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FAMOUS FIGURES

Sir John Pringle

JSG Blair

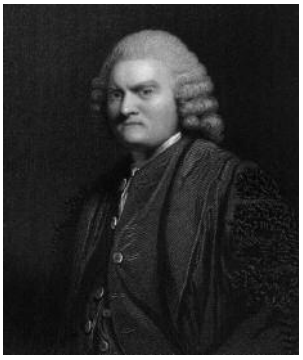


Photo courtesy of Royal College of Physicians of Edinburgh

Sir John Pringle, (1707-1782) regarded by many as the father of military medicine in Britain, was born at Stitchel House, in the Scottish border county of Roxburgh. His father was Sir John Pringle and his mother the sister of Sir Gilbert Elliott, of Stobs. The Pringles and Elliotts were neighbouring lairds, but the Elliotts were a much more important border family, on account of their fame as reivers in earlier centuries. Scholastic ability in the post-Union years in Scotland was by no means confined to the labouring classes; all walks of life shared the devotion to learning which produced men of worth who left their mark in wider British society. John Pringle had a private tutor in his home. He went to St Andrews, Scotland's first university, and matriculated as a bec jaune (bejant) in 1722 in St Leonard's College, where his uncle, Francis, was Professor of Greek there. In 1727 he went to Edinburgh University, Scotland's fourth, "with the view of studying physic, the profession which he was now resolved to follow'. Although the Chandos Chair of Medicine was only established in St Andrews in January of 1721, with the excellent Thomas Simpson from Glasgow as its first professor, Edinburgh was beginning to lead in medical teaching and would soon follow Leiden as the best medical school in Europe. Another account of young John Pringle's early life, by James Boswell, was that *'he was intended for commerce, and was sent to Amsterdam to further that object, and that, while in Holland, he heard a lecture by Boerhaave, which made up his mind for him'*.

In the event, Pringle spent only one year in the Edinburgh medical school and then went to Leiden to take his studies farther. From student age Pringle had contact with Flanders, Holland, where he would later return to earn his great reputation as a military physician and early bacteriologist. He graduated MD at Leiden in 1730, when his thesis diploma, 'De Marcore Senili', was signed by Boerhaave, Albinus, and Gravesande. It may seem surprising to 20th century minds that four years after graduating MD and starting practice in Edinburgh, Pringle was appointed 'Joint Professor' of Moral Philosophy in Edinburgh university, but even a century later, such switches of career still occurred; W.C. McIntosh, the Physician Superintendent of Murthly Lunatic Asylum in Perthshire, moved to St Andrews as Professor of Natural History, and later achieved the Gold Medal of the Royal Society. As the account of Pringle in Lives of British Physicians, 1707-82, nicely puts it, *'Variety of Knowledge was never seen to encumber the possessor in the century, it prepares an ample space and a firmer footing for all that is to come after'*.

Pringle's move into military medicine was probably because of local connections. The Earl of Stair, a nobleman whose lands lay only a short way north of Roxburgh, and who knew the Pringle family, appointed him his physician. Lord Stair was then General Officer Commanding the British Army on the continent. Dr Stevenson, a prominent Edinburgh physician, also advanced Pringle's career. Their choice was sound; as the biography written in 1780 recorded, *'this was the golden moment of his life, from which his eminence begins to date'*. Again by the good offices of Lord Stair, he was appointed Physician to the Army in Flanders in 1742 and Physician-General in 1745. During his six years in Flanders, where the British Army had 28,000 men under arms at its maximum, he established a Scottish connection with British and continental medicine via Edinburgh and Leiden. His service ran from the fall of Walpole, through the campaign launched by the French into the Austrian Netherlands, to the Peace of Aix-la-Chapelle in 1748. By coincidence his opposite number as Surgeon General of the Land Forces was another Scot, David Middleton. Middleton introduced separate beds and clean linen for wounded, and even some 'trained nurses'. Pringle's great innovations encompassed both administration and epidemiology. It was due to his efforts that military hospitals were first recognised as neutral territory and safely set up near a battlefield; 'to be placed together and be considered as sanctuaries for the disabled, and mutually protected'. At the battle of Dettingen in 1743, the last in which

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a British king drew the sword, under a 'temporary red cross', and with the agreement of the Duc de Noailles, the French commander, British and French hospitals were set up side by side, each taking wounded from the other army if the occasion arose. In this he anticipated the Geneva Convention by 120 years. Their successors in the North African desert battles of 1943-44 were the field surgical teams of the British and Germans.

