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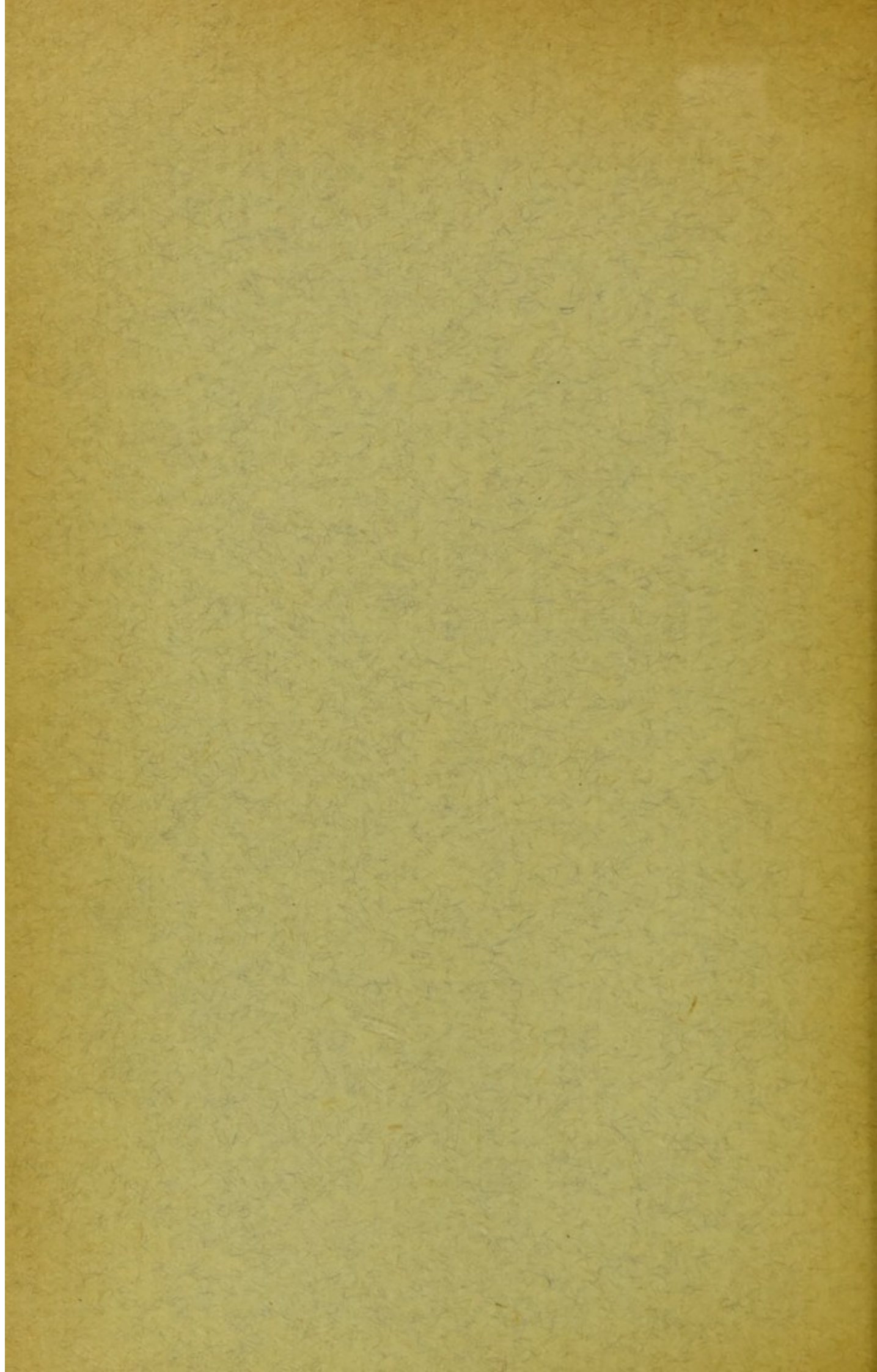
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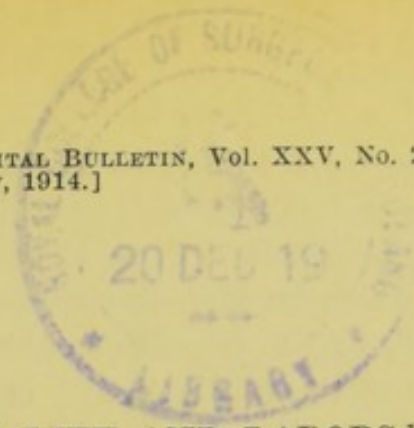
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JOHN HUNTER: HIS LIFE AND LABORS.

By C. W. G. ROHRER, M. D., Baltimore, Md,







JOHN HUNTER: HIS LIFE AND LABORS.¹

By C. W. G. ROHRER, M. D., Baltimore, Md.

For several years I have been pleasantly engaged in col- [10]
lecting the works of John Hunter, the founder of scientific
surgery. I now have them complete; and for this reason
I venture to bring before you a brief review of the life and
labors of one with whose career you already are reasonably
familiar.

BIRTH AND PARENTAGE.

John Hunter was born at Long Calderwood, Scotland, on
the 13th of February, 1728. Long Calderwood is a small
estate still belonging to his descendants, improved by a good
stone house two stories high, situated about eight miles from
Glasgow, in the parish of East Kilbride, county of Lanark.
Here, in the second story room above the kitchen, John
Hunter was born. There is some doubt concerning the exact
date of his birth, but the one given above accords with that
of the parish register.²

Strange to relate, Everard Home, in his "Life of Hun-
ter," prefixed to the first edition of the "Treatise on Blood,
Inflammation, and Gunshot Wounds," gives the 14th of *July*

¹ Paper read at the meeting of the Johns Hopkins Hospital
Historical Club, January 13, 1913.

² The following letter from the registrar for the parish of East
Kilbride to Dr. James Watson, the president of the Faculty of
Physicians and Surgeons of Glasgow, together with the accom-
panying register, are added as authority for any future biogra-
pher of John Hunter, and will doubtless be read with interest:—

EAST KILBRIDE, 29 March, 1859.

SIR:—I HAVE searched the records of Births and Baptisms
for this parish and have found the name of John Hunter, and
send you the Extract. You will observe that the Christian name

[10] as the correct date. This is manifestly wrong. The 14th of February is the date on which the anniversary of his birth is celebrated by the Royal College of Surgeons of England, and which he himself observed as his birthday; but "probably", as Stephen Paget writes, "he was born during the night of the 13th-14th and in the room over the kitchen."

He was the son of John Hunter and Agnes Hunter, his wife, whose maiden name was Paul. They were married on

of his mother is blank, and the place of birth a-wanting, neither being in the Register. On making further search, I found the name of a sister "Isobel," two years older than John the same omission occurs with the name of the mother; but the place of birth given is Calderfield and I am of opinion that the farm now known as Long Calderwood would at one time be divided into two farms named respectively Calderfield and Long Calderwood a circumstance very common in this Parish and I am led to this conclusion by the name of the farm adjoining that in question being likewise Long Calderwood, and no place known to me here having the designation of Calderfield.

I am, Sir, Yours, &c.,

MATTHEW DALGLISH, *Registrar.*

DR. JAMES WATSON,

153, St. Vincent Street, Glasgow.

COPY OF REGISTER ENCLOSED.

"John, a lawful son procreate between John Hunter and ——— Paul, born February 13th and baptized March 30th, 1728."

Extracted by me from the Register-Book of Births and Baptisms for the parish of East Kilbride, in the county of Lanark, this 28th day of March, 1859.

MATTHEW DALGLISH, *Registrar.*

In confirmation of the correctness of the registrar's notion, W. Hunter Baillie, the grandnephew of John Hunter, wrote as follows to John F. South, vice-president of the Royal College of Surgeons, under date of April 9, 1859:

"In looking at an old map I have of Long Calderwood farm and mansion, which belong to me, I find that a portion of this small property was called Calderfield, and that the larger portion was named Long Calderwood. Upon this latter stands the house which I have always heard was the birthplace of William and John Hunter. It was externally in good repair when I saw it a few years since, and is still serviceable for farming purposes, such as lodging for farm servants, &c. The house used for habitation by the farmer is on another part of the property."

December 30, 1707. His father, who appears to have been [10] a small farmer living on his own estate, was descended from a very old Scotch family, probably of Norman origin, the Hunters of Hunterston³ in Ayrshire, whose history goes back to the thirteenth century. He was a man of refinement and [11] of some education, with a high moral and religious sense. He was nearly seventy years old at the time of John's birth; who was the youngest of ten children, five dying in infancy. He died in 1738⁴ at the age of seventy-eight. The mother was the daughter of a respectable citizen of Glasgow. According to M. Baillie, she was "a woman of great worth and of considerable talents." John was thus left, at the age of ten, to her sole care and, although a woman of strong mind, she was particularly indulgent to him. She died on November 3d, 1751, aged sixty-six years.

James, the eldest of the brothers who attained to manhood, was born in 1715. He was brought up to the law, but in 1742 he went to London to visit his brother William, who was at that time a teacher of anatomy, and was so captivated by his brother's pursuits that he relinquished the law to become a practitioner of medicine. Intense application to anatomy impaired his health and made it necessary for him to return to Long Calderwood, where he died of a pulmonary hemorrhage in 1743, in the twenty-ninth year of his age. He was a young man of pleasing address, and brilliant promise. William said of him, that if he had lived to practice physic in London, nothing could have prevented his rising to the top of his profession.

William, born on the 23rd of May, 1718, early rose to unrivalled distinction as a teacher of anatomy in London,

³The old manor-house of Hunterston, with its tower of great antiquity, is still standing; once a strong-hold, now a farm-house. A report of the house, written in 1867, says that it has not changed since 1728, except that it was then thatched and is now slated, and two rooms downstairs have been thrown into one. From Hunter of Hunterston was descended Francis Hunter, John Hunter's paternal grandfather.

⁴1738 is the date given by Ottley. According to Dr. S. Foart Simmons, the correct date is October 30, 1741. This would make Hunter thirteen years old at the time of his father's death.

[11] attained a professional reputation which could not be exceeded, and a celebrity second only to that of his brother John. He was not only famous as a physician and physiologist, but also as the founder, so-called, of scientific midwifery. It was under the fostering care of this elder brother that John was initiated into those pursuits in which he soon became the rival of his instructor. He died in London, on the 30th of March, 1783, universally mourned and lamented.

The younger daughter, Dorothea, married Rev. James Baillie, the minister at Hamilton, near Kilbride, from whom descended the illustrious Dr. Matthew Baillie, and the no less distinguished Joanna Baillie, an authoress of high repute and one of Sir Walter Scott's closest friends.

BOYHOOD AND YOUTH.

Very little is known of the boyhood and youth of John Hunter. His biographers are unanimous in stating that he was wilful and disobedient, and much given to idleness. At the same time he was good at outdoor games, and observant of nature. While he cared little for books his mind was not wholly inactive, as the following statement concerning himself will show: "When I was a boy, I wanted to know all about the clouds and the grasses, and why the leaves changed color in the autumn; I watched the ants, bees, birds, tadpoles, and caddis-worms; I pestered people with questions about what nobody knew or cared anything about."

The above, after all, is perhaps the best education he could have had for sharpening his senses to observe, and bringing his reasoning powers to bear upon problems of the highest interest, in the pursuit of which he was later to become an acknowledged leader. As Sir James Paget said of him: "He was impelled to obtain knowledge by intellectual self-exertion, and like an athlete restless in the exercise of his strength, so he could not rest; he could not but search, and watch, and question nature; he must compel her to answer, and he could set no limit to his search. Within the range of the great world of life he must seek by every method of inquiry, every kind and degree of knowledge."

At the age of seventeen, learning that his brother-in-law, a

cabinet-maker at Glasgow, married to a sister whom he dearly [11] loved, was laboring under pecuniary embarrassment, he paid him a visit, and for a time assisted him in his business, not as an apprentice but as a volunteer, working probably at small wages or simply for his board and clothing. It was this circumstance which induced some of his envious contemporaries to assert that in early life he had been a wheelwright or a carpenter;⁵ a statement for which there is not the slightest foundation in truth. For three years he generously aided his brother-in-law, but tiring of an occupation which was in no wise congenial to him, he was seized with a desire to visit his brother William, who had been living for some time in London, and had succeeded in building up a large and lucrative practice, and was growing rapidly in reputation. He wrote to him, asking leave to come and be his assistant in his anatomical researches; or, if that proposal should not be accepted, expressing a wish to enlist in the army. In answer he received a very kind invitation from his brother, and immediately set off for London, where he arrived in September, 1748, about a fortnight before the commencement of the autumnal course of lectures. An arrangement was promptly made by which John became an assistant to his brother. Herein was aroused the latent fire of his remarkable genius, which never ceased to burn from that auspicious moment until the day of his widely-lamented death. His reception in London is described by Professor Samuel D. Gross, in the following words:

The meeting between the two brothers was cordial, and arrangements were at once effected by which John became an assistant in William's anatomical rooms, which, although only recently opened, had already acquired marked celebrity on account of their educational advantages. It was there that young Hunter first became aware of his latent powers, and threw off

⁵ Reference is here made to Jesse Foot's statement, on p. 10, of his "Life of Hunter," which reads as follows:

"A wheelwright or a carpenter he certainly was, until the event of William Hunter becoming a public lecturer in anatomy, changed the scheme of his future occupations, and determined him to accept the invitation of his brother: to lay down the chisel, the rule, and the mallet; and take up the knife, the blow-pipe, and the probe."

