SIR JOHN SIMON, K.C.B., F.R.S., F.R.C.S. 1816-1904.

THE year 1800 had seen the birth of the great lay reformer, the founder of sanitary science in England, Edwin Chadwick, and he was still but a boy when another genius, one destined to carry the work far in the more fruitful field of preventive medicine, saw the

light of day.

John Simon, one of the fourteen children of Louis Michael Simon of Blackheath by his second marriage to Mademoiselle Matilda Nonnet, was born on the 10th of October 1816. His paternal grandfather, who had settled in London as a merchant and there married an English wife, was a native of Montargis in France, and his father, an only son, became a leading member of the Stock Exchange, serving on the General Purposes Committee of that body. By descent, therefore, Simon was rather more French than English. Both his parents lived to great old age, his father being ninety-eight and his mother ninety-five, the latter surpassing by fifteen years what Simon calculated as the natural term of life in this country. "Death by old age is, physiologically speaking, the only normal death of man," he said. "Death by natural decay would in this country under present circumstances, usually happen about eighty years of age. Now little more than a tenth part of the deaths of England happen at seventy-five years



Sir John Simon 1816-1904

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and upwards, and thus, physiologically speaking, one may say that at least nine-tenths of the entire mortality occur more or less prematurely."

Simon was sent to a private school at Pentonville, then to the school of Dr Burney, a nephew of the author of Evelina, at Greenwich, where he spent seven years. From there he went to Hobensolms in Germany and stayed for one year under the care of a German pastor. His father intended him for surgery and in 1833, at the age of seventeen, he was apprenticed to Mr J. H. Green, Professor of Surgery at King's College and surgeon to St Thomas's Hospital, a man distinguished alike in his profession and in scholarship, and a friend of the poet Coleridge. Simon became demonstrator in anatomy, and in 1838 was elected a member of the Royal College of Surgeons. Two years later he was appointed assistant surgeon at King's College Hospital, and in 1845 his remarkable paper on "The Comparative Anatomy of the Thyroid Gland," considered an exceptional achievement for so young a man, won for him the Astley Cooper Medal for Physiology and he was elected a Fellow of the Royal Society at the early age of twenty-nine. In 1847 he received the appointment of lecturer in surgery at St Thomas's Hospital, and in the same year published a paper "On the Aims and Philosophic Method of Pathological Research," a work which showed, what was rare in the forties, an understanding of the vast significance for society of the science of preventive medicine. At this time the duty of the State for the care of the health of its citizens was not generally acknowledged. There were no medical officers of health, and Simon was to become the creator of that office in London and

before his day was done, to witness, what his own words may best express, "a spirit so changed from that of the old times as virtually to be the adoption of new standards of weight and measure in politics."

In 1848 Simon married Jane, the daughter of Matthew Delaval O'Meara, and shortly afterwards he received his first public appointment, when the Corporation of London, following Liverpool's example, decided to appoint a Medical Officer of Health for the City. Their choice fell upon a man whose rare combination of faculties for the position he was appointed to fill could scarcely have been surpassed. When Simon accepted the post the conception of a medical officer in an administrative position was quite new, and although the activities of the Poor Law Board since 1832, under Chadwick's powerful direction, had drawn public attention to the scandalous conditions under which the poor of the country lived, it was not generally recognised even by the commissioners themselves, that these could properly be dealt with by the medical profession. The General Board of Health, established in 1848 on the break up of the Poor Law Board, did not, in spite of its name, include among its commissioners (Lord Carlisle, Lord Shaftesbury, and Chadwick) a medical officer, until two years after its formation, the effects of the violent epidemic of cholera of 1848-49 and the needs of the Interments Act, forced the authorities to elect Dr Southwood Smith as a member. This connection of a doctor with the Interments Act, a measure for the prevention of overcrowding in the graves of the city churchyards, so amused the medical profession that one member of it published the criticism: "Who

would have thought that in the last decade of advancing civilisation, and in a nation boasting of its intellectual and material resources, of its administrative energy and efficiency, the whimsical experiment should have been actually tried of appointing three non-medical authorities - two lords and a barrister—to preserve the health of the living, and then, after a year or so of doubtful success, calling in a physician to bury the dead?" On the other hand, Lord Palmerston's reply to an appeal from the Edinburgh Presbytery a few years later to appoint a great religious fast in the hopes that this might stay the third cholera invasion, was significant of the changing outlook in the sphere of public health: "It did not appear to Lord Palmerston," he wrote in a published letter, "that a national fast would be suitable to the circumstances of the present moment. The Maker of the Universe established certain laws of nature for the planet on which we live; and the weal or woe of mankind depends upon the observance or neglect of those laws. . . . Lord Palmerston would therefore suggest that the best course which the people of this country can pursue to deserve that the further progress of the cholera should be stayed will be to employ the interval which will elapse between the present time and the beginning of next spring in planning and executing measures by which those portions of their towns and cities which are inhabited by the poorer classes, and . . . must most need purification and improvement, may be freed from those causes and sources of contagion which, if allowed to remain, will infallibly breed pestilence, and be fruitful in death, in spite of all the prayers and fastings of a united but inactive nation."

