general tendency of the age both the provision of water supply and the collection of refuse were matters for private enterprise. The local authorities sometimes paid street scavengers, but even this duty was often delegated to contractors in return 10r the saleable rights in the valuable refuse. The improved conditions were due, therefore, partly to the advance in agriculture which made all kinds of manure valuable; partly to the advance in joint stock enterprise, which enabled money to be found for water undertakings; partly to the increasing wealth, which provided money to be invested on the one hand and money to pay for decency and comfort on the other. But it was also due to increasing knowledge, not only knowledge as to steam engines and pumps but also knowledge as to the importance of cleanliness from the point of view of health. Undoubtedly many of the promoters and shareholders of the early water companies were actuated not so much by a desire for profit as by the wish to improve the water supply of the district in which they lived. That the knowledge which prompted such action was available was due to the advance in medicine, an advance which has been ignored in most histories of the period.

CHAPTER IX

THE 18TH CENTURY DOCTOR AND THE BRITISH PIONEERS OF PUBLIC HEALTH

"Dans mon art, je n'ai pas copié, comme on le croit, les figures des vases grecs, des frises ou des peintures. J'appris d'eux à regarder la nature".

Isadora Duncan.

Modern medicine is a child of the Renaissance and of that independent study of science which preceded the rediscovery of Greek literature. It belongs to that great re-birth of the human intellect of which the study of Greek literature at the source was only a part; though a part which infused a new spirit and outlook into the whole. Medieval medicine, like other medieval thought, was bound fast in traditionalism, it was content to repeat very debased and imperfect renderings of the ideas of the ancient Greek physicians, with a certain admixture of Arabian ideas. The importance of the study of the ancient medical writers at the source lay, not in the recalling of forgotten facts, but rather in the infusing of a new spirit into medical studies, a spirit of enquiry and freedom, of clear cut and questioning thought, above all in a return to the observation of Nature. The cradle of the renewed learning in medicine, as in other branches of knowledge, was in Italy. In Italy important schools of medicine had existed throughout the Middle Ages, anatomy was studied in the 11th century and public dissections took place as early as the 12th century; and there too, during the Renaissance, many modern medical ideas were anticipated by Fracastoro and others.1 In France also there were ancient medical schools that were justly famous. But though the ground was being prepared there was little change in the actual practice of medicine until the 17th century, for it was not until Vesalius revolutionized anatomy and Harvey had made possible modern physiology, that modern medicine could begin. Even then the new knowledge did not conquer suddenly or dramatically. Traditionalism and medievalism retained much of their influence in medicine during the 17th century and even in the early 18th century. In the 16th and 17th centuries thought had so broken its medieval fetters in the realms of literature that it is difficult to realize that in some branches of knowledge it was still in bondage. It was not until the middle of the 18th century that the broad conception of an immutable order in nature became part of the mental heritage of all educated persons, a conception that was of immeasurable importance in the study of medicine. Whoever glances through the index to the medical transactions of the Royal Society (founded 1660) cannot fail to be struck with the contrast between the titles of the papers of the first fifty years and those of the subsequent ones. The earlier papers are mainly concerned with marvels and curiosities while the subjects of the 18th century are similar to those which would be discussed in a modern medical society. Even in the year 1720 a woman in Godalming declared that she was giving birth to rabbits, and several doctors, including the King's anatomist, believed her story.2 Twenty years later no doctor could have been thus deceived. The scientific age had begun. The study of anatomy and physiology proceeded apace both in England and on the Continent, but the advance in knowledge of the human frame and its mechanism did not have any immediate outstanding result in diminishing human suffering except, and it is an important exception, in the practice of obstetrics. The art of the surgeon, which was ultimately to achieve such marvels, was held back until the discovery of anaesthetics and still more until Pasteur and Lister had laid bare the cause of, and cure for, septic wounds. The earliest triumphs of modern medicine were not so much due to advance in pure theory as to advance in practice in what may be called the departments of nursing and hygiene. But none the less the advance was scientific, since it was due to correct and detailed observation, to constant endeavour to classify correctly, to willingness to break away from tradition and to experiment, all of which is the mark of the scientific attitude. Diseases,

especially fevers, were diagnosed and classified and if the new methods of treatment often entailed nothing more than the application of fresh air and soap and water, this advocacy at the time, was bold in the extreme.

