

## Sir John Pringle, Baronet.

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PRINGLE (Sir John), Baronet, the late worthy president of the Royal Society, was born at Stichelhouse, in the county of Roxburgh, North Britain, April 10, 1707. His father was Sir John Pringle, of Stichel. Bart, and his mother Magdalen Elliott, was sister to Sir Gilbert Elliott, of Stobs, Baronet. He was the youngest of several sons, three of whom, besides himself, arrived to years of maturity. After receiving his grammatical education at home, he was sent to the university of St. Andrews, where having staid some years, he removed to Edinburgh in 1727, to study physic, that being the profession which he now determined to follow. He staid however only one year at Edinburgh, being desirous of going to Leyden, which was then the most celebrated school for medicine in Europe. Dr. Boerhaave, who had brought that university into great reputation, was considerably advanced in years, and Mr. Pringle was desirous of benefiting by that great man's lectures. After having gone through his proper course of studies at Leyden, he was admitted, in 1730, to his doctor of physic's degree; upon which occasion his inaugural dissertation, *De Marcove Senili*, was printed. On quitting Leyden, Dr. Pringle returned and settled at Edinburgh as a physician, where, in 1734, he was appointed, by the magistrates and council of the city, to be joint professor of pneumatics and moral philosophy with Mr. Scott, during this gentleman's life, and sole professor after his decease; being also admitted at the same time a member of the university, in discharging the duties of this new employment, his textbook was *Puffendorff de Officio Hominis et Civis*; agreeably to the method he pursued through life, of making fact and experiment the basis of science.

Dr. Pringle continued in the practice of Physic at Edinburgh, and in duly performing the office of professor, till 1742, when he was appointed physician to the earl of Stair, who then commanded the British army. By the interest of this nobleman. Dr. Pringle was constituted, the same year, physician to the military hospital in Flanders, with a salary of 20 shillings a-day, and the right to half pay for life. On this occasion he was permitted to retain his professorship of moral philosophy; two gentlemen, Messrs. Muirhead and Cleghorn teaching in his absence, as long as he requested it. The great attention which Dr. Pringle paid to his duty as an army physician, is evident from every page of his *Treatise on the Diseases of the Army*, in the execution of which office he was sometimes exposed to very imminent dangers. He soon after also met with no small affliction in the retirement of his great friend the earl of Stair, from the army. He offered to resign with his noble patron, but was not permitted: he was therefore obliged to content himself with testifying his respect and gratitude to him, by accompanying the earl 40 miles on his return to England; after which he took leave of him with the utmost regret.

But though Dr. Pringle was thus deprived of the immediate protection of a nobleman who knew and esteemed his worth, his conduct in the duties of his station procured him effectual support. He attended the army in Flanders through the campaign of 1744, and so powerfully recommended himself to the duke of Cumberland, that in the spring following he had a commission, appointing him physician-general to the king's forces in the Low Countries, and parts beyond the seas; and on the next day he received a second commission from the duke, constituting him physician to the royal hospitals in those countries. In consequence of these promotions, he the same year resigned his professorship in the university of Edinburgh.

In 1745 he was also with the army in Flanders; but was recalled from that country in the latter end of the year, to attend the forces which were to be sent against the rebels in Scotland. At this time he had the honour of being chosen F. R. S. and the Society had good reason to be pleased with the addition of such a member. In the beginning of 1746, Dr. Pringle accompanied, in his official capacity, the duke of Cumberland in his expedition against the rebels; and remained with the forces, after the battle of Culloden, till their return to England the following summer. In 1747 and 1748, he again attended the army abroad; but in the autumn of 1748, he embarked with the forces for England, on the signing of the treaty of Aix-la-Chapelle.

From that time he mostly resided in London, where, from his known skill and experience, and the reputation he had acquired, he might reasonably expect to succeed as a physician. In 1749 he was appointed physician in ordinary to the duke of Cumberland. And in 1750 he published, in a letter to Dr. Mead, *Observations on the Gaol or Hospital Fever*: this piece, with some alterations, was afterwards included in his grand work on the *Diseases of the Army*.

