The Scottish Society of the History of Medicine

(Founded April, 1948)

REPORT

OF

PROCEEDINGS

SESSION 1952-53

The Scottish Society of the History of Medicine.

President -	-	Dr. JOHN RITCHIE	
Vice-Presidents	_ = =	Dr. DOUGLAS GUTHRIE	
		Mr WALTER W. GALBRAITH (Glasgow)	
Hon. Secretary	-	Dr. H. P. TAIT, 137 Colinton Road, Edinburgh, 11	
Hon. Treasurer	•	Dr. W. A. ALEXANDER, 9 Randolph Cresce Edi	ent, inburgh, 3
Council -	-	Mr A. L. GOODALL retires by rotation	n, 1953
		Dr. J. MENZIES CAMPBELL "	1953
		Dr. A. M. GILLESPIE "	1954
		Dr. W. S. MITCHELL "	1954
		Professor JOHN CRAIG "	1955
		Dr. I. D FERGUSON "	1955
		Col. JOHN MORISON "	1956
		Dr. ANNIE MCCRORIE "	1956
		Mr J. H. J. HARTLEY "	1956
		THE SENIOR PRESIDENT,	
		ROYAL MEDICAL SOCIETY (ex officio).

The Scottish Society of the History of Medicine.

REPORT OF PROCEEDINGS 1952-53

THE Society has continued to receive considerable support and its membership has been well maintained through the past session. Attendances at the meetings have been encouraging and the discussions following on the various papers read before the Society have been stimulating and have added to the value and interest of the subjects reviewed. As usual, this Report contains the substance of the papers delivered at the meetings during the past session, and there has been added an Appendix containing a list of the medical books shown at the demonstration arranged by Dr. W. S. Mitchell for the Newcastle gathering in the summer.

At the Fourth Annual General Meeting held in Edinburgh in October 1952, the proceedings took the form of a symposium on plague, Dr. Ritchie and Col. Morison reading papers on special aspects of that disease. The discussion afterwards was an animated and full one. At the Society's sixteenth meeting in February 1953, at Glasgow, Dr. F. J. Hebbert and Professor Stanley Alstead gave very interesting papers on Dr. Allan Burns and Stephen Hales respectively. The summer meeting was held in Newcastle-upon-Tyne where the Society has several members. This gathering was a most happy and successful one to which Drs. Armstrong Davison and W. S. Mitchell and Professor John Boyes made noteworthy contributions.

Dr. Guthrie, one of the Society's Vice-Presidents, sailed in July for a nine-months' lecture-tour of Australia and New Zealand. He is returning to Britain in April 1954 via the United States of America where he has been invited to deliver the Logan Clendening Memorial Lectures at Kansas. He will then make a short stay at Baltimore where he hopes to meet Professor R. H. Shryock and the staff of the Institute of the History of Medicine, Johns Hopkins University.

The suggestion has been made that members of the Society might inform the Secretary of any items of medico-historical interest or submit notes on historical publications, so that consideration might be given to the inclusion of such items in this Report in future issues. By this means, the Report could be enlarged somewhat and contain information about matters of interest in the sphere of history of medicine and science.

The Fifteenth Meeting and Fourth Annual General Meeting

The Fifteenth Meeting and Fourth Annual General Meeting of the Society was held in the Library of the Royal College of Physicians of Edinburgh, on Wednesday, 22nd October 1952. Dr. Ritchie, the President, was in the Chair. The Fourth Annual Report of Proceedings of the Society was presented and unanimously approved. The Treasurer gave a brief review of the Society's finances. On the motion of Dr. T. R. R. Todd, seconded by Dr. W. A. Alexander, the President, Vice-Presidents, Secretary, Treasurer and members of Council were unanimously re-elected. As Drs. W. D. D. Small and A. F. Wilkie Millar retired by rotation from the Council, Dr. Annie M'Crorie and Mr. J. N. Jackson Hartley were elected to these vacancies.

The President opened the symposium on plague by reading a paper on the *De Officio Magistratus* of Johannes Ewichius, published in 1582. The author claims that it is the first book to be devoted to the study of plague from a social rather than a clinical standpoint. He begins by arguing that belief in plague as a punishment sent by the Almighty for the sins of mankind should not prevent the good citizen, directed by the magistrates, doing everything possible to bring that punishment to an end.

