AN EVENING AMONG THE BOOKS

December 29, 1969

(In commemoration of Sir William Osler,
who died December 29, 1919.)

"The past is always with us, never to be escaped; it alone is enduring; but, amidst the changes and chances which succeed one another so rapidly in this life, we are apt to live too much for the present and too much in the future....

"It is good to hark back to the olden days and gratefully to recall the men whose labours in the past have made the present possible."

[W. O., Aequanimitas.]

"I should like to see in each library a select company of the Immortals set apart for special adoration."

[W. O., Books and Men.]

"Faced with a bewildering variety and ever-increasing literature, how is the hard-pressed student to learn, first, the evolution of knowledge in any subject, and secondly, the life and work of the men who made the original contributions? So far as concerns Science and Medicine, an attempt is made to answer the question by the collection of a Bibliotheca Prima ...The idea is to have in a comparatively small number of works the essential literature grouped about the men of the first rank, arranged in chronological order...The fundamental contribution may be represented by a great Aldine edition, e.g., Aristotle, by the brief communication such as that of Darwin and Wallace in the Proceedings of the Linnean Society, 1858, or by a three-page pamphlet of Roentgen."

[W. O., Bibliotheca Osleriana, Editors' Preface.]

Hippocrates, 460-375 B.C.

"In the Hippocratic writings is summed up the experience of Greece to the Golden Age of Pericles. Out of philosophy, out of abstract speculation, had come a way of looking at nature for which the physicians were mainly responsible, and which has changed forever men's views on disease. Medicine broke its leading strings to religion and philosophy."

[W. O., Evolution of Modern Medicine. pp. 68-69.]

144. Opera omnia quae extant, in VIII Sectiones ex Erotiani mente distributa. Nunc recens Latina interpretatione & Annotationibus illustrata, Anutio Foesio authore. Francof.,apud Andr. Wecheli heredes, C. Marnium, & Io. Aubrium, 1595.

149. Octoginta Volumina...nunc tandem per M. Fabium Caluum Rhauennatem...latinitate donata ...ac nunc primum in lucem aedita...(Romae, ex aed. Francisci Minitii Calvi, 1525.) With the Life from Soranus.

Aretaeus, 81-? - 138 A.D.

"Aretaeus lived probably in the second half of the 1st century, but possibly towards the end of the 2nd or the beginning of the 3rd. He was a highly educated author, equally well acquainted with classical literature, history, poetry, and medicine. Of all medical writers of antiquity whose works have come down to us, the solidity and clearness of Aretaeus bring him nearest to Hippocrates, whom he also resembles in his modesty, love of his profession, and reverence for all that is good and beautiful. Above all, his descriptions of diseases are patterns of fidelity to nature and of literary finish, though not unfrequently there is a deliberate straining after brilliant phraseology. Haeser (no. 5946, I,P. 341."

[W. O.]

328. Opera omnia...novam versionem dedit, Johannes Wigan. Oxon., e Typographeo Clarendoniano, 1723.

"Wigan was a Graduate of Christ Church, Oxford. His name will always be held in respect by admirers of Aretaeus for his

splendid folio edition of that author. A great part of the expense was defrayed by Dr. Freind, to whom it is dedicated. When Boerhaave published his edition in 1735, he availed himself of Wigan's labours, and made a handsome acknowledgement of the circumstance. Wigan compiled the index to Petit's Commentary (no. 332). D.N.B."

Galen, 130-200 A.D.

"The greatest name, after Hippocrates, in Greek medicine [was that] of Galen, born at Pergamon in A.D. 130, in whom was united as never before - and indeed one may say, never since - the treble combination of observer, experimenter and philosopher."
[W. O., Evolution of Modern Medicine. p. 74.]

"...His works...comprise the most voluminous body of writings left by any of the ancients. The great edition is that in twenty-two volumes by Kühn (1821-1833). The most useful editions are the "Juntines" of Venice, which were issued in thirteen editions. In the fourth and subsequent editions a very useful index by Brassavola is included."
[W. O., Evolution of Modern Medicine. p. 79.]

364. OEuvres anatomiques, physiologiques et médicales de Galien. Traduites sur les textes imprimés et manuscrits, accompagnées de sommaires, de notes, de planches et d'une table des matières, précédées d'une intr. ou étude biographique, littéraire et scientifique sur Galien par Ch. Daremberg. 2 tomes. Par., 1854-6.

Leonardo da Vinci, 1452-1519.

