# The Scottish Society of the History of Medicine

(Founded April, 1948)

### REPORT

**OF** 

## **PROCEEDINGS**

**SESSION 1957-58** 

### The Scottish Society of the History of Medicine.

President -	-	Dr W. S. MITCHELL	
Vice-Presidents	-	Mr. A. L. GOODALL	
		Dr. M. H. ARMSTRONG DAVISON	
Hon. Secretary	-	Dr. H. P. TAIT, 26 Cluny Drive, Edinburgh, 10	
Hon. Treasurer	-	Dr. W. A. ALEXANDER, 9 Randolph Crescent,	
		Edinbu	rgh, 3
Council -	-	Dr. DOUGLAS GUTHRIE retires by rotation,	1958
		Dr M. H. ARMSTRONG DAVISON "	1958
		Mr THOMAS GIBSON "	1958
		Dr. W. P. D. WIGHTMAN "	1958
		Mr LEONARD JOLLEY "	1959
		Mr. J. HINTON ROBERTSON "	1959
		Dr. T. R. R. TODD "	1959
		Mr. T. B. MOUAT	1960
		Professor ADAM PATRICK "	1960
		THE SENIOR PRESIDENT,	((' . ! <u>. )</u>



VV. B.

William Bullein (d. 1576), from the King's College (Newcastle-upon-Tyne) copy of *The Government of Health*, 1558.

LEYDEN UNIVERSITY

### The Scottish Society of the History of Medicine

# REPORT OF PROCEEDINGS 1957-58

The Society has again had a successful session, although only two meetings instead of the usual three were held. It was decided that instead of having a meeting in February and one in June, 1958, since the tenth anniversary of the foundation of the Society fell towards the end of April, it would be appropriate to have a special meeting to celebrate this occasion, and so such a meeting was held on 26th April, at which our new President, Dr. W. S. Mitchell, delivered a Presidential Address. The proceedings were preceded by an informal "birthday" luncheon. At the Annual General Meeting held in October, 1957, Mr. A. L. Goodall demitted office as President, and Dr. W. S. Mitchell was unanimously elected to this office. This is the first occasion in which a nonmedical member has been elected to the President's chair during the Society's existence, for Dr. Mitchell is Librarian of King's College, Newcastle upon Tyne, and has been for several years an active participant in the Society's affairs. Opportunity must be taken here to pay tribute to the great services to the Society which have been rendered by Mr. Goodall during his notable presidency, and the Society's warmest thanks are offered to Dr. John Ritchie, a past-President, who demitted all office, although continuing as an active member. Dr. Ritchie was one of the small band of enthusiasts who instigated the inaugural meeting at which the Society was constituted.

Membership has been maintained but the Society has suffered grievously by the deaths of four distinguished members. Professor T. K. Monro died on 10th January, 1958, at the age of 92. We recall with pleasure his paper on the skull and portraits of Sir Thomas Browne, which he gave at the thirteenth meeting in February, 1952. Although his age prevented him from attending many meetings save those held in Glasgow, he took a keen and lively interest in the affairs of the Society. Professor J. C. Brash died suddenly on 19th January, aged 71. He was an original member but the commitments of a busy life mitigated against his regular attendance at meetings. Dr. A. Johnstone Brown died on 17th April. He was a member for several years and was an active supporter of the Society. His death, and that of Dr. J. Forbes Webster, former Dean of Glasgow Dental Hospital, who died on 5th May, remove two from an enthusiastic band of dental surgeons who are members. To the

relatives of these gentlemen we offer our sincere sympathy.

It is a pleasure to congratulate several members who have been honoured during the session. In chronological order these were: Professor John Bruce, who was awarded an Honorary Fellowship of the American College of Surgeons in October, 1957, and Professor J. H. F. Brotherston who, at the invitation of the Chadwick Trust, delivered on 31st October a Chadwick Public Lecture in Edinburgh. His subject was William Pulteney Alison, Scottish Pioneer of Social Medicine, and the lecture was subsequently published (Med. Officer, 1958, 99, 331-336). Dr. Ian Porter published early in 1958 a study of Alexander Gordon, M.D. of Aberdeen, and this work was awarded the History of Medicine Prize by Glasgow University. Professor John Boyes, of the Chair of Oral Surgery at Durham University, received a call to the Chair of Dental Surgery at Edinburgh University, and will take up his new appointment in October, 1958. A signal honour has been conferred on our senior dental member, Dr. J. Menzies Campbell. On 18th July, in the Great Hall of the Royal College of Surgeons of England, he had conferred on him an Honorary F.D.S. of the College. Dr. Campbell is the first dentist to receive this Fellowship, the highest

much towards the adoption of the accepted system of plant classification. He

was held in high esteem by Sir Joseph Banks.

The Royal Army Medical Corps came into being on 1st July, 1898, when for the first time the Army medical service achieved the status and recognition it deserved. In 1908 the Territorial Force was created and it was given its own R.A.M.C., identical in pattern to the regular R.A.M.C. Then, ten years later, on 1st April, 1918, the Royal Air Force was created from the Royal Flying Corps and the Royal Naval Air Service. This new service was given its own medical department to enable the special problems of aviation medicine to be studied and dealt with. An account of the activities, past and present, of the R.A.M.C., and the Naval and R.A.F. Medical Services has recently been published (*Public Health*, 1958, 72, 81-116).

The jubilee conference of the Scottish Library Association was held in

Edinburgh in May, 1958, the Association having been founded at a meeting

fifty years ago in the Edinburgh Central Library.

In the nursing world two jubilees should be mentioned. These were those of the Cavell-Depage Institute, and of the Canadian Nurses' Association. In 1907 Miss Edith Cavell went to Brussels to assist the well-known Belgian surgeon, Dr. Depage, in the training of nurses there, being appointed matron to the Institute. The C.N.A. was founded in June, 1908, and a convention was held at Ottawa, opening on 23rd June, 1958.