The 18th century doctor has some reason to complain of the historian, whose popular picture of him is of a pompous ass in a large wig, sniffing a knobbed stick, while he tries to look wise and to conceal his ignorance under a flow of meaningless technical terms. Even the medical historian dismisses 18th century medicine as making no significant contribution to medical science and as being sunk in formalism.3 It is, however, dangerous to learn history from the satirists, the greatest admirer of Mr. Bernard Shaw would not claim that a complete picture of modern medicine could be constructed by posterity from a study of his works. The satirist speaks pre-eminently for his own time, he stresses that which the ordinary man overlooks or tries to hide; he does not profess to give the whole picture, he can leave that to his readers. The very esteem in which the 18th century doctor was held by most of his contemporaries made his shortcomings a worthy object of satire. No doubt there were toadies and fools in the ranks of the physicians of the 18th century, there always have been such in all professions at all times. No doubt many of the trappings of the medical profession seemed foolish to a rational mind, but convention is strong and, moreover, modern psychology teaches us that such trivialities are not without their uses. By methods varying from the make-up of the primitive medicine man, to "a good bed-side manner", mankind in different ages, in different ways, has been re-assured in sickness by the presence of a person who, by some peculiarity of dress or speech, is associated with the power of healing. Again, the 18th century doctor no doubt often looked wise when he felt extremely ignorant and prescribed treatment which in the light of 20th century knowledge is absurd. But is the 20th century doctor never baffled under a calm and hopeful exterior? Will all his treatment be endorsed by future ages? No doubt the rational and superior person would say that the doctor ought, when medical knowledge fails, to address his patient somewhat in this fashion, "My dear

sir, I perhaps can give a name to your complaint but I cannot do more. I can do nothing whatever to help you, you will probably die, but Nature may effect a cure, for which, of course, I could claim no credit." The practical doctor of all ages, who has always practised much that modern psychology teaches, would know that if the patient believed such a speech it would be tantamount to murder, while if he did not he would call in another practitioner with less honesty and more wisdom. The doctor must at all costs give the ordinary patient the first requisites of recovery, hope and faith. In the 18th century, when in doubt, he prescribed to this end a nauseous mixture and a bleeding, in the 20th he gives a vaccine injection, and Nature in both cases might effect a cure or the treatment might happen, by a lucky accident, to be right. Of course the list of diseases the correct treatment of which was undiscovered was very much longer in the 18th century than it is at present, and the field for "eye wash" and quackery was therefore much larger. It must be confessed that the 18th century doctor was unduly fond of both "purging" and bleeding, but it has to be remembered that he had to deal largely with patients who had eaten or drunk too much or both.4 To imagine, however, that these were the only treatments given by the 18th century doctor or that he was complacent in his ignorance, is only possible to those who are unacquainted with medical writings of the period. It is, of course, almost impossible to evaluate a whole profession over the course of a century, and in the 18th century the medical profession was not one, but three. The unfortunate rivalry and the difference in social status between the physician, the surgeon and the apothecary, due to historical causes, undoubtedly held back the advance of medicine. In England the unsatisfactory nature of the training received by many doctors and the corruption and inefficiency of some of the examining bodies also made the difference between the qualifications of different practitioners very great. No wonder the modern student, viewing the corruption and inefficiency of professional organization, remembering the satirists' pictures of the hypocritical fashionable physician, of the illiterate brutal surgeon, of the subservient apothecary with his rule of thumb knowledge;

remembering also the antiquated and inelastic theoretical framework of knowledge upon which all of them worked, has dismissed 18th century medicine as negligible. But "by their fruits shall ye know them" and the 18th century has no cause to be ashamed of these. It is true the 18th century did not produce a Vesalius, a Harvey or a Pasteur; no genius made the dry bones of its system live, no revelation gave a new and inspiring outlook upon the problems to be solved. Its achievements were not in the realm of theory, but in practice; but here they are unquestionably greater than those of any preceding century. An age which made a real beginning in preventive medicine, which banished plague, which wiped out scurvy, which taught the correct method of avoiding malaria, typhus and smallpox and which succeeded in checking these scourges to a considerable degree, an age which revolutionized midwifery and infant nurture, such an age has no reason to hold its head.

