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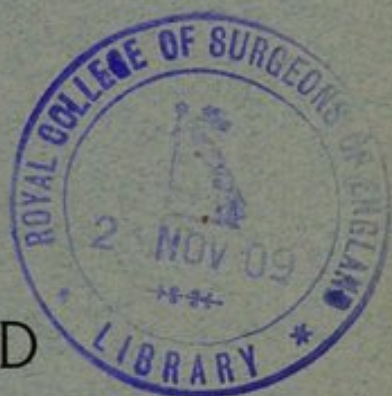
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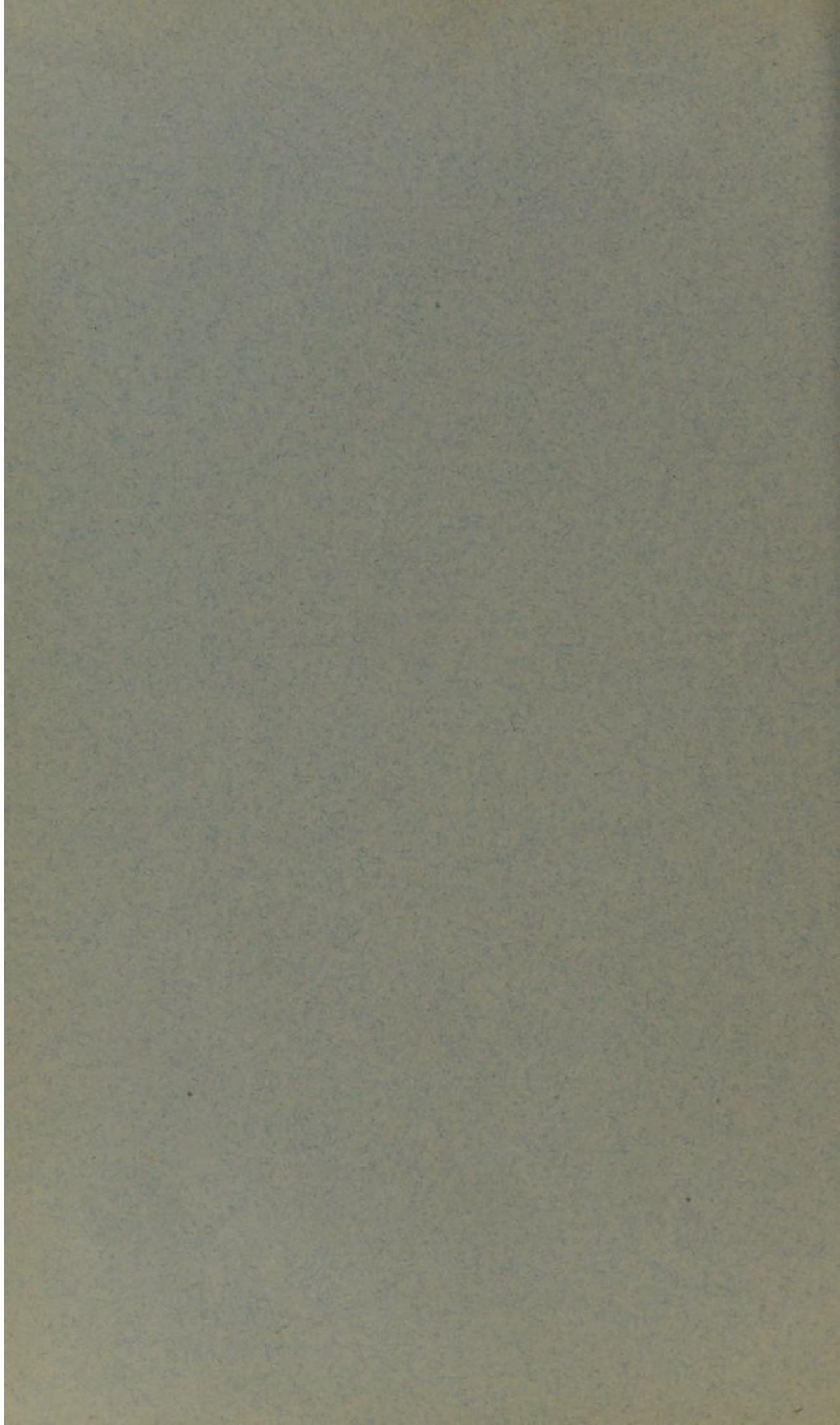
ST. GEORGE'S AND THE PROGRESS OF PHYSIC

(Introductory Address, October 1, 1909.)

BY

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St. George's and the Progress of Physic.

THE past year has seen one change only in our active staff, and that, fortunately, is pure gain, there being no retirement to temper our most hearty welcome to Mr. R. R. James, who has been elected to fill the revived post of Assistant Ophthalmic Surgeon. In the fulness of his 101 years, our Senior Consulting Physician, Sir Henry Pitman, passed away on November 6, 1908. He retired from this Hospital as far back as 1866, when he was elected the first Consulting Physician to the Hospital, and from the Registrarship of the Royal College of Physicians in 1889. The results of his work at the Royal College of Physicians and on behalf of medical education, especially the initiation of the Conjoint Board Examination, will long remain as a memorial to his wisdom and power of organization. Dr. Arthur Gamgee, F.R.S., who died from pneumonia, was Assistant Physician from 1887 to 1889, after making a world-wide reputation as a Physiologist. Unfortunately, ill-health necessitated his retirement and deprived us of the lustre the School and Hospital would have received from such a distinguished man of science. By the death of Laurence Read, St. George's Medical School has lost one of its oldest students and most loyal friends. He had practised for more than fifty years in Gloucester Road, and was a model of a general practitioner.