[12] the incubus which had so long oppressed his soul. A new life broke in upon him; his ambition was aroused; industry, steady and unremitting, took the place of idleness, and the undecided, wavering, erring youth, stimulated by the new atmosphere in which he was now daily immersed, assumed the attitude and the assured character of the philosopher and the student of nature. Who or what brought about these wonderful changes in the life and conduct of this young man, so sudden, so unexpected? It is not difficult to answer the question. It was simply William Hunter, and the influence of his example. John saw the wonderful things which his brother was doing in building up a great anatomical museum, and it is, therefore, not surprising that his tastes should soon have taken a similar direction.⁶

EARLY EDUCATION.

Hunter's preliminary education had been almost wholly neglected, a lack which was never made good, and which, in his maturer years, he never ceased to regret. Before his father's death he had been sent to a Latin school at Kilbride, where he made no progress in his studies, and from which he was removed. Later he went to the grammar-school of Glasgow, but he had little or no taste for books and preferred sports to study.

He tried to remedy his ignorance of the fundamental branches in 1753⁷ by entering St. Mary's Hall, Oxford, as a gentleman commoner. The motives which led him to take this step are not satisfactorily explained by any of his biographers, but it seems probable that he was urged to do so by his brother and friends. His brother was very anxious that he should abandon surgery and study medicine, which was regarded, and, perhaps not without reason in the then existing state of the science, as a higher branch of the healing art. With this end in view it was deemed very desirable that John should have a sound knowledge of Greek and Latin, as no physician was considered properly educated without it.

The effort, however, proved abortive. Hunter was now twenty-five years of age, and he had no disposition to shut himself up in a college, or to give up the idea, formed soon

⁶ "John Hunter and his Pupils," p. 13.

⁷ In the buttery book at St. Mary's Hall the date of Hunter's admission is given as June 5, 1755.

after he settled in London, of becoming a great surgeon. [12] He looked upon such studies as a waste of time; and in referring to the subject some years afterwards, in a conversation with Sir Anthony Carlisle he thus feelingly expressed himself: "They wanted," he said, "to make an old woman of me, or that I should stuff Latin and Greek at the University; but," added he, significantly pressing his thumbnail on the table "these schemes I cracked like so many vermin as they came before me."⁸

One cannot but regret that Hunter did not carry out the wishes of his friends. A little "stuffing" of Latin and Greek would have been of vast benefit to him, in preventing those errors of style and literary composition which so greatly disfigure and obscure his writings.

MEDICAL TRAINING.

Hunter received much of his inspiration and medical training from three celebrated teachers—his brother, William Hunter, William Cheselden, and Percivall Pott. Symonds,⁹ his brother's assistant in the dissecting room, also gave him much instruction.

Having been duly installed as assistant he set resolutely to work. He took, as it were, a new lease on life. Languor and indecision gave way to steady, unremitting toil, sustained by a definite purpose. It is stated of him that "he did not work in Anatomy, as is usually done, for a few hours in the day, but was employed in it from the rising to the setting of the sun."

The first task assigned to him was the dissection of the muscles of an arm, which was so well and so rapidly done that he was next set to preparing an arm in which all the arteries were injected, and these, as well as the muscles, were to be exposed and preserved. This labor was also performed in so satisfactory a manner as to elicit the highest commendation from his brother, who predicted his future greatness

⁸ Ottley's "Life of John Hunter" Palmer's Edition, vol. I, page 14, London, 1837.

⁹ Sometimes spelt "Simmons," and also "Symons."

[12] as an anatomist, and told him "he should not want for employment." His proficiency as a practical anatomist was so very rapid that, before the end of twelve months, he was intrusted with the preparation of his brother's subjects for his anatomical lectures.

The summer of 1749 was spent by Hunter at Chelsea Hospital, under the instruction of the celebrated Cheselden. Under this worthy master he learned the first rudiments of surgery, an exceptional opportunity which came to him at the request of his brother.

In the succeeding winter he was so far advanced as to become demonstrator of anatomy, assisting and directing the pupils in the dissecting-rooms, while his brother confined his attention almost exclusively to the regular lectures in the class-room.

The assiduous discharge of these most laborious duties gave Hunter full employment during the winter of 1749-50. During the summer he resumed his attendance at the hospital at Chelsea. In 1751 he entered St. Bartholomew's Hospital as surgeon's pupil to Percivall Pott, another great luminary in British surgery. In 1754 he became surgeon's pupil at St. George's Hospital. In the winter of 1755, seven years after his arrival in London and after he had acted as assistant for five years, he was admitted to a partnership in his brother William's private school of anatomy.²⁰ Besides a certain portion of the course of lectures allotted to him, he gave lectures when his brother was called away to attend his patients.

PROFESSIONAL CAREER.

[13] Hunter's professional career may be said to have begun in May, 1756, when he was appointed house-surgeon to St. George's Hospital, which position he retained, however, only for the short space of five months. The reason of his resignation is not recorded, but it was probably because he longed

²⁰ I have purposely refrained from making even brief allusion to Hunter's differences with his brother William, as these unfortunate occurrences will be fully narrated in a subsequent paper on William Hunter.

to return to the more congenial work of the dissecting room."¹¹ [13]

He worked for ten years on human anatomy, during which period, as Everard Home informs us, "he made himself master of what was already known, as well as made some addition to that knowledge." Some of his discoveries called forth the highest commendations of Baron Haller, then considered the first physiologist in Europe, and still command admiration. At that time he also began his studies in comparative anatomy, a new and untrodden field of scientific inquiry in which he was soon to become a distinguished authority. Unfortunately, owing to his incessant labors, his health was beginning to suffer. In the spring of 1759 he was attacked with inflammation of the lungs, from which he made a tardy recovery, the disease leaving in its wake certain symptoms suggestive of pulmonary tuberculosis.¹² He was strongly advised to go abroad; and in October, 1760, through the agency of his friends, he was made a staff-surgeon in the army. In the following spring he went with the army to Belleisle, off the western coast of France. He served as senior surgeon on the staff, both in Belleisle and in Portugal, till the year 1763, when peace having been proclaimed, he returned to England, completely restored to health, and settled in Golden Square, London, to start practice as a surgeon. He soon found that his half-pay as a military surgeon, and the emoluments derived from private practice, were inadequate for his support. Therefore, in order to increase his income, he taught practical anatomy and operative surgery for several winters. He also took private pupils, each of whom was apprenticed to him for five years, at a fee of five hundred guineas (about \$2,650.00), which included board and lodging. Among his private pupils whom he continued to receive until within a short time of his death were Edward Jenner, John Abernethy, Henry Cline, Philip Syng Physick, Astley Cooper, Everard Home, and others.

¹¹ In 1757, at the age of 29 years, Hunter was made Prosector and Demonstrator in Dr. William Hunter's Theatre of Anatomy, in Great Windmill Street (Professor Owen).

¹² There was a tuberculous taint in the Hunter family, James, an older brother of John, dying of "a spitting of blood," in the twenty-ninth year of his age, as stated in a preceding paragraph.

[13] At this time Hunter resumed, with unabated zeal, his researches in comparative anatomy and physiology. Finding that his experiments could not be conducted properly in the midst of a large city, in 1764 he purchased two acres of ground about two miles from London, beyond Brompton, and built upon it a small house to suit himself, well known by the name of Earl's Court.

In 1768 a vacancy on the surgical staff occurred at St. George's Hospital, and Hunter became a candidate for the position. Aided by his brother William, he was elected surgeon to the hospital, where he served until his death, twenty-five years later.

Soon after his appointment to St. George's Hospital he was elected a member of the Corporation of Surgeons. Although the corporation embraced some excellent men, Hunter had so little respect for it that he seldom attended its meetings or took any active part in its deliberations.

In the winter of 1773, Hunter determined to become a public lecturer on the theory and principles of surgery, his reasons for which were usually explained as often as he began his course. He stated that he had so frequently been compelled to hear his opinions either incorrectly quoted, or delivered as the discoveries of others, that he found it absolutely necessary himself to explain them systematically. For two winters he read his lectures gratuitously to the pupils of St. George's Hospital, and in 1775 publicly delivered them in his house in Jermyn Street.²³

CONTRIBUTIONS TO MEDICAL SCIENCE.

Hunter made many notable contributions to medicine and surgery. Several of his early papers were published, in 1762, in Dr. William Hunter's "Medical Commentaries." These

²³ The task of lecturing, even with his copy before him, was so formidable that he was obliged to take thirty drops of laudanum at the beginning of each course. Yet he certainly felt great delight in finding himself understood, always waiting at the close of each lecture to answer any questions; and evincing evident satisfaction when those questions were pertinent, and he perceived his answers were satisfactory and intelligible (Adams).

are: An account of his injecting the testis, his description of [13] the descent of that body, with observations on the hernia congenita, and his experiments in proof of the veins not being absorbents.

Among his discoveries in human anatomy, and his contributions to that science, are the following:

He traced the ramification of the olfactory nerves upon the mucous membrane of the nose, and discovered the course of some of the branches of the fifth pair of nerves—the trifacial.

He traced, in the gravid uterus, the arteries of the uterus to their termination in the placenta.

He was the first to demonstrate the function of the lymphatic vessels as absorbents in the human economy.

In the course of his inquiries in comparative anatomy, aided by the results gleaned from animal experimentation, among other things he made the following discoveries, all of which have a distinct bearing upon human medicine and surgery:

He ascertained the changes which animal and vegetable substances undergo in the stomach, when acted upon by the gastric juice.

He discovered, by means of feeding young animals with madder, which tinges growing bones red, the mode in which a bone retains its shape during its growth.

He explained the process of exfoliation by which a dead piece of bone is separated from the living.

In 1776 Hunter sent to the Royal Society a memoir on the means to be employed in the resuscitation of persons apparently drowned. In the same year he was appointed Croonian lecturer by the Royal Society. The subject selected was "Muscular Motion." The course extended over a period of six years, being completed in 1782.

The prevention of rabies or hydrophobia early engrossed [14] Hunter's attention, and he was one of the first surgeons who taught that deep excision of the wounded structures is the most successful method of operation.

He also made experiments upon the transplantation of teeth in the human subject, and upon skin grafting.¹⁴

¹⁴ "May we not claim for him," says Sir Wm. Fergusson, with reference to these experiments, "that he anticipated by a hundred years the scientific data on which the present system of human grafting is conducted?" (*Hunt. Orat.*, 1871. p. 17.)

[14] The most remarkable operation associated with Hunter's name is the one in which he tied the femoral artery in the "aponeurotic space in the middle third of the thigh," in what has since been termed, and rightly, "Hunter's canal," for the cure of a popliteal aneurism. This one feat of surgical daring, novel alike for its resourcefulness and originality, is in itself sufficient to give him undying fame. It was performed in December, 1785, at St. George's Hospital. The particulars of this case are given in the London Medical Journal, and in the Transactions of a Society for Improving Medical and Chirurgical Knowledge. The patient, a coachman, forty-five years of age, in six weeks walked away from the hospital cured.

In his "Lectures on the Principles of Surgery" (Palmer's edition, vol. I, p. 551,), he comments upon this operation, as follows:

In December, 1785, I performed the operation at St. George's Hospital, in a case of popliteal aneurism, in a manner different from that ordinarily practiced, and with success. ***** I would only observe, that in future I would advise only tying the artery in one part, and not to endeavor to unite the wound by the first intention. In that case four ligatures were applied upon the artery.

The three important principles on which the Hunterian operation is founded are:

1st. That *the impulse of the blood into the aneurism being restrained by a ligature placed on the artery above the tumor, the further progress of the disease will be checked, without the necessity for a ligature being also placed on the artery below the tumor.*

2d. *That the powers of absorption would suffice for the removal of the coagula in the sac, and the necessity for opening it be thus done away with.*

3d. *That the anastomosing vessels of the limb, in their natural state, would be capable of immediately taking on such increased action as would suffice for carrying on the circulation to the parts below the point at which the main artery was tied.*

It is a singular fact that Hunter foreshadowed the principles which now guide the surgeon in the treatment of club-foot and similar deformities. In 1767 he ruptured his tendo Achillis, a circumstance which led him to institute a series

of experiments upon the reunion of divided tendons in the [14] dog.

BOOKS AND PUBLICATIONS.

