JAMES DOUGLAS

1675 - 1742

FELLOW OF THE ROYAL SOCIETY

HONORARY FELLOW OF THE ROYAL COLLEGE OF PHYSICIANS
PHYSICIAN EXTRAORDINARY TO HER MAJESTY QUEEN CAROLINE

AN
EXHIBITION
OF
BOOKS AND MANUSCRIPTS
ORGANISED
BY
C.H. BROCK

EXHIBITION ROOM

GLASGOW UNIVERSITY LIBRARY

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The numbers in parentheses within the text refer to the exhibits.

From 1741 until James Douglas's death in 1742, William Hunter was his anatomy assistant and tutor to his son, William George, who was studying medicine. After Douglas's death, Hunter continued to live with the family, tutoring the son and practising medicine, and became engaged to the daughter, Martha Jane. Unfortunately she died in 1743 while Hunter was in Paris with William George attending the anatomy lectures of Antoine Ferrein. It was not until 1749, after he had been joined by his brother John, that William Hunter finally established his own home in London. It is not known whether he bought from the family, or was given, the large collection of Douglas papers, now in the Hunterian Library, which Hunter left to Glasgow University in his will.

James Douglas was born at Baads, about fifteen miles west of Edinburgh, the third of twelve children. The date of his birth is not known, but his baptism took place on 21 March, 1675, at the Church of West Calder. His family, which claimed descent from Robert the Bruce, had long been resident in the district and was connected by marriage with other local families of importance. His paternal grandmother was Joan Sandiland of the family of Sandiland of Calder, Lords of Torphichen. His father, William, married Joan, daughter of James Mason of Park, Blantyre. From James Douglas's family, through his brother Alexander, is descended the present family of Akers-Douglas, of Chilston and Baads.

The earliest Douglas paper dates from 1694 - a small commonplace book (1) of comments, facts and products of his imagination. It shows the nineteen-year-old Douglas as sophisticated and romantic, but gives no hint of an interest in medicine.

A James Douglas obtained an M.A. at Edinburgh University in 1694. This could have been James Douglas of Baads, for his knowledge of Latin and Greek suggests more than a school training in these subjects. It is known that he went abroad to study medicine, probably first to Utrecht, though the University there has no record of him. In 1698 he catalogued the library he had assembled while abroad, some ninety-seven titles in all, including most of the important medical works of the time (2). Some of these books almost certainly survive in the Hunterian Library (3).

From Utrecht Douglas moved to France and it may have been at Paris that he attended lectures on comparative anatomy, of which he took notes (4), possibly given by J.G. Duverncy, the main French worker in the field at this time. On 23 July, 1699, the degree of M.D. was conferred on him by the University of Rheims (5); he then settled in London, where he practised medicine and studied anatomy.

Between 1700 and 1712 Douglas kept very careful records of the cases he attended. Possibly this was because he was not in independent practice but was an assistant to Dr Paul Chamberlen, for case notes were sometimes written on the backs of letters to Chamberlen (6) and he often refers to advice received from him. During this period Douglas's patients were mainly artisans (7).

The Chamberlen family are credited with inventing the obstetric forceps. Only one record survives of Douglas using these (8); as this was a disaster, perhaps subsequently he was reluctant to use them.

After 1712 Douglas had among his patients many members of the aristocracy (9). He apparently ceased to keep records, and information about these patients can be obtained only from prescriptions and from their letters to him.

Douglas was ineligible for a fellowship of the Royal College of Physicians because he was not a graduate of Oxford or Cambridge. He was therefore elected an Honorary Fellow in 1720 - a category of fellowship introduced by the College when it was short of money. For this privilege he had to pay £100.

About the same time he was appointed Physician Extraordinary to Queen Caroline, and in 1735 was sent to Holland by George II to attend his daughter, the Princess of Orange, who was thought to be pregnant. For this the King awarded him an annuity of £500 per annum (10).