The objects of the introductory address may be numerous, but the most important motif should be one of welcome to the future, present, and past students. The future students, or those who are here for the first time, may be congratulated on joining a School with famous traditions. It is well on such an occasion as this to recall the achievements of our predecessors so as to keep their memory green, and thereby to stimulate esprit de corps and proper pride in our School. In attempting to record the influence of St. George's men on the advance of our professional knowledge I shall confine myself to medicine as apart from

surgery, and as "medicine" on these occasions is commonly used for the whole healing art I must employ the old-fashioned and perhaps pedantic word "physic," to indicate the scope of my remarks.

One of the most distinguished of our physicians was Matthew Baillie, who held office from 1787 to 1800. Trained under the eyes of his uncle, John Hunter, it is not surprising that he was early distinguished by publishing, in 1793, the first book in the English language devoted solely to morbid anatomy. "The Morbid Anatomy of some of the most Important Parts of the Human Body" went through five English editions up to 1818, and was translated into French, German, and Italian. It differed from the monumental work of Bonetus, "*Sepulcretum seu Anatomia practica*" (1700), and from Morgagni's famous "*De Sedibus et Causis Morborum*" (1761), in being restricted to morbid anatomy, and not dealing with the records of clinical cases, or with the relations of morbid lesions and symptoms. It is of small size compared with modern works on the same subject, and consists almost entirely of personal observations. Baillie first recognized cirrhosis of the liver, though not under that name, which was invented by Laennec in 1819, as a disease distinct from "scirrhus" tumours; he spoke of it as "common tubercle" of the liver. He also first pointed out that "polypi of the heart" were really blood-clots, and drew a distinction between cysts and hydatids of the kidney. This work was subsequently supplemented by "An Atlas of Modern Anatomy" (1799-1802), illustrated from his private collection of morbid specimens which he presented to the Royal College of Physicians in 1819, four years before his death. His influence on the study of morbid anatomy was most fittingly recognized by the Pathological Society of London (1846-1907), a medallion of his face being embossed on the cover of the Society's Transactions surrounded by the motto "*Nec silet mors.*" The lamp that he lighted was kept burning at his own hospital by his successors, Brodie, Hope, who published a beautifully illustrated work on "Morbid Anatomy" (1834); by Cæsar Hawkins, Sir Prescott Hewett, G. D. Pollock, Dr. Dickinson, and Dr. J. F. Payne, who may be specially mentioned as Presidents of the Pathological Society; and by Dr. John Ogle and Mr. Holmes, who were indefatigable contributors to the storehouse of observations contained in its transactions.

Baillie's best work was done, as is so commonly the case, before he was 40, for when just about this age the demands of private practice, which brought him in £10,000 a year, necessitated his retirement from the Hospital, and eventually wore him out at 62, a premature age for his long-lived family. There is a monument to his memory in Westminster Abbey. From his obituary notice delivered before the Royal College of Physicians by Sir Henry Hallford, it appears that "before his (Baillie's) time, it was not usual for a physician to do much more than prescribe remedies for the malady, and to encourage the patient by such arguments as might present themselves to humane and

cultivated minds."¹ We may therefore conclude that physical as apart from visual examination of the patient was neglected, and it is interesting to quote again from Sir Henry Hallford: "He appeared to lay a great stress upon the information which he might derive from the external examination of his patient, and to be much influenced in the formation of his opinion of the nature of the complaint by this practice. He had originally adopted this habit from the peculiar turn of his early studies, and assuredly such a method not indiscriminately but judiciously employed, as he employed it, is a valuable auxiliary to the other ordinary means used by a physician of obtaining the knowledge of a disease submitted to him. But it is equally true that, notwithstanding its air of mechanical precision, such examination is not to be depended upon beyond a certain point." . . . "One of the inevitable consequences of such a system is frequent disappointment in foretelling the issue of the malady, that most important of all points to the reputation of a physician; and though such a mode of investigation might prove eminently successful in the skilful hands of Dr. Baillie, it must be allowed to be an example of dangerous tendency to those who have not had his means of acquiring knowledge, nor enjoyed the advantages of his great experience, nor have learned, by the previous steps of education and good discipline, to reason and judge correctly."

Baillie thus appears to have done a great service in directing the minds of the physicians of the day to the routine practice of physical examination of the patient. His name is perhaps best known, as is not uncommonly the case with great men, by a comparatively small achievement, in his case a pill. "Baillie's pill" (*Pilula digitalis co.*), containing digitalis leaves, blue pill and squill, is much the same as the diuretic pill at Guy's, which Addison called *the* pill and is sometimes named after him.

In 1808 Baillie was the second President of the Medical and Chirurgical Society which in 1834 became the Royal Medical and Chirurgical Society, and in 1907 was merged into the Royal Society of Medicine. Of the fifty-one presidents of this the premier Medical Society in London, St. George's has had its full share, viz., nine—four physicians: Baillie (1808-9), Chambers (1845-6), Barclay (1881), and Dickinson (1896-7), and five surgeons: Sir B. Brodie (1839-40), Cæsar Hawkins (1855-6), Pollock (1886-7), Holmes (1890-1), and Haward (1906-7). In the centenary volume, 1905, of the Royal Medical and Chirurgical Society, Dr. Norman Moore says that Baillie's was undoubtedly the greatest name in the list of physicians, which includes Bright and Addison, who have filled the presidential chair. This is high praise, but it is fully justified by his influence on morbid anatomy and on the use of physical examination. Lest it might be thought that he was not appreciated during his life-time it should be added that he refused a baronetcy.

¹ "The Gold-Headed Cane," Second Edition, 1828. London. P. 259.

