of Donatus that the abbreviation *donet* passed into common use to signify an introductory handbook on any subject, much as we employ the word "primer." Hard as a ten-hour day was to the schoolboy, there were so many saints' days to be observed that hardly a week could have passed without one whole or half holiday. Then, too, in pre-Reformation times there were many peculiar observances. St. John Lateran's day, May 6, was kept by football, a siesta, and an interval for drinking beer, the equivalent of our modern afternoon tea—the ball, the bed, the beer (*Porta Latina pilam, pulvinar, pocula praeostat*). Then on St. Nicholas's Day, Dec. 6, there were the boy-bishop celebrations. It is impossible, of course, to draw a picture of the individual boy, but we do know that when Linacre not very many years afterwards was in Italy he was chosen, because of the elegance and modesty of his manners, as the associate in study of Lorenzo de' Medici's children.

It was probably with the assistance of Prior Selling that Linacre in 1480, at the age of 20, went up to Canterbury Hall, Oxford, later incorporated into Christchurch. Here he made friends with Grocyn, a man of 36, and with William Latimer, a youth of his own age. It is not known why Linacre waited till his twentieth year before entering the University, for boys entered much younger than now, and from 14 to 16 was quite a common age. The Warden of New College had introduced Greek lectures there in 1465, and it is presumed that the three friends studied under the guidance of the lecturer, an Italian, Cornelio Vitelli by name. Eventually Grocyn, already a Fellow of New College, was to be the first Englishman to lecture on Greek in Oxford, and later, in London, to share the honour with Linacre of imparting a knowledge of Greek to one of the great figures of history—Desiderius Erasmus. When to Grocyn, Linacre, and Latimer we add the names of the two other friends—Colet, afterwards Dean of St. Paul's and founder of St. Paul's School, and Thomas More, the author of *Utopia*—we have a list of the leading scholars in England devoted to the New Learning and usually known as the English Humanists.

*The Harveian Oration (abridged), delivered before the Royal College of Physicians of London, on Oct. 18, 1947.

A Sojourn in Italy

After four years at Canterbury Hall Linacre was made a Fellow of All Souls. The following year he accompanied Prior Selling, who had been chosen by Henry VII to conduct a mission to the Vatican, to Italy. Linacre appears to have remained in Italy for six years or so, and during this time to have stayed in Bologna, Florence, Rome, and Padua. At Bologna he was introduced by Selling to Politian, the most brilliant Latin poet and scholar of the day, attached to the Platonic Academy, founded in Florence by Cosmo de' Medici. Under the Medici Florence had become the modern Athens, and learning as well as art had found a home there. It is thought that this introduction to Politian stood Linacre in good stead, for when Linacre visited Florence, Politian, whose work it was to direct the studies of the children of Lorenzo the Magnificent, is supposed to have introduced Linacre to the merchant prince. However that may be, Linacre became the recipient of the patronage of Lorenzo, living in the most brilliant court in Europe and sharing the instruction given to the two young princes Piero and Giovanni. The latter ultimately became Pope under the name of Leo X, and in after years was not unmindful of this association with Linacre.

We may be confident that Linacre's association with some of the finest scholars in Italy played no little part in forming that facility of expression, elegance of taste, and accurate skill in the classical languages for which he is famed. It has been said that by Linacre's endeavours Galen speaks better Latin in the translation than he did Greek in the original, and that Aristotle shines not more in his Attic than in his Latin garb. Unfortunately, none of his translations of Aristotle into Latin has survived.

After a year in Florence, then almost at the zenith of her splendour, Linacre made his way to Rome. Here he was befriended by Hermolaus Barbarus, one of Europe's greatest scholars and the translator of Dioscorides' *Materia Medica*. It has been suggested that it was he who may have introduced Linacre to the works of Galen and have influenced him in choosing medicine as his profession. For a charming account of this scholar may I point to the writing of a Fellow of our own College, Sir Henry Bashford, in *The Harley Street Calendar*.