Ten years ago, on 5th July, 1948, the National Health Service came into operation throughout Great Britain, and an article reviewing the ten years' operation in Scotland appeared in The Scotsman on 5th July, 1958. World Health Organisation (WHO) also celebrated its tenth anniversary in April and an illustrated booklet, Ten Steps Forward, has been written by Ritchie Calder

to commemorate the event.

The last act in the history of the Polish Medical School at Edinburgh University was performed on 13th October, 1957, when all the documents relating to its origin were deposited in the archives of the General Sikorski Historical Institute, Banknock, Stirling, by the Dean of the Polish Medical School, Professor J. Rostowski. The School from its commencement in October, 1940, produced 228 doctors.

Of special interest to Scottish medical historians was the finding, towards the end of 1957, of the original reports of the late Dr. Elsie Inglis when she was head of the Scottish Women's Field Hospitals serving with the Serbian Division in Russia during September, 1916, to November, 1917. The discovery

of these important documents was quite a chance one.

A memorial to Sir Alexander Fleming was unveiled at Lochfield Farm, near Darvel, Ayrshire, where Fleming was born. The unveiling took place on 12th November, 1957, and the memorial, a block of Cumberland granite, bears on the polished front in gilt lettering the inscription:

#### SIR ALEXANDER FLEMING,

DISCOVERER OF PENICILLIN, WAS BORN HERE AT LOCHFIELD, 6TH AUGUST, 1881.

The Royal Victoria Hospital Tuberculosis Trust arranged for a Memorial Lecture to be delivered at the Royal College of Physicians of Edinburgh to mark the centenary of the birth of Sir Robert Philip. This lecture was given by Dr. Christopher Clayson, one of Sir Robert's pupils, on 13th December, The lecture was afterwards published (Brit. Med. Journ., 1957, ii, 1957. 1503-1508).

In The Scotsman (10th July, 1958) is an interesting article on the portrait head of Robert The Bruce by Mr. Pilkington Jackson, A.R.S.A., F.R.B.S., at present on show at the Royal Scottish Academy, Edinburgh. This is a unique

international dental honour. Just as we go to press Dr. Campbell has had printed privately a collection of his papers and addresses on dental history under the title *From a Trade to a Profession*. This is a delightful book and contains a reprint of the address on The Chevalier Ruspini which he gave to the Society in 1953.

In addition to the publications already referred to by Professor Brotherston and Dr. Porter, we have noticed several others by members of the Society. Dr. Menzies Campbell published an admirable Brief History of Dentistry in Scotland until 1951 (Dental Mag. and Oral Topics, 1957, June-September), and Dr. W. S Mitchell has described the bindings of manuscripts and books at Ushaw College (Libri, 1957, 7, 156-166). Dr. Douglas Guthrie gave a paper in December, 1957, on Dynasties of Doctors before the Scottish Genealogy Society (The Scott. Genealogist, 1958, 5, 22-29), and another on the Medical and Literary Contributions to the Transactions of the Royal Society of Edinburgh, from 1783 until 1900 (Year Book, R. S. Edin., 1958, 5-11). Dr. Ritchie contributed two short reports on a seventeenth century sermon anent the pestilence and the rule of the pestilence (Med. History, 1958, ii, 149-153), while Dr. R. M. McGregor read a paper before the Hawick Archaeological Society on the medical history of Hawick (Trans. Hawick Archaeolog. Soc., 1957). Mr. C. G. Drummond, one of our pharmaceutical chemist members who has contributed much to the history of his profession, wrote a most interesting article on the diary of an apothecary who practised in the district of Dalkeith in Midlothian and which covers the period 1733 to 1735 (Chemist and Druggist, 1958, 169, 692-96). The Honorary Secretary contributed a short study on early 19th century public health administration during the cholera outbreak of 1832 in Edinburgh (Med. Officer, 1957, 98, 235-237).

#### Medico-Historical Notes

The year covered by this report is quite a notable one for anniversaries, centenaries and jubilees, of events and people of medical interest. Four hundred years ago was born Dr. Henry Atkins, who became physician to King James VI and I, and at the British Records Association silver jubilee display in London were shown various documents relating to Atkins. For example, we learn that he was paid 50 shillings a day for looking after four-year-old "swete Duke Charles" as he brought the young prince from Scotland to England. But one puzzling exhibit of Atkins's effects was a list of members of the Scottish Parliament and of the Commissioners appointed to come to England for negotiations for union. This exhibition was held at the Public Records Office, London, in November, 1957.

Two hundred years ago, in 1758, there appeared a *History of Health* by James Mackenzie, an Edinburgh graduate who had long resided in Worcester. A contemporary reviewer stated that the author "has omitted no pains to inform himsel amply on this valuable topic. . . . He has read most, if not all the authors, of any considerable character, which he could obtain on the subject." Even to-day this book has a charm which attracts one to the author, and it is well worth a perusal.

On 4th November, 1857, the inaugural address was delivered at the new Veterinary School in Edinburgh and which had been founded by William Dick, a local blacksmith and farrier. The address was given by John Gamgee, lecturer

in anatomy and physiology at the college.

On 2nd January, 1858, the distinguished surgeon and naturalist, John Forbes Royle, died, and on 16th June, the great John Snow died. On 8th April, 1858, Sir Frederic Truby King was born. He was the great apostle of mothercraft. The Medical Act was also passed in this year and Florence Nightingale's *Notes on Nursing* were published. On 10th June, 1858, there died Robert Brown, F.R.S., an Army surgeon who was educated at Edinburgh and who became distinguished as a botanist, describing Brownian movement. He contributed

achievements have been dealt with by Michael Gelfand in his Livingstone the Doctor (1957). Livingstone's rescuer, H. M. Stanley, has been also the subject of a recent biography, The Man Who Presumed (1958), by Byron Farwell. Volume III of the late Ernest Jones's monumental work on Freud (1957) has been accompanied by a filial tribute by Martin Freud called Glory Reflected (1957); McEwan of Glasgow (1957) is a short sketch of Sir William McEwan by Charles Duguid; Sherrington: Physiologist, Philosopher and Poet (1958), by Lord Cohen of Birkenhead, gives in brief space an attractive picture of Sir Charles Sherrington and his work; D'Arcy Wentworth Thompson (1958), by his daughter, Ruth, gives a racy story of the active, rich and interesting life of this scholar-naturalist; Scotland's King James IV, who dabbled in medicine and dentistry, has been the subject of yet another biography (1958) by R. L. Mackie; Sir Charles Bell: His Life and Times (1958), by Sir Gordon Gordon-Taylor and E. W. Walls, is a fine volume in every way.