Thomas Young, the most comprehensive genius and the greatest man of science who ever became a member of our profession, was physician to this Hospital from 1811 to 1829. He was an example of the old adage that "a prophet is not without honour save in his own country," for it was not until it had been recognized and approved abroad that his great conception of the undulatory theory of light attracted attention in England. It is to be regretted that although "alike eminent in almost every department of human learning" he seems never to have applied his genius to the advancement of medicine in the same manner as he did with such marked success in the more exact sciences. It must not, however, be assumed that Dr. Young neglected medical science, for he had a most extensive knowledge of its literature, as is shown by his encyclopædic "Introduction to Medical Literature." He also formulated a "System of Nosology" (1813), or a classification of diseases arranged in classes, orders, genera, and species on the lines initiated by Linnæus in the natural sciences. Nosological classification was then a burning problem in medical science and there were numerous rival systems, of which, to mention only those of British origin, Cullen's, Erasmus Darwin's, and MacBride's preceded Young's, whilst Mason Good's came out later. Dr. Young's Nosology is very different in arrangement from those of his predecessors, among whom he specially criticizes Cullen, is full of bibliographical research, and contains numerous strange names of Greek origin for familiar diseases. In 1815 he brought out "A Practical and Historical Treatise on Consumptive Diseases" deduced from original observations, and collected from authors of all ages. In the preface he remarks that a work on these lines must be more conducive to the advancement of science than the compilation of a more general work, and that he considers the publication of this volume a sufficient apology and substitute for the more extensive System of practical physic on which he was once engaged. Some years ago I saw in a medical friend's house a large box of blocks prepared for the illustration of a work planned but never executed by an older member of the profession who had handed them over to his younger colleague; since then I have often wondered as to the number of medical works which have not seen the light, and which like this more extensive System of Young's have been strangled before their birth. Although the consumptive diseases dealt with are not confined to tuberculosis, the work is mainly devoted to this subject. He rather combats the infectivity of tuberculosis and on statistical grounds concludes that the occurrence of conjugal tuberculosis, or infection from husband to wife, or *vice versa*, is not proved. It may be noted that Professor Karl Pearson and Miss Elderton have recently stated, after an exhaustive consideration of statistics, that direct infection only accounts for about one-third of the cases of marital tuberculosis. The practical part is interesting from the scattered references to the somewhat heroic methods of treatment employed in Dr. Young's own case, for, like many other eminent men of our profession, such as

Sir James Paget, Sir Andrew Clark, Sir Michael Foster, he appears to have had pulmonary tuberculosis, but to have recovered. His death in 1829, which was preceded by hæmoptysis and weakness, was ascribed to "ossification of the aorta." For pulmonary tuberculosis in earlier life, he had tartar emetic in small doses for hectic fever, had a blister which was kept open for a year, was bled twice, and was in the habit of riding daily. More than three-quarters of the volume is occupied by the medical history of consumptive diseases and is a mine of information. Incidentally he gives the treatment employed by Dr. Donald Monro, Physician to the Hospital (1758-1786): "He always found bleeding necessary where cough was attended by pain, and removal to a more airy ward was thought useful to many of his patients; an out-patient at St. George's Hospital was cured by milk diet, riding, and saline draughts." One criticism is perhaps worth quoting: "Mr. Bonnafox Demalet ("Sur la Nature et le Traitement de la Phthisie Pulmonaire," Paris, 1804) is not distinguished either by learning or by diffidence; he has, however, often endeavoured to be original. He asserts that the arterial blood returning from the lungs is 3° or 4° warmer than the venous which enters it."

Dr. Young's experiences as a physician are interesting in connection with the question how far the possession of really great abilities or genius bears on the acquisition of worldly success in the practice of our profession. He is said not to have been popular as a physician and to have been but little followed in the wards by students, who regarded him as "a great philosopher, but as a bad physician." His hospital practice appears to have had only the negative virtue of being less "meddlesome" than that of his colleagues,¹ and that as a result a greater proportion of his patients were discharged cured from the Hospital than of those under the more "vigorous" treatment of the other physicians. But, as Dr. Dickinson says when commenting on Young, the public judges a physician by his methods, not by his results. That he did not acquire a lucrative *clientèle* appears to be shown by his accepting the Secretaryship of the Board of Longitude with a salary of £400 a year, and by his being Foreign Secretary of the Royal Society for the last twenty-seven years of his life. In addition to a really great mind he was entirely free from envy or jealousy, as shown by his remarks on the question of the relation between ability and success. "However inadequate the possession of superior talents alone may be to insure the confidence of the public, it must be a mistaken opinion, although it has been asserted by persons of no ordinary observation, that a man of great abilities is morally incapable of being a good physician."²

The advance of medicine due to the exertions of St. George's men naturally does not depend entirely on those who have held the office of

¹ For an analysis of Dr. Young's methods of treatment see Dr. W. H. Dickinson's article in *ST. GEORGE'S HOSPITAL GAZETTE*, 1893 i., 77.

² "Preliminary Essay on the Study of Physic," 1813, p. 2.

physician. Distinct though the fields of physician and surgeon be, surgeons have often invaded and sometimes enriched the province of their colleagues. The most distinguished surgeons are not uncommonly from the breadth of their mental horizon "rather medical in tone," and it has been modestly said that a "surgeon is, or should be, a physician and something more" (Pollock¹). The services rendered to physiology and so to pure medicine by John Hunter are too wide-reaching to be detailed. Like Hunter, Brodie's physiological and pathological work entitled him to be included among "The Masters of Medicine" series brought out by Fisher Unwin, his life being written by the late Mr. Timothy Holmes. Brodie was the first surgeon, the only other being Lord Lister, to be President of the Royal Society. In this connection it is interesting to note that the only physicians who have occupied the Presidential Chair of the Royal Society are Sir Hans Sloane (1727-40), Sir John Pringle (1772-8), and Wollaston (1820), who, however, threw up this profession in disgust when he was rejected in 1800 as a candidate for the office of Physician to St. George's Hospital.