Many of his proposals appear to have been inspired by the practice at Venice, with which, as a graduate of Padua, Ewichius must have been familiar. He advises that when plague seems imminent three Preservers of Health should be appointed, with extensive powers, to direct administration. A whole-time medical service should be established, to attend the plague-stricken in all social classes. Among the subjects he deals with are the support of the poor in time of plague, sanitary improvements, school closure, hospital provision, domiciliary midwifery amongst those isolated, disinfection and so forth. Ewichius' views on these matters are often considerably in advance of those current in his time.

Col. Morison, discussing "How the Problem of Plague was Solved," referred to the work of the Indian Plague Commission which commenced its work in 1898 and published its monumental Report in five volumes in the autumn of 1901. The Commission considered Dr. P.-L. Simond's paper "La Propagation de la Peste," published in 1898 in which that author had conceived the idea that rat fleas propagated the disease. The Commission, however, pronounced the evidence put forward by Simond as inconclusive, but William Glen Liston (1872-1950) was gripped by the French worker's thesis. Liston, a Glasgow graduate and a member of the Indian Medical Service, immediately got to work on rat fleas as possible vectors of plague, and after working with Almroth Wright, Haffkine, Bannerman and others, he found that when rats or guinea-pigs suffering from plague were placed in a small cage with healthy rats and guinea-pigs respectively and the only precaution taken was to remove all fleas, the sick animals died of plague and in no case did the healthy animals contract the disease. The plague bacillus

was demonstrated repeatedly by Liston in the bodies of rat fleas from infected rats.

In February 1905 Liston published his important paper on "Plague, Rats and Fleas" in the *Indian Medical Gazette*. Thus the stage was set for further study which amply proved Liston's work. Col. Morison, and Drs. G. F. Petrie and A. M. Gillespie, in an obituary notice of Liston, tell much of the fascinating story of the modern work on plague.*

A full discussion followed the reading of these papers, and Mr. Leonard Jolley, Librarian of the Royal College of Physicians of Edinburgh, arranged for a display of books on plague for members to examine.

Both Dr. Ritchie's and Col. Morison's papers are at present in the Press.

* Journ. Path. Bact., 1951, 63, 771-781.

The Sixteenth Meeting

This meeting was held in the Materia Medica Lecture Theatre, University of Glasgow, on Wednesday, 18th February 1953, Dr. Ritchie in the Chair. Papers were read by Dr. F. J. Hebbert and Professor Stanley Alstead. Dr. Hebbert spoke on the "Life and Work of Allan Burns, 1781-1813." Burns was the fourth son of the Rev. John Burns, minister of the famous Barony Church in Glasgow. He studied with his brother, John Burns, later Professor of Surgery at Glasgow University, and taught in his Allan was admitted a Member of the Royal brother's anatomy school. College of Surgeons of England in 1804, spent some months in Russia in 1805, and for the rest of his short life taught anatomy and surgery in Glasgow. He was the author of "Observations on Some of the Most Frequent and Important Diseases of the Heart" (1809), "Observations on the Surgical Anatomy of the Head and Neck" (1812) and several papers on other subjects. He died in 1813 of a ruptured appendix abscess and was buried in the Cathedral churchyard. His published work contains several notable observations on diseases of the heart and his book on this subject is the first one published in the English language. It is regrettable that posterity has not accorded Allan Burns the recognition that is his due and he is almost completely neglected by medical historians. His views on coronary artery disease were those of Parry and Jenner and he drew attention to the association of muscle ischaemia and pain. Burns was an original research worker and was not afraid to disagree with accepted authorities. Dr. Hebbert has published a full discussion on Burns and his contributions to the knowledge of heart disease.*

Professor Alstead, who illustrated his remarks on Stephen Hales with a series of lantern slides, recalled that Hales was descended from the Lord of Hale and Luceby in Norfolk who lived in the eleventh century. Born in September 1677, Hales was educated at Kensington and at Corpus Christi College, Cambridge, where he read Arts and Divinity as he was destined for Holy Orders. At Cambridge he met William Stukeley, a student of physic.

^{*} Glasg. Med. Journ., 1952, 33, 496-513.