In this, and the two following years Dr. Pringle communicated to the Royal Society his celebrated Experiments upon Septic and Antiseptic Substances, with Remarks relating to their Use in the Theory of Medicine; some of which were printed in the *Philosophical Transactions*, and the whole were subjoined, as an appendix, to his *Observations on the Diseases of the Army*. Those experiments procured for the ingenious author the honour of Sir Godfrey Copley's gold medal; besides gaining him a high and just reputation as an experimental philosopher. He gave also many other curious papers to the Royal Society: thus, in 1753, he presented. An Account of several Persons seized with the Gaol Fever by working in Newgate; and of the Manner by which the Infection

was communicated to one entire Family; in the Philos. Trans. vol. 48. His next communication was, A remarkable case of Fragility, Flexibility, and Dissolution of the Bones; in the same vol.—In the 49th volume, are accounts which he gave of an Earthquake felt at Brussels; of another at Glasgow and Dunbarton; and of the Agitation of the Waters, Nov. 1, 1756, in Scotland and at Hamburgh.—The 50th volume contains his Observations on the Case of lord Walpole, of Woollerton: and a Relation of the Virtues of Soap, in Dissolving the Stone.—The next volume is enriched with two of the doctor's articles, of considerable length, as well as value. In the first, he hath collected, digested, and related, the different accounts that had been given of a very extraordinary Fiery Meteor, which appeared the 26th of November 1758: and in the second he hath made a variety of remarks upon the whole, displaying a great degree of philosophical sagacity.—Besides his communications in the Philosophical Transactions, he gave, in the 5th volume of the Edinburgh Medical Essays, an Account of the Success of the Vitrum ceratum Antimonii.

In 1752. Dr. Pringle married Charlotte, the second daughter of Dr. Oliver, an eminent physician at Bath: a connection which however did not last long, the lady dying in the space of a few years. And nearly about the time of his marriage, he gave to the public the first edition of his Observations on the Diseases of the Army; which afterwards went through many editions with improvements, was translated into the French, the German, and the Italian languages, and deservedly gained the author the highest credit and encomiums. The utility of this work however was of still greater importance than its reputation. From the time that the doctor was appointed a physician to the army, it seems to have been his grand object to lessen, as far as lay in his power, the calamities of war; nor was he without considerable success in his noble and benevolent design. The benefits which may be derived from our author's great work, are not solely confined to gentlemen of the medical profession. General Melville, a gentleman who unites with his military abilities the spirit of philosophy, and the feelings of humanity, was enabled, when governor of the Neutral Islands, to be singularly useful, in consequence of the instructions he had received from Dr. Pringle's book, and from personal conversation with him. By taking care to have his men always lodged in large, open, and airy apartments, and by never letting his forces remain long enough in swampy places to be injured by the noxious air of such places, the general was the happy instrument of saving the lives of seven hundred soldiers.

Though Dr. Pringle had not for some years been called abroad, he still held his place of physician to the army; and in the war that began in 1755. he attended the camps in England during three seasons. In 1758, however he entirely quitted the service of the army; and being now determined to fix wholly in London, he was the same year admitted a licentiate of the college of physicians.—After the accession of king George the 3d to the throne of Great Britain. Dr. Pringle was appointed, in 1761. physician to the queen's household; and this honour was succeeded, by his being constituted, in 1763, physician extraordinary to the queen. The same year he was chosen a member of the Academy of Sciences at Haarlem, and elected a fellow of the Royal College of Physicians in London.—In 1764, on the decease of Dr. Wollaston, he was made physician in ordinary to the queen. In 1766 he was elected a foreign member, in the physical line, of the Royal Society of Sciences at Gottingen, and the same year he was raised to the dignity of a baronet of Great Britain. In 1768 he was appointed physician in ordinary to the late princess dowager of Wales.