How came this fruit from formalism, corruption and inefficiency? The answer lies mainly in the individualism of the 18th century. These achievements were made not because of the conditions, but in spite of them. The 19th century troubled greatly about the machinery of government, it spent a great deal of time in breaking down obstructions and building theoretically correct frameworks; the 18th century walked round the obstructions and ignored theories when convenient. Much depended on the individual, the ambitious and the conscientious medical student worked and studied, eager for knowledge, without the compulsion of exacting examinations. This spirit was carried into life. The eager student could also find good teachers if he sought them, men as keen to teach as he to learn, and however formalistic the framework of medicine, at least the importance of clinical observations would be impressed upon him. The results show that the formalism left the best minds extraordinarily free and plastic on the practical side.

The method of clinical instruction in hospitals originated in Italy and was introduced at Leyden University by Franciscus de le Boë called Sylvius (1641–72) and was there developed by Herman Boerhaave (1668–1738) with momentous results. The little hospital at Leyden which served the medical school had

only twelve beds, but it became the centre of medical instruction in Europe. Herman Boerhaave was perhaps one of the greatest medical teachers who has ever lived. Doctors and medical students from every country in Europe attended his lectures and it is not too much to say that every doctor of note in the next generation had come, directly or indirectly, under his influence. His fame was truly European, for it is said that a letter sent to him by a Chinese mandarin addressed "To the learned doctor Boerhaave, Europe", reached him safely. Boerhaave's name is associated with no great discovery or new line of thought, his published work excites surprise in modern commentators, who seek there in vain for the cause of his contemporary fame. His gift was no doubt that of personality rather than of outstanding intellect.⁵ His example should be a constant reminder to all teachers that the primary function of their art is not to impart facts, but to exercise their pupils in the difficult feat of ordered and logical thought and to inculcate a habit of mind at once receptive and discriminating. That attitude of mind which Boerhaave inculcated, which sought truth everywhere, in the writings of the ancients, in science, in history, in the experience of untaught sailors and the idle talk of ignorant dairymaids, but above all at the bedside of the patient, that attitude bore fruit ten thousand fold in the work of his pupils and his pupils' pupils. Boerhaave did not dethrone the knowledge of the ancients but he directed his pupils to regard it critically and to combine it with the new knowledge of anatomy, physiology and other branches of science which was in his time growing apace. The clinical method of instruction which he constructed and organized was continued in the noted School of Medicine of Vienna which was founded by his pupil Geerad van Swieten, and in Britain by another group of his students who founded the equally famous medical school of Edinburgh (about 1725). For the clinical method to be developed at its best the co-operation of two institutions was necessary, a University and a General Hospital, and the Edinburgh Infirmary was founded in 1736 as a necessary corollary to the foundation of the School of Medicine. In London, since there was no University there was no organized school of medicine, while Oxford and Cambridge failed to develop really satisfactory schools of medicine, partly owing to lack of opportunity for clinical instruction and partly to the general state of those Universities. There can be no doubt that the progress of medicine in England was much hampered by these facts. The ordinary English method of training a doctor was by apprenticeship, and though often a conscientious and able master could and did teach his pupil a good deal of practical importance, the method at its best was not conducive to a scientific habit of mind or to the dissemination of new ideas. At its worst the apprentice spent most of his time running errands or making pills, not only learning nothing but acquiring habits of mental idleness and moral laxity. After the expiration of his apprenticeship, the budding doctor usually went to London or some other large town and became a pupil at one of the numerous private venture schools of medicine. The tuition provided very often included visits to the hospitals under the guidance of the teacher and in the early 19th century "walking the hospitals" had become in London a normal part of the young doctor's training. The quality of the instruction received at the different private schools varied very much, there were some brilliant men whose teaching and personality left a lasting mark on their pupils and on the development of medicine. Hunter the anatomist and Smellie the obstetrician may be mentioned as examples. The best of them, however, were specialists and unless a young man went from school to school his training, one suspects, was apt to be one-sided. A clever, earnest student no doubt sought out good masters and profited by their tuition but many a lazy rascal, after idling through his apprenticeship, must have idled through another year or two in London under an indifferent master and then gone out into the world to spread darkness instead of light. It is significant that practically all the British doctors who advanced medicine in the second part of the 18th century and the early 19th century received the whole, or the greater part of their training at one of the organized schools of medicine attached to a University, either on the Continent or in Scotland. Edinburgh was the Alma Mater of a very large proportion of them and therefore, naturally, a very large proportion of them were Scotsmen though, in spite of the prejudice of the time, many Englishmen availed themselves of the advantages provided in the sister kingdom. But though undergraduate work was probably less satisfactory in London than in other centres, it was an excellent field for post-graduate work. It offered lucrative employment among the rich and opportunities in its numerous hospitals and dispensaries for observation of the diseases of the poor. The College of Physicians (founded 1520) and the Royal Society formed excellent media for the propagation of new ideas, and so in the 18th century as now, London was the Mecca of the successful doctor.