It was not long before the Corporation of the City of London were made fully alive to the consequences of the experiment they had made, for Simon swiftly brought to bear on his new office his great scientific genius and administrative skill, and the need for medical guidance in matters relating to the public health became abundantly plain. The conditions that he had to contend with are not easy to picture in the twentieth century. Overcrowding in the poorer districts was terrible, "the shocking custom of inhabiting cellars," spoken of by Dr Roberton in his book on Medical Police in 1809, still prevailed in 1850, for the window tax put a premium on light and ventilation; slaughter-houses, of which there were 130 within the city boundaries, were mostly in underground vaults of the most unwholesome description; although public conduits existed, they were often padlocked against too lavish a use, and water for the poor was delivered sometimes in a putrid state from the insanitary cisterns where it was stored; the drainage system was disgracefully neglected, and infectious diseases ran their course unchecked. Among the poor it was common for the dead to be kept a week before burial in the one room of the living. The public conscience was awakening to these things, but it was slow to act. Free circulation of newspapers did not exist because the stamp duty and the tax on printing confined the journals to the few, and as often as not the speeches of Members of Parliament went unreported, because of the tyranny the press was able to exercise in the choice of what it would report. In order that ignorance might no longer be their excuse for inaction, Simon opened upon the public the floodgates of

knowledge. His Annual Reports for the years 1848-1855, when he held the office of Medical Officer of Health for the City, have become a classic in the history of English sanitation. In them he exposed to the light of day all the degradation under which the masses of the people were obliged to live. He showed the risks that arose from the bad drainage in the spread of cholera and other diseases, and the means taken to overcome these evils, especially the improvements in the sewerage undertaken by the Corporation, in the water-supply and in a system of periodical inspections. He began his official career by throwing himself on the compassion of the Registrar-General, in his own phrase, for without his special help he might have had to wait indefinitely to hear of any death which had occurred within the City boundary. As it was, punctually every Monday morning the nine City Registrars by a voluntary arrangement provided the Registrar-General with returns of deaths registered during the previous week in their districts together with the causes, and punctually every Monday afternoon these papers were placed at Simon's disposal and, guided by the information they contained, he set about his schemes of local inquiry and inspections. Gradually by this means a regular system of weekly inspection in all the poorer parts of the city was built up. His reports bear witness in their masterly English to the colossal labours undertaken by Simon in the seven years he spent in the City. Plain language was needed to attract public attention to the degrading state of affairs which was tolerated by a great nation, and Simon did not hesitate to use it. Congratulating the Corporation in 1855 on the abolition of cesspools

(one of the greatest of the evils), he said: "When cesspools were still almost universal in the metropolis, and while in the mansions of the West End they were regarded as equally sacred with the wine-cellars, they had been abolished, for rich and poor, throughout all the square mile of the City." The reports, much in demand at the time, were eventually republished, prefaced by an essay entitled "A Ministry of Public Health," in which Simon's conception of the ideal Health Department was ably set forth.

As a result of the awakening of popular interest in health matters, a great deal of voluntary work among the poor was undertaken, and in 1850 the Epidemiological Society of London was formed for the study of the causes of disease and premature death, with the object of advising administrative authorities on the best means of prevention. Most of the leading scientific men of the day were connected with this Society and Simon was one of the founders. In 1853 he served on a Commission of Inquiry into the causes of the cholera outbreak at Gateshead and Newcastle, where public alarm was assuming the proportions of a panic. It was during this epidemic that a Council of the Medical Profession consisting of thirteen distinguished members, among them Simon, was called into being to give advice in the preventive measures to be adopted.

The first Board of Health, which was virtually Chadwick, came to an untimely end in 1854, when the Commons, irritated by what was considered Chadwick's too masterful policy, refused to renew its life. In after years, writing in *English Sanitary Institutions*, Simon referred to this slur on Chadwick's work in the following terms: "Mr Chadwick beyond

any man of his time, knew what large fresh additions of human misery were accruing day by day under the then almost universal prevalence of sanitary neglect, and the indignation which he was entitled to feel at the spectacle of so much needless human suffering is a not ignoble excuse for such signs of over-eagerness as he may have shown."