Linacre next visited Venice and, possibly on the commendation of Hermolaus, made the acquaintance of another distinguished scholar. Aldus Manutius Romanus was contributing to the spread of learning by printing the classics in inexpensive octavo volumes—approximately at the price of our Everyman's Library. They were well read, for of the 24,000 copies printed of Erasmus's *Praise of Folly* only one copy has survived, and that is in an imperfect state. Books from the Aldine Press, with their distinctive device of the anchor and the dolphin on the title-page, are much sought after by collectors, distinguished as they are by a high standard of accuracy of text and by beauty of type. The type first used in the Virgil which he published in 1501, known as Aldino or to most of us as "italics," is said to have been modelled on Petrarch's handwriting. Erasmus acted for a short time as his editor and reader. It was for Aldus that Linacre began a translation from the Greek of *Proclus on the Sphere*, said to be the earliest accurate translation of a Greek writer ever made in England, but it does not appear to have been published until twelve years later.

Linacre's next move was to Padua, where he graduated M.D. with great distinction. This we learn from a reference to the event in the *Fructu ex Doctrina*, a book written by Richard Pace, Secretary of State to Henry VIII, and published in Basle in 1517.

His Return to Oxford

Returning to Oxford, which he must have found a trifle secluded after breathing the feverish atmosphere of the Renaissance in Florence and living in the most brilliant court in Europe, he found his friends Grocyn and Latimer awaiting him. They too had made a sojourn in Italy during his absence, and had attended the lectures of Politian and Chalcondylas; but whether they met him there it does not seem possible to determine. No sooner was Linacre back in Oxford than the degree of M.D. was confirmed by an act of incorporation, and it is asserted, without any convincing proof, that by a similar act of incorporation at Cambridge he became an M.D. of that University. The year 1490 seems to be the year in which he graduated in medicine. Caius claims that Linacre resided for a time in Cambridge—a statement which receives some weight from his subsequent foundation of a lectureship in medicine there.

In 1494 Linacre had to mourn the death of his old tutor and kinsman, Selling, who for twenty-two years had been Prior of the Monastery of Christchurch, Canterbury. He is said to have been the first Englishman to visit Northern Italy to study Greek. He died on the anniversary of the death of Thomas à Becket and was interred in the Martyrdom of the Cathedral, the last proof of the respect in which the brethren held the memory of their superior.

In 1499 Desiderius Erasmus arrived at Oxford. Erasmus was an entire stranger in England, brought over by Lord Mountjoy from Paris, and he did not know a word of English. He had come to England in spite of ill-health and poverty to learn Greek. This poor foreign scholar, destined to become one of the great figures of history, whom fortune had used so hardly, cast adrift upon the world without resources—for he had been robbed of his slender patrimony by dishonest guardians—found a friend in Linacre. Writing to an Englishman whose tutor he had been in Paris and who had gone to Italy to learn Greek, Erasmus says:

"Yes, you will say, but how do you like our England? Believe me that nothing in my life has ever pleased me so much. I have found the climate both pleasant and healthy; and I have met with so much kindness and so much learning, not hackneyed and trivial but deep, exact, ancient, Latin and Greek, that I am not hankering so much after Italy except just for the sake of seeing it. When I hear my Colet I seem to be listening to Plato himself. In Grocyn, who does not wonder at that compass of all knowledge? What is more acute, more profound, more keen than the judgment of Linacre? What did Nature ever create milder, sweeter, or happier than the genius of Thomas More? But why should I run through the whole list? It is marvellous how widespread and how abundant is the harvest of ancient learning which is flourishing in this country. All the more reason for your returning to it quickly."

But Erasmus, after conferring such praise, was to receive a rude shock on leaving this island. Henry VII had re-enacted an old law of Edward IV which forbade temporarily the export of gold and silver coin from England. More had assured Erasmus that as long as his money was not in English currency all would be well. Arrived at Dover, Erasmus attested that the money he was taking back had neither been earned nor been received in England, and that he was only taking back what he had brought with him into the country. The custom-house officials were adamant, and of the £20 which he had with him all but six angels (£2) was confiscated. Robbed of his money, he had perforce to stay in France instead of visiting Italy, which had been his intention. It seems very like our own year of grace!