This friendship proved important as it drew out Hales's latent talent for biological research and encouraged his genius for devising experimental methods.

In 1700, Hales left Cambridge and became perpetual curate of Teddington in Middlesex-now a part of the borough of Twickenham-and for fifty-one years he ministered faithfully to his parish. It was at Teddington that all his classic experiments were made. Professor Alstead referred to Hales's fundamental work on haemodynamics and said that this alone sufficed to place Hales in the company of Harvey, Borelli and Malpighi. Using apparatus of his own design he studied the blood pressure of various animals, estimated the volume of the heart chambers by means of wax casts, correlated heart rate with body weight, and made quantitative observations on peripheral resistance in the systematic and pulmonary circulations. Hales's researches on plant physiology were no less remarkable than his work on animals and Professor Alstead pointed to the ease with which Hales transferred the principle of one set of experiments to a new sphere of research. Thus the methods used for the study of plant growth were adapted to an investigation of the elongation of bone, experiments completed by Hales before John Hunter was born, though Hunter usually got the credit for these demonstrations.

Many of Hales's investigations were prompted by a compelling desire to improve the standard of living and to mitigate the evils which made for misery and bad health. Thus he invented a system of ventilation for ships, especially for those vessels engaged in the slave trade and on which the negroes suffered a high mortality consequent upon infection and bad hygiene. This ventilating system was also installed in prisons and other institutions with immediate success. In spite of all his scientific work, Hales found time to participate in the campaign to control the menace of gin drinking and other matters of importance to the public welfare. But if he achieved an international reputation by reason of his scientific work and publications, he nevertheless remained in close contact with his congregation and his church had to be enlarged to accommodate their growing numbers. By his own wish he was buried beneath the tower of his little church of St. Mary's-in-the-Meadows.

The Seventeenth Meeting

The Seventeenth Meeting of the Society was held in Newcastle-upon-Tyne on Saturday, 20th June 1953. After an informal luncheon, members and friends adjourned to the Council Room of the Medical School for the meeting over which Dr. Douglas Guthrie presided in the unavoidable absence of Dr. Ritchie.

Dr. M. H. Armstrong Davison spoke on "Byways in the History of Anaesthesia." He began by recalling the association between the Medical School in Newcastle and Dr. John Snow, the first physician-anaesthetist in the world. Dr. Snow was also the first to formulate the idea that cholera was

a water-borne disease, and it was probably during the Newcastle epidemic of 1831-1832 that he gained his first insight into the disease.

Five years before Simpson introduced chloroform into anaesthetic practice (1847), Dr. Glover of Newcastle published in the Edinburgh Medical Journal a paper in which he described the effects of the intravenous administration of chloroform to dogs, noticing cardiac upsets, fall in blood pressure and coma, and suggesting that the drug might prove active if administered by inhalation. It was at Winlaton, near Newcastle, that the first death under chloroform anaesthesia took place. This was young Hannah Greener, who in November 1847 successfully underwent an operation under ether anaesthesia. A further operation proved necessary in January 1848. Chloroform was the chosen anaesthetic for this occasion but during its administration Hannah collapsed and died. Dr. Armstrong Davison also referred to certain points in the history of refrigeration anaesthesia and of resuscitation. Alexander Wood (1817-1884) of Edinburgh enjoyed the merit of having been the first to introduce hypodermic medication into medical practice in Britain. This he did in 1853, though he did not publish his results until 1855.

Dr. Armstrong Davison illustrated his talk by showing a number of early books on anaesthesia and cognate subjects from his personal collection.