In 1855, a new Board of Health, subject to annual renewal, was appointed with power to elect a medical officer, and Simon was offered, and accepted, the position. At this time "none but the vaguest notions had been formed as to the work which the officer ought to do," says Simon. Government had no statutory functions of a medical kind except under the Diseases Prevention Act, which was only called in force when epidemics arose. The general view taken was that the functions of a medical officer should be confined to fighting the dangers of the diseases when they occurred. These were, needless to say, not Simon's ideas of his office. "To stand and wait in the ante-chambers of legislation" was hardly his notion of service to the State; but owing to the antagonism which had been created by the activities of the first Board of Health, and the uncertainty attaching to the term of his appointment, he found it impossible to inaugurate a policy of sanitary reform such as he would have desired. "The legislature recognises no medical authority," he said, in his essay on "A Ministry of Public Health." "Occasionally this fact stands out in painful conspicuousness and brings most injurious results." In his first four years then, when his office was more or less on trial year by year, he made it his business to teach the nation how necessary a medical department had become to the needs of the

country. In 1856 was published his report reviewing all the inquiries made for the Board of Health during the cholera outbreaks of 1848-49 and 1853-54. In it he compared the different degrees of mortality which had accompanied the different water-supplies in the southern districts of London. For this purpose the populations which had received these different supplies had had to be identified, and when this laborious undertaking was accomplished, it was made plain that Lambeth, with the purest water-supply, had suffered least from cholera. Reviewing the mortality returns, he said: "No reasonable person could doubt the extremely important significance of that uncomplicated final arithmetic." In 1857, he published a comprehensive report on the subject of vaccination entitled Papers relating to the History and Practice of Vaccination, reviewing all the medical experience up to date with an account of the disastrous ravages of smallpox. It was only in 1853 that ivaccination had been made compulsory in England, and the controversy for and against it was to rage around this subject for many a day to come. In 1856 it was proposed to appoint a select committee to receive the evidence against the practice, and Simon's report was prepared in anticipation of having to provide counter-evidence. The committee, however, was not then appointed, and fourteen years later, in 1871, after the Vaccination Act of 1867 had been passed, for which Simon was in a great measure responsible, his report was used when the opponents of vaccination were invited to state their case before the Commons.

In 1858 his famous Report on the Sanitary State of the People of England, which has since become another classic of sanitary science, was published.

It was republished in 1887 under the title Public Health Reports, edited by Edward Seton, M.D. This work, based on the laborious collection of facts which Simon and his brilliant staff had got together from all parts of the country, clearly showed for the first time the extent to which diseases varied in different parts of the country, and the need for a reliable record of their occurrence. The case it presented for the establishment of a medical department of Government was unanswerable, and in 1859, after the passing of the Public Health Act of 1858, when the functions of the Board of Health were absorbed by the Privy Council, Simon was permanently appointed medical officer to that Council, an office which he held until 1876, using to the full the opportunities it offered for his genius and skill in organising an efficient medical service. In 1858, too, he published his Paper on the Constitution of the Medical Profession, dealing with the much needed reform of the regulation of medical education. It was followed by the passing of the Medical Act, by which the General Medical Council was established, with a system of registration "to enable persons requiring medical aid to distinguish qualified from unqualified practitioners." Before this Act "the legal titles of medical practitioners were as various as the names of snuffs and sauces," to quote Simon again. There were twenty-one different authorities, mostly of mediæval origin, at liberty to issue credentials for medical qualification, and the State did not concern itself with the terms on which these were granted.

The Privy Council Reports from 1859 to 1872 give an account of Simon's labours as medical officer, and of those of the eminent scientific workers whose

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investigations he directed. Such well-known names as Burdon Sanderson, Bristowe and Thorne Thorne testify to the high standard of the inquiries made. The measures undertaken to procure an efficient service of vaccination had the advantage of bringing his inspectors into contact with every part of the country, and he procured by this means, not only an account of vaccinations, but reports on the incidence of many other diseases as well, including diphtheria, diseases of the cotton famine, cerebro-spinal meningitis and cholera. In 1862 he set on foot inquiries into the evil effects of dangerous industries on health, by lead, mercury, phosphorus and arsenic poisoning. In 1863 a survey of the hospitals of the United Kingdom was undertaken, and in 1864 a most valuable report on the housing of the poor in towns and country was issued, the results of which showed conclusively the advantages and value of good sanitation in saving life in the districts where it had been practised.

All these investigations were chiefly connected with the administrative work of his office, but from 1866 onwards researches of a purely scientific nature were instituted without reference to immediate practical results, in the certain hope that "they would lead to more precise and intimate knowledge of the causes and processes of important diseases, and would thus augment more and more the vital resources of preventive medicine." Although Simon knew of the germ theory, he did not believe it was far enough advanced to be of any practical value, and he thought its evolution would be a slow process. He was more interested in the classification of contagious diseases by the uniformity of their symptoms than by Pasteur and Koch's method of isolating the micro-organisms of infection.