After having had the honour to be several times elected into the council of the Royal Society. Sir John Pringle was at length, viz, Nov. 30, 1772, in consequence of the death of James West Esq. elected president of that learned body. His election to this high station, though he had so respectable a character as the late Sir James Porter for his opponent, was carried by a very considerable majority. Sir John Pringle's conduct in this honourable station fully justified the choice the Society made of him as their president. By his equal, impartial, and encouraging behaviour, he secured the good will and best exertions of all for the general benefit of science, and true interests of the Society, which in his time was raised to the pinnacle of honour and credit. Instead of splitting the members into opposite parties, by cruel, unjust, and tyrannical conduct, as has sometimes been the case, to the ruin of the best interests of the Society, Sir John Pringle cherished and happily united the endeavours of all, collecting and directing the energy of every one to the common good of the whole. He happily also struck out a new way to distinction and usefulness, by the discourses which were delivered by him. on the annual assignment of Sir Godfrey Copley's medal. This gentleman had originally bequeathed five guineas, to be given at each anniversary meeting of the Royal Society, by the determination of the president and council, to the person who should be the author of the best paper of experimental observations for the year. In process of time, this pecuniary reward, which would never be an important consideration to a man of an enlarged and philosophical mind, however narrow his circumstances might be, was changed into the more liberal sorm of a gold medal: in which form it is become a truly honourable mark of distinction, and a just and laudable object of ambition. No doubt it was always usual for the president, on the delivery of the medal, to pay some compliment to the gentleman on whom it was bestowed; but the custom of making a set speech on the occasion, and of entering into the history of that part of philosophy to which the experiments, or the subject of the paper related, was first introduced by Martin Folkes Esq. The discourses however which he and his successors delivered, were very short, and were only inserted in the minute-books of the Society. None of them had ever been printed

before Sir John Pringle was raised to the chair. The first speech that was made by him being much more elaborate and extended than usual, the publication of it was desired; and with this request, it is said, he was the more ready to comply, as an absurd account of what he had delivered had appeared in a newspaper. Sir John was very happy in the subject of his first discourse. The discoveries in magnetism and electricity had been succeeded by the inquiries into the various species of air. In these enquiries, Dr. Priestley, who had already greatly distinguished himself by his electrical experiments, and his other philosophical pursuits and labours, took the principal lead. A paper of his, entitled, Observations on different Kinds of Air, having been read before the Society in March 1772, was adjudged to be deserving of the gold medal; and Sir John Pringle embraced with pleasure the occasion of celebrating the important communications of his friend, and of relating with accuracy and fidelity what had previously been discovered upon the subject.

It was not intended, we believe, when Sir John's first speech was printed, that the example should be followed: but the second discourse was so well received by the Society, that the publication of it was unanimously requested. Both the discourse itself, and the subject on which it was delivered, merited such a distinction. The composition of the second speech is evidently superior to that of the former one; Sir John having probably been animated by the favourable reception of his first effort. His account of the Torpedo, and of Mr. Walsh's ingenious and admirable experiments relative to the electrical properties of that extraordinary fish, is singularly curious. The whole discourse abounds with ancient and modern learning, and exhibits the worthy president's knowledge in natural history, as well as in medicine, to great advantage.

The third time that he was called upon to display his abilities at the delivery of the annual medal, was on a very beautiful and important occasion. This was no less than Mr. (now Dr.) Maskelyne's successful attempt completely to establish Newton's system of the universe, by his Observations made on the Mountain Schehallien, for finding its attraction. Sir John laid hold of this opportunity to give a perspicuous and accurate relation of the several hypotheses of the Ancients, with regard to the revolutions of the heavenly bodies, and of the noble discoveries with which Copernicus enriched the astronomical world. He then traces the progress of the grand principle of gravitation down to Sir Isaac's illustrious confirmation of it: to which he adds a concise account of Messrs. Bouguer's and Condamine's experiment at Chimborazo, and of Mr. Maskelyne's at Schehallien. If any doubts still remained with respect to the truth of the Newtonian system, they were now completely removed.

Sir John Pringle had reason to be peculiarly satisfied with the subject of his fourth discourse; that subject being - perfectly congenial to his disposition and studies. His own life had been much employed in pointing out the means which tended not only to cure, but to prevent the diseases of mankind; and it is probable, from his intimate friendship with captain Cook, that he might suggest to that sagacious commander some of the rules which he followed, in order to preserve the health of the crew of his ship, during his voyage round the world. Whether this was the case, or whether the method pursued by the captain to attain so salutary an end, was the result alone of his own reflections, the success of it was astonishing; and this celebrated voyager seemed well entitled to every honour which could be bestowed. To him the Society assigned their gold medal, but he was not present to receive the honour. He was gone out upon the voyage, from which he never returned. In this last voyage he continued equally successful in maintaining the health of his men.

