

Sir Hans Sloane and the *Philosophical Transactions*

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Of the 93 Presidents of the Royal College of Physicians of London, Sir Hans Sloane must be accounted one of the most distinguished. Born in 1660, he lived till 1753 a full life of service to his patients, to medicine and to science, and in particular to the Royal College of Physicians and the Royal Society.

He qualified MD at Orange, a fifteenth-century university which was abolished in the French Revolution. Sloane was well-to-do and knew everybody who was anybody—Voltaire, Albrecht Haller, Benjamin Franklin, Linnaeus, Handel, Leibnitz, Samuel Pepys, Isaac Newton, Christopher Wren, Edmund Halley, Alexander Pope, Robert Walpole, Boerhaave, John Locke, and many others. He had a large private practice among royalty (Queen Anne and George II), the nobility and gentry. Despite doing what may be called ‘good works among the rich’, he was not insensible to illness among the poor. He not only gave free consultations to the needy, but in 1719 recommended to the Fellows of the Royal College of Physicians that ‘they would give some of their time for the relief of their poor sick neighbours’, and this was agreed to unanimously.

Sloane held several public offices, notably Physician-General to the Army and Medical Officer to Christ’s Hospital, the latter for 36 years, during which time he never claimed his stipend. He re-founded the Chelsea Physic Garden. His reputation was truly international, and led to honours from the Academies of Science of Paris, Berlin, Göttingen, St Petersburg and Madrid.

At the Royal College of Physicians he was a Fellow for 66 years, a Censor on three occasions, an Elect, and President for 16 years (1719–35), the longest tenure until the 24 years of Sir Henry Hallford in the nineteenth century. At the Royal Society he was a Fellow for 68 years, Secretary for 20 years, and, in succession to Sir Isaac Newton, President for 14 years (1727–41). For a period of eight years he presided over both institutions at the same time, a distinction unlikely to be repeated.

As Sloane lived to be 93 and had married a rich widow, he was able to indulge his passion for collecting. At his death in 1753 he left 50,000 books, 4,000 MSS, and a collection of 80,000 items, including coins, medals, prints, antiquities, fossils, botanical specimens, medical specimens, zoological specimens and mathematical instruments, which eventually became, with two other collections, the nucleus of the British Museum.

This brief account of the major events in Sloane’s life is to provide a background to the main theme of the present article, his connexion with the *Philosophical Transactions*. The Royal Society of London for Improving Natural Knowledge (originally with the additional words ‘by Experiment’) was founded in 1660, and in 1664 began publication of *Philosophical Transactions*. The object, as shown on the title-page, was ‘giving some Account of the Present Undertakings, Studies and Labours of the Ingenious in many Considerable Parts of the World’. In 1687, either because of lack of material or lack of interest, publication ceased with volume 16. The *Transactions* were revived by Sloane when he became Secretary of the Society in 1693, with volume 17, and have continued ever since, to become the oldest scientific journal in the world.

Persons who wished to communicate material to the Society or to the *Transactions* had to do so through a Fellow or officer of the Society. Sloane made some communications of his own, but mostly introduced those of other persons, some of whom were Fellows and some not. He did this for three years as a Fellow, for 20 years as Secretary, for 14 years as President, and for another 12 years as a respected senior scientist. As a result, there are 237 entries which mention his name, in 48 volumes covering a period of 80 years, 21 of which were after his death. The reason for the last fact is explained later.

From all over the world information was sent to the *Transactions* on an immense variety of subjects. There was no narrow specialisation in those days, and the Fellows showed wide-ranging and enthusiastic interest in all natural phenomena. Communications came from the British Isles, France, Germany, Holland, Denmark, Sweden, Italy, Hungary, Switzerland, Russia, Cyprus, Brazil, Peru, the Caribbean, North America, the Cape of Good Hope, India, Tunisia and China. Not surprisingly, many were related to medicine, surgery and midwifery. There are accounts of new diseases, new methods of treatment, postmortem reports, pharmacology and toxicology. There was a notable interest in the unusual and bizarre—monstrous births, the strange contents of teratomas, extra-uterine conceptions, a child that cried in the womb, the passage of stones and hair *per urethram*, a woman of 68 who suckled two of her grandchildren, and a man of 80 who grew a new set of teeth. There is an account of ‘the Caesarian Operation performed by an ignorant Butcher’ in 1741. Actually, the patient had a

pyometrium, containing fetal bones, which pointed as an abscess on the abdominal wall. The patient recovered. There is an entry in 1706 'Concerning two Deaf Persons who can speak and understand what is said to them by the Motions of the Lips'.

Physicians in this period were nearly all botanists, because the majority of medical remedies were of plant origin. Sloane was an enthusiastic botanist. As a young man of 27 he had accompanied the Duke of Albemarle's expedition to the West Indies, which resulted in his great work *Catalogus Plantarum quae in Insula Jamaica sponte proveniunt* . . . (1696), in which he described 800 species. He later published in two folio volumes *A Voyage to the Islands of Madera, Barbados, Nieves, St. Christophers, and Jamaica; with the Natural History of the Herbs and Trees, four-footed Beasts, Fishes, Birds, Insects, Reptiles, etc.* . . . (1707). Both books were reviewed in the *Transactions*.

In 1722 Sloane gave new life to the Chelsea Physic Garden, which had been founded in 1676, but was in a poor way. He gave the freehold of the site to the Society of Apothecaries, who had previously held it on a lease. A condition of his gift was that the Apothecaries should send 50 distinct specimens of plants 'well dried and preserved' to the Royal Society each year, to a total of 2,000. There are 44 entries in the *Transactions* about these gifts, the last in 1774, more than 20 years after Sloane's death, so over a period of 52 years the bargain was kept, and the 2,000 plants exceeded.

Zoological topics occur frequently. There are accounts of new species and of dissections. The animals studied include the ox, sheep, elephant, ostrich, dog, silkworm, rattlesnake, bat, moose-deer, flying squirrel, narwhal, centipede, pediculus, mammoth, marine worms, sunfish, aquatic insects, rhinoceros, wolf and parasitic worms.

There is a report on the gigantic horns found at Wapping (probably from an Irish elk), the migration of birds, the method of castrating fish, and an account of how madder-root fed to animals colours the bones.

Natural phenomena feature largely—rain, hailstones, floods, frost, thunder, lightning, earthquakes, volcanic eruptions, the aurora borealis, meteors (including one seen in the day-time), a lunar rainbow, and eclipses, not only of the sun and moon, but of the satellites of Jupiter. There are notes on archaeology, antiquities, coins, buildings and inscriptions. In general science there are communications on how to grind spherical lenses, how to construct microscopes, the mercury barometer, how to find the date of Easter, why the sun and moon appear larger when near the horizon than when at the zenith, magnetic declination, chemistry, mineralogy, geology, travel, a calculating machine, capillary attraction, and the invention of printing.

These are the entries relating only to Sir Hans Sloane, admittedly a man of unusual talents, industry and longevity, and form a memorial to him. There are countless other entries in the *Transactions*, from other hands, many of equal interest.

CORRECTION

We apologise for an error in the report Food Intolerance and Food Aversion in Volume 18 No. 2 (April 1984). Page 95, the section entitled Prevention, paragraph 2, line 12, should have read '. . . introduction of diverse solids, which may *increase* the incidence of eczema [19] but not of asthma [20].'