Hunter's merits as an author are truly great. Notwithstanding his want of scholarship, and the labor with which he composed, he was a prolific writer. Like his celebrated teacher and older brother, William, he early formed the habit of committing his views to writing, even when he did not intend to give them immediate publicity. Owing to an unfortunate circumstance (the burning of the Hunter MSS., by Sir Everard Home, in July, 1823), much that he wrote never met the public gaze. Many of his early contributions, especially those on comparative anatomy and physiology, found their way into the Transactions of the Royal Society and other similar publications, where they elicited much attention.

Hunter's first systematic work was his "Treatise on the Natural History and Diseases of the Human Teeth," the first part of which was issued in 1771, and the second seven years after (1778).²⁵ The work was well received, and greatly enhanced his reputation as an acute observer and investigator. His attention seems to have been originally

²⁵ On the occasion of the publication of Part II, a new title-page was added to Part I, and the two (being bound together) were sold as the *second* edition.

The full title of Part I, which consists of 128 quarto pages, is:

The
NATURAL HISTORY
of the
HUMAN TEETH:
Explaining their
Structure, Use, Formation,
Growth, and Diseases.
Illustrated with Copper-plates.
By John Hunter, F. R. S.
Surgeon Extraordinary to the King, and Fellow of the
Royal Society.

London,
Printed for J. Johnson, No. 72, St. Paul's Church-yard.

MDCCLXXVIII.

[14] directed to the subject by the deplorable state of dentistry, which was almost solely confined to the barber or ignorant mechanic, whose chief occupation consisted in extracting and plugging teeth.

On pp. 121 and 122, of Part I, in his remarks entitled "Of the Diseases of the Teeth," he says:

[15] The Teeth are subject to diseases as well as other parts of the body. Whatever the disorder is that affects them, it is generally attended with pain; and from this indeed we commonly first know that they are affected.

Pain in the Teeth proceeds, I believe, in a great measure, from the air coming into contact with the nerve in the cavity of the Tooth; for we seldom see people affected with the Tooth-ach, but when the cavity is exposed to the air.

It is not easy to say by what means the cavity comes to be exposed.

The most common disease to which the Teeth are subject, begins with a small, dark coloured speck, generally on the side of the Tooth where it is not exposed to pressure; from what cause this arises is hitherto unknown. The substance of the Tooth thus discoloured, gradually decays, and an opening is made into the cavity.

Part II consists of ten chapters, treating of a variety of topics. For example, Chap. I, Sec. IV, is devoted to a consideration of gum boils; Sec. VII, to abscess of the *Antrum Maxillare*. Sec. I, of Chap. III, is allotted to a discussion of the scurvy in the gums; while in Chap. IX, the transplanting

The full title of Part II, also containing 128 quarto pages, is:

A
PRACTICAL TREATISE
on the
Diseases
of the
TEETH;
Intended as a
Supplement
to the
Natural History of those Parts.
By John Hunter,
Surgeon Extraordinary to the KING, and Fellow of the Royal
Society.

London.

Printed for J. Johnson, No. 72, St. Paul's Church-Yard,
MDCCLXXVIII.

of teeth is discussed *pro* and *con*. In Chap. X, pp. 126 and [15] 127, he relates the following case where a disorder of the urethra was produced by dentition:

A boy, about two years of age, was taken with a pain and difficulty in making water; and voided matter from the *urethra*. I suspected that by some means or other this child might possibly be affected by the venereal poison; and the suspicion naturally fell on the nurse.

These complaints sometimes abated, and would go off altogether; and then return again. It was observed at last, that they returned only upon his cutting a new Tooth: this happened so often, regularly and constantly, that there was no reason to doubt but that it was owing to that cause.

The text of Hunter's book on the Teeth is embellished by sixteen plates. It also has a copious index. The work passed through three editions, the last having been issued in 1803, ten years after Hunter's death.

The "Treatise on the Venereal Disease" appeared in 1786,¹⁶ followed by a second edition in 1788. A third edition

¹⁶ The first edition was a handsome quarto volume of 398 pages, illustrated with seven full-page plates from drawings made by William Bell, and provided with a most comprehensive index. Its simple, but all-expressive title is:

A
TREATISE
on
THE VENEREAL DISEASE.
By John Hunter.
London,
Sold at No. 13, Castle-Street, Leicester-Square.
MDCCLXXXVI.

The dedicatory page of this pioneer and famous publication is interesting. It bears the following inscription:

To
SIR GEORGE BAKER, Bart.
Physician to Her Majesty,
President of the College of Physicians,
and
Fellow of the Royal Society,
THIS WORK
is inscribed
As a Mark of Esteem,

Leicester-Square,
March 30, 1786.

By His Friend, and
Humble Servant,
John Hunter.

[15] was issued by Everard Home, in 1810. Having been long and impatiently expected, it at once attracted general attention. Hunter had spent many years in collecting his material; his object was to produce a great work, founded solely upon his personal observations. He had seen much of these diseases during his connection with the army, and afterwards in civil practice, and he felt that he could let the work rest upon its own intrinsic merits. His account of venereal affections was for upwards of a third of a century the best authority on the subject in any language, and his description of the indurated chancre is so graphic and distinct that it will always be called by his name. It runs in part as follows:

This, like most other inflammations which terminate in ulcers, begins first with an itching in the part; if it is the glans that is inflamed, generally a small pimple appears full of matter, without much hardness, or seeming inflammation, and with very little tumefaction, the glans not being so readily tumefied from inflammation as many parts are, especially the prepuce; nor are the chancres attended with so much pain or inconvenience, as those on the prepuce; but if upon the frænum, and more especially the prepuce, an inflammation more considerable than the former soon follows, or at least the effects of the inflammation are more extensive and visible. Those parts being composed of very loose cellular membrane, afford a ready passage for the extravasated juices; continued sympathy also more readily takes place in them. The itching is gradually changed to pain; the surface of the prepuce is in some cases excoriated, and afterwards ulcerates: in others a small pimple, or abscess appears, as on the glans, which forms an ulcer. A thickening of the part comes on, which at first, and while of the true venereal kind, is very circumscribed, not diffusing itself gradually and imperceptibly into the surrounding parts, but terminating rather abruptly. Its base is hard, and the edges a little prominent. When it begins on the frænum, or near it, that part is very commonly wholly destroyed, or a hole is often ulcerated through it, which proves rather inconvenient in the cure, and in general it had better, in such cases, be divided at first.

In 1788 a second edition of the "Treatise" was issued, also consisting of one quarto volume, price a guinea. On this work Hunter had bestowed an infinity of time and trouble; and before publication he submitted every part of it to a committee of his friends, consisting of Sir Gilbert Blane,

Dr. Fordyce, Dr. David Pitcairn, and Dr. Marshall. Both [15] the first and second editions were printed and published at Hunter's own residence."

Of the "Treatise on the Venereal Disease," Jesse Foot has [16] this to say (Life of Hunter, pp. 272 and 273) :

The sale of it was rapid at first from curiosity being artificially raised, as the papers of the day had announced that it was to throw all former productions at an humble distance.

"A third quarto edition was published the year after Hunter's death, by Everard Home. This was printed by some mistake from the first instead of from the second edition, and is, therefore, chargeable with all those errors which Hunter was at so much pains to correct. A fourth edition, in one octavo volume, with notes by Dr. Joseph Adams, was published in 1810. This is a pretty correct reprint from the second edition, augmented and elaborated by Adams' Commentaries. Meeting with a ready sale, a second edition of it was called for in 1818. In his preface, Dr. Adams pays Hunter a compliment by saying:

"I would advise every medical student to read the whole of the book in the order in which it stands. He will find it the best introduction to pathological reasoning that his closet can afford him. Those chapters, in the Third Part, which relate to Stricture and other diseases in the urinary passages, may perhaps fatigue his attention without adding sufficiently to his knowledge. It cannot be expected that he should retain the whole in his memory, and the remarks being chiefly practical, must be referred to as often as intricate cases occur. If therefore these chapters are read in their order, the student must not be angry with his Author or himself, if he cannot keep up his attention to every minutia. Whenever he has an intricate case, in his own practice, he will not accuse Mr. Hunter of prolixity."

A fifth edition, quarto, consisting of 429 pages, with notes by Sir Everard Home, Bart., was published in 1809 and 1810, it being the *second* edition by this editor, in which, however, few deviations from the first are observable. A supposititious title-page, purporting to be the *third* edition, seems to have been added in 1810, in order to increase the sale. The copy which I possess, of this edition, came from the library of Joseph Henry Green, who was president of the Royal College of Surgeons of England, in 1859, when Hunter's remains were transferred from the vault of St. Martin's-in-the-Fields to Westminster Abbey. It has for a frontispiece a print of Sharp's engraving of Reynolds' celebrated portrait of Hunter.

[16] Hunter's "Observations on Certain Parts of the Animal Economy" was first published in 1786. It is dedicated to Sir Joseph Banks, president of the Royal Society.¹⁸ A second edition appeared in 1792; and in 1837, a third, edited by Richard Owen. The first two editions are quarto; and, like the corresponding ones of the "Treatise on the Venereal Disease," were printed and sold at Hunter's own residence. The third edition, the one by Owen, is an octavo volume of 506 pages.

The "Treatise on the Blood, Inflammation, and Gun-shot Wounds," a work of vast labor and the most patient research, and upon which Hunter's fame as a surgeon and a medical philosopher largely rests, was published in 1794, under the supervision of Dr. Matthew Baillie and Everard Home, only about one-third of the proofs having been revised by the author at the time of his death. A life, by Everard Home, was prefixed to the volume, but this, for some reason, was omitted in the succeeding editions of 1812, 1818, and 1828.¹⁹

Abernethy, in his "Lectures on Local Diseases," pays the following splendid tribute to this work:

I know of no book, to which I can refer a surgical student for a satisfactory account of those febrile and nervous affections

¹⁸ TO SIR JOSEPH BANKS, Bart.,

President of the Royal Society, &c. &c. &c.

DEAR SIR,

As the following Observations were made in the course of those pursuits in which you have so warmly interested yourself, and promoted with the most friendly assistance, I should be wanting in gratitude were I not to address them to you, as a public testimony of the friendship and esteem with which I am,

*Dear Sir,
Your obliged and
Very humble Servant,
JOHN HUNTER.*

Leicester Square,
Nov. 9, 1786.

¹⁹The original edition of this splendid work was issued in a quarto volume of 575 pages, with eight plates. Prefixed to it is an account of Hunter's life and writings, consisting of 67

which local disease produces, except that of Mr. John Hunter's [17]
TREATISE ON THE BLOOD, INFLAMMATION, &c.

That Hunter was pre-eminently fitted to write such a treatise, the following quotation from the advertisement to the English edition will abundantly show:

Mr. Hunter, in the year 1760, went as senior surgeon on the staff to Bellisle and Portugal, and continued abroad in active employment during the war, and there acquired a complete knowledge of *gun-shot wounds*, which can alone be procured by *actual* experience. In the year 1790 he was appointed inspector-general of hospitals, and surgeon-general of the army. Three years after this appointment, having long maturely weighed the important subject of gun-shot wounds, with the effects thereby procured (having now had three and thirty years ample experience) he brought forward his immortal treatise on the blood, inflammation, and *gun-shot* wounds. The expectation of the public was great, nor was it disappointed; for this work was found to answer the exalted reputation of the author. It was not a collection of the sentiments of others, but his own observations. It was wholly original.

pages. An engraving of his head forms the frontispiece. The full title of the volume is:

A
Treatise
on
The Blood,
INFLAMMATION,
and
Gun-Shot Wounds,
By the Late
John Hunter.

To Which is Prefixed,
A Short Account of the Author's Life,
By His Brother-in-Law,
Everard Home.

London:
Printed by John Richardson,
For George Nicol, Bookseller to His Majesty, Pall-Mall.

1794.

[17] It is interesting for Americans to note that a number of the experiments contained in Hunter's "Treatise on the Blood" were performed by one of his American pupils, Dr. Philip Syng Physick of Philadelphia, later known as the "Father of American Surgery." In this treatise, on p. 94, Hunter says: "Many of these experiments were repeated, by my desire, by Dr. Physick, now of Philadelphia, when he acted as house-

It is dedicated to his Majesty, the King, in the following laudatory terms:

TO THE KING.

MAY IT PLEASE YOUR MAJESTY,

In the year 1761, I had the honour of being appointed by your Majesty a surgeon on the staff in the expedition against Bellisle.

In the year 1790, your Majesty honoured me with one of the most important appointments in the medical department of the army, in fulfilling the duties of which every exertion shall be called forth to render me deserving of the trust reposed in me, and not unworthy of your Majesty's patronage.

The first of these appointments gave me extensive opportunities of attending to gun-shot wounds, of seeing the errors and defects in that branch of military surgery, and of studying to remove them. It drew my attention to inflammation in general, and enabled me to make observations which have formed the basis of the present Treatise. That office which I now hold has afforded me the means of extending my pursuits, and of laying this work before the public.