Two biographies dealing with members of the nursing profession contain a great deal of interest. Edith Cavell (1957), by A. A. Hoehling, is well worth reading in spite of slight inaccuracies, while Florence Nightingale and the Doctors (1958), by Sir Zachary Cope, sheds fresh light on the forceful character of F. N. It is of interest, in passing, to note that some previously unpublished letters of Florence Nightingale have been found in the files of the Queen's Institute of District Nursing and these letters have been published in the Institute's new

journal, District Nursing (1958, 1, 37-38; 61-63).

Three autobiographies, each interesting in a different way, are: Left-handed Doctor (1957), by Peter Quince; The Sea My Surgery (1957), by Joseph Maguire, who was formerly Chief Medical Officer to the Cunard Line; and

Medicine My Passport (1957), by D. S. Matthews.

Of special histories which have been noticed: The Century of the Surgeon (1957), by Jurgen Thorwald, describes in popular terms the advances in surgery during the last hundred years; Scalpel (1957), by Agatha Young, is a history of surgery with the sub-title "Men Who Made Surgery"; Medical Education in the Nineteenth Century (1957), by Charles Newman, is a scholarly and well annotated book on this important and topical subject; The Englishman's Food, first published in 1939, and the work of the late Sir Jack Drummond and his wife, has been revised and brought up to date (1985) by Dorothy Hollingsworth; The Story of Bread (1957), by Ronald Sheppard and Edward Newton, describes bread-making from Biblical times to the present; The Royal Eye Hospital, 1857-1957 (1957), by Professor Arnold Sorsby, is a short history of the famous London hospital; British Social Work in the Nineteenth Century (1956), by A. F. Young and E. T. Ashton, is a fine story of action and progress, while Social Security in Britain: A History (1957), by E. Harold E. Raynes, traces the history of social insurance from early times to latest developments after World War II.

The Silver Bough (1957), by Marian McNeill, is the first of four volumes which will be devoted to the study of the National and Local Festivals of Scotland. This volume deals, inter alia, with magic and witchcraft, while Witchcraft (1958), by Geoffrey Parrinder, is a Pelican Book, dealing with witchcraft in Europe yesterday and Africa to-day. It is also of interest that Sir James Frazer's Golden Bough, Abridged Edition, is now available in a two-volume paper-backed edition in the St. Martin's Library of Macmillan & Co. (1957).

Two new Penguin Classics, Suetonius' The Twelve Caesars (1957), translated by Robert Graves, and The Travels of Marco Polo (1958), translated by R. E. Latham, are valuable modern additions to a library because of the many

references they contain to medicine, maladies and doctors.

There has always been a tendency to regard the Dublin Medical School as the only one in Eire, but recently there came to hand an excellent account of the Cork Medical School, called A History of the Cork Medical School, 1849-1949 (1949), by Ronan O'Rahilly, who has also written a sketch of Benjamin Alcock (1948), the first Professor of Anatomy and Physiology in Queen's College,

Cork. Alcock was, of course, the anatomist who described the canal named after him.

Dr. Bryan Gandevia of Melbourne, Australia, has written an Annotated Bibliography of the History of Medicine in Australia (1957). Dr. Gandevia is an active member of the Victoria Branch of the British Medical Association, Section of the History of Medicine, and we recently had the pleasure of

welcoming him to Edinburgh,

From the United States of America we welcome the excellent account by Professor Richard H. Shryock of the National Tuberculosis Association, 1904-1954 (1957). In this work Shryock deals with erudition and insight with the medical and social background of tuberculosis before describing the founding and later work of the Association. Benjamin Waterhouse and the Introduction of Vaccination (1597), by J. B. Blake, and The Adoption of Inoculation for Smallpox in England and France (1957), by Genevieve Miller, are two well-documented books dealing with two aspects of the prevention of smallpox. From Miss Miller's book we learn, rather sadly, that the romantic Lady Mary Wortley Montagu was not the protagonist of the practice of inoculation in this country that we have always fondly imagined. Pediatric Profiles (1957), edited by Borden S. Veeder, are a collection of word pictures of well-known American, British and Continental pædiatricians. Halstead of Johns Hopkins: The Man and his Men (1957), by S. J. Crowe, is a history of the Department of Surgery during the time of W. S. Halstead, while J. S. Rodman has written a History of the American Board of Surgery (1957). Two autobiographies are well worth reading. The first is by Selman A. Waksman, a pioneer in antibiotics, whose My Life with the Microbes (1957) is, especially in the earlier sections, of great interest; the other is *The Happy Life of a Doctor* (1956), by Roger I. Lee, a founder of the Harvard School of Public Health, an early Treasurer of the American Public Health Association, and a past President of the American Medical Association. The first of a series of monographs on medical history under the editorial direction of Professor Marti-Ibanez has just come to hand. It is A History of Public Health (1958), by George Rosen, editor of the American Journal of Public Health and a distinguished medical historian. It promises to make good reading.

