A Great Physician.

The Life of Sir William Osler. By Harvey Cushing. Vol. 1. Pp., xv + 685 + 20 plates. Vol. 2. Pp. xii + 728 + 21 plates. (Oxford: Clarendon Press; London: Oxford University Press, 1925.) 37*s.* 6*d.* net.

THE awaited Life of Sir William Osler is before us. His subject "A Physician of Two Continents," the author has appropriately devoted the first volume to the Canadian and United States periods, while the second volume deals with the Oxford period. But to readers in the new world as well as the old, both volumes will appeal for the sake of Osler's great and lovable personality.

Dr. Harvey Cushing, who handles pen and scalpel with equal skill, has made Osler live again for us in these pages. He has mainly effected this by a similar method to that pursued by Lockhart in writing the Life of Scott. So far as is possible, extracts from Sir William's letters and the writings of his contemporaries are introduced to bring back the events of past days; the art of the biographer is declared in the way in which these documents fall naturally into the course of the main narrative. This indeed, as is stated in

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almost reconcile one to its price. R. H

Science for the Public.

Chats on Science. By Dr. Edwin E. Slosson. Pp. vii + 253. (London: G. Bell and Sons, Ltd., 1924.) 6*s.* net.

Keeping up with Science; Notes on recent Progress in the various Sciences for Unscientific Readers. Edited by Dr. Edwin E. Slosson. Pp. xv + 355 + 30 plates. (London: Jonathan Cape, Ltd., 1924.) 10*s.* 6*d.* net.

THE popularisation of science has been frequently discussed in the columns of NATURE, and the subject is undoubtedly arousing increased attention. In the daily press there is evidence of a desire to devote more attention to science; and some of the leading dailies endeavour to secure that what they print is really authentic. On the whole, however, the position is far from satisfactory, and in those cases where the serving up of science is left entirely to the ordinary journalist in search of stirring news, the result is often very deplorable. A newspaper that would think it discreditable to commit a solecism in dealing with any other branch of knowledge, or with

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A short foreword, has been Dr. Cushing's object, and he has not wished, for the present at all events, to appraise Osler's professional accomplishments. Most readers after perusing the book will agree that such comments would be superfluous.

William Osler was born on July 12, 1849, at Bond Head, in Upper Canada. He came of Cornish stock through both parents. His father was a clergyman, the Rev. Featherstone Lake Osler, who settled as a missionary in Canada in 1837 with his wife, Ellen Pickton, who died a centenarian. William, named after William of Orange, was the youngest son in a family of nine, nearly all of whom became distinguished in the affairs of their native country. At first destined for the church, the influence of two of his teachers, Johnson and Bovell, one a priest and school-master, first a theologian, secondly a naturalist, the other, a physician but at heart a priest, undoubtedly directed the young student's attention to medicine through the portal of natural science. Osler's studies of the Diatomaceæ and fresh-water Polyzoa led him on to Entozoa and eventually to work on blood-films in London and Montreal; to note malarial parasites at Philadelphia and the amœbæ of dysentery at Baltimore. He took his medical degree at McGill University in 1872, and then passed two years of study abroad in the course of which he worked at physiology and pathology under Burdon Sanderson, to whose future chair at Oxford in the fulness of time he was to succeed.

In the 'seventies, medicine was being again revolutionised; to every port of knowledge came argosies rich in the new learning. Giants indeed were in those days; Darwin had written "The Origin of Species"; Huxley and Burdon Sanderson were making physiology a science; Pasteur was founding bacteriology, and Lister was re-making surgery; Ferrier was discovering cerebral localisation; Paget was wedding pathology to surgery; Virchow was teaching pathology in Berlin; and Villemin's researches had paved the way for Koch's impending discovery of the tubercle bacillus. Into the harvest of science came the young Canadian doctor, a worker as well as a gleaner. He returned to Montreal in 1874 as lecturer in the new subjects of physiology and pathology at his *alma mater*.