In the year 1501 an event occurred which was to influence profoundly Linacre's future mode of life. Henry VII's

eldest son, the unfortunate Prince Arthur, was sent up to Magdalen, and Linacre was chosen as his tutor and private physician. The prince was delicate and, though only in his fifteenth year, was about to make a diplomatic marriage with a foreign princess—Catherine of Aragon. Linacre must have seen that his charge of the prince foreboded ere long the end of his Oxford life and would be likely to entail his definite committal to the practice of medicine. Five months after their marriage Prince Arthur and his wife were struck down by the sweating sickness, which proved fatal to the prince. The princess recovered and later became the first wife of her husband's brother, Henry VIII. Linacre about this time was made domestic physician to Henry VII and, leaving Oxford, moved to London, where he appears to have entered upon the regular practice of his profession. He was certainly the most erudite of those attending the sick in London, but we have no means of assessing his clinical ability apart from the fact that the most distinguished statesmen and courtiers were to be found among his patients—Wolsey, Archbishop Warham, Tunstall (Bishop of London), Foxe (Privy Seal and Bishop of Winchester), and Sir Thomas More. In 1509 he became physician to Henry VIII, and he seems to have found time to direct the studies of Reginald Pole, a future Archbishop of Canterbury, and to help Erasmus with the publication of the New Testament in the original Greek.

John Colet

A short reference must be made to another of Linacre's friends, John Colet, the son of a wealthy Lord Mayor of London, Sir Henry Colet. Colet in 1493 had gone to Paris and thence to Italy to study canon law, patristics, and Greek, and while abroad had become acquainted with the ubiquitous Erasmus. On his return to England three years later he startled Oxford in his lectures on St. Paul's Epistles. These were in almost every particular in striking contrast with the dissertations of the day. There was hardly a quotation from the Schoolmen and from the Fathers, but the Epistles were treated as straightforward letters written by a living man to his friends, which invested them with a freshness and an interest quite new to his hearers.

The field of Colet's influence was changed and in some ways widened when in 1505 he became Dean of St. Paul's. Five years later he devoted his patrimony to the foundation of St. Paul's School. Here he decided that the boys, who had to be able to read and write before being allowed to enter the school, should be taught good literature, both Latin and Greek, and that debased mediaeval Latin, "all that abusion that the later blind world brought in and which may rather be called Blotterature than Literature," should be utterly banished and excluded. Colet requested Linacre to write a Latin grammar for the use of the boys. This Linacre undertook to provide, and with great pains and the sacrifice of much time wrote a work consisting of quite a few volumes. As a school book it certainly seems to have been ill-judged, and Colet, finding it little adapted to the requirements of his pupils, put it altogether aside as too long and too learned for his "little beginners." Colet substituted some rudiments of his own composition under the title of *Paul's Accidence* which he dedicated to William Lilly, whom he had appointed as the first High Master. The book was later enlarged by Lilly and by Erasmus and others, and, finally becoming generally adopted in other English schools under the name of *Lilly's Grammar*, it formed the foundation of various Latin grammars used in England up to the middle of the last century. Canon Shirley, Head Master of the King's School, Canterbury, informs me that, though there is no actual record of what Latin grammar was used in the school in the time of Queen

Elizabeth, there is little doubt that Lilly's was the grammar that William Harvey used. Colet's rejection of Linacre's book led to a break in their long-standing friendship, and in spite of the efforts of Erasmus the breach was never healed.

The year 1518 saw the foundation of the College of Physicians, at which time Linacre was 58 years of age. The meetings were held in Linacre's own house—the Stone House, as it was called—in Knighttrider Street, and there they continued to be held for nearly a century. The front portion of the house, consisting of a parlour below and a chamber above to be used as a council room and library, were given to the College during Linacre's lifetime. After his death the remainder of the premises reverted to Merton College, Oxford.

Linacre's Later Years

Two years later Linacre appears to have taken priest's orders, but at the time of the foundation of the College he held the livings of Merham and Hawkhurst, in Kent, and had been a Prebendary of Wells and a Canon of St. Stephen's Collegiate Church, Westminster. Some have suggested that he had taken deacon's orders in 1505, but it was the practice of the day to present livings to scholars even though they had never been ordained.