James Douglas is now chiefly remembered as an anatomist. One of the first to give private lectures on anatomy outside the control of the Barber-Surgeons' Company, he started lecturing in 1706 and published a syllabus of his lectures (11). His course is of interest because he was the first anatomist in England who is known to have included comparative anatomy and microscopic detail in his lectures. In 1707 he published Myographiae comparatae specimen, or A comparative description of all the muscles in a man and a quadruped ... to which is added An account of the muscles peculiar to a woman (12). It was designed as a book cheap enough to be bought by students and small enough to be slipped into the pocket and taken to public dissections, and its popularity and usefulness were confirmed by John Innes in the introduction to his A short description of the human muscles, 1776 (13).

Although not a surgeon, Douglas was, in 1712, elected by the Barber-Surgeons' Company to the Gale Osteology Lectureship. No published syllabuses of any of this series of lectures appear to have survived, but Douglas left a rough draft of his final lecture (14). In 1716 the Company elected him to the Arris Muscle Lectureship. These lectures appear to have been much more stereotyped than the Gale Lectures. Syllabuses of several of the series survive, including Douglas's (15); they are all virtually identical. In 1717 Douglas resigned his lectureship on account of a difference with the Masters of Anatomy, but the letter setting out the difference has been lost.

Early in his career Douglas planned a vast work on osteology and as the years went by he improved and extended the project. The earliest set of drawings and engravings, which date from 1713 (16), leave much to be desired; the final set (17a) are impressive examples of anatomical iconography. The work was also to include a history of

osteology (17b), a history of osteological figures (18), a treatise on diseases of bones (19) and an etymology of all the terms used by the Greek writers on this part of anatomy. Manuscripts covering these subjects exist, but in spite of a gift in 1725 from George I of £500 to help him to publish this work (20), he never succeeded in doing so.

After his death his son, William George, in 1748 published Nine anatomical figures (21) which James Douglas had had redrawn from the works of Vesalius and Bidloo, perhaps the least satisfactory of James Douglas's anatomical plates. William Hunter records in his Two introductory lectures (22) that he had hoped to published Douglas's plates but he also failed to do so.

Douglas also worked out the anatomical basis for his brother John's suprapubic operation for the removal of stones from the bladder (23). He himself published two works on lithotomy. His researches into the anatomy of the abdomen in connection with lithotomy culminated in his A description of the peritoneum, 1730 (24), in which he first describes the fold in the peritoneum between the bladder and the rectum, which perpetuates his name as the pouch of Douglas. One of the Hunterian Library copies of this work was given by William George Douglas to William Hunter.

Another project of James Douglas, never published, was a work on The knowledge and cure of the diseases incident to women, including a study of the uterus in all stages of pregnancy (25). Though William and John Hunter disputed between themselves as to which of them had first demonstrated that the foetal circulation was not directly continuous with that of the mother through the placenta, James Douglas before them was aware that this was so (26). His extensive collection of drawings and writings on the subject may well have been the inspiration for William Hunter's The anatomy of the human gravid uterus (27 and 28).

Douglas intended to include in his book on reproduction some studies he had made on the development of the chick embryo (29).

James Douglas must have come early to the notice of his seniors. He gave his first paper to the Royal Society in 1705 and was elected a Fellow, on the recommendation of Sir Hans Sloane, the following year. He recorded the occasion on his copy of the Philosophical Transactions for the date of his election (30). He made more than thirty original communications to the Royal Society and served on its council from 1726 to 1729, and again from 1741 until his death. In 1740, in recognition of services rendered to the Society, he was excused payment of his subscription.

In 1741 he was elected to read the Croonian Lectures on muscular motion for that year. He read the first on The membrana palati mobilis, the uvula and the Eustachiana, a canal of communication on 18 March, 1741/2. The manuscript of the lecture is at the Royal Society, but copious notes on the subject are in the Hunterian Library (31).

Douglas died before delivering the second lecture, on the bladder. Hunter helped William George to organise his father's notes and present them to a meeting of the Royal Society (32 and 33).

It was to the Royal Society that Douglas communicated most of the results of his work on comparative anatomy. On 12 July, 1712, Ralph Thoresby, the antiquary, saw him demonstrate the development of the frog (34), while in 1716 he read a paper on the anatomy of the armadillo (35) - James Petiver had sent him a specimen to dissect (36) though its viscera had already been removed.