As in other spheres, personality counted for a great deal in the medical world of the 18th century. It will not be out of place, therefore, to give a few biographical details of the men to whom the advance in public hygiene was mainly due. References to their work will, moreover, recur frequently in these pages.

War was a great stimulant to advance in medical practice and the origins of modern public hygiene must be sought in the departments of naval and military hygiene. In this connection two names stand out pre-eminent, those of John Pringle and James Lind. Sir John Pringle 6 (1707-1782) was the youngest son of a baronet of Roxburghshire. After a year at Edinburgh University he went to Amsterdam to gain a knowledge of business, he being intended for a commercial career. He happened, however, to visit Leyden and to hear a lecture by the famous Boerhaave and thereupon determined to devote himself to medicine. He graduated at Leyden and afterwards studied in Paris. He then practised for a time in Edinburgh, but in 1742 was appointed physician to the Earl of Stair, then commanding the British forces on the Continent, and physician to the troops in Flanders. He served in this capacity throughout the German campaign and also throughout that against the Young Pretender. He then settled in London, was made a Licentiate of the Royal College of Physicians, became President of the Royal Society and enjoyed the patronage of the royal family. In 1752 he published his "Observations on Diseases of the Army" which attained a European reputation.

Pringle has been justly called the founder of modern military medicine. His rules for camp hygiene are in many cases still followed in army practice. He discovered that camp dysentery was spread by improper sanitary arrangements and pointed out the correct methods of prevention. He was the first to point to putrefaction as a cause of disease and he studied the subject of antiseptics. He also pointed out that camping near marsh land led to intermittent fever (i.e., malaria). He laid down sensible rules as to the clothing and diet of troops. Further he first identified hospital and gaol fever as being the same disease (typhus) 7 but he thought that the infection was spread by putrid air and therefore insisted on the importance of fresh air, rather than on personal cleanliness, as a preventive.

James Lind, M.D. (Edin.) (1716-1794), Fellow of the College of Surgeons, received his medical training in Edinburgh and became a navy surgeon. He made a long voyage in his professional capacity in 1746 and 80 men out of 350 were prostrated by scurvy. In 1753 he published his Treatise on Scurvy which laid down the correct rules for its prevention, that is the proper provision of fresh vegetables or lemon juice. This was not a new discovery, sailors had observed long before that scurvy could be prevented and cured by these means, but Lind laid it down with the full authority of a doctor and naval officer. Many commanders followed his advice and in 1795 the provision of lemon juice on all men of war was ordered by the Admiralty. But Lind's work in connection with scurvy is not his sole title to fame. His rules for ship hygiene were as sensible and enduring as those of Pringle for the army. In particular he laid down correct rules for the prevention of typhus.9 In 1757 he published "An Essay on the most effectual means of preserving the Health of Seamen in the Royal Navy." In 1758 he was appointed physician to the Naval Hospital at Haslar, where he worked out the method of preventing the spread of typhus in hospitals and so made possible the hospital treatment of this disease. Lind was also a pioneer in tropical

medicine. In 1768 he published an "Essay on Diseases of Europeans in Hot Climates". He laid down sensible rules for avoiding tropical diseases. He, like Pringle, pointed out the danger of the proximity of marshes. All his books went into several editions and were translated into French and German, attracting considerable notice on the Continent.

Pringle and Lind had many disciples, who repeated and amplified their teaching in a host of publications. Among them Sir Gilbert Blane has perhaps the best claim to be mentioned.

Sir Gilbert Blane (1749–1834) was born in Ayrshire. He took his arts and medical degrees at Edinburgh University. He obtained the appointment of private physician to Lord Rodney in the West Indian expedition of 1779, became a great friend of his commander and was made physician to the fleet. He applied the latest methods of dealing with disease and effected a great improvement in the health of the fleet, especially in regard to scurvy. He issued a printed tract to the officers of the fleet upon the care of the health of the seamen. It was through his influence that the Admiralty order as to the provision of lemon juice was issued in 1795.