Within the last seven years of his life he made and published translations from Greek into Latin of no fewer than eight of Galen's works, the *De Sanitate Tuenda* and the *Methodus Medendi* being published before he retired from practice.

In 1523 Linacre received his last Court appointment, being made, with Ludovicus Vives, Latin tutor to the Princess Mary, then 5 years old, and being charged with the care of her health. He published a simple Latin grammar in English in the same year for the use of his royal pupil. This was afterwards translated into Latin by George Buchanan, the celebrated Scots scholar, who was imprisoned by the Inquisition in Portugal and who during the two years of his imprisonment, 1549–51, wrote a Latin version of the Psalms in various metres.

But perhaps the work that gave Linacre most satisfaction was the *De Emendata Structura Latina Sermonis*. This, which may be called an "Advanced Manual of Latin Prose Composition," had taken many years to prepare and was published in six volumes in 1524, the year of his death. This served to place him in the first rank of Latin scholarship of the day. It was reprinted abroad with a letter from Melancthon recommending its use in the schools of Germany.

During the last few years of his life Linacre, growing more and more infirm, suffered from calculous cystitis, from the effects of which he died on Oct. 12, 1524. Almost his last act was the foundation of three lectureships—two at Oxford and one at Cambridge. The lectures were dedicated to the glory of God and the true art of medicine, and they were to be distinguished by the name of "Lynacre's Lectures."

Robert Browning, in his *Grammarians' Funeral*, has given us the picture of an idealist scholar, and it has been suggested that his grammarian was Linacre. I borrow from Sir Henry Bashford:

"With his grammar finished, therefore, and his affairs in order—the house in Knighttrider Street left to the College, and a sufficient income from the rest of his property to provide lectureships at the Universities—he may well have thought in the autumn of 1524, that it was about time for him to be going. In the background of his age he had led a full life: most of its statesmen had been his friends. And if there is just a hint, perhaps, to be found in his will of the Linacre trespassed upon by Colet—if he had somehow detected in his

niece Agnes a certain tendency to *laesa majestas*—it was only by the gentlest of posthumous rebukes that she and the world were to discover it. Her sister Margaret, he said, was to have the better of the two beds that he had bequeathed them."

Linacre was buried in old St. Paul's before the rood screen of the west door, a spot chosen by himself. His grave was marked by no memorial for more than 30 years, when John Caius, during his presidency of the College, erected a monument to his memory at his own cost. This perished when the cathedral was destroyed in the Great Fire of 1666.

Caius and Gilbert

John Caius, whose presidency extended with intervals from 1555 to 1571, set out for Italy in 1539 and studied physics at Padua under Montanus, the greatest medical teacher of the time. Caius lodged in the same house as Vesalius, the celebrated anatomist, who possibly may have fired Caius's enthusiasm in this direction, for in 1564 Caius introduced anatomies, as they were called—that is, demonstrations of dissections—into Cambridge. These demonstrations were not the first to be held in England, as they had been introduced 20 years earlier at the Barber-Surgeons' Hall in London, where Caius had lectured on anatomy. He is usually regarded as the founder of the study of anatomy in this country. He is said to have modelled his life upon the example of Linacre, and, like him, devoted much time to the collation and translation of Greek medical writers, but, unlike Linacre, he recorded the results of his own observations. These appeared in 1552 under the title of "A Booke of Counseil against the Disease commonly called the Sweate or Sweating Sickness." This is said to be the first instance of a medical book being published in English, but he afterwards republished it in Latin.

It was Caius who designed the insignia by which the President of the College should be fittingly honoured—the cushion of crimson velvet, edged with gold, placed before the President on all solemn meetings, and the caduceus, its head adorned with the arms of the College supported by four serpents, which the President carries to remind him by its material—silver—as Caius quaintly says, to govern with patience and courtesy, and by its symbols, the serpents, with judgment and wisdom. Caius is said to have foretold the very day of his own death, and to have chosen his own epitaph, *Fui Caius*, still to be seen in the Chapel of Caius College.