In the nursing world, A General History of Nursing (1957), by L. R. Seymer, is now in its fourth edition, and remains as comprehensive and up to date as previous editions. A Brief History of Nursing in India and Pakistan (1958), by A. Wilkinson, and a History of Nursing Sourcebook (1957), by Anne L. Austin, are two worthwhile publications. The Nursing Mirror during the year has published a series of interesting historical articles; the first, by Sir Arthur MacNalty, deals with the illnesses of Sir Walter Scott, George Meredith, Charles Dickens, and the Brontes, the second series is by Miss D. M. Carter, in which she tells the Great Love Stories of Medical History, those of Osler, Wilfred Grenfell, Pierre Curie, Sir James Paget, Louis Pasteur and Joseph Lister.

# The Thirtieth Meeting and Ninth Annual General Meeting

The Thirtieth Meeting and Ninth Annual General Meeting was held on Friday, 18th October, 1957, in the Library of the Royal College of Physicians of Edinburgh, Mr. Goodall, the President, in the chair. The Annual Report for 1956-57 was presented and unanimously approved. The Honorary Treasurer then presented an account of the Society's finances, during which he gave a plain warning that the Society would have to give serious consideration to increasing the annual subscription, which had remained unaltered since the Society's inception in 1948. With increasing costs, the Society could not afford

to carry on satisfactorily unless the subscription was raised. The Meeting agreed to this matter being discussed fully at the next Annual General Meeting

to conform with the Constitution of the Society.

Mr. Goodall, the retiring President, then thanked the Society for its support during his period in office and called for nominations for his successor. On the motion of Dr. W. N. Boog Watson, seconded by Dr. H. W. Y. Taylor, Dr. W. S. Mitchell was unanimously elected President. After taking the chair, Dr. Mitchell paid tribute to his predecessor and thanked the Society for the honour conferred on him, the first non-medical President of the Society. Mr. Goodall and Dr. M. H. Armstrong Davison were elected Vice-Presidents, and Mr. T. B. Mouat and Professor Adam Patrick Members of Council in place of Dr. W. G. Harrington and Professor J. L. Henderson, who retired by rotation. The remaining Members of Council, the Honorary Treasurer, and the Honorary Secretary were all re-elected for a further session. Dr. Mitchell paid special tribute to Dr. John Ritchie, who demitted all office in the Society, for the sterling services he had rendered to the Society since its formation. He was one of the prime movers in initiating the inaugural meeting by which the Society came into being, and he had occupied the Presidential chair with distinction for three consecutive sessions.

The Society decided to postpone its usual Meeting in February, 1958, until April, so as to be able to hold a Special Meeting to celebrate its Tenth Anniversary as near to 23rd April as possible, this being the date in 1948 when the inaugural

meeting was held.

Public Business took the form of a paper by Dr. Douglas Guthrie, who spoke on

### THE INFLUENCE OF THE LEYDEN SCHOOL UPON SCOTTISH MEDICINE

Medical knowledge, from earliest times, has spread through the world by certain definite routes. Any attempt, therefore, to reconstruct the story of medical progress should include a consideration of space as well as time, places

as well as dates, and geography as well as history.

In ancient times, learning moved slowly from East to West; from China and India to Babylonia and Egypt. How much these early civilisations borrowed from each other is still a matter of uncertainty, but it seems safe to assume that Egypt did contribute to the great climax of cultural activity which coincided

with the life and work of Hippocrates about 400 B.C.

After the downfall of Greece and Rome, the torch burned feebly for some centuries, enlightened to some extent by Arab learning, until at Salerno, about 1000 A.D., it again shone brightly, stimulated by the teachers at that famous school, the first organised medical school of Europe. From that time, knowledge spread more widely, aided by the travels of wandering scholars, the discovery of new countries and increased facilities of transport. The path of progress became more easy to trace, especially after the Renaissance: it led from Salerno to Padua, thence to Leyden, and from there to Edinburgh, and to Philadelphia. Those were, in succession, the leading schools of medicine, each in turn becoming the main centre. Leyden, the subject of the present paper, was pre-eminent as a centre of medical education in the 17th and 18th centuries. The University of Leyden was founded in 1575 by William the Silent as a reward to the city for a gallant defence during a siege, the University being chosen by the citizens in preference to the alternative offer of exemption from taxation for ten years.

The majority of the students were Dutch, but the fame of Leyden soon attracted students of all nations. Some came to study theology, some law, but the majority were medical students, attracted by the excellence of the teaching, which has continued to the present day. All did not graduate, and the Album Studiosorum Lugduno Bataviae, 1575-1875, printed in the tercentenary year, is a list of all the students who matriculated during the three centuries. From this Album, Edward Peacock, in 1883, compiled his Index to English-Speaking

attempt to reconstruct the likeness of an individual who died more than six

hundred years ago and of whom no authentic portraits exist.

A specially warm welcome must be accorded to Res Medica, the new journal of the Royal Medical Society. This publication, appearing in the winter term of 1957, is intended to interest members of the RMS and students in the Medical Faculty at Edinburgh. It is, however, available to anyone interested. It is proposed that the journal appear twice yearly. It is a wholly admirable journal and congratulations are accorded to the editor and management committee. The annual subscription is only three shillings, which covers postage for the two numbers. Information concerning the journal should be addressed to: The Sales Manager, Res Medica, Royal Medical Society, 7 Melbourne Place, Edinburgh, 1.

We have recently received from the United States of America a profusely illustrated magazine called MD Medical Newsmagazine. This journal aims at covering all fields of life from a medical standpoint, and to present a panoramic view of world events, persons and things, as seen through the physician's eyes. The editor-in-chief is Professor Marti-Ibanez whose close association with the magazine is a sure guarantee of its containing much of interest, presented attractively, and, particularly gratifying to the medical historian, accurately. The magazine is produced by MD Publications Inc., 30 East 60th Street, New York 22, New York.