Although Pringle left the Physician-General's post in 1748 – he had been posted back to Britain during the 1745 Jacobite rebellion and was present at the Battle of Culloden in 1746 – he did not publish his Observations on the Diseases of the Army till 1752.

This watershed work has probably not received the credit it deserves in history, let alone military history. Like his countryman James Lind (qv), Pringle had quickly recognised hospitals as, to use his own words, 'among the chief causes of sickness and death in the Army'. His special contribution was the first scientific account of epidemiology in the field, prevention of cross-infection, and, it can be argued, of antiseptics. His clinical treatments were those of the period. Dismissals of Pringle by some are invalid, if the progress of his thought is followed carefully. In his own words, as expressed in the fourth edition of his Observations: '*....in the camp, the contagion (of dysentery) passes from one who is ill to his companion in the same tent, and from them perhaps to the next. The foul straw becomes very infectious. But of what nature is this infection? In the former editions of this work, I considered the spreading of the distemper as owing to putrid exhalations of the humours of those who first fell ill of it; and that when this miasma is received into the blood, I conceived it to act upon the whole mass as a ferment, disposing it to putrefaction..... But having since perused the curious dissertation, published by Linnaeus, in favour of Kircher's system of contagion by animalicula, it seems reasonable to suspend all hypotheses, till the matter in further enquired into'*. In his thinking he was influenced by the great men of Leiden: *'Leeuwenhoeck had shown "small insects" in the pustules of scabies, under the microscope....So the frequency of the itch is not to be ascribed to change of air or diet, but to the infection propagated by a few such.....'* Pringle's consideration of the possibility of microscopic contamination then led him to think in terms of 'septic' and 'antiseptic': *'The faeces are rendered less, if at all infectious, by means of a strong acid combined with the parts that are really septic – especially, in the dysentery, where the faeces are highly corrupted and contagious.....'* He even considered the systemic use of such 'antiseptics': *'were putrefaction the only change made in the body by contagion, it would be easy to cure such fevers, at any period, by the use of acids, or other antiseptics'*. Yet Pringle is not mentioned by Dr W.A.R. Thomson in his History of Antisepsis (1963) and it is almost certain that Lister knew nothing of his work.

When the Earl of Stair retired, in 1745, Pringle, now a physician of merit and doctor of note, was at once appointed physician to the Duke of Cumberland, initially once more in the Low Countries. He only now resigned his Edinburgh Chair of Philosophy – it is remarkable he retained it for so long. From 1748 he settled in London and continued in medical practice. He entered into the period of his life when he published a series of papers and received a succession of honours. In 1749 he became Physician in Ordinary to the Duke of Cumberland. In 1750 he published Observations on the Gaol or Hospital Fever, and Experiments upon septic and Antiseptic Substances, with remarks relating to their use in the Theory of Medicine. For the latter he received Copeley's Gold Medal from the Royal Society, of which he was now a member. Dr Stephen Hales (qv) was so impressed with his Account of Persons seized with the Gaol Fever while working in Newgate that he published it in the Gentleman's Magazine. On 14th April 1752 Pringle married Charlotte, the second daughter of Dr William Oliver, 'an eminent physician of Bath, but this lady did not long participate in his increasing celebrity'. There were no children. Pringle became a council member of the Royal Society in 1753, Licentiate of the RCP London in 1758, Physician to the Queen in 1761, President of the Royal Society in 1772 when he was 66, and notably in 1766, Physician to the King and was created a Baronet.

In 1778 Sir John Pringle had a fall and resigned from the Royal Society Presidency. He returned briefly to Edinburgh, but Edinburgh did not cheer his spirits. While there he presented a copy of his complete work, in 10 volumes, on Medical and Physical Observations, to the RCPEd. and to St Andrews. In 1781 he was back in London, and soon after, on 14th January 1782 had a probable stroke while at his club Watson's in the Strand. He died a few days later, aged 75 years. After his death there was a monument built for him in Westminster Abbey and his name celebrated in eulogies by Vicq d'Azyr and Concordet at the Paris Academy. Through his life his religious belief varied – he was a Unitarian for a time – but he became 'very diligent in reading sermons and Scripture in his later life'. In politics he was a strong Whig. While he loved music, he had no liking for poetry. James Boswell found him 'sour' and his portrait by Sir Joshua Reynolds shows him to look somewhat severe. His high cheek colour could be a clue to the nature of his final illness. His letters and writings however show him a pleasantly civil person. His Observations on the Diseases of the

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Army was published shortly after his marriage and quickly translated into German, French and Italian. However varied and excellent his many other papers were, none came near this one. It is by this great work that Sir John Pringle will be remembered, and justly so.

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