"The great artists were keen students of the human form.... But greater than any of these, and antedating them, is Leonardo da Vinci, the one universal genius in whom the new spirit was incarnate - the Moses who alone among his contemporaries saw the promised land....Insatiate in experiment, intellectually as greedy as Aristotle, painter, poet, sculptor, engineer, architect, mathematician, chemist, botanist, aëronaut, musician and withal a dreamer and mystic, full accomplishment in any one department was not for him! A passionate desire for a mastery of nature's secrets made him a fierce thing, replete with too much rage! But for us a record remains - Leonardo was the first of modern anatomists, and fifty years later, into the breach he made, Vesalius entered."
[W. O., Evolution of Modern Medicine. pp. 162-163.]

517. Quaderni d'Anatomia. I-VI...Fogli della Royal Library di Windsor...pubblicati da C. L. Vangensten, A. Fonahn, H. Hopstock. Con Traduzione inglese e tedesca. Christiania, 1911-16.

Vesalius, Andreas, 1514-1564.

"In itself, for what it contains, but still more for what it did, the 'Humani corporis fabrica' is one of the great books of the world, with which in the literature of Medicine only the 'De motu cordis' of Harvey is to be compared. The one revolutionized anatomy, the other created modern physiology. This work of Vesalius is the first modern treatise on anatomy based upon dissections of the human body. To appreciate the extraordinary character of the descriptions and of the plates they must be compared with contemporary works. Vesalius really described the body as we know it, for the first time fully, and for the first time accurately. It is difficult to say whether in text or figure the departure from the anatomy of the day is the more striking. There are grave mistakes of omission and of commission, but they appear insignificant in a volume full of such important contributions. To the middle of the sixteenth century anatomy was taught from the writings of Galen, not from what was seen in the occasional public dissections. From what the great Master had written there was no appeal, and the veneration with which his works were regarded was as for a gospel, like the feeling men have towards the sacred Scriptures. Imagine the surprise and consternation of the easy-going old professors who held the chairs of anatomy to have a huge volume thrust into their hands filled from cover to cover with descriptions and figures with which they were unfamiliar. And written by a young man of 28! Headed by his old teacher Sylvius a storm of opposition soon raged, and a vindication of Galen was attempted, but it was soon found that the old anatomy, correct enough in places, was largely that of swine, dogs and monkeys, while the 'Fabrica' contained descriptions and figures from human dissections. To understand the phenomenon, almost unique in the history of science, of a revolution of this character effected by so young a man, we must remember that from boyhood Vesalius had had a perfect passion for dissecting. After devoting his energies to the anatomy of the domestic animals, he robbed graveyards and the gallows for human skeletons, while as early as 1534-36, as prosector to Sylvius and Guinterius in Paris, he had opportunities to dissect the human body. His reputation must have been remarkable, as at the age of 23 he was appointed Professor at Padua, one of the leading schools of Europe. The 'Fabrica' remains a monument of human effort, one of the greatest in the history of our profession."

[W. O.]

567. Andreae Vesalii, Bruxellensis, Scholae medicorum Patauinae professoris, de Humani corporis fabrica Libri septem. Basileae, (ex off. Iohannis Oporini, 1543).

568. The same. Basil., per Io. Oporinum, (1555).

585. Radicis Chynae Vsus. Lugd., (excud. Io. Frellonius), 1547.

"The China-root is the root of Smilax china, a near relative of Sarsaparilla."
[W. O.]

Paré, Ambroise, 1510-1590.

"[Paré] surely stands alone in the surgery of the renaissance as an independent, original and inventive genius, and as a gentle, masterly and true man." (Allbutt, no. 5624, p. 80.)
[W. O.]

660. OEuvres complètes, accompagnées de Notes historiques et critiques; et précédées d'une Introduction sur l'Origine et les Progres de la Chirurgie en Occident du 6e au 16e siècle, et sur la Vie et les Ouvrages d'Ambroise Paré, par J.-F. Malgaigne...3 tomes. Par., 1840-1.

Harvey, William, 1578-1657.

"Harvey returned to Greek method and became the founder of modern experimental physiology and the great glory of British scientific medicine."
[W. O., Aequanimitas.]

"The De Motu Cordis constitutes a unique piece of work in the history of medicine. Nothing of the same type had appeared before. It is a thoroughly sensible, scientific study of a definite problem, the solution of which was arrived at through the combination of accurate observation and ingenious experiment....

"It was reserved for the immortal Harvey to put into practice the experimental method by which he demonstrated conclusively that the blood moved in a circle. The De Motu Cordis marks the final break of the modern spirit with the old traditions."
[W. O., Evolution of Modern Medicine. pp. 171, 172-173.]