The library of the late Sir John Stirling-Maxwell, who died on 30th May, 1956, after a distinguished career, came up for sale during May, 1958, and two works of Vesalius were sold. The works were first editions of the Fabrica, which fetched £650, and the Epitome went for £600. Disciples of Osler will remember well the photograph in Volume 2 of Cushing's Life of Osler of the Tabulae Sex owned by Sir John and which was specially shown to Osler.

Our attention has been drawn to two foreign medical museums which have been visited by members of the Society who have come back with interesting descriptions of these museums. Dr. A. T. Wallace visited the Musee de l'Assistance Publique in Paris, where a unique collection of pharmaceutical jars and other objects of interest are on display, and Dr. Guthrie, just returned from a visit to Sweden, saw in Stockholm the Medical-Historical Museum and has given an enthusiastic account of his visit to it.

#### **Book Notices**

Some books and articles which may interest members, and which have appeared or come to our notice since the last report, deserve at least passing mention here. Sidelights on the History of Medicine (1957), edited by Sir Zachary Cope, was published on the occasion of the jubilee of the Royal Society of Medicine in London. The contents of this volume consist of a series of papers selected from those given before the Section of History of Medicine during the past forty years, the subjects ranging from "Ancient Egypt and the Origin of Anatomical Science" to "Wilhelm Conrad Rontgen and the Early Development of Radiology," and includes Dr. Guthrie's paper on "The Patient: A Neglected Factor in the History of Medicine." The Wonderful World of Medicine (1958) by Ritchie Calder is a well illustrated popular history of medicine. A small book, The Evolution of Modern Medicine (1958), by Lord Cohen of Birkenhead, is a printing of the first Maurice Bloch Lecture delivered at Glasgow.

Biographies always claim attention and many have been noticed during the past year. The Student Life (1957) by R. E. Verney, is a delightful anthology of the writings of Osler specially gathered together for the medical student, and Verney has also included in his book his own biographical sketch of Francis Adams of Banchory. Six Great Doctors (1957), by J. G. Crowther, deals with the life and achievements of Harvey, Pasteur, Lister, Pavlov, Ross and Fleming; David Livingstone (1957), by George Seaver, is a most comprehensive and authoritative life of the great Victorian doctor-explorer, while his medical Students Who have Graduated at Leyden University (Index Society, No. 13). All the English-speaking students are listed, not merely medical students, and there are no biographical notes, simply the name and date of graduation in each case. About four thousand entries are given. The Album formed also the basis of the excellent researches of R. W. Innes Smith (1872-1933), which he published in 1932 in book form as English-Speaking Students of Medicine at the University of Leyden. Smith's list contains 2,124 entries, with biographical notes of each, and although Scottish students are not listed separately, it has been possible to ascertain that they numbered 546, or about one-quarter of the English-speaking student population of medical students at Leyden. This proportion rose to about one-third in the time of Boerhaave, from 1701 to 1738. The late J. D. Comrie, in an address given at Leyden in honour of Boerhaave, on the bi-centenary of his death, stated that when Boerhaave was teaching during that period, the total number of students of medicine was 1,919, of whom 659 were English-speaking, including 205 Scottish students.

The basis of the present study has been the 546 Scottish names extracted from Innes Smith's record. Many of these have been traced in the original manuscripts at Leyden, although the difficulty of doing so was considerable. The majority, to be sure, are designated "Scotus," but a large number are listed "Scoto-Britannus," a few are classed under cities and appear as "Scotus Aberdonensis," "Scotus Edinburgensis," or "Glascovia-Scotus." Among other isolated titles are "Bamfia-Scotus" (Kelk), "Invernessa-Scotus" (Innes), "Hadingtoni-Scotus" (Smiles), and even "Wicko-Britannus"

(Anderson of Wick).

#### Early Teachers at Leyden

It is interesting to note that the majority of those who taught medicine at Leyden in the early times had themselves been students at Padua. In this category may be mentioned Pieter van Foreest (Forestius), the first professor of medicine, Geraert de Bondt (Bontius), the famous botanist, and Pieter Paaw, who built the first anatomical theatre at Leyden. There were also Johann van Heuren, who introduced into Leyden the clinical method of teaching which had been originated at Padua by Giovanni Battista da Monte (Montanus), and of later date, Franz de le Boe (Sylvius), who was succeeded by Rau, Albinus and other well-known anatomists.

But by far the greatest of all Leyden medical teachers was the world-renowned Hermann Boerhaave (1668-1738). Commencing teaching in 1701, he was a master, not only of medicine, but of botany and chemistry as well; indeed, he was a whole faculty of medicine in himself. For the dissemination of knowledge which Leyden now began to undertake, Boerhaave was largely responsible. Students of many lands flocked to attend his classes and it may truly be said that modern scientific medicine commenced with Boerhaave. Not only did he raise Leyden to the height of its fame as a medical school, but, through his students, he was responsible for the founding of the famous schools of Vienna and Edinburgh. Among his pupils were Albrecht von Haller (1708-77), who brought fame to the new University of Gottingen, Gerhard van Swieten (1700-72), who reconstructed the medical school of Vienna, and Alexander Monro, primus (1697-1767), who, with other Leyden students, founded the faculty of medicine at Edinburgh.

Shortly before Boerhaave's time, there occurred at Leyden an event which united still further the medical partnership between Holland and Scotland. This was the appointment of Archibald Pitcairne (1653-1713) of Edinburgh, to be professor of medicine at Leyden in 1692. The originality of his writings, his defence of Harvey's discovery of the circulation, which remained a matter of dispute for a century after the discovery, led to the selection of Pitcairne as successor to Schacht in the chair of medicine at Leyden. At that time, teaching was still conducted in Latin, so that an interchange of scholarship of this nature was possible. Boerhaave may have been a pupil of Pitcairne, but

this has never been conclusively proved.

#### Leyden Students and the Edinburgh School of Medicine

The first name deserving of mention is that of John Monro (1670-1740), who was at Leyden in 1692-93, when a pupil of Pitcairne. Monro greatly desired that Edinburgh should have a medical school comparable to those of Padua, at which he had also studied, and Leyden, and with this ideal in view he educated his son, Alexander, with the intention of having him eventually

appointed professor of anatomy at Edinburgh.