In 1720 Sir Hans Sloane offered James Douglas a female elephant to dissect. Douglas reluctantly declined the invitation (37) and it was then dissected by William Stukeley in Sir Hans Sloane's Chelsea garden, but Douglas, in the end, could not keep away and assisted in the dissection of the organs of reproduction (38). Richard Eradley, Professor of Botany at Cambridge, hearing about this, sent James Douglas his ideas on how elephants copulate (39).

Almost certainly Douglas's primary interest in botany was the study of plants of medicinal importance. His earliest botanical paper - on mistletoe - given to the Royal Society in 1719 (40), contained a chemical analysis of the plant, which was believed to be useful in the treatment of epilepsy (41). He also produced an extensive work on the saffron crocus (42), but his most important botanical work was on the Guernsey lily (Nerine sarniensis). He first described it in a paper to the Royal Society in 1724, and in 1725 he published Lilium Sarniense: or a description of the Guernsay-Lilly, a folio volume (43); a much altered second edition appeared in 1737 (44). Believed at the time to be a Japanese plant, the lily is in fact a native of the Cape of Good Hope. Douglas's work covers not only a description of the plant and a study of its growth (45) but a history of its occurrence in Europe and how it was believed to have been introduced into Guernsey, where it grew freely. The letters he received from inhabitants of Guernsey on this subject have survived (46). Or of the features of the Guernsey lily is the golden sparkle of the petals in the sun. Douglas's explanation of this phenomenon falls not far short of the modern one (47).

In 1726 James Douglas became involved in a great medical farce. Mary Toft of Godalming claimed that she was giving birth to rabbits. Accounts of this reached London (48) and George I sent to Godalming first his surgeon-anatomist, Nathaniel St. André, who believed the story, then Sir Richard Manningham, one of the most distinguished man-midwives of the day. Manningham suspected trickery and had Mary Toft removed to Lacey's Bagnio, Leicester Fields, London, where she could be kept under observation. St. André wrote to James Douglas, who also had a considerable reputation as an obstetrician, and asked him to come to the Bagnio to deliver Mary of a rabbit (49), but no further rabbit births took place. James Douglas was firmly convinced that the whole thing was a fraud. Eventually Mary Toft confessed, in the presence of Sir Richard Manningham, the Duke of Richmond and Montague, and James Douglas, to pushing pieces of rabbit,

supplied to her, into her vagina when no one was looking. Douglas took down her confession (50), which however he was unable to publish because the case was sub judice (51), Mary Toft having been remanded to the Bridewell to stand trial at the Court of King's Bench 'for an infamous cheat and imposture in pretending to have brought forth seventeen preternatural rabbits. These goings-on provided rich material for the satirists; John Arbuthnot (52), Alexander Pope and Jonathan Swift (53) made comments, and the cartoonists, including Hogarth, found scope for their art (54). reputations suffered badly, particularly that of St. André, who had to retire from Court, and that of the Godalming doctor, John Howard, who was party to the deception and was prosecuted. Sir Richard Manningham published An exact diary of what was observ'd during a close attendance upon Mary Toft, the pretended rabbet-breeder of Godalming (55), in which Douglas felt that his opinions had been misrepresented and in reply published An advertisement occasion'd by some passages in Sir R. Manningham's Diary lately publish'd (56).

To illustrate his scientific work Douglas employed a number of artists and engravers, some otherwise unknown, some well known. The earliest was François Boitard who both drew and engraved for him, though his capacity as an anatomical artist was not great (57). is known chiefly for a set of obscene cartoons. Michael van der Gucht, engraved some of the Osteology plates (58) and Gerard van der Gucht, his son, the plates for Lilium Sarniense. Letters and one signed engraving suggest that, amongst others, Douglas employed three French engravers. Charles Dupuis (59) and Claude du Bosc l been brought over by Sir Nicholas Dorigny to help him engrave the Charles Dupuis (59) and Claude du Bosc had Raphael cartoons at Hampton Court, but they both quarrelled with Dorigny and established themselves independently in London (60). Du Bosc opened a print shop and sent to Paris for Bernard Baron (61). Many of the original drawings for the final Osteology are in folders None of the drawings or engravings, except labelled in French. those by Boitard and M. van der Gucht. revised from the earlier Osteologies, is signed, so it is impossible to tell which of the artists were responsible for individual plates and whether they drew as well as engraved for Douglas.