701. The Anatomical Exercises of Dr. William Harvey concerning the motion of the Heart and Blood. With the Preface of Zachariah Wood. To which is added, Dr. James de Back, his Discourse of the Heart. Lond., pr. for R. Lowndes and M. Gilliflower, 1673.

7698. The Anatomical Exercises of Dr. William Harvey concerning the motion of the Heart and Blood. With the Preface of Zachariah Wood. Lond. pr. by F. Leach, for R. Lowndes, 1653. The first ed. of De Motu, &, in English.

717. Opera omnia: a Collegio Medicorum Londinensi edita: 1766. (Lond., 1766.)

Servetus [alias Reves] Michael Villanovanus, 1511-1553.

"On October 27, [1553] shortly after twelve o'clock, a procession started from the town-hall of Geneva...and in their midst, with arms bound, in shabby, dirty clothes, walked a man of middle age, whose intellectual face bore the marks of long suffering....By his side, in earnest entreaty, walked the aged pastor, Farel...Mounting the hill, the field of Champel was reached, and here on a slight eminence was the fateful stake, with the dangling chains and heaping bundles of faggots. At this sight the poor victim prostrated himself on the ground in prayer. In reply to the exhortation of the clergyman for a specific confession of faith, there was the cry, 'Misericordia, misericordia! Jesu, thou Son of the eternal God, have compassion upon me!' Bound to the stake by the iron chain, with a chaplet of straw and green twigs covered with sulphur on his head, with his long dark face, it is said that he looked like the Christ in whose name he was bound. Around his waist were tied a large bundle of manuscript and a thick octavo printed book. The torch was applied, and as the flames spread to the straw and sulphur and flashed in his eyes, there was a piercing cry that struck terror into the hearts of the bystanders. The faggots were green, the burning was slow, and it was long before in a last agony he cried again, 'Jesu, thou Son of the eternal God, have mercy upon me!' Thus died, in his forty-fourth year, Michael Servetus Villanovanus, physician, physiologist, and heretic. Strange, is it not, that could he have cried, 'Jesu thou Eternal Son of God!' even at this last moment, the chains would have been unwound, the chaplet removed, and the faggots scattered; but he remained faithful unto death to what he believed was the Truth as revealed in the Bible."

[W. O., Michael Servetus.]

839. Christiani||Smi Restitv||Tio. M.D. LIII. 1553. [reprinted 1790].

"The reprint (page for page), with the date 1790 (not 1791, as usually stated) at the end, at the foot of p. 734...Extremely rare. This is a reprint made in [Nuremberg] of the original of 1553, of which most copies were burnt along with the author....In the small portion of the book dealing incidentally with physiology (pp. 169-78) occurs the famous passage on p. 170, in which the lesser circulation is first described in print."

Columbus, [Matthaeus] Realdus, 1494? or 1516?-1559.

897. De Re Anatomica libri XV. Ven., ex typogr. Beuilacquae, 1559.

"This is the first edition....Dedicated by Colombo's sons (who state that their father died while the work was in the press) to Pius IV, who became pope in this year.... In many reference books the date of Colombo's death is erroneously given as 1577. The passages on the pulmonary circulation are in Bks. vii and xi, cap. ii, pp. 177 and 223."

Descartes, René, 1596-1650.

"It was a philosopher of another kidney, René Descartes, who did more than anyone else to help men to realize the value of the better way which Harvey had pointed out. That the beginning of wisdom was in doubt, not in authority, was a novel doctrine in the world, but Descartes was no armchair philosopher, and his strong advocacy and practice of experimentation had a profound influence in directing men to "la nouvelle methode." He brought the human body, the earthly machine, as he calls it, into the sphere of mechanics and physics, and he wrote the first textbook of physiology, De l'Homme.
[W. O., Evolution of Modern Medicine. p. 174.]

931. Renatus Des Cartes de Homine figuris et Latinitate donatus a Florentio Schuyl. Lugd., Bat., apud P. Leffen & F. Moyardum, 1662.

932. The same. Renati Des-Cartes Tractatus de Homine, et de Formatione Foetus. Quorum prior notis perpetuis Ludovici de la Forge illustratur. Amst.,apud D. Elsevirium, 1677.

Boyle, Robert, 1627-1691.

"It is a remarkable fact that the distinguished English philosopher of the seventeenth century, the man who more than anyone else of his century appreciated the importance of the experimental method, Robert Boyle, had said that he who could discover the nature of ferments and fermentation, would be more capable than anyone else of explaining the nature of certain diseases."
[W. O., Evolution of Modern Medicine. p. 209.]

942. New Experiments and Observations touching Cold, or, An Experimental History of Cold, begun. Lond., pr. for R. Davis, Bookseller in Oxf., 168 3/4.