This scheme proved highly successful. Alexander, later called primus to distinguish him from his son and grandson who followed him in the chair, fully justified his father's expectations and was duly appointed. When at Leyden in 1719-20 he was a favourite pupil of Boerhaave, whom he used to assist in dealing with the many English-speaking patients who were sent to consult the professor, then at the height of his fame. Monro primus, on his return home, was appointed professor of anatomy and surgery in succession to Adam Drummond and John McGill, who had succeeded the first holder of the chair, Robert Eliot. Eliot's appointment had been made in 1706 jointly by the College of Surgeons and the University of Edinburgh. He, too, had been a Leyden student in 1692 when Pitcairne was teaching there.

The next of the three Alexander Monros, Alexander secundus (1733-1817), who was even more successful in the Edinburgh chair of anatomy than his father, had spent a year at Leyden in 1757, but his son, Alexander tertius (1773-1859), was not a Leyden student.

Associated with Monro primus in foundation of the Faculty of Medicine at Edinburgh were four other professors, who had just been appointed. Rutherford (1695-1779), maternal grandfather of Sir Walter Scott, spent a year at Leyden in 1718, and was appointed professor of the practice of medicine in 1726 and held the post for forty years, introducing clinical teaching. other three were all students at Leyden along with Monro primus in 1720. They were Andrew Plummer (1698-1756), appointed professor of chemistry and materia medica; Andrew St. Clair (1699-1760), professor of institutes of medicine (physiology); and John Innes (1796-1733), professor of chemistry and materia medica which post he shared with Plummer. All these appointments were made in 1726, and thus the Faculty of Medicine at Edinburgh University came into being. In the same year the first professor of midwifery was appointed in the person of Joseph Gibson, although at first he lectured to midwives only.

Before the time of Monro primus, anatomy had been taught for many years, in fact since 1505, when the Incorporation of Barber-Surgeons was founded in Edinburgh. Their first accredited teacher of anatomy, James Borthwick, studied at Leyden in 1667. Archibald Pitcairne himself, although a physician, joined the Incorporation of Surgeons after a quarrel with the College of Physicians, and acted as one of the teachers of anatomy in 1702. Eventually the Surgcons and the University of Edinburgh joined forces and appointed Robert Eliot as

professor of anatomy in 1706.

Botany and chemistry were also taught at Edinburgh University before the Faculty of Medicine was founded. In 1676, James Sutherland became professor of botany and he was succeeded in 1706 by Charles Preston, a Leyden student of 1694. A successor to Preston was Charles Alston, who had been at Leyden in 1718. Chemistry was accorded official recognition in 1713, when James Crauford, of Leith, and a M.D. of Leyden (1707), was appointed professor of this subject.

Thus the basic studies of botany, chemistry and anatomy in the new Edinburgh

School were all founded on knowledge obtained in Leyden.

John Monro was not the first to envisage the foundation of a complete medical school at Edinburgh. Archibald Pitciarne and Sir Robert Sibbald (1641-1722) should be mentioned. Both these two were original Fellows of the Royal College of Physicians of Edinburgh, and four years after its foundation (1681) an effort was made to inaugurate organised medical teaching at the University by the appointment of three professors of medicine, Sibbald, Pitcairne and Halket, also an original Fellow of the College of Physicians and a Leyden student. There is no evidence of any lectures having been given by the three professors and almost half a century was to elapse before the Faculty of Medicine

was founded at the University.

To complete the picture, it is necessary to refer to several other men of distinction who had studied medicine at Leyden and who became intimately associated with the Edinburgh Medical School. Exigencies of space demand that these be merely mentioned. Sir Archibald Stevensone (1629-1710), first President of the Royal College of Physicians of Edinburgh; Sir Alexander Dick, Bart. (1703-85), another President who served for the unusually long period of seven years, 1756-63; Sir John Pringle (1707-82), a founder of military medicine; James Gregory (1753-1821), inventor of the famous powder.

Looking back upon the list of those who were connected with medical education at the University of Edinburgh in early times, it is quite remarkable to observe how many of them studied at Leyden and how many were pupils of

Boerhaave.

#### Other Scottish Students at Leyden

Besides those associated with the Edinburgh School, there were many students at Leyden who came from other academic centres in Scotland. The influence of Leyden, though most profoundly felt at Edinburgh, was apparent throughout Scotland.

The first Scottish student to study and graduate in medicine at Leyden was Peter Goldman, a native of Dundee. His M.D. thesis, accepted at Leyden in 1610, was on melancholia. On his return to his native land he became a minor poet of some repute.

Not all Scottish students who attended classes at Leyden took degrees, and no distinction has been drawn between those who did and those who did not

in the present review.

One of the earliest students to arrive in Leyden was Alexander Leighton (1568-1649). He appears in the list of M.D. graduates of 1617 as "Anglus Londonensis," but the reason for this was, that although his only degree was M.A. of St. Andrews, his birthplace, he had practised medicine for some years in London, and was forty-nine years old before he decided to graduate at Leyden. Leighton is remembered, not for his medical achievements, but for his participation, with disastrous results to himself, in the religious controversies of his time. For his virulent attack on episcopacy he was heavily fined, had his ears cut off and his face branded "S.S." (Sower of Sedition). He was the father of the more famous Robert Leighton (1611-84) who, in 1653, became Principal of Edinburgh University.

Another St. Andrews student who was at Leyden about a century after Leighton was George Martine (1702-41). He spent the year 1721 in the Netherlands and graduated M.D. at St. Andrews on his return home. There he practised for some time and published his researches on animal heat and on periods and crises of disease, besides his important description of tracheotomy, which he carried out in 1730, many years before the operation was performed elsewhere in Britian. The first professor of Medicine at St. Andrews, Thomas Simson (1696-1764), was a Leyden student of 1718, and M.D. of Glasgow

(1720), being appointed to the chair at St. Andrews in 1712.