As the object of this book is the improvement of surgery in general, and particularly of that branch of it which is peculiarly directed to the service of the army, I am led by my situation, my duty, and my feelings, to address it, with all humility, to your Majesty.

That your Majesty may long live to enjoy the love and esteem of a happy people, is the fervent wish of

YOUR MAJESTY'S
MOST FAITHFUL SUBJECT,
AND MOST DUTIFUL SERVANT,
JOHN HUNTER.

Leicester Square,
May 20, 1793.

surgeon at St. George's Hospital, whose accuracy I could [17] depend upon." Hunter was so pleased with Physick that he offered him a share in his business, which, fortunately for this country, he declined.

A complete edition of Hunter's works was issued in London in 1837, in four octavo volumes, illustrated by a volume of plates in quarto, under the supervision of James F. Palmer,²⁰ assisted by Drewry Ottley, Thomas Bell, George B. Babington, and Richard Owen. Palmer himself superintended the publication of the "Lectures on the Principles of Surgery," and on the "Treatise on the Blood, Inflammation, and Gun-shot Wounds"; to Bell, an eminent dentist, was assigned the tract of the "Teeth"; Babington, a physician of wide reputation, took charge of the "Treatise on the Venereal Disease"; and Owen edited the papers on "Comparative Anatomy and Physiology," including an account of those published in the Philosophical Transactions. Ottley furnished a biography of Hunter for the first volume, which contains by far the most able and lucid account of him and of his writings that has ever been written. The "Lectures on the Principles of Surgery" were mainly printed from a copy, taken in short hand, by Nathaniel Rumsey, a pupil of Hunter.

In 1842, "A Descriptive and Illustrated Catalogue of the Calculi and other Animal Concretions Contained in the

²⁰ In vol. I, of Palmer's edition of Hunter's complete works, appears Ottley's admirable "Life of Hunter," by far the best which we possess. It comprises 198 pages. The remainder of this volume contains Hunter's "Lectures on the Principles of Surgery." Vol. II contains the two treatises on the "Teeth," and the "Treatise on the Venereal Disease." Vol. III is a reprint of the "Treatise on Inflammation," comprising 638 pages, and an elaborate general index to the three volumes, consisting of the remaining 38 pages. Nine pages descriptive of the plates then follow, the plates themselves appearing in a separate volume, quarto in size. Vol. IV is a reprint of the "Animal Economy."

In 1861 the scientific works of Hunter were published, in two octavo volumes, under the caption "Essays and Observations on Natural History, Anatomy, Physiology, Psychology, and Geology." These were edited by Professor Richard Owen. Vol. I contains observations on natural history, physiology, palæontology, phytology, and a treatise on animals. Vol II contains the observations on comparative anatomy.

- [17] Museum of the Royal College of Surgeons in London," was published. The greater part of this collection, amounting to about six hundred specimens, was formed by Hunter.

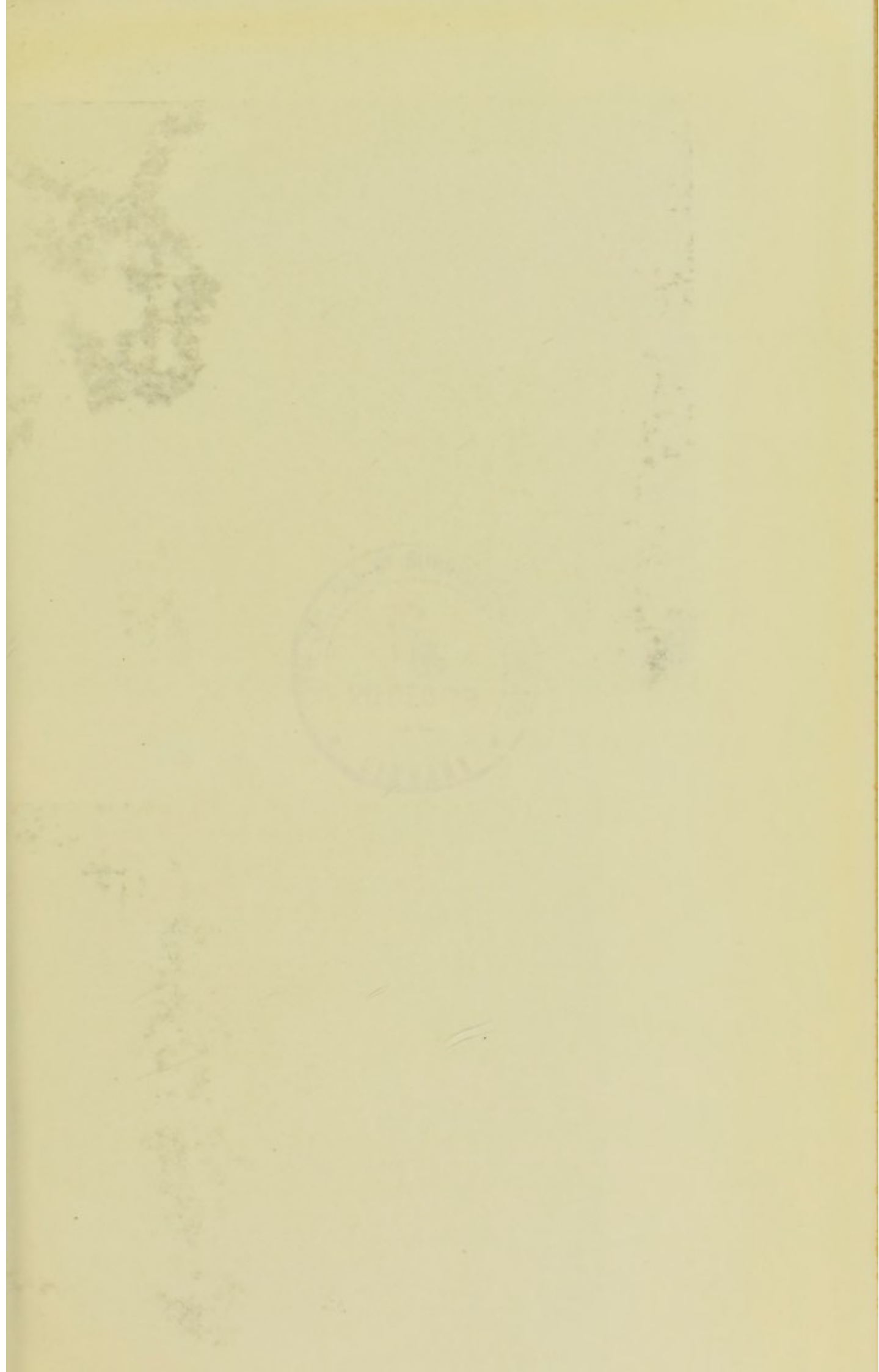
DEGREES AND HONORS.

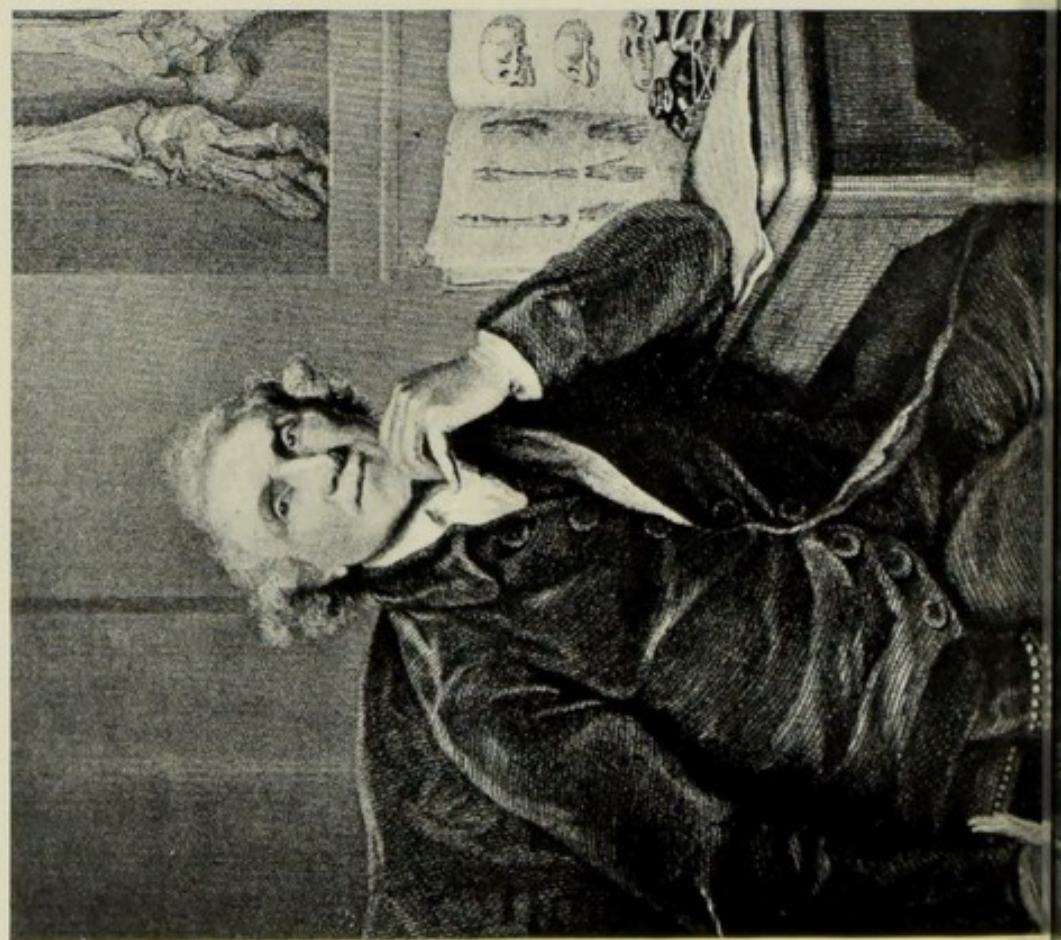
Hunter received numerous testimonials of esteem and appreciation from learned societies at home and abroad, as well as friendly recognition from his own sovereign. In 1767 he was made a Fellow of the Royal Society of London; in 1776, Surgeon Extraordinary to George III; in 1783, a member of the Royal Society of Medicine and of the Royal Academy of Surgery in Paris; in 1786, Deputy Surgeon-General of the army; and in 1789, four years before his death, Surgeon-General and Inspector. The Copley medal of the Royal Society, the highest distinction in its gift, was conferred upon him in 1787, in recognition of the value of his services as an original investigator. The American Philosophical Society, the Royal College of Surgeons of Ireland, the Chirurgico-Physical Society of Edinburgh, and the Royal Society of Sciences and Belles-Lettres of Gottenburg also enrolled him among their members.

PRIVATE LIFE.

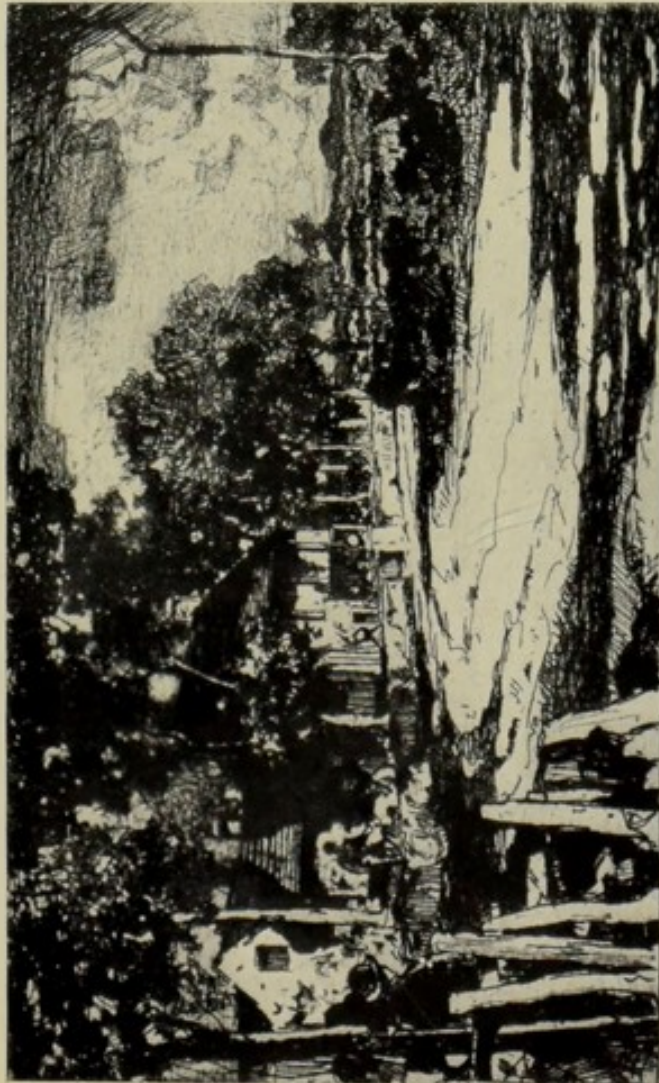
Hunter led a busy life. He was one of the most industrious of men, spending, for the furtherance of his great aims, practically all that he made. His brother-in-law, Sir Everard Home, tells us that for the first eleven years of Hunter's practice, 1763-1774, his income never amounted to a thousand pounds a year; and that he always added something to his collection as soon as he had succeeded in collecting fees to the amount of ten guineas. In the year 1778 his income exceeded a thousand pounds; for several years before his death it had increased to five, and at that period was above six thousand pounds.