Ten years of scientific work followed, chiefly in pure pathology, but towards the end of the Canadian period, Osler had found his life-work. In 1884 he accepted the post of professor of clinical medicine in the University of Pennsylvania, and five years later was called to Baltimore as professor of medicine in the newly established Johns Hopkins Medical School. Dr. Cushing tells in detail the story of Osler's achievements here. He built up a wonderful Medical School; he was made a fellow of the Royal Society; he wrote a text-book, successive editions of which have been in the hands of medical students and medical practitioners throughout the world; he made it possible for the American students to study medicine in the wards by the bedside; he gained international reputation as a physician, a teacher, and a writer. At fifty-six years of age his cup overflowed with wisdom; yet fortune had more gifts in store for him, and the land of his ancestry claimed him as her own.

After refusing many calls to other positions, in 1904 he accepted the Regius professorship of medicine at Oxford. It is a chair in which one may grow old gracefully; the duties attached to the post are not onerous, and ample leisure might have been afforded for Osler's enjoyment of his library and literary pursuits.

Sir William (he received a baronetcy in 1911) was not a man to rest on his laurels. Within a short space of time his personality was felt in the ancient University, where he was soon known to the medical undergraduate as the most human of professors. He taught clinical medicine at the Radcliffe Infirmary; he proved himself a classic and a philosopher at the high tables of colleges; he and Lady Osler in their unbounded hospitality made Oxford the Mecca of every doctor and student and knit up a thousand close ties between England and America. His influence went far beyond Oxford in constant demands for lectures, addresses, committees, and consultations; he spent himself freely for the advancement of learning and the good of mankind. The aim of Osler's life is written in the preface to his text-book: "To feel that I may have been helpful in promoting sound knowledge is my greatest satisfaction." Needless to add, this feeling was amply justified. The War came and clouded his last days with irreparable sorrow, but to the end in 1919 he was the captain of his soul.

It has been stated that Osler made few contributions to science, and that his chief claim to fame rests on his unquestioned abilities as a teacher and exponent of clinical medicine. There is scant justice in this view, supported, though it may be, by Osler's modest estimation of his own work. As has been mentioned, his bent for scientific research was shown in youth when, in his paper on the Diatomaceæ, he enumerated 110 species in 31 genera collected by himself. When only twenty-four years of age, he made the fundamental investigation of blood platelets and was the first to describe these bodies in the circulating blood. In 1877 he described a form of broncho-pneumonia in dogs, due to a previously unknown parasitic nematode to which Cobbold has given the name of *Filaria Osleri*. There is little doubt that, had he continued his studies in pure pathology, he would have taken high place

both as an investigator and teacher. In many respects he was more prescient than some of his contemporaries, for he early apprehended the importance of the new pathology and made it the basis of scientific medicine. This practice is so generally accepted to-day that we are apt to forget it is in large part due to Osler; through his work and teaching the modern presentation of medicine, based on known causes with signs and symptoms explained or verified in the *post-mortem* room and in the laboratory, has emerged.

Although a sedulous compiler of the work of others, in medicine itself Osler made numerous original observations. In 1902, he described the condition of cyanosis with polycythæmia, known as Vaquez-Osler disease, and an hereditary malady characterised by multiple telangiectases associated with hæmorrhages may rightly also be styled Osler's disease. His Goulstonian lectures on malignant endocarditis, his lectures on the cerebral palsies of children, and his Lumleian lectures on angina pectoris, were based on a wealth of clinical experience and information. In addition to the work published under his own name, many important discoveries in various branches of medicine put forth by his colleagues and pupils can be ascribed to what Clifford Allbutt termed Osler's wonderful power, only possessed by a few great teachers, of "inseminating other minds."