Douglas had interests outside medicine, anatomy and botany. The English, French, Latin and Greek grammars in manuscript in the Hunterian Library may have been produced on behalf of his children, but his work on English grammar (62) received praise from Sol. Lowe, a well-known contemporary grammarian, and has recently been evaluated by Ian Michael in English grammatic categories, 1970 (63). His work on the pronunciation of English (64) was edited and published in 1956 by Borje Holmberg (65).

His other great interest was in Horace. Douglas collected all the known editions published between 1476 and 1739 when he published his Catalogus editionum Quinti Horatii Flacci ab an. 1476 ad an. 1739 quae in bibliotheca Jacobi Douglas adservantur (66). The fate of this collection is not certainly known; it is said to have been bought by Dr Richard Mead, the famous physician and collector

and it may have been sold to him by William George Douglas who was often in debt. James Douglas rarely wrote his name on his books. but it has been possible to identify one of his copies of Horace in the Hunterian Library because he wrote the author's name in it (67). At the time of his death he was in the process of publishing a work on the first ode of Horace, mainly concerned with whether the twentyninth line of the first ode, which in the standard rendering was 'Me doctarum hedere premia frontium' should be corrected to read 'Te doctarum ...', a matter which occupied the minds of scholars at that time, as recorded by Alexander Pope in The new Dunciad, 1742 (68). Part of the work had been printed and two copies are in the British Library (King's Library) while another copy is in the Dyce Library In the Dyce Library copy is at the Victoria and Albert Museum. written: 'To the Reverend Mr Canon Tate from A. Dyce, 4 Nov. 1836. After Mr Tate's death, this tract was kindly returned to me by Mrs Tate 16 Dec. 1843. It is of the greatest rarity - so rare I never saw any other copy except one in the King's Library (Brit. Museum) From the MS note on the flyleaf at the end there can be no doubt that the tract was never completed. A. Dyce. From the end fly-leaf: 'No more was printed off by reason of the Doctor's Death.' The manuscript of this work is in the Hunterian Library (69) and a few of the printed pages have been used as folders round Douglas's anatomical plates (70).

James Douglas employed a number of amanuenses. Some of these were also his anatomical assistants, for a number of manuscripts on various subjects are in the handwriting of William Hunter and James Parsons, whom William Hunter replaced. Many of these amanuenses cannot now be identified, but of the few who can one of the most interesting was Samuel Boyse (1708-1749), a poet and literary hack. Born in Dublin and educated privately and at Glasgow University, he seemed incapable of earning a living and arrived in London about 1736 to escape debts he had accumulated in Edinburgh. Often forced to sell his only shirt, he invented paper collars to supply its place; letters from Boyse to Douglas describe the problems he had with his clothes (71). There are no examples of his poetry in the University Library, only two works translated by him (72). As a poet he is now forgotten but his handwriting was excellent (73).

No portraits of James Douglas exist except two verbal ones from the literature of the Rabbitwoman of Godalming (74) and these are unlikely to be fair descriptions.

Though the Douglas Papers in the Hunterian Library show the stature of the man as a scientist and scholar, little has survived to give an insight into his private life. He married twice, though the name of his first wife and the date of her death (75) are unknown. Secondly he married Martha Wilkes, aunt of the politician, John Wilkes. They had three children: Martha Jane, William George, and Israel James - of whom the only record is a note on the cover of a manuscript French grammar (76). No letters to or from Douglas's wife or children, and few from other members of his family, have survived. Three of his brothers became Fellows of the Royal Society, and his eldest brother.

Walter, became Captain-General, Chief Governor and Vice-Admiral of the Leeward Islands from 1712 until 1715 when he was recalled for embezzlement and nepotism, fined £500 and imprisoned for five years.

A few transcriptions of political verse (77) show that James Douglas was not uninterested in the political scene. Almost certainly his sympathies lay with the Whigs - his brother Walter and his brother-in-law had served in the army of William of Orange, and his own connections with the Hanoverians would support this. Many surviving letters speak of his charitable acts (78) and published acknowledgements record the gratitude of former pupils (79) and the esteem of colleagues (80). Apart from his medical, botanical and grammatical works Douglas survives also in the pages of Alexander Pope's Dunciad (81).