In his reports Simon has described the chaos that existed in the administration of the local Government, and in 1868 a Royal Sanitary Commission was appointed to inquire into the administration of sanitary laws and the formation of local sanitary areas. This Commission reported in 1871, recommending the amalgamation of the old Poor Law Board, the Local Government Act Office, which was then part of the Home Office, and the Medical Department of the Privy Council; the new department thus constituted, the Local Government Board, to be under the direction of one Minister with possibly two permanent secretaries. There was no reference in the report to the work of the Medical Department of the Privy Council, or to the questions of industrial diseases, unhealthy conditions of employment, or the administration of the Medical and Pharmacy Acts. To Simon the amalgamation of the Health Department with the Poor Law Board seemed a retrograde step. He regarded it as "virtually a policy of retreat." The Commons, however, endorsed the recommendations of the Commission, and the Local Government Act of 1871 established the new department. In the hope that he would be given a free hand in inaugurating a satisfactory medical policy, Simon accepted the post of Chief Medical Officer to the new Board. His hope was not realised, for he found that the Medical Department was placed in a subordinate position under the poor law staff, and instead of the medical policy being under scientific direction, he was obliged to witness the blunders of the civil officers, acting without his advice in the formation of sanitary areas, the cutting down of all medical investigations, and the supplanting of his able staff by poor law officers. The

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President, Sir James Stansfield, and Sir John Lambert, the Secretary, refused him the initiative and administrative independence to which his great work in the Medical Department of the Privy Council had entitled him, and the bitterness of his position in having to witness the loss of the splendid opportunities for the development of an efficient public health service, became intolerable. "He endured," says Professor Burdon Sanderson, "perhaps with too little patience, the constantly recurring pinpricks of official interference." In 1876, when the policy of the new Board had become fixed, Simon asked leave to retire. His office was abolished and he received a pension of £1333. His resignation at the age of sixty in the full vigour of his strength deprived the country of the services of one of the most brilliant scientific and administrative officers the nineteenth century had seen, and the substitution of the Local Government Board methods for Simon's statesmanlike conception of a Ministry of Health delayed the progress of sanitary science. Long after his retirement, his successors were still struggling against the same inter-departmental difficulties against which he had so ably, though so vainly, protested.

English Sanitary Institutions, published in 1890, contains the history of sanitary science in England and a record of Simon's work, told in the classical English for which his writing is famed. This volume alone, by reason of its vivid language and literary merit and its wide human outlook, would have procured for Simon a high place in the annals of famous men.

On his resignation in 1876, Simon was decorated with the C.B., and in 1887, on the occasion of the Oueen's Jubilee, he received the order of knighthood.

He was Crown Member of the General Medical Council from 1876 till 1895, Vice-President of the Royal Society in 1879-80, and received numerous honorary degrees from universities at home and abroad. The Buchanan Medal of the Royal Society was awarded him in 1897 for "eminence in sanitary science," and he also received the Harben Medal of the Royal Institute of Public Health.

On his retirement, he lived in his old-fashioned house in Kensington Square, where he entertained a distinguished band of friends up to the last days of his long life. Thackeray, who lived near by, Tennyson, Rossetti, Burne-Jones, and Jowett were often to be found at the gatherings in his house, among many of the other famous men of the century. for Simon was a man of wide interests. "Cultivated to an extraordinary degree," says Dr J. F. Payne, "a linguist, a student of Oriental literature, the friend of artists, poets and philosophers, he was able to think grandly, to project his mind into the future, to discern the real meaning of social evils as well as their probable developments, and so to devise schemes of prevention and amelioration that could never have occurred to more plodding, if equally industrious, spirits." And again, it was said of him: "Such was the versatility of Sir John Simon, at so many points did he touch the intellectual life of his time, that it would be misleading if we considered him merely from the sides of scientific and official achievement. Simon was, indeed, much more than a great officer of health and writer on preventive medicine, hygiene and surgery. He belonged to the highest type of the man of culture and progress in the middle of the last century. Friend of Buckle, Claude Bernard, Charles

Kingsley and Ernest Renan, he was a social force in quarters where science seldom shows her face—among distinguished circles, both literary and artistic, political and social, where the man of science is only too apt to be regarded merely as the enemy of aesthetics or the chiller of enthusiasms."

Simon outlived most of his contemporaries. Ultimately his eyesight began to fail and "plunged him in a great darkness," as he so aptly described the condition. After a short illness, he died on the 23rd of July 1904, at the great age of eighty-eight.

REFERENCES.—English Sanitary Institutions, by Sir J. Simon: Smith Elder & Co., London 1897. Lancet, 1904, vol. ii., 320, by J. F. Payne. Brit. Med. Journ., 1904, vol. xi., 265-356 Proc. Roy. Soc., 1905, vol. lxxv., by Burdon Sanderson.