947. Memoirs for the Natural History of Humane Blood, especially the Spirit of that Liquor. Lond., pr. for S. Smith, 168 3/4.

952. Medicinal Experiments: or, A Collection of choice and safe Remedies. Lond., pr. for S. Smith (& B. Walford), 1693.

Malpighi, Marcello, 1628-1694.

990. De Viscerum Structura Exercitatio anatomica. Accedit Dissertatio eiusdem de Polypo Cordis. Bononiae, ex typogr. Iac. Montij, 1666.

Sydenham, Thomas, 1624-1689.

"Sydenham - Angliae lumen, as he has been well called - is the model practical physician of modern times.... Sydenham broke with authority and went to nature. It is an extraordinary fact that he could have been so emancipated from dogmas and theories of all sorts. He laid down the fundamental proposition, and acted upon it, that "all diseases should be described as objects of natural history".... Sydenham led us back to Hippocrates, I would that we could be led oftener to Sydenham!"

"Sydenham was called "a man of many doubts" and therein lay the secret of his great strength."
[W. O., British Medicine in Greater Britain.]

994. Observationes medicae circa Morborum acutorum Historiam et Curationem...Lond., typis A. C., impens. Gualt. Kettilby, 1676.

1008. The Whole Works of...Dr. Thomas Sydenham. Tr. from the original Latin, by John Pechy. Lond., pr. for M. Wellington, 1696.

"Peachy, Pechy, or Peche (1655-1716), New Inn Hall, Oxon., M.A. 1678, practised in the City at the Angel and Crown, rather as an apothecary than as a physician. He was in hot water with the College about his sign and his shilling fee. After publishing a number of useless works he issued in 1695 "a vigorous and idiomatic translation of 'the whole works' of Sydenham', which went through eleven eds. to 1740. He must not be confounded with John Pechey of Gloucestershire, a Frenchman. See D.N.B."
[W. O.]

Haller, [Victor] Albrecht Von, 1708-1777.

"Haller lives in his bibliographies and poems, and a halo of reminiscence surrounds him as one of the outstanding figures of the 18th century: (a) His scientific work has long since passed into the impersonal stage, but to his credit stand researches of the first rank in the irritability of muscle and nerve, a demonstration of the myogenic theory of the heart's action, an admirable and accurate account of the mechanics of respiration, and the first great modern treatise on Physiology. How many 'new' discoveries are adumbrated in his works may be gathered from Kronecker's 'Haller redivivus' (no. 1172). (b) Haller is the greatest bibliographer in our ranks. Next to the Index-Catalogue of the Surgeon-General's Library, his works have been most helpful in the preparation of this catalogue. To learning and judgement he added that indispensable quality in a bibliographer, accuracy. No one has paid a sounder tribute of affection to him than that inimitable character James Atkinson in his two-letter Bibliography (no. 6874), p. 49. (c) As a poet Haller is in the first rank of our medical poets-"der edelste und tiefste und vor allem... der wahrste unter den deutschen Lyrikern und trotz vieler Härten seines Ausdrucks...einer der ersten Meister der Sprache" (Hirzel, no. 1167, p. CDXXIX)."
[W. O.]

1156. Opera minora emendata, aucta, et renovata, Lausannae, 1762(-8).

1162. Bibliotheca Chirurgica. Bernae, apud Em. Haller, &c., 1774-5.

Morgagni, Giovanni Battista, 1682-1771.

"To know accurately the anatomical changes that take place in disease is of importance both for diagnosis and for treatment. The man who created the science, who taught us to think anatomically of disease, was Morgagni, whose "De sedibus et causis morborum per anatomen indagatis" is one of the great books in our literature. During the seventeenth century, the practice of making post-mortem examinations had extended greatly, and in "Sepulchretum anatomicum" of Bonetus (1679), these scattered fragments are collected. But the work of Morgagni is of a different type, for in it are the clinical and anatomical observations of an able physician during a long and active life."

"The great work which has made his name immortal in the profession, appeared in his eightieth year, and represents the accumulated experience of a long life. Though written in the form of letters, the work is arranged systematically and has an index of exceptional value....It is not the anatomical observations alone that make the work of unusual value, but the combination of clinical with anatomical records."
[W. O., Evolution of Modern Medicine. pp. 185, 188.]

1178. De Sedibus, et Causis Morborum per Anatomen indagatis, libri quinque....Tomi 2.... Ven., 1761.

1180. The Seats and Causes of Diseases investigated by Anatomy; in five books, containing a great variety of Dissections, with remarks...Tr. from the Latin...by Benjamin Alexander. In 3 vols. Lond., 1769.