As Dr. Cushing writes: "There were indeed many Oslers: the physician, the professor, the scholar, the author, the bibliophile, the historian, the philanthropist, the friend and companion for young or old." In literature and philosophy, his learning was profound, and his presidential address to the Classical Association at Oxford in 1919 on "The Old Humanities and the New Science" impressed his audience with his width of outlook, his easy mastery of great tracts of literature, and his all-embracing humanity in the widest sense of the term. Those who knew and loved Osler—and few men have been more personally beloved throughout the world—will feel grateful to Dr. Cushing for dwelling on the intimate aspect of Sir William's character, for revealing through his own words his infinite capacity for friendship and his unselfish aid to every one who came to him in doubt or difficulty. "He talked with crowds and kept his virtue, or walked with kings—nor lost the common touch."

Such is the story told by Dr. Cushing; the theme is noble, the book is worthy of its subject; there is little to criticise; we could have spared a page treating of the Royal College of Physicians from a mistaken point of view, and the addition of a complete list of Osler's published writings would have been desirable; but the matter is all pure gold and the book should rank as one of the classical biographies. A. S. M.

Our Bookshelf.

Trees and How they Grow. By G. Clarke Nuttall. New edition. Pp. xi+184+70 plates. (London, New York, Toronto and Melbourne: Cassell and Co., Ltd., 1923.) 7*s.* 6*d.* net.

Mr. Nuttall's work is a chatty book about the botany, history, and literature of our common trees. The biological details are fairly accurate, attention being paid to the pollination of the flower, the distribution of the seed, and the growth of the seedling. Errors, however, are not infrequent in the other part of the text, mainly due to previous writers, from whom the author has compiled. The remarkable hazel tree, 60 feet high, at Syon House, Brentford, is not the common species (as stated on p. 5, an error due to Tollemache in 1901); but is *Corylus Colurna*, the Turkish hazel, a large forest tree of S.E. Europe and Asia Minor. There are actually three magnificent Turkish hazels at Syon, ranging in height from 68 to 87 feet.

The derivations of tree names in this book are mostly of the kind known as folk-etymology, and perpetuate time-honoured errors. The statement (p. 60) that the Lombardy poplar is a native of the Himalayas is without foundation, there being no doubt that it originated, as its name indicates, in the plain of the River Po. The statement (p. 16) that the word elm is a derivative of the Latin *ulmus* is incorrect, and certainly lends no support to the tradition that the common elm was introduced into Britain by the Romans. The wych elm is so called on account of its pendulous branches (A.S. *wice*, bending), and the etymology given on p. 16 is impossible. The derivation (p. 24) of the Latin *taxus*, yew, from the Greek τόξον, a bow, rests on a guess of Pliny and is not supported by any evidence. Absurd derivations of the Latin *alnus*, alder (p. 47), and *carpinus*, hornbeam (p. 53), are put forward. Acorn means the fruit of the open country (A.S. *æcern*), and has no connexion (as stated on p. 104) with the A.S. *ac*, oak—the present spelling "acorn" being a good example of the influence of folk-etymology on the form of words. The word holly (p. 133) is not derived from the Norse, and has no connexion with the word *holy*. The A.S. name of the tree is *holen* or *holegn*, cognate with the Irish *cuileann* and the Welsh *celyn*. This name is as old as the A.S. *mapel* (*Acer campestre*), which is said (p. 141) to be an old British name, "handed down to us from days long before Anglo-Saxons were thought of; and it is the only plant whose name has come down from those days." This is a fairy tale without any foundation. The lime tree owes its name to a corruption of the A.S. *lind*, which survives in the adjective linden; and the explanation offered by Mr. Nuttall is baseless.

The book may be serviceable in Nature study classes, as it is cheap, readable, and provided with useful illustrations.

The Borders and Beyond: Arctic, Cheviot, Tropic. By Abel Chapman. Pp. xxi+489+35 plates. (London and Edinburgh: Gurney and Jackson, 1924.) 25*s.* net.

This book is a fine record of personal observation of wild life at home and abroad, and sets forth the opinions arrived at by the author as the result of many years

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