Professor Boyes, speaking on "An Aspect of Dental History," introduced his address by recalling some personal experiences in collecting scraps connected with dental history. He then went on to discuss James Rae (1716-1791), an Edinburgh surgeon who was the first in Britain to deliver formal lectures on diseases of the teeth. Rae may have been born in Edinburgh but there was no factual evidence of this. Indeed it is still a mystery what he did before taking up surgery in 1741. Certainly in 1742 he was apprenticed to George Lauder who was Deacon (President) of the Incorporation of Surgeons of Edinburgh. Lauder mentioned that he and his apprentices treated the wounded at the Battle of Prestonpans in 1745. Rae was admitted a member of the Incorporation in 1747, and a point worthy of note in view of his known interest in diseases of the teeth is that when he acted as an examiner in 1749, one of the candidates was questioned mainly upon the teeth. On no other occasion can it be traced that teeth formed the subject of examination up to this time. After holding various offices in the Incorporation of Surgeons, he made application in 1764 to be granted the use of the Hall of the Surgeons for the purpose of delivering a course of lectures upon the diseases of the teeth. This established that the first lectures in dentistry in Britain were given in Edînburgh in 1764. These lectures were gradually widened in scope and attracted a number of students including Silas Neville, part of whose Journal was published recently. Neville also consulted Rae about one of his own teeth. Rae was one of the first surgeons to be appointed to the Edinburgh Royal Infirmary and started almost immediately following his appointment to give clinical lectures in that institution. Supported by the Incorporation of Surgeons, Rae was the chief figure in an unsuccessful attempt to obtain the establishment of a Chair of Surgery at Edinburgh University. Monro secundus thwarted the attempt pointing out that all it was necessary to know of surgery was already taught by him in the department of Anatomy. Indeed, shortly afterwards Monro obtained an alteration to the title of his Chair from that of Anatomy to Anatomy and Surgery.

Rae's grandfather was Barber to Charles II at that interesting period when there was "a scarcity of those skilled in the art of barbery." In Edinburgh at that time, the gentlemen of the city sent a protest to the Town Council pointing out that it was necessary for them to journey to the outskirts of the city in order to be shaved. As barbers at the time of the Restoration also drew teeth, this perhaps is the origin of James Rae's interest in dentistry. Rae's grandfather also erected the first public baths in Edinburgh and was given a monopoly to build such for seven years. Rae had two sons, William, the elder, giving the first lectures in dentistry in England in 1782 at the instigation of John Hunter in whose premises in Windmill Street the lectures were given. The younger son, John, practised dentistry also. He was the first Fellow of the Royal College of Surgeons of Edinburgh to be admitted after examination after the Incorporation of Surgeons became the Royal College. One of Rae's daughters was the mother of "Pet Marjorie" about whom Dr. John Brown created so much romance. Professor Boyes has elsewhere contributed a paper on James Rae.*

He then went on to mention such men as Robert Reed, Tomes and Underwood, leaders of the dental profession nearly a century ago. In conclusion, Professor Boyes spoke on some local facts of interest in the history of dentistry in Newcastle and Northumberland.

After tea, the members of the Society and their friends repaired to the Library, King's College, to examine the exhibition of medical books of historical interest which had been prepared by Dr. Mitchell, the Librarian at King's College. As this exhibition contained so much of interest the books have been listed in the Appendix.

JOHN RITCHIE, President. H. P. TAIT, Secretary.

^{*} James Rae, 1716-1791. Proc. Roy. Soc. Med., 1953, 46, 457-460.

APPENDIX

EXHIBITION OF EARLY MEDICAL BOOKS SHOWN AT KING'S COLLEGE, NEWCASTLE-UPON-TYNE

ARRANGED BY DR. W. S. MITCHELL

ADDISON, Thomas. On the constitutional and local effects of disease of the supra-renal capsules. London, 1855.

ALBUCASIS. Chirurgia; OCTAVIANUS HORATIANUS. Rerum medicarum. Strassburg, 1532.

ARETAEUS. De causis et signis morborum; de curatione morborum. Oxford, 1723.

AVICENNA. Canon medicinae. Venice, 1527.

BARBETTE, Paul. Opera chirurgico-anatomica. Leyden, 1672. Presented by Thomas Sydenham to Bartholomew Beale (M.B. Cantab. 1682).

BEAUMONT, William. Experiments and observations on the gastric juice. Edinburgh, 1838.

BULLEIN, William. Bulwark of defence. London, 1562. Contemporary London binding by R.P. Bears the signature "Emanuel Swedenburg."

BULLEIN, William. The government of healthc. London, 1558.

CLOWES, William. A profitable and necessarie book of observations for all those that are burned with the flame of gun powder, etc. 3rd ed. London, 1637.

COLUMBUS, Realdus. De re anatomica. Paris, 1562.

DESCARTES, René. De homine figuris. Leyden, 1664.