Hunter, John, 1728-1793.

"But the man who combined the qualities of Vesalius, Harvey and Morgagni in an extraordinary personality was John Hunter. He was, in the first place, a naturalist to whom pathological processes were only a small part of a stupendous whole, governed by law, which, however, could never be understood until the facts had been accumulated, tabulated and systematized. By his example, by his prodigious industry, and by his suggestive experiments he led men again into the old paths of Aristotle, Galen and Harvey. He made all thinking physicians naturalists, and he lent a dignity to the study of organic life, and re-established a close union between medicine and the natural sciences.
[W. O., Evolution of Modern Medicine. p. 197.]

1222. Observations on certain parts of the Animal OEconomy. Lond., 1786.

1225. A practical Treatise on the Diseases of the Teeth; intended as a Supplement to the Natural History of those Parts. Lond., 1778.

1227. A Treatise on the Venereal Disease. Lond., 1786.

1230. A Treatise on the Blood, Inflammation, and gun-shot Wounds. To which is prefixed, A short account of the Author's life, by his brother-in-law, Everard Home. Lond., 1794.

Jenner, Edward, 1749-1823.

"A vague notion had prevailed among the dairies from time immemorial that this disease [cowpox] was a preventive of the smallpox. Jenner put the matter to the test of experiment. Let me quote here his own words: 'The first experiment was made upon a lad of the name of Phipps, in whose arm a little vaccine virus was inserted, taken from the hand of a young woman who had been accidentally infected by a cow. Notwithstanding the resemblance with the pustule, thus excited on the boy's arm, bore to variolous inoculation, yet as the indisposition attending it was barely perceptible, I could scarcely persuade myself the patient was secure from the Small Pox. However, on his being inoculated some months afterwards, it proved that he was secure.' The results of his experiments were published in a famous small quarto volume in 1798. From this date smallpox has been under control. Thanks to Jenner, not a single person in this audience is pockmarked!"

[W. O., Evolution of Modern Medicine. p. 199.]

1251. An Inquiry into the Causes and Effects of the Variolae Vaccinae, a Disease discovered in some of the Western Counties of England, particularly Gloucestershire, and known by the name of the Cow Pox...Lond., 1798.

1252. The same. 2nd ed. Lond, 1800.

Bichat, [Marie François] Xavier, 1771-1802.

"The man who gave the greatest impetus to the study of scientific medicine at this time was Bichat, who pointed out that the pathological changes in disease were not so much in the organs as in tissues. His studies laid the foundation of modern histology. He separated the chief constituent elements of the body into various tissues possessing definite physical and vital qualities. 'Sensibility and contractability are the fundamental qualities of living matter and of the life of our tissues.' Thus Bichat substituted for vital forces "vital properties", that is to say, a series of vital forces inherent in the different tissues. His Anatomie Generale, published in 1802, gave an extraordinary stimulus to the study of the finer processes of disease, and his famous Recherches sur la Vie et sur la Mort (1800), dealt a deathblow to old iatromechanical and iatrochemical views."
[W. O., Evolution of Modern Medicine. p. 201.]

1301. Anatomie générale, appliquée à la Physiologie et à la Médecine...è ptie, tomes 1-2; 2 ptie, tomes 3-4. Par., an X (1801).

1302. Traite d'Anatomie descriptive. 5 tomes. Par., an X (1801)-an XII (1803).

Laennec, René Théophile Hyacinthe, 1781-1826.

"It was a pupil of Corvisart, Rene Theophile Laennec, who laid the foundation of modern clinical medicine....Influenced by Corvisart, he began to combine the accurate study of cases in the wards with anatomical investigations in the dead-house. Before Laennec, the examination of a patient had been largely by sense of sight, supplemented by that of touch, as in estimating the degree of fever, or the character of the pulse....The discovery of auscultation by Laennec, and the publication of his work De l'Auscultation Mediate, 1819,-marked an era in the study of medicine. The clinical recognition of individual diseases had made really very little progress; with the stethoscope begins the day of physical diagnosis. The clinical pathology of the heart, lungs and abdomen was revolutionized. Laennec's book is in the category of the eight or ten greatest contributions to the science of medicine. His description of tuberculosis is perhaps the most masterly chapter in clinical medicine. This revolution was effected by a simple extension of the Hippocratic method from the bed to the dead-house, and by correlating the signs and symptoms of a disease with its anatomical appearances."
[W. O., Evolution of Modern Medicine. pp. 203-204.]

1318. De l'Auscultation médiate ou Traité du Diagnostic des Maladies des Poumons et du Coeur, fondé principalement sur ce nouveau moyen d'exploration...2 tomes. Par., 1819.