Of E. Jenner's discovery of vaccination and its influence on medicine it is impossible even now to realize the full significance. For over a century Jenner's name has been immortal for the prevention of small-pox, and what the future will eventually bring forth in the application by Sir A. E. Wright of vaccine treatment to the prevention and cure of disease it is impossible to estimate.

In addition to epoch-making advances, which are so familiar that further insistence would be wearisome, there are many points—now so amalgamated into textbook knowledge that their sponsors are almost forgotten—concerning which St. George's may justly feel some proprietary pride. The materials for forming an estimate of these advances are somewhat scattered, and it is not always easy to be quite certain as to the originality or influence of the work done; but some clue may be obtained by examining the specimens in our museum and tracing their history, by reference to our Hospital reports and Gazette, and by desultory reading. It is therefore inevitable that many observations of value must have escaped me, and I must beg indulgence for these shortcomings. At the risk of hiding the substance of the text in the references, I have in most cases given the latter on the chance of their being of some use. To the work of some very distinguished men, such as Lockhart Clarke and Gamgee, whose connection with St. George's was somewhat slight, I do not propose to refer. It has been truly said that there is no profession in which a man may be so distinguished in his lifetime and leave behind so slight a record of his life as in Medicine. This applies to some of our past physicians, such as Teissier, Broxolme, Sir R. Jebb, Gisborne, R. Warren, and Chambers, who held Court

¹ G. D. Pollock, "Introductory Address," 1895.

appointments, but never had the time or inclination to record their experience and observations.¹

The *cardio-vascular system* has been a favourite study with our professional ancestors. Hope (1832) and Fuller (1863) wrote systematic works on the subject, and some of the early experimental work on the causation of the sounds of the heart was done in the dissecting-room of the Kinnerton Street School of Medicine, attached to St. George's Hospital, by Hope and his rival, C. J. B. Williams, in 1834 and 1835. These two were candidates for the post of physician in 1839, Hope having in 1835 been elected to the post of assistant physician, then officially established for the first time; for previously assistant physicians had been temporarily appointed to take the work of the physicians when they were away on active service with the Navy or Army. The unsuccessful candidate—Williams—was almost at once appointed Professor of Medicine at University College, and became well known 'as an authority on diseases of the lungs and as the first president of the Pathological Society. His son, Dr. Theodore Williams, was educated at our school, and has shown his appreciation of scientific research by generous benefactions to Oxford and to the Royal College of Physicians. Hope described the early diastolic murmur of mitral stenosis, now regarded as caused by pulmonary regurgitation due to backward pressure and dilatation of the pulmonary artery—the pulmonary diastolic murmur of high blood-pressure—but although he looked for a murmur, produced by the auricular systole, before the contraction of the ventricle, he never recognized the presystolic murmur which was first described in 1843 by Fauvel. The presystolic murmur was criticized by Dr. A. W. Barclay (1872) and by Dr. W. H. Dickinson (1887), both of whom, while fully acknowledging its distinctive characters and diagnostic significance, contended that it was systolic and not presystolic. One of the first descriptions of a ball-clot in the left auricle in mitral stenosis was given by Dr. John Ogle in 1863. Pulmonary apoplexies, first really described by Laennec in 1819, were shown to be specially associated with mitral disease by Dr. J. A. Wilson in 1830. This observation, now universally accepted, was very briefly reported, and the original manuscript was only published in 1896 in our Gazette by his grandson, Dr. Lee Dickinson, the third distinguished member of his family to adorn our staff. Hampered by illness and prematurely cut off, Lee Dickinson made contributions to medicine which are of permanent value for their originality, terseness, and solidity. In establishing his grandfather's claim to the association of pulmonary apoplexies with mitral disease, he showed by an analysis of seventy cases of pulmonary apoplexy that this condition is more often associated with mitral regurgitation than, as is usually taught, with mitral stenosis. Some of his other contributions

¹ For the lives of the early physicians to the Hospital reference may be made to papers by Dr. G. C. Peachey, the historian of St. George's, in the *Hospital Gazette* (1902, x. 94; 1906, xiv. 25).

were on the vascular system, to which he may be said to have been drawn by his names, for, in addition to the work by his relations, his godfather, after whom he was called, Dr. Robert Lee—our first obstetric physician—was well known for his minute dissections of the ganglia and nerves of the heart (*Phil. Trans.*, 1849, 1851). The diagnosis during life of mitral regurgitation by physical signs was really first made possible by Hope's work on the heart. Both Dr. Cheadle and the late Dr. O. Sturges, a former medical registrar who was subsequently senior physician to the Westminster Hospital, did much in their clinical studies on the effects of rheumatism and chorea to broaden our views of the cardiac lesions resulting from these diseases. Sturges revived the word *carditis* to describe the widespread damage to the endocardium, myocardium, and pericardium which renders the cardiac manifestations of rheumatism so dangerous in children. The effect of strain in producing cardiac disease and aneurysm is now so universally recognized that we are beginning to forget the influence of Sir Clifford Allbutt's observations in establishing this.¹ In 1897 Dr. W. H. Dickinson² made the clinical observation that in some cases of pure aortic stenosis the only murmur may be a musical one at the apex due to mitral regurgitation in small volume at high pressure, the high pressure being provided by hypertrophy of the ventricle and aortic obstruction.