DODOENS, Rembert. A niewe herball; translated by Henry Lyte. London, 1578.

FOX, Joseph. The natural history of the human teeth. London, 1803.

FOX, Joseph. The history and treatment of the diseases of the teeth, etc. London, 1806. With the bookplate of Dr. Thomas M. Winterbottom.

FUCHS, Leonhardt. De historia stirpium. Basileae, 1542. With the signature of William Withering on the titlepage.

GALEN. Opera graeca. Basel, 1538. The second Greek edition. Initials by Hans Holbein.

GERARDE, John. The herball or generall historie of plantes, enlarged by Thomas Johnson. London, 1633. Winterbottom Bequest.

GOODALL, Charles. The Royal College of Physicians of London. London, 1684.

GUILLEMEAU, Jacques. Child-birth, or the happy delivery of women, and The nursing of children. London, 1612. Also the second edition, 1635.

HALL, John. Select observations on English bodies of eminent persons in desperate diseases. Englished by James Cook. London, 1679.

HARVEY, William. De generatione animalium. London, 1651.

HARVEY, William. De motu cordis; WALAEUS, Joannes. De motu chyli; BACK, Jacobus de. De corde. London, 1660.

HERBOLARIUM, seu tractatus de virtutibus herbarum. Venice, 1509.

HIGHMORE, Nathaniel. Corporis humani disquisitio anatomica. The Hague, 1651.

HUNTER, John. Natural history of the human teeth. London, 1771.

HUNTER, John. A treatise on the venereal disease. London, 1786. Also the second edition, 1788.

- INGRASSIA, Giovanni Filippo. Informatione del pestifero, il quale have afflitto Sicilia nell' anno 1575 et 1576. Palermo, 1576. Winterbottom Bequest.
- JENNER, Edward. Inquiry into the causes and effects of the variolae vaccinae. London, 1798.
- LETTSOM, John Coakley. The natural history of the tea-tree. London, 1772.
- MEDICAE ARTIS PRINCIPES, post Hippocratem et Galenum. Actuarius, Aretaeus, Paulus Aegineta, Alexander Trallianus, Celsus, et al. [Paris] 1567.
- NEWCASTLE-UPON TYNE. Infirmary. First minute book of the Infirmary, 1751.

 Lent by Dr. A. W. Sanderson, House Governor and Secretary, The Royal Victoria Infirmary.
- NEWCASTLE-UPON-TYNE. Infirmary. Statutes, rules and orders for the government of the Infirmary. Newcastle-upon-Tyne, 1752.
- NEWCASTLE-UPON-TYNE. Infirmary. Catalogue of the books in the Library. Newcastle, 1823. Also the edition of 1827.
- NIGHTINGALE, Florence. Notes on hospitals. London, 1859.
- NIGHTINGALE, Florence. Notes on nursing: what it is, and what it is not. London [1860].
- PHARMACOPOEIA Collegii Regalis Medicorum Londinensis. London, 1746.
- PISO [Le Pois], Gulielmus; MARGRAVIUS, Georgius; BONTIUS, Jacobus [Opera]. 1648. Winterbottom Bequest, with a holograph inscription by Piso.
- PORTA, Giovanni Battista. De humana physiognomia. Ursel, 1601.
- REGIMEN SANITATIS SALERNI, translated by Thomas Paynell. London, 1557.
- ROSSLIN, Eucharius. The birth of mankind otherwise called the woman's book. Translated by Thomas Reynald [or rather by Richard Jonas]. London, 1654. Last ed.
- SOLDUS, Jacobus. De peste. Bologna, 1478. Winterbottom Bequest.
- TURNER, William. The first and seconde partes of the herbal, with the thirde parte. Collen, 1568. Bound with this is Hieronymus von Braunschweig's Homish apothecarye, translated by Jhon Hollybush [i.e. Miles Coverdale]. Collen, 1561.
- VALSALVA, Antonio Maria. De aure humana tractatus. Utrecht, 1707.
 - WITHERING, William. Account of the fox-glove. Birmingham, 1775.



The Scottish Society of the History 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.
- 5. The Annual Subscription shall be Ten Shillings, payable to the Treasurer, who will submit a balance-sheet at each Annual Meeting.
- 6 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.