1319. Traité de l'Auscultation médiate et des Maladies des Poumons et du Coeur...Seconde éd., entiérement refondue. 2 tomes. Par., 1826.

1320. The same. 3^{e} ed. augmentee de notes par Meriadec Laennec, 3 tomes. Par., 1831.

1322. The same. Avec les notes et additions de M. M. Laennec. 4^{e} éd....augmentee par M. Andral...3 tomes. Par., 1837.

Bright, Richard, 1789-1858.

"Everywhere the investigation of disease by clinical-pathological methods widened enormously the diagnostic powers of the physician. By this method Richard Bright, in 1836, opened a new chapter on the relation of the kidney to dropsy, and to albuminous urine....It was not until Bright began a careful investigation of the bodies of patients who had presented these symptoms, that he discovered the association of various forms of diseases of the kidney with anasarca and albuminous urine."

[W. O., Evolution of Modern Medicine. p. 204.]

1340. Reports of Medical Cases, selected with a view of illustrating the Symptoms and Cure of Diseases by a reference to Morbid Anatomy. Vol. 1. Lond., 1827.

"Vol. I begins with the series of cases on which Bright based his "statements and conjectures regarding the dependence of a peculiar class of Dropsies on disease and irritation of the Kidneys" (pref., p. viii)."

1342. Travels from Vienna through Lower Hungary; with some remarks on the state of Vienna during the Congress, in the year 1814. Edinb. &c., 1818.

ANAESTHESIA

Morton, W[illiam] T. G., 1819-1868.

"Before Oct. 16, 1846, surgical anaesthesia did not exist; within a few months it became a world-wide procedure; and the full credit for its introduction must be given to Morton, who, on the date mentioned, demonstrated at the Massachusetts General Hospital the simplicity and safety of ether anaesthesia. On the priority question, let me quote two appropriate paragraphs: 'He becomes the true discoverer who establishes the truth; and the sign of the truth is the general acceptance. Whoever, therefore, resumes the investigation of neglected or repudiated doctrine, elicits its true demonstration, and discovers and explains the nature of the errors which have led to its tacit or declared rejection, may certainly and confidently await the acknowledgments of his right in its discovery' (Owen, On the archetype and homologies of the vertebrate skeleton, Lond., 1848, p. 76). 'In science the credit goes to the man who convinces the world, not to the man to whom the idea first occurs' (Francis Darwin, Eugenics Review, 1914). Morton convinced the world; the credit is his. Osler, no. 1365, p. 2.

'Boston, Nov. 21, 1846...The state should, I think, be called anaesthesia. This signifies insensibility, more particularly (as used by Linnaeus and Cullen) to objects of touch. The adjective will be anaesthetic. Thus we might say, the 'state of anaesthesia', or the 'anaesthetic state'. The means employed would be properly called the 'anti-aesthetic agent'. Perhaps it might be allowable to say 'anaesthetic agent'; but this admits of question (O. W. Holmes to Morton.)"

[W. O.]

1355. Bigelow, Henry Jacob, 1818-1890. Insensibility during the Surgical Operations produced by Inhalation. Read before the Boston Society of Medical Improvement, Nov. 9th, 1846, an abstract having been previously read before the American Academy of Arts and Sciences, Nov. 3d, 1846...Boston, 1846. Boston Med. and Surg. Jrnl., no. 16 of vol. 35, 18 Nov., 1846 (at p. 309; with editorial note, 'Operations without Pain', on p. 324).

1357. The Boston Medical and Surgical Journal. Vol. 35 (Aug.-Jan.). Boston, 1846-7.

"When this long-looked-for volume arrived in December, 1919, towards the end of his last illness, Sir Wm. Osler asked that the

following note be inscribed in it: All things come to him who waits-but it was a pretty close shave this time! Start with the documents that magnetized into life an ancient practice-these pamphlets of Morton's, Bigelow's paper, Warren's paper, and vol. XXXV of the Boston Medical and Surgical Journal. Put these together as the blastoderm from which the enormous literature has developed. (Osler, no. 1365, p.4.)"

Davy, Sir Humphry, 1778-1829.

1382. Researches, chemical and philosophical; chiefly concerning Nitrous Oxide, or Dephlogisticated Nitrous Air, and its Respiration. Lond., 1800.

"As nitrous oxide in its extensive operation appears capable of destroying physical pain, it may probably be used with advantage during surgical operations in which no great effusion of blood takes place." (p. 556.)
[W. O.]

Bernard, Claude, 1813-1878.