Turning north from St. Andrews to Aberdeen, we find that the first professor of medicine at Marischal College, in 1701, was Patrick Chalmers (died 1727). He was a student at Leyden in 1679, after graduating at Padua in 1677. While at Padua he represented the Scottish nation, and his "stemma" or coat-of-arms, like that of William Harvey, may still be seen in the University quadrangle. Chalmers' ledger, preserved at Aberdeen, gives interesting details of the medical practice of his time. Chalmers' successor in the chair at Aberdeen was Matthew Mackaile (died 1734) and he had studied at Leyden in 1712. He was appointed in 1716, after Chalmers had been expelled for his Jacobite sympathies.

Of much later date was Alexander Gordon (1752-1803), the well-known obstetrician whose treatise on puerperal fever (1789) is a medical classic. was at Leyden in 1776 and he served for some years in the Navy before graduating M.D. at Aberdeen, and starting practice there.

Glasgow can claim a number of Leyden students who became members of

the university staff, and two of them may be mentioned.

Thomas Brisbane (died 1742), was M.D. Leyden (1707), and in 1720 was appointed first professor of anatomy and botany at Glasgow University, while his successor, Robert Hamilton (died 1757), studied at Leyden in 1736. Hamilton was transferred to the chair of medicine the year before his death, but the real founder of the Glasgow Medical School was William Cullen, who began to lecture in chemistry in 1747, and who went to Edinburgh in 1755, there to continue his career as the leading physician of his day.

Among the few Scottish students at Leyden during the 19th century was one who became more famous for his literary work than for any contribution he made to medicine. Samuel Smiles (1812-1904), was a native of Haddington, who graduated M.D. at Edinburgh before going to Leyden in 1838. He practised medicine in his native town, and later in Leeds, where his organising ability led to his appointment as secretary of the South-Eastern Railway, a post he held until 1866. His chief book, Self-Help, had an enormous circulation, and his other works of similar nature were almost as popular.

#### American Students at Leyden University

The number of American students who graduated at Leyden is relatively small when compared with the number who studied at Edinburgh. In the 18th century the Edinburgh degree ranked equal to that of Leyden, and many young Americans faced the long and difficult journey across the Atlantic to avail themselves of the opportunities for medical education which Edinburgh now offered. Indeed, from Edinburgh during this period, the methods of medical education which had come from Leyden were to be carried across to the North American Continent by Edinburgh graduates who founded the first medical school at Philadelphia.

When Silas Weir Mitchell received the LL.D. degree from Edinburgh University in 1895, he spoke of the medical institutions of Philadelphia as "children of Edinburgh and grandchildren of Leyden." More than one hundred American students took the M.D. at Edinburgh during the second half of the 18th century. All members of the first faculty of medicine at Philadelphia-Morgan, Shippen, Rush, Kuhn, Wistar, and Physick—were Edinburgh graduates, just as all those who composed the first faculty at Edinburgh had been Levden graduates. Also graduates of Edinburgh were the great men of New York, Samuel Bard and, later, David Hossack, while in a much more remote part of that great country, another Edinburgh graduate, Ephraim McDowell, made history by his bold performance of ovariotomy (1809).

#### The Influence of Leyden in Modern Medicine

An attempt has been made to demonstrate the significance of the Leyden School during the years of its greatest fame, and especially to indicate how important was its influence upon Scottish medicine. In the early part of the 19th century, the fame of Edinburgh became less, and Paris was the centre of medical education, with Louis as one of the leading teachers, as Osler has told us so dramatically.

Then, about the middle of the century, the scene changed once more, and the German schools drew students from many lands. Vienna, until the outbreak of the First World War, was the foremost post-graduate school. has travelled by devious paths since the days when Padua and Leyden were in the forefront. But it must not be imagined that the glories of the ancient seats of learning have now entirely faded. Padua is still a famous medical school, and so, also is Leyden.

It is good that we should recall the past and draw inspiration from the pioneers who achieved so much in the face of many difficulties. It is well, also, to realise that the University of Leyden still holds a position equal to that of Amsterdam, of Groningen, or of Utrecht, all universities founded early in the 17th century. The number of students at Leyden in 1956 was 4,344 (3,101 men and 1,243 women).

\* Full text of this paper has been submitted to Edinburgh University Journal, and will be published at a later date.

#### The Thirty-First Meeting

The Thirty-First Meeting was held on Saturday, 26th April, 1958, at the Royal College of Surgeons of Edinburgh. Ten years ago, on the 23rd April, 1948, in the Hall of the Royal College of Surgeons, the inaugural meeting of the Society was held, at which a large and representative gathering was present. It was then unanimously decided to launch the Society, and it seemed appropriate that the Tenth Anniversary Meeting should be held in the same building. Members and guests sat down to an informal lunch, over which the President, Dr. W. S. Mitchell, presided, in the Library of the College. In the course of a happy speech, Dr. Mitchell recalled many of the meetings of the Society and of the many distinguished medical historians who had spoken at its proceedings.

After lunch, the Society was constituted for business in the Hall of the College, and this took the form of a Presidential Address, entitled

#### William Bullein, Elizabethan Physician and Author

Dr. Mitchell said that it was appropriate to reconsider the life and work of the Elizabethan physician William Bullein during this year, the four-hundredth anniversary of the publication of his first book, *The Government of Health*.

Bullein was born in the Isle of Ely during the reign of Henry VIII, probably between the years 1520 and 1530, and most of our knowledge of his life comes from scraps of information scattered in his works. It is not known for certain where he was educated, but a reference in his *Bulwarke of Defence* to studying under a certain R. R. may indicate that he was a pupil of Robert Recorde, who taught at both Oxford and Cambridge. However, Bullein began his career as a parson, in Blaxhall in Suffolk, in 1550, but he had turned to the practice of medicine in the north of England a few years later. He became physician to Sir Thomas Hilton, Baron of Hilton, Captain of Tynemouth Castle, who, along with other distinguished patients, is mentioned in Bullein's works. In 1560 Bullein went to London, taking a house in Grub Street, where he remained until his death in 1576 (N.S.).