A discovery of Jenner's, sufficient to make the reputation of any ordinary man, would have been entirely cast into the shade by his other achievements had he published it. It was that angina pectoris depends on disease of the coronary arteries. It is usually stated that John Hunter suffered from angina pectoris for the extremely long period of twenty years, from 1773 to his death from that disease in this hospital in 1793.³ In 1776 Jenner saw Hunter, diagnosed his disease, and wrote to the elder Heberden, who was one of Hunter's medical advisers and had recently given a clinical account of the malady, mentioning two cases in which necropsies showed coronary disease. Jenner, however, refrained from making his discovery known out of consideration for the feelings of his friend Hunter. The view now generally held as to the causation of angina pectoris—namely, coronary obstruction—has been contested since 1894 by Sir Clifford Allbutt, who maintains that it is a painful affection of the first part of the aorta, coronary obstruction being a complication and not a necessary factor. Angina pectoris, he argues, is not itself the cause of death, which is due to some additional lesion, such as myocardial or valvular disease. Light was thrown on

¹ T. C. Allbutt, *St. George's Hosp. Rep.*, 1871, v., 23.

² W. H. Dickinson, *Med.-Chir. Trans.*, 1897, lxx., 409.

³ Dr. James Mackenzie has suggested to me that some at least of the earlier attacks were not anginal but due to gall-stones, for Hunter's attack in 1773 was characterized by severe pain in the pyloric region which obliged him to change his position constantly; and at the necropsy the gall-bladder contained five or six calculi (*vide* "Life of John Hunter," by Everard Home, appended to Hunter's "Treatise on the Blood, Inflammation, and Gun-shot Wounds," 1794, pp. xlv. and lxii.).

the pathology of angina pectoris by Sir Benjamin Brodie's observations on intermittent claudication or limp, resulting in muscles supplied by arteries narrowed by disease, the attenuated blood-supply being sufficient for the muscles when at rest, but so inadequate for active contraction that cramp soon supervened. In this respect, however, Sir Benjamin Brodie had been anticipated by Allen Burns in 1809. Dr. W. H. Dickinson,¹ in reporting cases of angina pectoris, argued that fatal cases, such as the classical instance of Dr. Thomas Arnold, of Rugby, in which it is stated that there was one coronary artery only, are not congenital abnormalities, but examples of complete obliteration of the orifice of the missing coronary by atheroma.

When a discovery is made in medicine it often happens that the same idea is maturing in several minds, and it is interesting to note that in 1897 in reviewing "cases of unusual and persistent slow pulse," which he had carefully examined years before and found to show fibrosis in the interventricular septum, Dr. John Ogle² came very near to the present explanation of "heart-block," due to a lesion of His's bundle as the essential factor in his cases, which would now be known as examples of Stokes-Adams disease.

To the work of active members of the staff it would be unbecoming to refer, and as he is so often with us I have hesitated about recalling Dr. Ewart's work on the vascular and other systems, but in justice I cannot entirely refrain from mentioning his valuable observations on the signs, early and late, of pericarditis with effusion.³ In 1866 Sir Clifford Allbutt was instrumental in introducing into this country the operative treatment of pericardial effusion, a subject which is also connected with the names of J. Ogle, Allingham, and some members of our active staff.

Hope, whose work on the heart contained much that was both new and true, was an ardent disciple of Laennec, and with others was instrumental in introducing auscultation into ordinary practice in London. Laennec had considered it impossible to diagnose thoracic aneurysm by physical signs, but in this respect Hope did better than his master, and in his graduation thesis (1828) at Edinburgh showed that this could be done. Aneurysm has long been common ground to physicians and surgeons, and the latter have often contributed to our methods of treatment—for example, Mr. Tufnell, of Dublin. Everyone interested in the diagnosis should read Mr. Holmes's article on "Pulsating Tumours which are not Aneurismal, and on Aneurisms which are not Pulsating Tumours."⁴ Both he and Dr. John Ogle⁵

¹ W. H. Dickinson, *Trans. Path. Soc.*, London, 1865, xvii., 53.

² J. Ogle, *Lancet*, London, 1897, i., 296. ³ W. Ewart, *Brit. Med. Journ.*, 1896, i., 717.

⁴ T. Holmes, *St. George's Hosp. Rep.*, 1875, vii., 173.

⁵ J. Ogle, "On the Formation of Aneurism in Connection with Embolism, or with Thrombosis of an Artery," *Med. Times and Gazette*, London, 1866, i., 196. "On the Influence of the Cervical Portions of the Sympathetic Nerve and Spinal Cord upon the Eye and its Appendages," *Med.-Chir. Trans.*, 1858, xli., 397.

were among the first to describe aneurysm due to embolism, and J. Ogle paid special attention to the changes in the pupil seen in thoracic aneurysm. An entirely original observation was made by Dr. Lee Dickinson¹ in the association of aneurysm with hypoplasia of the arteries. He recorded cases of ruptured aneurysm in patients whose arteries were remarkably free from atheroma—the almost invariable antecedent of aneurysm—but were abnormally thin. He also wrote on the occurrence of thrombosis in pneumonia, and of the cerebral sinuses in chlorosis. Phlebitis was investigated by Mr. Henry Lee, thrombosis and phlebitis by Mr. Warrington Haward, and varicose veins by Sir W. Bennett.

The histology of syphilitic disease of the cerebral arteries was first described by Sir Clifford Allbutt, then of Leeds, in our Hospital Reports (1868, iii., 55) more than forty years ago. The estimation of arterial blood-pressure by instrumental means, which has now come to be an ordinary method of clinical investigation, owes its position in no small degree to the advocacy of the present Regius Professor of Physic at Cambridge.