"One of the greatest contributions of the nineteenth century to scientific medicine was the discovery of the internal secretions of organs. The basic work on the subject was done by Claude Bernard...More than any other man of his generation, Claude Bernard appreciated the importance of experiment in practical medicine. For him the experimental physician was the physician of the future - a view well borne out by the influence his epoch-making work has had on the treatment of disease. His studies on the glycogenic functions of the liver opened the way for the modern fruitful researches on the internal secretions of the various glands.
[W. O., Evolution of Modern Medicine. p. 215.]

1507. Leçons de Physiologie expérimentale appliquée à la Médecine, faites au Collége de France. Cours du semestre d'hiver 1854-1855: Cours du semestre d'été 1855. Par., &c., 1855-6.

"These 'Leçons' and those on the 'Liquides de l'organisme' (no. 1510) contain Bernard's classical work on the function of the pancreas, liver, and gastric glands. His first communication on the glycogenic function of the liver, 'De la présence du sucre dans le foie', was published in 1848 as a brief note in the Comptes rendus de l'Acad. des Sc., vol. 27, p. 514."

1511. Introduction à l'étude de la Médecine expérimentale. Par. &c., 1865.

Pasteur, Louis, 1822-1895.

"In December of the same year (1857) Pasteur presented to the Academy of Sciences in Paris a paper on Alcoholic Fermentation in which he concluded that 'the deduplication of sugar into alcohol and carbonic acid is correlative to a phenomenon of life'. A new era in medicine dates from these two publications. The story of Pasteur's life is one of the glories of human literature and, as a record of achievement and of nobility of character, is almost without an equal. Osler, No. 6260, p. 206."

"The 'Mémoire sur la Fermentation alcoolique' is in the Comptes rendus, 21 Dec., 1857, vol. 45. pp. 1032-6, and in its final form, in Ann. de chimie et de phys., 1860, vol. 58, p. 323.

1534. Mémoire sur la Fermentation appelée Lactique. Ann. de chimie et de phys. 3^{e} sér., t. 52, 1858.

1547. Études sur le Vin, ses Maladies, Causes qui les provoquent, Procédés nouveaux pour le conserver et pour le vieillir...Par., 1866.

1548. The same. 2^{e} éd., revue et augmentée. Par., 1873.

1549. Études sur la Maladie des Vers à Soie, moyen pratique assuré de la combattre et d'en prévenir le retour...2tomes....Par., 1870.

1550. Études sur la Bière, ses Maladies, Causes qui les provoquent, Procédé pour la rendre inaltérable, avec une Théorie nouvelle de la Fermentation... Par., 1876.

1551. Studies on Fermentation: the Diseases of Beer, their Causes, and the means of preventing them. A trl....By Frank Faulkner and D. Constable Robb. Lond., 1879.

Darwin, Charles Robert, 1809-1882.

"Then with the Origin of Species came the awakening, and the theory of evolution has not only changed the entire aspect of biology, but has revolutionized every department of human thought."

[W. O., The Leaven of Science.]

1566. On the Origin of Species by means of Natural Selection, or the Preservation of Favoured Races in the Struggle for Life, Lond., 1859.

"Poulton called my attention to the story of the bear, p. 184 of this volume, by which one can tell the early impression (first 1,250 copies). Darwin was chaffed about this story and changed it in the second printing."

[W. O.]

Wallace, Alfred Russel, 1823-1913.

1617. Contributions to the theory of Natural Selection. A series of essays. Lond., 1870.

Virchow, Rudolf [Ludwig Karl], 1821-1902.

"Virchow's life work has been the study of the processes of disease, and in the profession we revere him as the greatest master that has appeared among us since John Hunter....The influence of his work has been deep and far-reaching, and in one way or another has been felt by each one of us."

[W. O., Rudolph Virchow, the man and the student.]

1624. Die Cellularpathologie in ihrer Begründung auf physiologische und pathologische Gewebelehre. Zwanzig Vorlesungen gehalten während der Monate Feb., März, und Apr. 1858 im pathologischen Institute zu Berlin. Berl., 1858.

"Virchow is the father of modern pathology, not simply in relation to the ultimate structural alterations dealt with in this work, but as the founder of the pathology of disordered function, which applies the facts of science to the interpretation of disease. His point of view may best be had from the

article 'Ueber die Standpunkte in der wissenschaftlichen Medizin' in the first number (1847) of his famous 'Archiv'. I have given in no. 1663 my impressions of the great master, with whom I had the privilege of working in the autumn semester of 1873 and in the summer semester of 1884. My set of the 'Archiv' was left in Philadelphia.

[W. O.]

1631. Die krankhaften Geschwülste. Dreissig Vorlesungen, gehalten...1862-1863 an der Universität zu Berlin. Bde. 1-2. Berl., 1863 [-5].