In 1783, largely through the influence of Rodney, he was appointed physician to St. Thomas's Hospital, which position he resigned in 1795. His two immediate predecessors, also one of the surgeons and several attendants, had died during the year preceding his appointment of fever caught in the hospital. Blane reduced the number of patients and introduced the new methods of scrupulous cleanliness with complete success. He had now achieved a considerable eminence in the medical world. His "Observations on the Diseases of Seamen" went through several editions and became a medical classic. He received several Court appointments and was frequently consulted in matters of public health. The Turkey Company asked his advice as to the prevention of the import of plague and he was one of the medical committee which drew up the Quarantine Act of 1799. The return of the army from Egypt was carried out under regulations drawn up by him to prevent the import of plague. The return of the army from the illfated Walcheren expedition was also under his supervision and he, a navy officer, was called upon by the War Office to report upon the unsatisfactory conduct of the medical officers attached to the expedition. The Home Office also consulted him as to the prevention of typhus in prisons and convict ships. Nor was his advice sought only by his own countrymen; he was consulted by the Emperor of Russia, the King of Prussia and the President of the United States. Honours were not lacking, he was made a baronet in 1812, he was also a Fellow of the Royal Society and a member of the Institut de France. Blane made no striking discoveries but his books are well written and full of original observations. He was a man of great force of character with a capacity for getting things done. Perhaps this was partly due to his generosity of mind which was ever ready to appreciate and help the work of others. In particular he had a profound admiration for Lind and Jenner and the latter years of his life were largely taken up with the campaign in favour of vaccination. Blane was one of the many medical men who began to deal with the history of diseases and the statistics of public health as likely to throw light on the causes of disease.

Sir John Simon in his "English Sanitary Institutions" is the only authority, to the writer's knowledge, who places Pringle and Lind in their proper place as the precursors of the public health movement. He asserts, however, that within the reign of William IV an appreciation of the social value of the new medical knowledge had hardly begun, and that this knowledge had been applied only to naval and military undertakings where the "economy of human tools was a requisite for success . . . But in the common civil world the question had hardly yet arisen whether economies in the expenditure of human life could be made". He bases this statement upon the fact that in 1837 the Statute Book contained no general sanitary law except a "futile quarantine act" and the only other Government "activity" was an annual grant of £2,000 towards the expenses of the Vaccination Board. "Outside these two matters the Central Government had nothing to say in regard to Public Health and the Local Authorities had but the most indefinite

relation to it." Sir John Simon thus implies that the work of the medical pioneers had no results as regards the civil population until 1848. But it is never safe in English history to date a reform from the Statute Book. An Act of Parliament often only imposes upon a reluctant minority a course of action which the majority have already been persuaded to follow by voluntary effort.

THE 18TH CENTURY DOCTOR

In fact, attempts soon began to be made to apply the lessons of military and naval hygiene to civil life, an attempt that was obviously fraught with many difficulties. The labours, the achievements and the failures of the pioneers of civilian public hygiene will be dealt with in some detail in another chapter, but a few biographical particulars of the principal protagonists may not be out of place here. Though Haygarth of Chester, who had already conducted a vigorous anti-smallpox campaign, was the first to apply Lind's methods of fighting typhus to civilian practice, the man who has some claim to the title of the first civilian public health reformer is Thomas Percival (1740-1804) of Manchester.

Percival was born at Warrington and received his medical education at Edinburgh and Leyden.10. In 1767 he started practice in Manchester where he became the leading light in the Manchester Literary and Philosophical Society and thus became intimate with all the most enlightened and cultured residents of that town. Robert Owen gives a vivid little picture of a meeting of the Society to which he was introduced by Percival, then its President, and remarks incidentally that the medical profession stood high in Manchester " and its leading members were the aristocracy of the town ".11 Percival used his prestige and influence to forward matters of public health, he was one of the prime movers in the Manchester Board of Health, a voluntary organization of which the most outstanding work was the establishment of the famous Manchester House of Recovery or Fever Hospital. Percival advocated, in numerous publications, better conditions in factories and doubtless his personal acquaintance with many of the wealthy merchants who owned the early cotton mills led to some of his ideas being put into practice. He, however, was one of the earliest to

see that private effort had its serious limitations, he was in favour of public health laws enforced by paid officials and was the first advocate of Factory Legislation. His work upon voluntary lines was, however, by no means totally ineffectual and Blane 12 ascribes the relatively low death rate in Manchester to his efforts.13 This honour, however, should be shared by Percival's friend and colleague, John Ferriar (1761-1815).