Respiratory System.—When the Royal Humane Society was first started, John Hunter was appealed to for advice, and, in 1776, on the basis of some old but unpublished experiments, he suggested artificial respiration by means of bellows and the employment of oxygen, then recently discovered by Priestley. In 1821, however, as the result of Sir Benjamin Brodie's influence, the Society abandoned the use of the bellows. St. George's had a good deal to do with methods of artificial respiration; Dr. Bowles assisted Dr. Marshall Hall in the elaboration of the method which bears his name, and wrote on this subject, and on stertor and its mechanism (1860), pointing out that the distressing stertor and cyanosis of a patient with cerebral hæmorrhage can be rapidly removed by turning him from the dorsal to the lateral position. Dr. Champneys,² when Assistant Obstetric Physician, conducted an extensive research into artificial respiration in new-born infants, and drew special attention to the occurrence of pneumothorax and mediastinal emphysema after tracheotomy. The anatomy of the bronchi, and the localization of cavities in chronic pulmonary tuberculosis, were elucidated by Dr. Ewart in 1882. Among the numerous workers on pulmonary tuberculosis, none in London has been more consistent than Dr. Theodore Williams, whose name is specially connected with climatic and sanatorium treatment, and also with aerotherapeutics. The first specimen of plastic bronchitis shown at the Pathological Society was that described by H. W. Fuller in 1854.

Digestive System.—The epoch-making discovery that cholera is conveyed by water was made in 1854 by Dr. John Snow, who gave his

¹ W. Lee Dickinson, *Trans. Path. Soc.*, London, 1894, xlv., 52.

² Champneys, *Med.-Chir. Trans.*, 1881, lxiv., 41, 87; 1882, lxv., 75.

services to the hospital as anæsthetist.* Almost the first case of a pulsion diverticulum at the junction of the pharynx and œsophagus ever published was reported by Dr. John Ogle in the *Pathological Transactions* for 1866. For many years—in fact until the early nineties—this condition remained a pathological curiosity, but, like many other quondam rarities, it has become a matter of common knowledge—probably a hundred cases are on record—and is now recognized as being readily curable by surgical measures. Dr. J. Ogle also contributed valuable papers on diseases of the abdomen and liver, which are so full of careful observations that anyone who comes across some rare and possibly undescribed morbid condition would do well to consult them before publishing his discovery. Lee Dickinson,¹ both alone and with Mr. Warrington Haward and Dr. Penrose, made a careful investigation into the clinical aspects of gaseous subphrenic abscess. Disease of the vermiform appendix is so familiar now that it is rather surprising to find that as late as 1886, while arguing that so-called “typhlitis” and “perityphlitis” are both due to disease of the appendix, Fagge brings as proof of this a case recorded by Dr. Theodore Williams. Ulceration of the intestines in chronic renal disease was described by Dr. W. H. Dickinson² as albuminuric ulceration, apparently quite independently of Traube's earlier account of the same condition as uræmic ulceration. Dr. Theodore Williams³ first described pigmentation of the colon from the long-continued ingestion of mercury.

Diseases of the Kidneys.—Among the older physicians to the hospital Donald Monro (1758-1786) wrote on “Dropsy, and its Various Species.” Dr. Bence Jones was a recognized authority on chemistry in application to medicine, especially as regards diseases of the kidneys and disorders of digestion, and thus led the way to modern work on metabolism. He described one of the first urinary calculi composed of cystine; and his name is perpetuated in connection with Bence Jones' protein, or the albumose found in the urine of patients suffering from multiple myeloma of bones. In 1848 he described “A New Substance occurring in the Urine of a Patient with Mollities Ossium”; it seems certain, however, that the disease was not mollities ossium, but the condition of multiple myeloma, described by Kahler and sometimes called Kahler's disease. Of Dr. W. H. Dickinson's numerous contributions to medicine the most exhaustive is his great work on “Diseases of the Kidneys”; closely associated with this are his researches on the pathological and clinical aspects of œdema, on granular kidney and the accompanying cardio-vascular changes, on

* Snow was one of the original students of the Medical School of Newcastle-upon-Tyne. “He was a teetotaller when there were only few, and also a vegetarian” (“History of the Medical School at Newcastle-upon-Tyne,” by D. Embleton M.D., 1890, p. 10).

¹ W. Lee Dickinson, *Trans. Clin. Soc.*, London, 1893, xxvi., 73, 179.

² W. H. Dickinson, Croonian Lectures, Royal College of Physicians, 1877.

³ C. T. Williams, *Trans. Path. Soc.*, London, 1867, xviii., 111.

diabetes, and on lardaceous disease. The first full account of uræmic skin eruptions in this country was published by Dr. Le Cronier Lancaster* in 1892.

Nervous System.—Dr. Dickinson¹ pointed out that atrophic changes occur in the central nervous system after amputation of limbs, and together with Dr. John Ogle² argued against the once popular view that chorea was due to multiple cerebral emboli. Sir Prescott Hewett and Dr. J. Ogle described the "arachnoid cysts" with which they endowed our museum. Dr. W. Ogle, the translator of Aristotle "On the Parts of Animals," who resigned the post of assistant physician in 1872, to direct the vital statistics at Somerset House, his relative, Dr. John Ogle, and Dr. Wadham³ discussed the explanation of aphasia. In his first paper Dr. W. Ogle⁴ confirms Broca's then recent localization of the speech-centre by a number of cases; and in his second contribution he deals with aphasia due to snake-bite. Dr. John Ogle's clinical lecture on aphasia contains interesting historical references to the cases of Dr. Samuel Johnson and Dean Swift.⁵ He also wrote on trophic changes and fracture of bones in nervous diseases.⁶ The first case published in this country of "locomotor ataxia with hydrarthrosis" was put on record in the fourth volume of our Hospital Reports by Sir Clifford Allbutt in 1869, one year after Charcot's description of the condition which is now usually called after him. He was also one of the pioneers in the introduction of the ophthalmoscope into general medicine as a means of diagnosis (1871), and wrote especially on the ophthalmoscopic appearances in the insane (1868).