In 1768 Hunter changed his residence, moving from Golden Square to Jermyn Street, into the house vacated by his brother William. The first part of the "Treatise on the Natural History of the Human Teeth" was published in May, 1771,





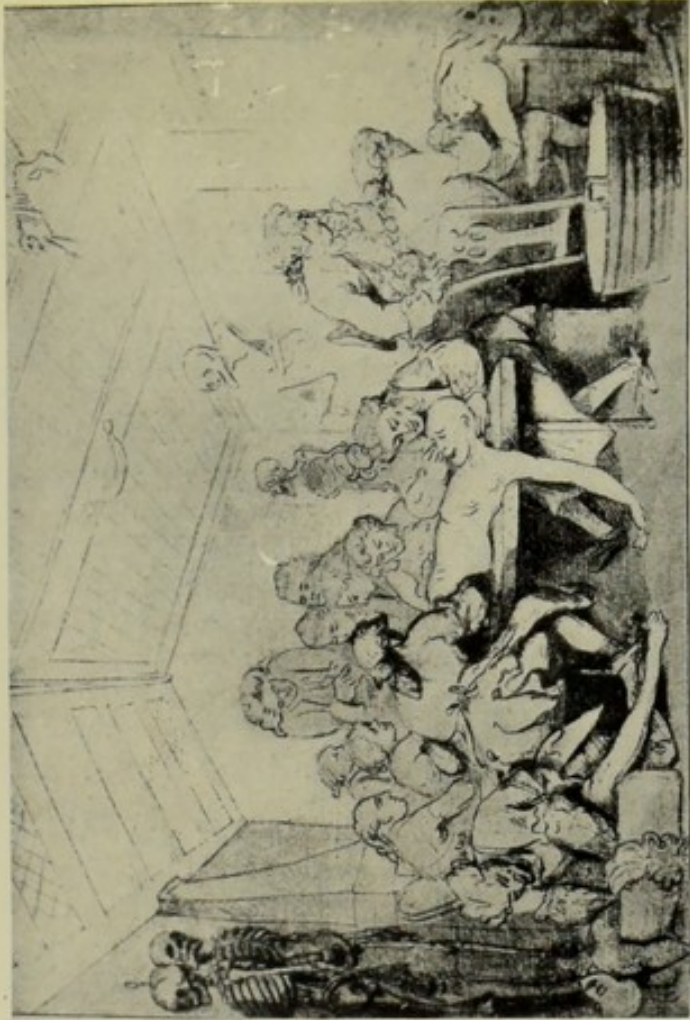
JOHN HUNTER. ENGRAVING OF REYNOLDS' PORTRAIT.



LONG CALDERWOOD.

LONG CALDERWOOD, THE BIRTHPLACE OF HUNTER.

DR. WILLIAM HUNTER, HUNTER'S BROTHER AND FIRST TEACHER
IN ANATOMY.



"THE DISSECTING ROOM." BY ROWLANDSON.

The figure standing up above the rest is William Hunter; the figure John is on his right-hand side, and Matthew Kellie is the next figure to William Hunter's right. The figures are taken from the engraving of the dissection room.

WM. HUNTER'S DISSECTING-ROOM.



and two months later he married Anne, elder daughter of [17] Robert Boyne Home, surgeon to Burgoyne's regiment of light horse. She was twenty-nine years old and he was forty-three. They had been engaged many years; but Hunter's financial condition did not permit of an earlier marriage, and it is stated that he used the proceeds of the above publication to [18] defray the expenses of his wedding. Their married life is said to have been a happy one. Four children were born unto them, only two of whom grew to maturity.

In 1783, Hunter's lease of the house on Jermyn Street came to an end. His collection had grown so rapidly that he sought for more commodious accommodations, and purchased a large house on the east side of Leicester Square, with the ground behind it, and a house on Castle Street (it was No. 13), now part of Charing Cross Road. He continued to reside in Leicester Square until he died, with the exception of the summers, which were still spent at Earl's Court. Between the two houses he erected a building for his museum, on which he expended above three thousand pounds. It was ready for occupancy in April, 1785. Everard Home, William Bell, and a new assistant, André, helped to move the preparations and arrange them in the new building, which was opened to visitors in 1787.

With the exception of an attack of pneumonia in 1759, Hunter enjoyed excellent health during the first forty years of his life. In 1769 he had a severe attack of gout, and another in 1773, accompanied by a spasmodic affection of different parts of his body, eventually involving his heart. From this time his cardiac disturbance was apt to recur after exertion, fatigue, or mental irritation.²¹ In December, 1789, four years before his death, he was suddenly seized with a total loss of memory, lasting for fully half an hour. In the autumn of 1790, and in the spring and autumn of 1791, his attacks of angina became more and more severe; in the beginning of October, 1792, he had one so violent as to almost cause his death.²²

²¹ He was accustomed to say that "his life was in the hands of any rascal who chose to annoy and tease him."

²² In addition to the above he had a severe attack of illness in the spring of 1777, and another in 1785, lasting about fifty days.

[18] In person Hunter was about the middle stature, measuring five feet two inches in height, uncommonly strong and active, very compactly made, but free from corpulency, and capable of great bodily exertion. His shoulders were high, and his neck short. His eyes and complexion were light, his brows heavy, his cheeks rather high, and, as one of his biographers (Jesse Foot) expresses it, his mouth was somewhat underhung. In a word, his features were rather large, and strongly marked. His hair, in his youth, was inclined to red, but as he advanced in life it became gray, and at length partially white. His countenance was animated, open, and in the latter part of his life deeply impressed with thoughtfulness. When an engraving of him was shown to Lavater, he said, "That man thinks for himself." He required little sleep, often working, with hardly any intermission, for nearly twenty hours out of the twenty-four. He was unassuming in his manners, but rather cold and reserved at times; in his dress he was plain and simple, and not always neat.

CLOSING YEARS.

Hunter's final hour came at last—death, sudden and unexpected, overtook him at St. George's Hospital. A special meeting of the governors and of the surgical staff of that institution had been called, to discuss business of importance connected with the admission of pupils and the mode of instructing them. A remark which Hunter made during the discussion was flatly contradicted by one of his colleagues. This disturbed Hunter immeasurably; and, as a consequence, he was seized with a most excruciating attack of angina. He immediately ceased speaking and hurried into an adjoining room, to fight out his pain by himself. His nephew, Dr. Matthew Baillie, followed him from the board-room; he went a few steps, gave a deep groan and fell into the arms of Dr. Robertson, one of the physicians of the hospital who chanced to be present, and expired.

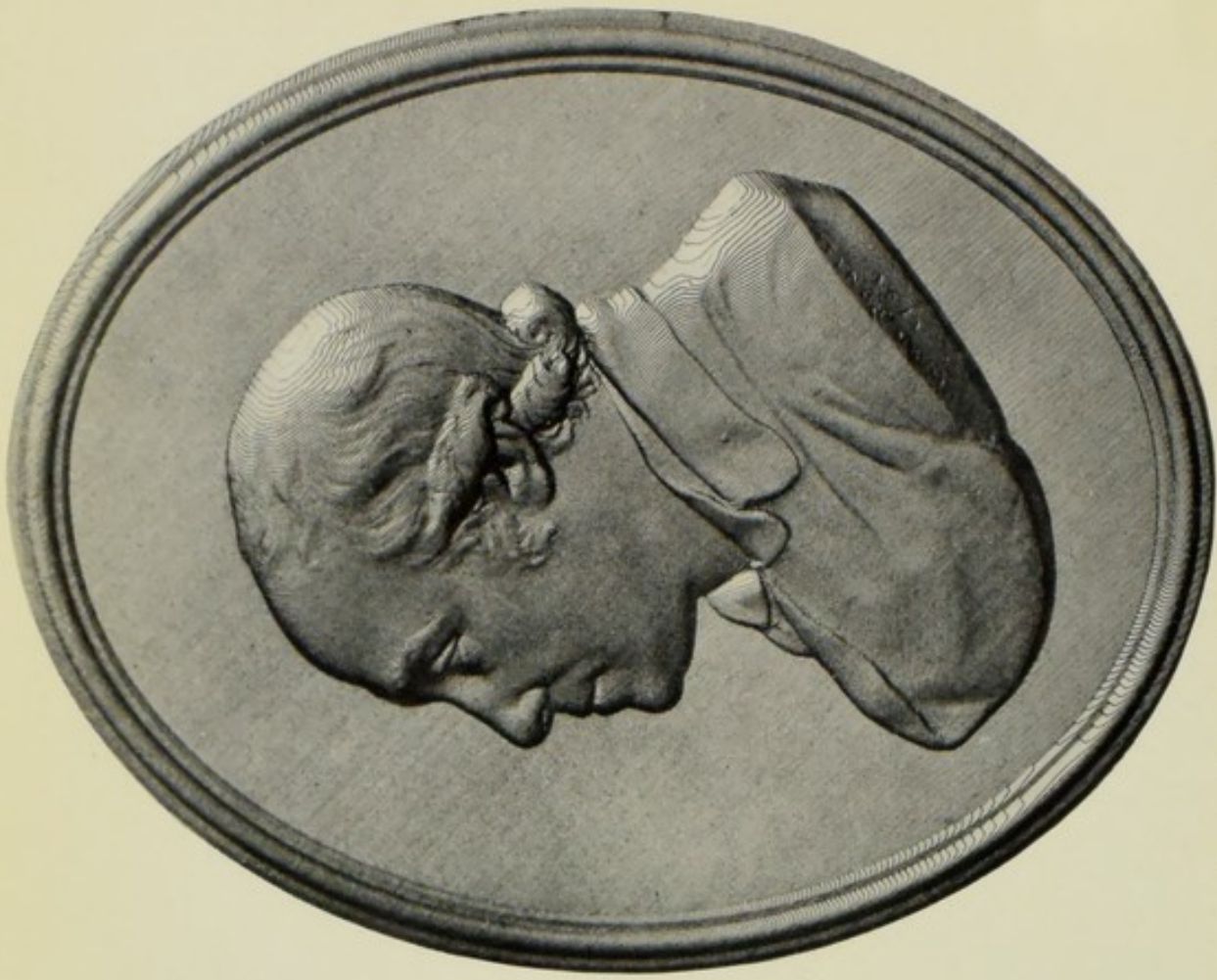
Hunter's brother-in-law and assistant, Everard Home, who was in the hospital at the time, was also summoned. Various attempts were made for upwards of an hour to restore anima-

11





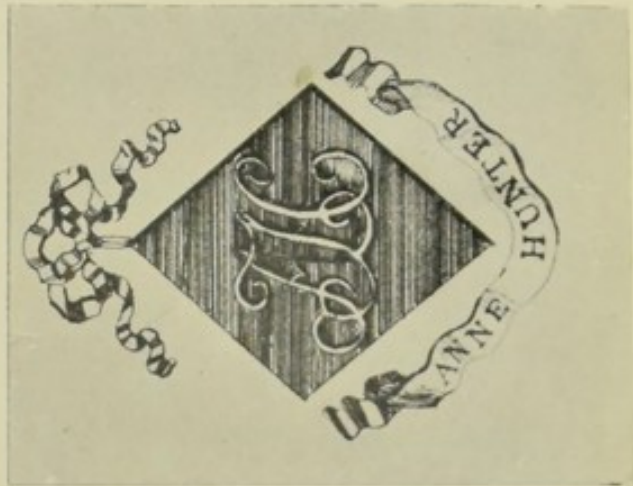
JOHN HUNTER. AFTER JOSI, SCULPTOR.



JOHN HUNTER. AFTER A MEDALLION TAKEN IN 1791.



JOHN HUNTER. PENCIL DRAWING BY HOLLAND.



JOHN HUNTER'S BOOKPLATE WITH ARMORIAL BEARINGS AND
MRS. HUNTER'S BOOKPLATE WITH HER MONOGRAM.



tion, under the hope that the attack might prove to be a [18] fainting fit, such as he had before experienced, but in vain. His body was placed in a sedan chair and conveyed to Leicester-Square, followed by his now vacant carriage.²³

This most distressing event put an end to the business of the meeting. The only notice to be found on the books of that day's proceedings is the following minute:

“*Resolved*,—That Mr. Hunter's letter to this Board relating to two of the surgeons' pupils, which was received this day, be preserved for future consideration.”