The learned president, in his fifth annual dissertation, had an opportunity of displaying his knowledge in a way in which it had not hitherto appeared. The discourse took its rise from the adjudication of the prize medal to Mr. Mudge, then an eminent surgeon at Plymouth, on account of his valuable paper, containing Directions for making the best Composition for the Metals of Reflecting Telescopes, together with a Description of the Process for Grinding, Polishing, and giving the Great Speculum the true Parabolic form. Sir John hath accurately related a variety of particulars, concerning the invention of reflecting telescopes, the subsequent improvements of these instruments, and the state in which Mr. Mudge found them, when he first set about working them to a greater perfection, till he had truly realized the expectation of Newton, who, above an hundred years ago, presaged that the public would one day possess a parabolic speculum, not accomplished by mathematical rules, but by mechanical devices.

Sir John Pringle's sixth and last discourse, to which he was led by the assignment of the gold medal to myself, on account of my paper entitled. The Force of fired Gunpowder, and the Initial Velocity of Cannon Balls, determined by Experiments, was on the theory of gunnery. Though Sir John had so long attended the army, this was probably a subject to which he had heretofore paid very little attention. We cannot however help admiring with what perspicuity and judgment he hath stated the progress that was made, from time to time, in the knowledge of projectiles, and the scientific perfection to which it has been said to be carried in my paper. As Sir John Pringle was not one of those who delighted in war. and in the shedding of human blood, he was happy in being able to shew that even the study of artillery might be useful to mankind; and therefore this is a topic which he hath not forgotten to mention. Here ended our author's discourses upon the delivery of Sir Godfrey Copley's medal, and his presidency over the Royal Society at the same time, the delivering that medal into my hand being the last

office he ever performed in that capacity; a ceremony which was attended by a greater number of the members, than had ever met together before upon any other occasion. Had he been permitted to preside longer in that chair, he would doubtless have found other occasions of displaying his acquaintance with the history of philosophy. But the opportunities which he had of signaling himself in this respect were important in themselves, happily varied, and sufficient to gain him a solid and lasting reputation.

Several marks of literary distinction, as we have already seen, had been conferred upon Sir John Pringle, before he was raised to the president's chair. But after that event they were bestowed upon him in great abundance, having been elected a member of almost all the literary societies and institutions in Europe. He was also, in 1774, appointed physician extraordinary to the king.

It was at rather a late period of life when Sir John Pringle was chosen to be president of the Royal Society, being then 65 years of age. Considering therefore the great attention that was paid by him to the various and important duties of his office, and the great pains he took in the preparation of his discourses, it was natural to expect that the burthen of his honourable station should grow heavy upon him in a course of time. This burthen, though not increased by any great addition to his life, for he was only 6 years president, was somewhat augmented by the accident of a fall in the area in the back part of his house, from which he received some hurt. From these circumstances some persons have affected to account for his resigning the chair at the time when he did. But Sir John Pringle was naturally of a strong and robust frame and constitution, and had a fair prospect of being well able to discharge the duties of his situation for many years to come, had his spirits not been broken by the most cruel harassings and baitings in his office. His resolution to quit the chair arose from the disputes introduced into the Society, concerning the question, whether pointed or blunted electrical conductors are the most efficacious in preserving buildings from the pernicious effects of lightning, and from the cruel circumstances attending those disputes. These drove him from the chair. Such of those circumstances as were open and manifest to every one, were even of themselves perhaps quite sufficient to drive him to that resolution. But there were yet others of a more private nature, which operated still more powerfully and directly to produce that event; which may probably hereafter be laid before the public, when I shall give to them the history of the most material transactions of the Royal Society, especially those of the last 22 years, which I have from time to time composed and prepared with that view.

His intention of resigning however, was disagreeable to his friends, and the most distinguished members of the Society', who were many of them perhaps ignorant of the true motive for it. Accordingly, they earnestly solicited him to continue in the chair; but, his resolution being fixed, he resigned it at the anniversary meeting in 1778, immediately on delivering the medal, at the conclusion of his speech, as mentioned above.

Though Sir John Pringle thus quitted his particular relation to the Royal Society, and did not attend its meetings so constantly as he had formerly done, he still retained his literary connections in general. His house continued to be the resort of ingenious and philosophical men, whether of his own country', or from abroad; and he was frequent in his visits to his friends. He was held in particular esteem by eminent and learned foreigners, none of whom came to England without waiting upon him, and paying him the greatest respect. He treated them, in return, with distinguished civility and regard. When a number of gentlemen met at his table, foreigners were usually a part of the company.