The normal temperature of the body and the influence on it of physiological conditions, such as exercise, were investigated by Dr. William Ogle and by Sir Clifford Allbutt, and to the latter we are indebted for a most useful improvement in the form of the clinical thermometer, as is recorded in the following extract from the catalogue of the Museum of Scientific Apparatus, South Kensington, 1876: "Dr. Aitkin used thermometers 10 in. long, and the instrument was hardly met with beyond the wards of a few hospitals. In 1867 Dr. Clifford Allbutt requested Messrs. Harvey and Reynolds to make for him instruments with a chamber anterior to the bulb, reducing the length of the tube from 10 in. to 6 in., then to 4 in. and to 3 in." The temperature in certain nervous diseases, especially tetanus, was investigated by Dr. J. Ogle⁷ in 1872.

* Lancaster, *Trans. Clin. Soc.*, London, 1892, xxv., 49.

¹ W. H. Dickinson, *Journ. Anat. and Physiol.*, 1869, iii., 88, and (Chorea) *Med.-Chir. Trans.*, 1876, lix., 1.

² J. Ogle, *Brit. and Foreign Med.-Chir. Rev.*, 1868, xli., 208.

³ Wadham, *St. George's Hosp. Rep.*, 1869, iv., 245.

⁴ W. Ogle, *ibid.*, 1867, ii., 83, and 1868, iii., 167.

⁵ J. Ogle, *Brit. Med. Journ.*, 1874, ii., 163.

⁶ *Idem*, *St. George's Hosp. Rep.*, 1871-2, vi., 265.

⁷ *Idem*, *Trans. Clin. Soc.*, London, 1872, v., 71.

Ductless Glands, &c.—In 1846 H. W. Fuller demonstrated the blood-picture of spleno-medullary leukæmia which had been described only the year before by Hughes Bennett in Edinburgh, and by Virchow; and in 1880, Dr. Cavafy,¹ then lecturer on physiology, found that only a small percentage (12) of the leucocytes showed amœboid movement.

Since 1905 it has become clear that in cases of primary tumours arising in the cortex of the suprarenal bodies (hypernephromas) there may be precocious development, especially of the sexual organs and hair. But forty years before this, Dr. J. Ogle² recorded a well-marked example of this association in a child aged 3, the water-colour drawing of whose body and the tumour being in our Museum. One of the first cases illustrating the now accepted law that primary carcinoma of the thyroid is especially prone to produce secondary growths in bone, was published by Mr. Warrington Haward³ in 1882. Dr. H. Watney investigated the histology of the thymus gland.

Dr. Cheadle, who, like some other St. George's men, migrated to St. Mary's Hospital, was one of the first to recognize the condition of infantile scurvy. The condition of the viscera in rickets was elucidated by Dr. W. H. Dickinson; and Dr. D. Drewitt interested himself in the rare form of late rickets. Sir Clifford Allbutt provided Sir James Paget with one of the cases on which he based his well-known description of osteitis deformans, one of the conditions spoken of as Paget's disease.

Hypodermic Medication.—It is now over fifty years since the hypodermic injection of drugs was introduced by Dr. Alexander Wood, of Edinburgh. In 1853 he first practised hypodermic injection of morphine for the relief of neuralgia. Taking as his model the sting of the bee, he constructed a small glass syringe with a fine perforated needle-point attached. An account of this great advance in treatment was published in 1855, as a "New Method of Treating Neuralgia by Subcutaneous Injection." At first, and apparently as a matter of course, the injections were given in the painful part only. It was, indeed, in the wards of St. George's Hospital that neuralgia was first treated by subcutaneous injection at a distance from the seat of the pain, and that the hypodermic method was first employed for other than neuralgic affections. This advance was initiated by Mr. Charles Hunter, at that time house-surgeon to the hospital. Although at the present day it may be difficult to realize the necessity, there was considerable and prolonged discussion whether the hypodermic injection should be given at the site of the pain or at a distance; and as late as 1866 Mr. Charles Hunter contributed to the first volume of our Hospital Reports a paper of twelve pages, entitled "Remarks on

¹ Cavafy, *Med.-Chir. Trans.*, London, 1881, lxiv., 31.

² J. Ogle, *Trans. Path. Soc.*, London, 1865, xvi., 250.

³ Warrington Haward, *ibid.*, 1882, xxxiii., 291.

the *Modus Operandi of Hypodermic Injections*," in which he argues in set fashion that, "notwithstanding the strong current of opinion still in favour of localization . . . distant injections have, with some experimenters, as a rule, been always equally effectual with local injections." Very shortly after this—namely, in 1869—Sir Clifford Allbutt¹ published the remarkably good results of what was then quite an unknown form of treatment, namely, the injection of morphine in bad cases of heart disease. Snow, who introduced the scientific use of ether-anæsthesia into England, worked at St. George's (1847-1858) as anæsthetist.