Bullein married the widow of Sir Thomas Hilton, and the latter's brother, William, accused him of murdering Sir Thomas, but the charge appears to have been quashed. Bullein and his wife were, however, imprisoned in London on a charge of debt, and it was while in prison that he wrote his longest work, The Bulwarke of Defence, which replaced another book, the manuscript of which was lost at sea during the transport of Bullein's goods from the Tyne to London.

The works of William Bullein which were examined were (with the date of the first publication of each): The Government of Health, 1558; The Bulwarke of Defence, 1562; Regiment Against the Pleurisi, 1562; and Regiment Against the Fever Pestilence, 1564. All are in dialogue form. The Government of Health, which is dedicated to Sir Thomas Hilton, is concerned with the virtues of moderation in eating and drinking, and gives directions on wise living generally. A short herbal is given, and a discourse on pestilence ends the work, in the introduction to which the author declares that his youth and lack of experience are the reasons for his quoting so much from earlier authors.

The Bulwarke of Defence, first published in 1562 and reprinted in 1579, contains four works, namely, The Book of Simples, A Dialogue on Apostumacions and Wounds, The Booke of Compounds, and The Use of Sick Men and Medicens, while a fifth which the author had no time to write, The Anatomie, is represented by one page only. The Book of Simples deals with the qualities and values of plants and other substances such as honey, milk, and salt. Bullein mentions the anaesthetic properties of mandrakes, and, though his words are translated from Pliny, he appears to have been the first to do so in English. The illustrations of plants were shown to resemble closely those in Fuchs's De historia stirpium of 1542, from which most of the illustrations in 16th and 17th century herbals are derived.

On apostumacions and wounds the author has little original to say, though he does point out the necessity for making incisions at the lowest point "so that the matter may the better avoid." The Booke of Compounds consists of prescriptions and recipes for the treatment of disease, showing a mixture of old and new—sympathetic medicine in the use of the dried lungs of a fox for consumption, and modern-sounding names such as Emplastrum diachilon album and Emplastrum diachilon magnum. The Book of the Use of Sick Men and Medicens, which concludes the work, deals with the use and abuse of medicines, rules of health, and so on, the basis being, as in Bullein's other works, the doctrine of the four humours.

A short work entitled A Regiment against Pleurisi, appeared in the same year as the Bulwarke. There are not many copies of any of Bullein's works available, but this is the scarcest of all, as only the British Museum copy appears to exist in Britain. According to the author, the primary cause of the disease is the drinking of cold water for want of good ale or wine! A description of the disease is given, along with prescriptions for its cure; these include clysters,

fomentations, ointments and lozenges.

Bullein's last work, A Dialogue and Regiment against the Fever Pestilence, appeared in 1564, and later editions were published in 1569, 1573 and 1578. A modern reprint, edited by M. and A. H. Bullein for the Early English Text Society, appeared in 1888. This work differs in kind, though not in form, from Bullein's other books, since it is a dialogue-novel in eight scenes dealing with the flight from plague-stricken London of a citizen, his wife and their servant. Other characters introduced are the wealthy merchant Antonius, the traveller Mendax, and Doctor Tocrub, an anagram of Burcot, a physician and metallurgist well known in the London of his day. The immediate origin of the book was the London outbreak of the plague of 1563, the details of which may be found in Creighten's History of Epiciemics in Britain. Much of it is taken up with stories told by the various characters to while away the journey, but the didactic element appears in the prescriptions given by Dr. Tocrub and the spiritual comfort given by Theologus to the citizen after Death has appeared to him.

Bullein appears to be the earliest writer in English on any aspect of the history of medicine, since he gave a brief history of surgery in his *Bulwarke* and of pleurisy in his little work on that subject, and though he was not an original writer, he was an interesting one who deserved to be recalled, even if the briefly from the medical that had appeared to be recalled, even

if only briefly, from the neglect that had overtaken him.

The address was illustrated by lantern slides and some of Bullein's works were also shown.

\* This paper has been accepted for publication by *Medical History* and the reference will be given in next year's report.

W. S. MITCHELL, President.

H. P. TAIT, Honorary Secretary.

#### The Scottish Society of the Mistory of Medicine.

#### CONSTITUTION.

- 1. The Society shall be called "THE SCOTTISH SOCIETY OF THE HISTORY OF MEDICINE," and shall consist of those who desire to promote the study of the History of Medicine.
- 2. A General Meeting of Members shall be held once a year to receive a report and to elect Office-Bearers.
- 3. The management of the affairs of the Society shall be vested in the Office-Bearers, who shall include a President, one or more Vice-Presidents, a Secretary, a Treasurer, and not more than ten other Members to form a Council. The Council shall have power to co-opt other Members who, in their opinion, are fitted to render special service to the Society.
- 4. All Office-Bearers shall be elected annually. The President shall not hold office for more than three successive years, but shall be eligible to serve again after one year. Not more than eight Members of Council, or two-thirds of the total number, shall be eligible for immediate re-election.
- The Annual Subscription shall be Ten Shillings, payable to the Treasurer, who will submit a balance-sheet at each Annual Meeting.
- The Secretary shall keep brief Minutes of the proceedings, shall prepare Agenda, and shall conduct the correspondence of the Society.
- 7. Meetings shall be held at least twice yearly, and the place of meeting shall be in any of the four University centres, or elsewhere, as the Council may decide.
- 8. This Constitution may be amended at any General Meeting of the Society on twenty-one days' notice of the proposed amendment being given by the Secretary, such amendment to be included in the Agenda circulated for the Meeting.