Lister, Joseph, 1st Baron, 1827-1912.

"I have just come from the Abbey service - the most splendid tribute ever paid to our profession, and so richly deserved in the person of Joseph Lister, one of the greatest benefactors of humanity."
[W. O., Quote in Cushing's Life. v.2, p. 308.]

1675. The collected papers of Joseph, Baron Lister. In 2 vols. Oxf., 1909. For the first papers on the Antiseptic Principle, reprinted from the Lancet, 1867, see vol. ii, pp. i and 37.

Koch, Robert, 1843-1910.

"Koch is really our medical Galileo, who, by means of a new technique, - pure cultures and isolated staining, - introduced us to a new world. In 1878 [in] his study on the "AEtiology of Wound Infections,"...he was able to demonstrate conclusively the association of micro-organisms with the disease. Upon...memorable researches made by a country doctor rests the modern science of bacteriology....

"It is not too much to say that the demonstration by Koch of the "bacillus tuberculosis" (1882) is, in its far-reaching results, one of the most momentous discoveries ever made."
[W. O., Evolution of Modern Medicine. pp. 209, 211-212, 214.]

1686. Die Ätiologie der Milzbrand-Krankheit, begründet auf die Entwicklungsgeschichte des Bacillus Anthracis (1876). Eingeleitet von M. Ficker. Hierzu I Tafel. Leipz., 1910. Klassiker der Med., herausg. V. K. Sudhoff, Bd. 9. Reprinted from F. Cohn's Beitr. z. Biol. d. Pflanzen, 1876-7, vol. 2, pp. 277-310.

1687. Untersuchungen über die Aetiologie der Wundinfektionskrankheiten. Leipz., 1878.

1688. Ueber die Aetiologie der Tuberculose. (Wiesbaden, 1882.) Verhandl. d. Congr. f. inn. Medecin, I. Congress, Wiesbaden, 20-22. April 1882. A resume, by Koch, of his researches, with discussion by Aufrecht, Klebs and others, pp. 56-79. Koch's previous paper, 'Die Aetiologie der Tuberculose', in which he announced the discovery of the tubercle bacillus and formulated his 'postulates' for establishing the specific pathogenic nature of a micro-organism, was read Mar. 24, and published April 10, 1882, in the Berl. klin. Wochensch., xix, pp. 221-30.

Roentgen, Wilhelm Conrad, 1845-1923.

"To observation and reasoned thought, the Greek added experiment, but never fully used it in biology, an instrument which has made science productive, and to which the modern world owes its civilization. Our everyday existence depends on the practical application of discoveries in pure science by men who had no other motives than a search for knowledge of Nature's laws, a disinterestedness which Burnet claims to be the distinctive gift of Hellas to humanity. With the discovery of induced currents Faraday had no thought of the dynamo. Crookes' tubes were a plaything until Roentgen turned them into practical use with the X-rays."
[W. O., The Old Humanities and the New Science.]

1700. Ueber eine neue Art von Strahlen. (Vorläufige Mittheilung.) (Würzburg, 1896.) Dated Dec., 1895. Repr. fr. Sitzungsberichte der Würzburger Physikal.-med. Gesellschaft, 1895. Followed in same vol., by 'Fortsetzung', dated 9 Marz, 1896, also from the Sitzungsberichte, 'Jahrgang 1895', and with title-page 'Eine neue Art von Strahlen. II. Mittheilung. Von Dr. Wilhelm Konrad Röntgen', Würzburg, 1896.

"Show me his friends and I the man shall know;
This wiser turn a larger wisdom lends:
Show me the books he loves and I shall know
The man far better than through mortal friends."

POSTLUDE

"An Evening Among the Books" was conceived by Miss Ruth Mann, Librarian of the History of Medicine Collection, as a way of recognizing the fiftieth anniversary of the death of the great physician, Sir William Osler. All of us in our careers have tried to emulate someone living or dead whom we have greatly admired. Some of us here tonight feel that way about Sir William.

Osler retained his interest in books and libraries all of his life. As his own library developed he considered its educational value as well as its literary and historic interest. It is a great library and he grouped the books into eight general divisions. The first of these he called Bibliotheca Prima. He arranged in chronological order the books from his library representing the important contributions in the evolution of science including medicine. It is this first section that we are concerned with this evening. A number of books that were in Sir William's library and duplicated in our holdings have been chosen for display. They are all literary landmarks of the first magnitude. Osler's comments about the books and authors are included. The numbers are from the published catalogue of his library, The Bibliotheca Osleriana.

TEK