Treatment of Rheumatic Fever.—It is fairly safe to say that next to morphine and anæsthetics the drugs most effective in the relief of pain are salicylic compounds. Probably few of the present generation know that the physician who was largely instrumental in introducing this treatment of rheumatic fever into England, the late Dr. T. J. Maclagan, was an unsuccessful candidate for the post of assistant physician to this hospital on July 15, 1889. Maclagan² first published an account of the action of salicin in rheumatism in 1876. It is true that Stricker, of Vienna, had just begun to employ salicylic acid in the treatment of rheumatic fever and that Sir William Broadbent had obtained good results at St. Mary's Hospital on these lines before Maclagan, then of Dundee, publicly advocated salicin. But Maclagan, who began to use it in 1874, seems to have reached this therapeutic triumph in quite an original manner. Believing that rheumatism belonged to the same class of diseases as malaria and was "miasmatic" in origin, he conceived that "a remedy for it would most hopefully be looked for among those plants and trees whose favourite habitat presented conditions analogous to those under which the rheumatic miasm seemed most to prevail." He therefore turned to the willow, the bark of which was known to contain salicin. Salicin had indeed since 1830 been used as a substitute for quinine, first in France and soon afterwards in London by Elliotson,³ but when Maclagan wrote it had dropped out of the *Pharmacopœia*. It subsequently came to Maclagan's knowledge that the Hottentots employed a decoction of the shoots of willow for rheumatic fever.⁴ The influence of salicylates on rheumatism was early (1876) tested in the hospital by Drs. Cavafy and Whiphham, who thereby helped to confirm the utility of the treatment. Before the introduction of the treatment of rheumatic fever by salicylates, the course of the disease was very different from that now seen. In 1860, H. W. Fuller⁵ (physician to this hospital) wrote: "If the

¹ Clifford Allbutt, *Practitioner*, 1869, iii., 342.

² Maclagan, *Lancet*, London, 1876, i., 342.

³ Elliotson, *ibid.*, 1831, i., 554.

⁴ Maclagan, *ibid.*, 1876, i., 910.

⁵ Fuller, "On Rheumatism, Rheumatic Gout, and Sciatica," p. 75, 1860.

contradictory nature of the treatment recommended for the cure of acute rheumatism be taken as a test of its obstinacy and intractability, it certainly is the most tedious and untractable of diseases." Historical interest attaches to the thirteen methods of treatment tabulated by Fuller—namely, bleeding, purging, opium, vapour and hot-air baths, mercury, tartar emetic, cinchona, colchicum, guaiacum, nitrate of potash, blistering, lemon juice, alkalis and their salts.* Probably the most successful of these methods of treatment was the alkaline treatment as expanded by Fuller. He did not originate it, but he carried it much further and endeavoured, by giving far larger amounts than had been previously employed at short intervals, to restore the alkaline condition of the system as shown by the alkalinity of the urine. Besides shortening the course of the disease he put in a strong claim for the efficacy of the alkaline treatment in preventing rheumatic implication of the heart. He says: "Amongst the last 126 cases in which the heart remained free from inflammation at the time the patients were first brought under my care, not a single instance of pericarditis or endocarditis has occurred, the heart having been protected by the administration of the remedies in the manner already pointed out."¹ This is certainly a result which has never been rivalled by the salicylate treatment, even though combined, as it commonly is, with a fairly free administration of alkalis.

In 1894 or 1895 we were, by the foresight of our then Dean, Sir Isambard Owen, the first school to recognize tropical medicine as deserving of a special lectureship, and were fortunate in securing the services of Sir (then Dr.) Patrick Manson as lecturer. The pioneer, if not the founder, of the scientific study of Tropical Diseases in India was an old St. George's man, H. Vandyke Carter, whose name is familiar to every medical man as the draftsman of numerous figures in "Gray's Anatomy." The amount of work he did in tropical diseases covers a very large field; he proved that the "famine fever" of India was due to the *Spirochæta obermeieri* and so identical with relapsing fever; he was the first to discover the malarial parasite in India, thus confirming Laveran's and Osler's observations; he worked at leprosy, elephantiasis, and chyluria, and showed that Madura foot or mycetoma is due to a fungus, and that it is not, as had previously been thought, tuberculous; and he appears to have been the first to cut microscopic sections of urinary calculi.

St. George's men have also influenced medicine as Regius Professors at Oxford and Cambridge. At Oxford Dr. J. A. Ogle was Professor from 1851 to 1857, and was then succeeded by Sir Henry Acland, who resigned in 1894, after having done so much to render possible the present flourishing condition of that school. At Cambridge Sir Clifford

* These various methods of treatment were considered in statistical detail as to their influence on the occurrence of cardiac complications by Dr. W. H. Dickinson in 1862 (*Med.-Chir. Trans.*, 1862, xlv. 342).

¹ Fuller, *loc. cit.*, p. 113.

Allbutt has held the chair since 1892, and as Professor Osler is attached to our teaching staff as Thomas Young Lecturer we could not be more highly represented at the older Universities. The Armstrong College of Science at Newcastle-on-Tyne enriched itself at our expense by taking Sir Isambard Owen, whom, though he should still be our senior physician, we most cordially congratulate on his recent appointment as Vice-Chancellor of the University of Bristol.

Lastly, St. George's men have influenced the progress of medicine in a manner often overlooked, but none the less important, by the editorial control of medical journals. Dr. Roderick Macleod, one of our physicians, was first editor of the *Medical and Physical Journal*, which Dr. Sprigge, who now edits the *Lancet* with such eminent success, describes in his "Life of Wakley" as "a decent monthly magazine of some ninety pages with no particular reason for its existence." At that time Wakley was vigorously attacking abuses in the medical world in the pages of the *Lancet*, and the two journals came into opposition, the strained relations eventually landing the rival editors in the Law Courts. In 1827 Macleod left the *Medical and Physical Journal* to direct the *Medical Gazette*, which was started by some leading hospital surgeons, including Brodie and Abernethy, to counteract the "evil influences" of the *Lancet*, but it must be admitted that it was not very successful in the fight against Wakley and his energetic methods. The *British and Foreign Medico-Chirurgical Review*, which was conducted on much the same lines as the *Edinburgh Quarterly*, and probably marked the highest level of medical journalism in this country, was for a time edited by Dr. John Ogle.