Dr. William Gilbert, physician to Queen Elizabeth and James I, and President of the College in 1660, published in that year a remarkable book, *De Magnete*, in which he records his experiments relative to the magnet. Gilbert may therefore be said to have introduced the method of experiment into scientific research. By his will he gave his whole library, globes, mathematical instruments, and a cabinet of minerals to the College, but with the exception of a few folios, which cannot now be identified with certainty, these seem to have perished when the College was burnt down in the Fire of London.

I am indebted to Canon F. J. Shirley, Head Master of the King's School, Canterbury, for copies of the wills of Robert Harvey and of John Harvey—both of Folkestone, William Harvey's birthplace—which I gratefully append.

"Archdeaconry Court of Canterbury. Probate records deposited at KCC Record Office, Maidstone.

"PRC 17, vol. 41 (will register), F. 112.

"23 April, 1570. I Robert Harvye of Towne of folkestone—Jone my wife—my house and stable lying at Estbroke—son Roger Harvye—Jone my wife to be exetrx. Witnesses:

John Redhed, John Browne, John Edwardes.

John Cadman, curate of Folkestone mentioned.

"Proved: 7 March, 1570 (-1).

"PRC 13, vol. 13 (Act book), f. 45.

"23 Feb. (1552-3). Admin. of goods of John Harvie of Folkiston' intestate; admin. to Florence widow, sworn, &c. Bound with her Thos. Baker, Jurate of Folkestone, & Hy. Hogben of same yeoman in £40.

"(It is slightly ambiguous as Baker is called *jurat.*=either sworn or jurate. I think it means he is Jurate of the Town of F.)"

In surveying this progress we become conscious of the various phases through which medical endeavour has passed. Contemporary medical practice and knowledge in Linacre's time was a confused mixture of empiricism, folklore, astrology, and magic. Such vestiges of Greek medicine as remained were often tainted, for they had come through the medium of Arabian and Syriac translations from the original Greek texts, and these in turn had been translated again into Latin and contained many inaccuracies. Hermolaus Barbarus, for instance, is reputed to have restored no fewer than two thousand passages in the works of Pliny. Linacre by his careful and accurate translations from the Greek into Latin was able to bring to the notice of his contemporaries the conclusions of Hippocrates, Aristotle, and Galen, based as they were on the simple yet valid foundation of direct observation. By the very nature of things, and to clear the stage, so to speak, he was obliged to look backwards. Caius advanced a step further. In common with Linacre he was strongly attracted to the writings of Galen, and when in Italy had spent much of his time carefully collating the manuscripts of that author, but to scholarship he added the practice of direct observation. This is seen in his devotion to practical anatomy and in his clinical observations set out in his book on the sweating sickness. Gilbert advanced further still: not content with observation, he introduced the method of experiment into scientific research. As Sir Walter Langdon-Brown has aptly said, "Linacre looked to the past for the Revival of Learning, Caius faced both ways, but Gilbert steadfastly looked forward."

THE LOCALIZATION OF DEEP PAIN

BY

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This paper is concerned with the laws that determine where a deep pain is felt or, in other words, with its local sign. It is intended to show that the pain is not felt in any particular structure of the body, such as viscera or body wall, but that it is best regarded as a projection from the brain—to show in effect that the place where a pain is felt is determined as much or more by the anatomy of the cortex as by the structure of the limb or part of the body in which it seems to be. The view has indeed been hinted at from time to time, and has received a more definite statement from Lewis (1942). I believe it to be in harmony with current ideas on perception and to provide an explanation for those vexatious experiments with "novocain" block and phantom limbs.

It will not be necessary to review the many theories of the last fifty years, but since our common beliefs are still coloured by the traces they have left behind them it will be better to clear the ground by stating three propositions that may be regarded as proved. The first is that viscera can in fact be pain-sensitive. As is well known, Lennander (1902) popularized the view that they were insensitive, and this was widely held until Hurst (1911) showed that distension could cause pain in the oesophagus and rectum. Since then many other instances have been described in which