Ferriar was born near Jedburgh, Roxburghshire, and studied medicine at Edinburgh where he graduated M.D. in 1781. He entered practice at Stockton-on-Tees in 1782 but about 1785 removed to Manchester. There he became an active member of the Literary and Philosophical Society and contributed many literary papers. In 1789 he was appointed a physician to Manchester Infirmary and was one of the founders of the Board of Health. Many of Ferriar's ideas about public health have a curiously modern ring. He was in favour of the inspection and licensing of common lodging houses and of their compulsory whitewashing. He also advocated the provision of public common lodging houses or failing this their provision by charity. He advocated the abolition of night work in factories and the provision of cricket pitches for workers. He was also in favour of the encouragement of clothing and sick benefit clubs. His ideas are set forth in his Medical Histories and Reflections, the three volumes of which were published between 1792-1798 and which consist mainly of detailed clinical observations of the cases at the Manchester Infirmary.14 Closely associated with Percival and Ferriar was James Currie of Liverpool, a man of outstanding force of character and moral courage.

James Currie, M.D. (1756-1805), was born in Dumfrieshire, when not quite 16 he emigrated to Virginia where he obtained commercial employment. His mercantile career was interrupted by severe attacks of fever and was finally terminated by the War of Independence. During the war he lived for a time with a medical relative at Richmond, Virginia, and then determined to take up medicine. For this purpose he returned to his native country, enduring on the journey numerous hardships due to the war, to poverty and to ill health. But in spite of all difficulties he achieved his object and studied medicine at

Edinburgh and Glasgow, graduating at the latter University in 1780. He at first contemplated returning to America but instead settled at Liverpool where he became a physician at the Dispensary and also obtained a lucrative private practice.

Currie was a man of warm sympathies and, when they were excited, was fearless of popular disapproval. In Liverpool, the stronghold of the slave trade, he had the supreme courage to be an ardent advocate of its abolition. Later on he espoused the almost equally unpopular cause of the French prisoners. He was anti-war and in 1793 published, under a pseudonym, several pamphlets, in the form of letters to Pitt, urging a peace policy. The secret of the authorship was divulged and Currie's practice is said to have suffered. In the latter part of his life he somewhat eschewed politics, like many others his sympathies were probably less with an imperial France than they had been with a revolutionary one. Further, his health was not good, he was suffering from the hardships of his youth and his energies were more and more occupied with questions of public health. His unremitting labours in regard to the provision of a fever hospital are described in some detail in a later chapter, he also took part in measures against smallpox. In 1802 by the request of the Corporation, he drew up a report upon the health of Liverpool and it was doubtless owing to his suggestions that the Corporation attempted to obtain a Building Act to regulate the dwellings of the poor; the Bill, however, failed to pass. As a doctor, Currie's chief interest was fevers. His Medical Reports, first published in 1797, which dealt with the prevention and treatment of fevers, went into four editions and have won praise from modern medical authorities. He was a great believer in the use of cold water in fever, both internally and externally, and was the first doctor who insisted upon the importance of thermal observations in fevers and other diseases. An improved clinical thermometer was constructed by Ramsden under Currie's direction and was known by his name. Politics, national and local, and medicine did not exhaust Currie's interests. He was one of the founders and the first president of the Athenaeum, the first literary and scientific institution in Liverpool. He was a commentator on Burns and wrote his life for the benefit

of the poet's widow. To Currie these literary labours probably represented relaxation and recreation, a side of life that brought him into amicable and restful relations with his fellow men. But curiously enough it is by these that he is best remembered in his adopted city, where his name is still held in honour.15

Most of the British medical pioneers of the 18th century were of good birth and education, and men of high moral character actuated by a noble zeal for advancing knowledge and benefiting humanity. Their work was not unrecognized or ignored by their contemporaries.16 Most of them enjoyed the encouragement of the learned societies of the time, and the patronage of the great in the form of lucrative private practice and Court or State appointments. Moreover, the more important of their writings went into many editions and were translated into foreign languages. That, and their work as teachers, meant that their ideas must have been rapidly and widely disseminated. In fact, like Adam Smith in another sphere, part of their greatness lay in the fact that their work was in harmony with the spirit of the age in which they lived; being marked by accurate observation, shrewd common sense and a power of lucid exposition rather than by the intuition of genius. A good deal of their theory was hopelessly wrong, but their practice was often brilliantly and triumphantly right.