An occurrence so sad and so unusual called forth a widespread sympathy, and created a profound sensation wherever Hunter's name and fame were known and appreciated. In the language of Professor Gross, (“John Hunter and His Pupils,” pp. 26 and 27):

Like Cæsar, Hunter was murdered by his friends, not in the senate chamber, but in the consultation room of a hospital which had so long been the recipient of his services, of which he was the chief ornament, and which should have overlooked his infirmities, some of them inherent in his nature and others the result of long-continued overwork of mind and body.

Even Jesse Foot was moved to eulogistic expression when [19] he wrote the following (“Life of John Hunter,” p. 282):

On being told of this event, on the same day, I recollected seeing the bay stallions returning, through Piccadilly, home,

²³ Mrs. Hunter survived her husband twenty-seven years, dying January 7, 1821, aged seventy-nine. According to Ottley, “she was an agreeable, clever, and handsome woman, a little of the *bas bleu*, and rather fond of gay society, a taste which occasionally interfered with her husband's more philosophical pursuits.” She wrote the Shepherd's Song, “My Mother Bids Me Bind My Hair,” immortalized by the setting which Haydn gave it; she also wrote the words for Haydn's “Creation.” In her latter years she published a small volume of poems, which possess considerable merit as a light effort. She was universally beloved and esteemed, retaining her wit and beauty to the end of her days. The Hunterian orator of 1821 paid to her memory this heavy compliment—that “she had sustained an honourable widowhood, estimable for talents of her own, and venerable as the relict of her illustrious husband.”

[19] without their master; and this circumstance introduced to my reflection the sympathy which Virgil has attributed to the war-horse of young Pallas in his funeral procession—

*Post bellator Equus, positus insignibus Æthon
It lachrymans.*

Hunter's death occurred on Wednesday, October 16, 1793, in the sixty-fifth year of his age. On the following Tuesday (October 22) his body was interred²⁴ in one of the public vaults of the church of St. Martin's-in-the-Fields, the obsequies being attended only by the family and a few intimate medical friends.

The autopsy,²⁵ performed by Everard Home and Dr. Matthew Baillie, amply confirmed the diagnosis of his friend and pupil, Dr. Jenner. It revealed the existence of ossification of the mitral valves of the heart and dilatation of the aorta, with thickening of its valves and degeneration of its coats. The coronary arteries were converted into long, rigid tubes. The heart itself was uncommonly small.²⁶

That Hunter wished an autopsy to be performed upon him,

²⁴ The burial took place at quarter past four in the afternoon, as the following entry in the sexton's old register-book at St. Martin's Church would indicate. The statement, however, that Hunter died of apoplexy, is inaccurate.

"1793, Oct. 22, John Hunter, Esq., Leicester Square, No. 3 vault, 6*l.* 10*s.* 0*d.*—no candles, $\frac{1}{4}$ past 4. Apoplexy."

²⁵ For a detailed account of the post mortem appearances, the thoughtful reader is invited to turn to pp. lxii, to lxxv, of the *Life* by Home, prefixed to the "Treatise on Inflammation"; or to an article entitled "Angina Pectoris and Allied States," by Professor Gairdner, M. D., in vol. IV, of Reynolds' "System of Medicine," p. 560 *et seq.*

²⁶ I am inclined to believe that the aneurismal dilatation of Hunter's aorta, and the other pathological conditions noted above, which caused his death, were largely due to an attack of syphilis which he had had in early manhood as the result of his inoculating himself on the glans and prepuce, in May, 1767, with secretion from what was probably a concealed urethral chancre, mistaking it for gonorrhœal discharge. Then, too, he was subjected to other perturbing influences productive of arteriosclerosis—worry, overwork, financial embarrassment, loss of sleep, and a hasty temper.

the subjoined foot-note on p. 132, of Ottley's "Life," would [19] indicate:

It has been supposed by some that Hunter had the same antipathy to the scalpel of the anatomist as was felt by his brother; but this was by no means the case; on the contrary, he always spoke of it as a matter of course, and used, in the strongest language, to express his condemnation of those who should neglect to examine his body and preserve his heart. It is to be regretted that no relic of this sort has been preserved."

Commenting upon Hunter's death, Ottley, on the following page (p. 133), adds:

Thus, in his sixty-fifth year, died John Hunter, celebrated alike as a surgeon and as a naturalist; in neither of which capacities has he had many equals,—in his combined character, none.

MEMOIRS OF HUNTER.

Memoirs of Hunter were published soon after his death by his brother-in-law, Everard Home, Jesse Foot, Surgeon, and Dr. Joseph Adams, an eminent English medical scholar.

The "Life" by Home was prefixed to the first edition of Hunter's "Treatise on Inflammation," but was omitted in the subsequent issues. It is a splendid account of the life and labors, professional and private, of this justly celebrated British surgeon, "the first anatomist and the first surgeon in the world," as many talked of him in the later part of his brilliant and eventful career."

In the same year, 1794, Jesse Foot published his "Life of John Hunter," an octavo volume of 287 pages. This memoir was not well received by the profession. Ottley states that some of Hunter's enemies paid Foot four hundred pounds for writing it. The work is characterized by Professor Gross as "a scurrilous attempt to depreciate the character of Hunter as a scientific man, and abounds, as might be supposed, in flagrant misstatements and wilful misrepresentations." "If

"He was the greatest man in the combined character of physiologist and surgeon that the whole annals of medicine can furnish (Lawrence).

[19] the author had set out," he continues, "with a determination to gain an ignominious immortality, he could not have succeeded better."

Despite the numerous aspersions which have been cast upon Jesse Foot's book, I find at least some little good in it.

His description of Hunter's habits of work, coming first-hand from one who knew him personally, is one of the best which we have (p. 285):

I believe John Hunter to have been one of the most industrious of men. The way in which his time was devoted,—before he obtained the public appointments,—was, as follows:—He rose very early in the morning, and went immediately into the dissecting room,—where he sometimes dissected, and gave directions concerning, what he would have done, in the course of the day. After breakfast, he attended to those patients who came to his house. At eleven he went abroad; and was employed in visiting patients,—attending at the hospital,—and when the occasion called for it, in opening dead bodies. He eat very hearty at his dinner,—and rarely drank more, than a glass of wine, and sometimes not that. In the evening, he was engaged in reading his lectures, and writing down observations, which he had made through the day,—or preparing, for the next coming publication. He seldom retired to rest till twelve, or one o'clock.

In 1817 a meritorious work appeared, entitled "Memoirs of the Life and Doctrines of the late John Hunter, Esq., founder of the Hunterian Museum at the Royal College of Surgeons in London," written by Dr. Joseph Adams. The portrait prefixed to this work is from a bust by Bacon, in the execution of which he was assisted by a cast taken during life. In the following year a second edition was called for. The portrait in this edition is from a bust by Flaxman, in the execution of which he also was assisted by a cast taken during life.

[20] In 1833, Parkinson's "Hunterian Reminiscences" were published.²⁸

In 1837 appeared the excellent memoir by Drewry Ottley, prepared for Palmer's edition of Hunter's complete works. This is by far the most able, full and impartial memoir that we have of him. The portrait of Hunter is identical with that in the second (1818) edition of Adams' "Memoirs."

A good memoir of Hunter is to be found in Vol. XXII,

of the Naturalist's Library, edited by Sir William Jardine [20] and published in 1854. In 1881, there was published a small octavo volume by Professor Samuel D. Gross, of Philadelphia, entitled "John Hunter and His Pupils." In his opening paragraph he says:

All intelligent readers of biography are more or less familiar with the labors and writings of John Hunter, his marvellous

²⁸ The following is a copy of the title-page of this comely volume, now excessively rare and extremely difficult to obtain:

HUNTERIAN REMINISCENCES;
Being the Substance of a
COURSE OF LECTURES
on the
PRINCIPLES AND PRACTICE OF SURGERY,
Delivered by the Late
MR. JOHN HUNTER,
IN THE YEAR 1785:
TAKEN IN SHORT-HAND, AND AFTERWARDS FAIRLY
TRANSCRIBED, BY
THE LATE MR. JAMES PARKINSON,
Author of "Organic Remains of a Former World," &c.

Edited By His Son,
J. W. K. PARKINSON,
Fellow of the Royal College of Surgeons, in London,
By whom are appended
ILLUSTRATIVE NOTES.

LONDON:
SHERWOOD, GILBERT, AND PIPER, PATERNOSTER ROW.

1833.

The dedication is interesting, and calls to mind many historical associations. It reads, as follows:

TO
MR. WILLIAM CLIFT,
Formerly the Zealous and Diligent Assistant of the Late
MR. JOHN HUNTER,
Now the Able Conservator and Intelligent Illustrator
of the
HUNTERIAN MUSEUM,
THIS WORK IS INSCRIBED,
by
THE EDITOR.

[20] genius, and his vast contributions to science. In the medical profession his name is, and always will be, a household word throughout the civilized world; it is spoken with respect and reverence in every college amphitheatre, and is deeply engraved upon the mind of every student of surgery. Nevertheless there are, it may safely be asserted, many points of interest in his life, and many traits of character, which have escaped our memory, or which have never been so thoroughly impressed upon our attention as to enable us to appreciate them at their full value.

In 1893, George Mather, a celebrated British physician, wrote an engaging volume entitled "Two Great Scotsmen—William and John Hunter," in which is contained a most fascinating record of John Hunter's life and labors. In the "Masters of Medicine" series, there is an admirable little book entitled "John Hunter, Man of Science and Surgeon," 1897, by Stephen Paget. Notices, more or less elaborate, of Hunter have also appeared in the various orations which have been delivered, since 1814, in commemoration of him by the president and fellows of the Royal College of Surgeons of England. The brief eulogy by the president, Sir William Mac Cormac, at the centenary festival of the Royal College of Surgeons held in London on Thursday, July 26, 1900, is the most beautiful tribute to Hunter that I know. He says:

Of John Hunter (1728-1793) no detailed mention is required here. His memory and his methods continue a living influence amongst us. He made our Surgery a science, and has given to us in our Museum an imperishable memorial of his industry. In it are illustrated those marvellous powers of observation which had never before been equalled, and will never in all probability be surpassed. So long as Surgery continues, Hunter's influence must be felt. It is witnessed in the creation of so many distinguished disciples imbued with his principles and able to expound his doctrines. He embodies and represents the glory of our Science, our College, and our Country.

MEMORIALS TO HUNTER.

The casual observer will find much to remind him that John Hunter lived among men. Of the various portraits that are extant of him, that by Sir Joshua Reynolds, painted in 1787, is by far the best. It represents him as sitting in a

chair in deep thought, with a pen in one hand and the other [20] supporting his chin. Three of the folio volumes of MSS., burned thirty-six years later by Sir Everard Home, are placed at his side. Other things around him, in addition to the manuscripts, are the jars containing preparations, and the dangling feet of the Irish giant's skeleton, the latter said to have cost Hunter the extravagant sum of £500. From this portrait by Reynolds an admirable engraving was made by Sharp.

As a frontispiece to Hunter's "Essays and Observations" there is a good likeness of him, after a medallion taken in 1791. Another favorite likeness is a pencil drawing taken by Sir Nathaniel Holland in 1793, the year of Hunter's death. After Hunter's death a bust of him was made by Flaxman, in the execution of which he was assisted by a cast taken during life.

The Hunterian museum, purchased by the British Government and placed in custody of the Royal College of Surgeons of England, is another mighty reminder of Hunter and his indefatigable industry. Hunter's executors, Sir Everard Home and Dr. Matthew Baillie, on June 13, 1799, sold the museum to the Government for £15,000. It cost £70,000. The trustees held it for six years, but Mrs. Hunter's financial needs were pressing, and for this reason they urged the sale. The original collection was estimated by Prof. Charles Stewart and Timothy Holmes to consist of 13,682 specimens, the largest number ever gotten together by one man, distributed [21] under the following heads:

I. PHYSIOLOGICAL DEPARTMENT, OR NORMAL STRUCTURES.

1. Physiological preparations in spirit,.....	3,745
2. Osteological preparations,.....	965
3. Dry preparations,.....	617
4. Zoological preparations,.....	1,968
5. Fossils:—	
a. Vertebrate,	1,215
b. Invertebrate,	2,202
c. Plants,	292

[21] II. PATHOLOGICAL DEPARTMENT, OR ABNORMAL STRUCTURES.

1. Preparations in spirit,.....	1,084
2. Dry preparations (including bones),.....	625
3. Calculi and concretions,.....	536
4. Monsters and malformations.....	218
III. <i>Microscopic preparations</i> ,	215

Catalogues of the Hunterian Museum, comprising ten quarto volumes, were prepared many years ago (1833-1856) by Professor Richard Owen and Mr., later Sir James, Paget, the latter having charge of the pathological specimens. The first curator, or, as he is styled in England, conservator, of the museum was William Clift, Hunter's last assistant.