In 1780 Sir John spent the summer on a visit to Edinburgh; as he did also that of 1781; where he was treated with the greatest respect. In this last visit he presented to the Royal College of Physicians in that city, the result of many years labour, being ten folio volumes of Medical and Physical Observations, in manuscript, on condition that they should neither be published, nor lent out of the library of the college on any account whatever. He was at the same time preparing two other volumes, to be given to the university, containing the formulas referred to in his annotations. He returned again to London, and continued for some time his usual course of life, receiving and paying visits to the most eminent literary men, but languishing and declining in his health and spirits, till the 18th of January 1782, when he died, in the 75th year of his age; the account of his death being every where received in a manner which shewed the high sense that was entertained of his merit.

Sir John Pringle's eminent character as a practical physician, as well as a medical author, is so well known, and so universally acknowledged, that an enlargement upon it cannot be necessary. In the exercise of his profession he was not rapacious; being ready, on various occasions, to give his advice without pecuniary views. The turn of his mind led him chiefly to the love of science, which he built on the firm basis of fact. With regard to philosophy in general, he was as averse to theory, unsupported by experiments, as he was with respect to medicine in particular. Lord Bacon was his favourite author; and to the method of investigation recommended by that great man, he steadily adhered. Such being his intellectual character, it will not be thought surprising that he had a dislike to Plato. And to metaphysical disquisitions he lost all regard in the latter part of his life.

Sir John had no great fondness for poetry. He had not even any distinguished relish for the immortal Shakespeare: at least he seemed too highly sensible of the defects of that illustrious bard, to give him the proper degree of estimation. Sir John had not in his youth been neglectful of philological enquiries, nor did he desert them in the last stages of his life, but cultivated even to the last a knowledge of the Greek language. He paid a great attention to the French language; and it is said that he was fond of Voltaire's critical writings. Among all his other pursuits, he never forgot the study of the English language. This he regarded as a matter of so much consequence, that he took uncommon pains with regard to the style of his compositions; and it cannot be denied, that he excelled in perspicuity, correctness, and propriety of expression. His six discourses in particular, delivered at the annual meetings of the Royal Society, on occasion of the prize medals, have been universally admired as elegant compositions, as well as critical and learned dissertations. And this characteristic of them, seemed to increase and heighten, from year to year: a circumstance which argues rather an improvement of his faculties, than any decline of them, and that even after the accident which it was pretended occasioned his descent from the president's chair. So excellent indeed were these compositions esteemed, that envy used to asperse his character with the imputation of borrowing the hand of another in those learned discourses. But how false such aspersion was. I, and I believe most of the other gentlemen who had the honour of receiving the annual medal from his hands, can fully testify. For myself in particular, I can witness for the last, and perhaps the best, that on the theory and improvements in gunnery, having been present or privy to his composition of every part of it.—Though our author was not fond of poetry, he had a great affection for the sister art, music. Of this art he was not merely an admirer, but became so far a practitioner in it, as to be a performer on the violoncello, at a weekly concert given by a society of gentlemen at Edinburgh. Besides a close application to medical and philosophical science, during the latter part of his life, he devoted much time to the study of divinity: this being with him a very favourite and interesting object.

If, from the intellectual, we pass on to the moral character of Sir John Pringle, we shall find that the ruling feature of it was integrity. By this principle he was uniformly actuated in the whole of his conduct and behaviour. He was equally distinguished for his sobriety'. I and other persons have heard him declare, that he had never once in his life been intoxicated with liquor. In his friendships, he was ardent and steady. The intimacies which were formed by him, in the early part of his life, continued unbroken to the decease of the gentlemen with whom they were made; and were kept up by a regular correspondence, and by all the good offices that lay in his power.

With regard to Sir John's external manner of deportment, he paid a very respectful attention to those who were honoured with his friendship and esteem, and to such strangers as came to him well recommended. Foreigners in particular had good reason to be satisfied with the uncommon pains which he took to shew them every mark of civility and regard. He had however at times somewhat of a dryness and reserve in his behaviour, which had the appearance of coldness: and this was the case when he was not perfectly pleased with the persons who were introduced to him, or who happened to be in his company. His sense of integrity and dignity would not permit him to adopt that false and superficial politeness, which treats all men alike, though ever so different in point of real estimation and merit with the same shew of cordiality and kindness. He was above assuming the profession, without the reality of respect.