In the year 1813 Dr. Matthew Baillie and Sir Everard Home, executors of John Hunter, "being desirous of showing a lasting mark of respect to the memory of the late Mr. John Hunter," gave to the Royal College of Surgeons of England the sum of £1684 4s. 4d., for the endowment of an annual oration, to be called the Hunterian oration, and to be delivered in the theatre of the college on Hunter's birthday. The first Hunterian oration was delivered on February 14, 1814, Sir Everard Home being the orator. In 1853 it was decided that the oration should in future be delivered biennially instead of annually. The next Hunterian oration will be delivered by Sir Rickman Godlee,²⁹ president of the Col-

²⁹ The following reference thereto appeared on p. 146, of *T. P.'s Weekly*, of date January 31, 1913.

"The Hunterian Festival, which is held biennially, takes place on February 14 at the Royal College of Surgeons. The oration will be delivered by the president, Sir Rickman J. Godlee, in the afternoon, and the customary banquet will be held in the library of the college in the evening."

³⁰ At the same time I received the subjoined letter:

Royal College of Surgeons of England,
Lincoln's Inn Fields,
London, W. C.

2d day of December, 1912.

Dear Sir:—I am desired by the president, Sir Rickman Godlee, to send you the enclosed particulars with reference to the Hunterian oration.

Each oration is called simply the Hunterian oration, and no other title is ever adopted.

Dr. Frank Buckland presented to the college a photograph of John Hunter's coffin, taken when it was removed from St. Mar-

lege, on Friday, February 14, of the present year. To him I [21] am indebted for the complete list of Hunterian orators:³⁰

- | | |
|----------------------------------|--------------------------------|
| 1814. Sir Everard Home, Bart. | 1853. Bransby Blake Cooper. |
| 1815. Sir William Blizard, Knt. | 1855. Joseph Hodgson. |
| 1816. Henry Cline. | 1857. Thomas Wormald. |
| 1817. William Norris. | 1859. John Bishop. |
| 1818. Sir David Dundas, Bart. | 1861. William Coulson. |
| 1819. John Abernethy. | 1863. George Gulliver. |
| 1820. Sir Anthony Carlisle, Knt. | 1865. Richard Partridge. |
| 1821. Thomas Chevalier. | 1867. John Hilton |
| 1822. Sir Everard Home, Bart. | 1869. Richard Quain. |
| 1823. Sir William Blizard, Knt. | 1871. Sir William Fergusson, |
| 1824. Henry Cline. | Bart. |
| 1825. William Norris. | 1873. Henry Hancock. |
| 1826. Sir Anthony Carlisle, Knt. | 1875. Frederick Le Gros Clark. |
| 1827. Honoratus Leigh Thomas. | 1877. Sir James Paget, Bart. |
| 1828. Sir William Blizard, Knt. | 1879. George Murray Humphry. |
| 1829. John Painter Vincent. | 1881. Luther Holden. |
| 1830. George James Guthrie. | 1883. Sir Thomas Spencer |
| 1831. Anthony White. | Wells, Bart. |
| 1832. Samuel Cooper. | 1885. John Marshall. |
| 1833. John Howship. | 1887. William Scovell Savory. |
| 1834. William Lawrence. | 1889. Henry Power. |
| 1837. Sir Benjamin Collins | 1891. Jonathan Hutchinson. |
| Brodie, Bart. | 1893. Thomas Bryant. |
| 1838. Benjamin Travers. | 1895. John Whitaker Hulke. |
| 1839. Edward Stanley. | 1897. Christopher Heath. |
| 1840. Joseph Henry Green. | 1899. Sir William MacCormac, |
| 1841. Thomas Callaway. | Bart. |
| 1842. George Gisborne Babington. | 1901. Nottidge Charles Mac- |
| 1843. James Moncrieff Arnott. | namara. |
| 1844. John Flint South. | 1903. Sir Henry Greenway |
| 1846. William Lawrence. | Howse, Knt. |
| 1847. Joseph Henry Green. | 1905. John Tweedy. |
| 1848. Richard Dugard Grainger. | 1907. Henry Trentham Butlin. |
| 1849. Cæsar Henry Hawkins. | 1909. Henry Morris. |
| 1850. Frederic Carpenter Skey. | 1911. Edmund Owen. |
| 1852. James Luke. | 1913. Sir Rickman John God- |
| | lee, Bart. |

tin's-in-the-Fields, and this is in the library of the college. There are, however, no duplicates, nor have we any photographs of the tomb in Westminster Abbey; but the president is pleased to send you the enclosed copy of the inscription on the tomb.

The president also desires me to thank you for the two pamphlets which you have kindly sent to him.

Yours faithfully,

(Signed) S. FORREST COWELL, *Secretary.*

DR. C. W. G. ROHRER.

- [21] In 1859 the remains of John Hunter were removed from St. Martin's-in-the-Fields and reinterred in Westminster Abbey, largely through the efforts of Frank Buckland, the eminent naturalist.²¹ For sixteen days, with but one assistant, he
- [22] searched the vaults of St. Martin's, before finding Hunter's coffin. It was well preserved, bearing upon it, besides the brass name plate, Hunter's arms—a hand with an arrow in it, and the three horns of the hunter. The happy culmination of this extraordinary labor of Mr. Buckland, this "chivalrous devotion to the relics of a great man," can best be described in his own words.²²

After a time all the coffins were removed away from the vault but five; two lay side by side upon the floor, and three one over the other in a corner of the vault; and I could see the names on

²¹ The beginning of the story of the discovery, on February 22, 1859, of the remains of John Hunter in the vaults of St. Martin's-in-the-Fields, is also of absorbing interest, and I shall here give it in Mr. Buckland's own words, as related by him on pp. 215-218, of his "Curiosities of Natural History," Fourth Series:

"In the month of January, 1859, when sitting in the mess-room of the 2d Life Guards, at Windsor, looking over the advertisement sheet of the 'Times,' the following caught my attention:—

"'ST. MARTIN'S-in-the-FIELDS—CHURCH VAULTS AND CATACOMBS—ORDER in COUNCIL—NOTICE. Any person or persons having the remains of relatives or friends deposited in any of the vaults under the church, or in any of the catacombs under the churchyard, situate at the north-east corner of Trafalgar Square, are hereby informed that they may, if they so desire, remove the same before the 1st day of February 1859; after which date, all coffins remaining in the said vaults or catacombs will be reinterred in the same place, and finally built and closed up in accordance with the said Order in Council, and cannot afterwards be inspected on any pretence whatever.

"'BENJAMIN LATCHFORD, Churchwardens of the said
CHARLES H. PETTER, Parish.

"'All communications to be made in writing, addressed to us at the Vestry House, Adelaide Place, W. C.'

"Why, surely John Hunter is buried in this church, was the thought that immediately struck my mind: his remains ought certainly to be looked after; but who is to do it? I will try to rescue his remains. If I fail there will be no harm done."

²² "Curiosities of Natural History," Fourth Series, pp. 225 and 226.

all these coffins except two: my chance was now therefore limited [22] to these two coffins.

The total number of coffins in No. 3 vault was over two hundred. The total number of coffins removed was three thousand two hundred and sixty. This will give some idea of the task that I had undertaken and had now nearly finished. If one of these coffins therefore was not John Hunter's, all our labours would have been in vain. The workmen stood at the head and foot of the uppermost coffin of the three, and slowly moved it away that I might see the name upon that immediately below it. As it moved slowly off, I discerned first the letter J, then the O, and at last the whole word John. My anxiety was now at its height, and quickly running to one end, Mr. Burstall at the other, we moved the coffin away. At last I got it completely off, and to my intense delight read upon the brass plate the following inscription:—

JOHN HUNTER,
Esq.,
DIED 16TH OCTR.,
1793,
Aged 64 Years.

The Hunters' arms, viz., a hand with an arrow on it, also the three horns of the hunter, were upon the plate.

Lest there should be any subsequent doubt upon the identity of this coffin, a photograph was taken of it by Mr. Soame, which I have presented to the Royal College of Surgeons.

On March 28, re-interment was made in Westminster Abbey with impressive ceremonies.²³ On the following day, March

²³ I take pleasure in giving the following brief account of the funeral rites at the re-interment of the remains of Hunter, because such information is not readily accessible to the reader:

Very great interest had been excited among the profession when the intention of the Council of the College to undertake the pious duty of the removal to the Abbey had been made public, and a very numerous assemblage collected there early in the afternoon of the 28th of March; and it having been intimated that the choral service would be suited to the solemnity, which would take place immediately afterwards, the choir was crowded with medical men, of whom many had come from the country to testify their respect for John Hunter's memory.

The Musical Service consisted of—

Single Chant to Psalms.....*Turle.*
"Magnificat" and "Nunc dimittis".....*Farrant.*

ANTHEM.

"When the ear heard him." }*Handel.*
"His body is buried in peace." }

- [22] 29, 1859, an address was delivered by Joseph Henry Green, president of the Royal College of Surgeons of England, urging the erection of a statue to Hunter. Mainly through the efforts of John Flint South, one of the vice-presidents of the college, the sum of £1172 17s. 1*d.* was promptly raised for that object. The work was intrusted to Mr. Weekes, the eminent sculptor, who produced an admirable likeness which was completed in 1864, and now graces the first room on the lower floor of the museum of the college.

On May 29, 1886, a statue of John Hunter was unveiled in the University museum, at Oxford, England, on which occasion Sir James Paget was one of the speakers. A bust of Hunter, along with that of Newton, of Hogarth, and of Rey-

Soon after four o'clock the procession, headed by the vergers, passed from the Jerusalem Chamber into the Abbey, arranged in the following order:—

The Dean of Westminster.	W. Hunter Baillie, Esq.
Frank T. Buckland, Esq.	Richard Owen, Esq.
The President of the Royal College of Physicians.	Earl of Ducie.
The President of the Royal College of Surgeons of England.	
The Vice-Presidents and	
The Council of the Royal College of Surgeons.	
The Censors of the Royal College of Physicians.	
The Master of the Society of Apothecaries of London.	
The Director-General of the Navy Medical Department.	The President of the Linnæan Society.
And other Members of the Medical Profession.	

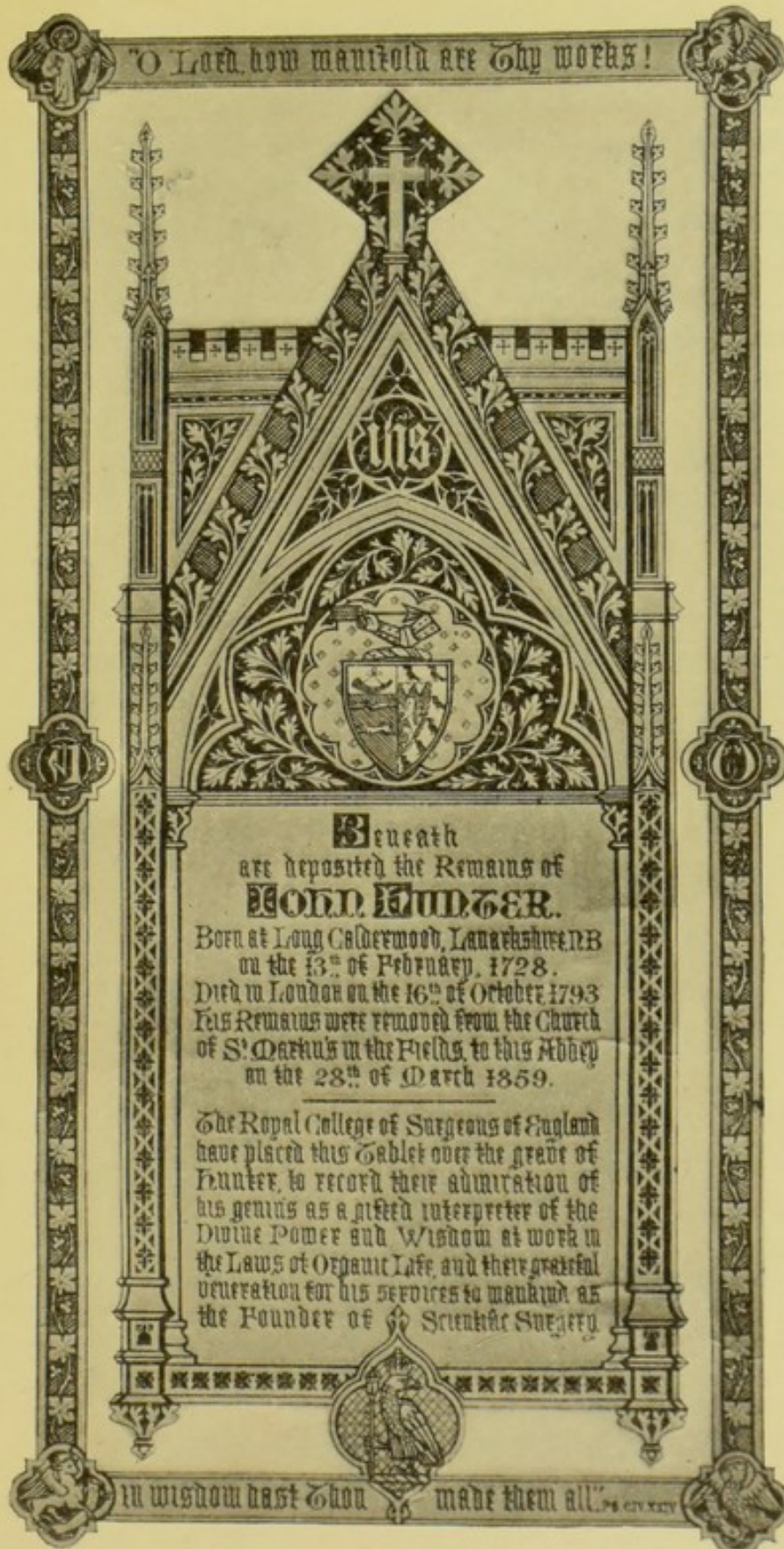
The procession having reached Abbot Islip's Chapel, and the coffin, uncovered and placed on a bier, having been raised on shoulders, proceeded round St. Edward's Chapel into the nave, the Dead March in "Samson" being played by Mr. Turle, and continued till the grave was reached, in which the

REMAINS OF JOHN HUNTER

were lowered whilst the pealing organ poured forth Handel's grand and sublime chorus, well suited to this memorable occasion—

HIS BODY IS BURIED IN PEACE, BUT HIS NAME LIVETH
EVERMORE.*

*A very handsome ornamental brass tablet now covers the tomb, upon which is the following inscription, written by John Flint



COPY OF THE INSCRIPTION ON JOHN HUNTER'S TOMB IN
WESTMINSTER ABBEY.

[23] nolds, occupies one of the four corners of Leicester Square, London; and there is a window to his memory in the church of St. Mary Abbott's, Kensington.

Another constant reminder of John Hunter and his unwearyed labors is the Hunterian laboratory connected with the medical school of *this* university—the leading institution of its kind on the Western Hemisphere. Founded in 1906, it stands to-day a pioneer in the diffusion of such knowledge as Hunter endeavored to convey. Truly, “its line has gone out to the ends of the earth;” and it not only reflects lasting credit upon those who nurtured it and gave it birth, but also bears with dignity an appellation which can justly be applied to it; namely, “the greatest of all memorials to John Hunter.”

SUMMARY OF LIFE WORK.³⁴

John Hunter not only laid the foundations of scientific surgery, but his name is also indelibly associated with the rise

South, the well-known author of *Memorials of the Craft of Surgery*:—

“O Lord, how manifold are Thy Works.”

Beneath
are deposited the remains of
JOHN HUNTER.

Born at Long Calderwood, Lanarkshire, N. B.,
on the 13th of February, 1728.

Died in London on the 16th of October, 1793.

His Remains were removed from the Church
of St. Martin's-in-the-Fields to this Abbey
on the 28th of March, 1859.

The Royal College of Surgeons of England have placed this Tablet over the grave of Hunter, to record their admiration of his genius, as a gifted interpreter of Divine Power and Wisdom at work in the Laws of Organic Life, and their grateful veneration for his services to mankind as the founder of Scientific Surgery.

“In wisdom hast Thou made them all.”—Ps.civ. 24.

³⁴ British surgeon, anatomist and physiologist. First to discover the system of vessels known as lymphatics, although the

and progress of histology, physiology, and comparative anatomy. [23]

In the language of Professor Gross :

He was not only a great surgeon, a wise physician, and a great anatomist and physiologist, human and comparative, but, above all, he was a philosopher whose mental grasp embraced the whole range of nature's works, from the humble structure to the most complex and the most lofty. He was emphatically the Newton of the medical profession, and what Pope said of that great philosopher may, by paraphrase, be said with equal force and truth of Hunter:

"Nature and Nature's laws lay hid in night;
God said 'Let Hunter be,' and all was light."

Hunter is peerless in the history of British surgery; and after the lapse of nearly a century the profession turns to his memory with increased reverence for his transcendent genius, his matchless ability, and his unequalled services. To say that he was simply the founder of scientific surgery would fall far short of his great deserts; to do him full justice we must add that he was the father also of scientific zoology and of comparative physiology.

It is interesting to record that James Jackson, Jr., M. D., of pious memory, in a letter to his father, is loud in his praise of Hunter and his work, as the following extract will show:³⁵

London, September 28, 1832.

Would you were here, my dear father, to enjoy with me the study of John Hunter's works, and to kindle with me in my admiration of his genius; the elevation and extent of which I know not even now; nor does any man living, though my conceptions of his vast and comprehensive mind have been greatly elevated within the last fortnight. His museum is intelligible to no one in its full extent. The materials there collected and arranged, are often indicative of peculiar ideas, which are lost to the world for want of their great interpreter.

function of these vessels was suggested by his brother, William Hunter. His studies of tendons laid the foundation for the operation for the cure of club feet. His experiments to determine the blood-supply for the growing antler of a deer led to the discovery of the "collateral circulation of the blood"—one of the most important discoveries in surgery. This led directly to his invention of the "Hunterian" operation for aneurism, an operation still in use, and which has made the name of Hunter immortal in the annals of surgery (Henry Smith Williams).

³⁵ Memoir of James Jackson, Jr., M. D., p. 160.

[24] For more than forty years Hunter toiled as never man toiled; and yet, so it is stated, his doctrines were not well received by his contemporaries. Some were incited by prejudice, some by envy and jealousy, whilst still others were impelled by a spirit of indifference. Is it any wonder, then, that he should have become discouraged at times? "The few good things I have been able to do," he was heard to say, "have been accomplished with the greatest difficulty, and encountered the greatest opposition."

His labors increased with his years and with his honors; and when the end came, sudden though it was, it found him assiduously engaged in those pursuits which had been the joy and the delight of his life. He pursued studies in every department of natural history and surgery, and added luster to them all. His "mind was like a bee-hive"—full of industry, method, and the laying-up of stores for future use; and whatever he touched he adorned. Hunter had a high opinion of putting one's thoughts into writing. "It resembles," he said, "a tradesman taking stock, without which he never knows what he possesses or in what he is deficient." The infinite variety and wide range of his mental qualifications, is shown in a chronological list of his works and papers, to be found in Ottley's "Life of Hunter" (pp. 189-192).

So far as a bank account was concerned, John Hunter died a poor man; yet who is there among you who would call him poor? His name comes down to us as one of the great figures of the eighteenth century—a century famous for a wonderfully rich harvest of discovery in anatomy and physiology, in medicine and surgery. The mystery, however, is solved when we remember that he rose regularly at four o'clock in the morning, and seldom retired before twelve o'clock at night. The compliment which Cecil paid to Sir Walter Raleigh was equally deserved by Hunter: "I know he can labor terribly." His mind was incessantly in his work.³⁸

³⁸ The following is a summary with the ages and the dates, of the chief events of his life (after Professor Owen, "The Scientific Works of John Hunter," vol. ii, pp. 492, 493. Sir James Paget,

Surgery of to-day is immensely indebted to Hunter.³⁷ His [24] constant saying was: "We are but beginning to learn our profession." Dead though he has been for an hundred and twenty years, yet the principles which he taught and the foundations which he laid have become the woof and warp of the surgical fabric of the present day. The ever-widening circle of his influence still abides.

To quote again from Professor Gross:

The lesson of the life of such a man, in every respect so grand and colossal, so powerful and majestic in intellect, and so indissolubly associated with the scientific history of his age and coun-

in the Hunterian oration for 1877, pp. 37 and 38, also gives a fine calendar of the chief events of Hunter's life):

Age.	Year.	Event.
	1728	Birth, 13th or 14th of February, at Long Calderwood, Kilbride, near Glasgow.
20	1748	Migration to London to his brother, Dr. Wm. Hunter.
25	1753	Entered as "Gentleman Commoner" at St. Mary's, Oxford.
28	1756	House-surgeon at St. George's Hospital, London.
29	1757	Prosecutor and Demonstrator in Dr. Wm. Hunter's Theatre of Anatomy, in Great Windmill Street.
33	1761	As Surgeon in the Army, accompanied the Expedition to Belleisle.
35	1763	Returned from Portugal to London.
38	1766	Communicated his first Paper, printed in the Transactions of the Royal Society, entitled "Anatomical Description of an Amphibious Bipes."
39	1767	Elected Fellow of the Royal Society of London.
40	1768	Became "Member of the Corporation of Surgeons."
41	1769	Elected Surgeon to St. George's Hospital: had his first attack of the gout.
42	1770	Jenner became Hunter's House-pupil.

³⁷ In "Leisure Hour," No. 385, May 12, 1865, Frank Buckland wrote:

Without slighting the labours of other great surgeons and anatomists, it may be confidently affirmed that there is not a man, woman, or child among us who, when struck by the sting of disease, and receiving relief from the art of medicine, does not directly or indirectly receive relief to his suffering from the discoveries of John Hunter.

- [24] try, is full of instruction, not only to the members of our own profession, but to men in every avenue and pursuit in life. His example of industry and of steady, persistent effort in the cause of human progress reflects the highest credit upon his character, and is worthy of the imitation of every student ambitious of distinction and usefulness. Nowhere, either in ancient or modern times, can there be found a nobler pattern for the formation of a truly scientific career. Commencing life as an erratic, hesitating youth, undecided what to do, or whither to turn, without any promise or definite aim, a source of constant annoyance to his
- [25] family and of disappointment to his friends, he became eventually one of the most illustrious men in all Europe, leaving behind him imperishable monuments of patient research, of vast genius, and of wonderful philosophical acumen, destined to grow brighter and more stately as the ages roll on, and as men become more and more appreciative of man's work and of man's intellectual powers.

Age.	Year.	Event.
43	1771	Married Miss Home. Published his "Treatise on the Natural History and Diseases of the Human Teeth."
44	1772	Communicated his Paper "On the Torpedo" to the Royal Society. Mr. (afterwards Sir Everard) Home, his wife's brother, became his pupil.
45	1773	His first attack of "Angina pectoris."
46	1774	Gave his first Course of Lectures "On the Principles of Surgery."
48	1776	Appointed Surgeon Extraordinary to His Majesty. Mr. Wm. Bell became Hunter's assistant.
55	1783	Purchased the lease of the house No. 29 Leicester Square, and the ground extending to and including a house in Castle Street, and began to build his Museum on the intervening space.
57	1785	Museum completed, and arrangement of the Preparations begun.
58	1786	Published his "Observations on the Animal Economy," and his work "On the Venereal Disease." Made Dep. Surgeon-General to the Army.
59	1787	Preparations arranged in the Museum, which was opened to Visitors.
61	1789	Mr. Wm. Bell left Hunter for an appointment in Sumatra, where he died in 1792.
64	1792	The printing of the work "On the Blood and Inflammation," was commenced. Mr. Wm. Clift was articulated as an "apprentice" to John Hunter.
65	1793	Died suddenly, October 16th, at St. George's Hospital: was buried in St. Martin's Church.
	1859	Was re-interred, March 28th, in Westminster Abbey.

Hunter, to use Dante's phrase, followed his star; and in [25] finding the good that he wished for humanity, found, along with it, name and fame.

His death though precipitate, and in a measure unexpected, was doubtless as he would have wished it to be. He was thereby mercifully delivered from those "cold gradations of decay"—that time in life when old age creeps on apace, and the hands tremble and the eyes grow dim.

Thus ended a career of almost unexampled industry and usefulness; a life abounding in zeal and good deeds, which made the world wiser and better. So we shall leave him—beloved during life, honored at death, secure in his fame; sentiments most beautifully expressed in the following verses written by Mrs. Hunter,²⁸ and originally intended for the inscription upon her husband's grave-stone:

Here rests in awful silence, cold and still,
One whom no common sparks of genius fired;
Whose reach of thought Nature alone could fill,
Whose deep research the love of Truth inspired.
Hunter! if years of toil and watchful care,
If the vast labours of a powerful mind
To soothe the ills humanity must share,
Deserve the grateful plaudits of mankind,—
Then be each human weakness buried here
Envy would raise to dim a name so bright:
Those specks which in the orb of day appear
Take nothing from his warm and welcome light.

Acknowledgment is hereby gratefully made to the president of this society, Dr. Henry Barton Jacobs, for much valuable assistance and kindly encouragement so cheerfully given; to its secretary, Dr. Thomas B. Fitcher; to Dr. George H. Whipple, of the Hunterian laboratory; to Sir Rickman Godlee, president of the Royal College of Surgeons of England; and last, but by no means least, to my photographer, Mr. Harry B. Weaver, of this city, who has been untiring in his efforts to prepare a series of accurate and complete photographs.

²⁸ In 1804, eleven years after Hunter's death.

