then burst out afresh. Pus also passed through the fistulous opening, and when the purulent discharge diminished, much uneasiness was produced.

July 22nd.—It was noticed that No. 12 sound enters the bladder easily. The urine still contains much pus. Health good. In September he was deriving benefit from wearing, habitually, an elastic catheter.

On June 15th of the next year, 1846, it is reported, that we have not examined his bladder for a considerable time. A few days ago Mr. Simons detected a stone in the bladder; the bladder was not more irritable than it had been for some time, and allowed nearly a pint of water to be injected, without pain, and the man's health was very good to-day, therefore I extracted the stone by the operation of lithotomy, with the assistance of Mr. Hodgson, Mr. Wickenden, Mr. Baker, and my father. The calculus was composed chiefly of triple phosphate; the weight was three drachms. In the evening of this day, whilst moving the cannula which had been introduced into the wound, I distinctly felt a stone, as I thought, about the neck of the bladder. Particular caution had been exercised, not only by myself but by my able assistants, in assuring ourselves that no stone remained in the bladder, as we had reason to suspect the presence of more than one. Next morning persevering attempts were made by myself, with the aid of my father and of Mr. Baker, to detect this second stone, but without any success, we therefore concluded that the calculus was impacted near the neck of the bladder, and were obliged to resign the hope of extracting it, and the following day Mr. Hodgson was unable even to touch the stone with an instrument.

August 1st.—I find it reported that he had passed a small fragment of triple phosphate by the urethra, with much pain. The urine contained pus and ropy mucus, the mucus not in large quantity; specific gravity 1009, alkaline. I subsequently threw into the bladder injections, containing diluted muriatic acid.

22nd.—A stone of some size was plainly detected when the patient lay on his back. We endeavoured to introduce the lithotrite, but the passage would not allow of the necessary distension, and at last we were compelled to give up all hope of extracting the calculus. In the condition of the bladder we did not venture on any second operation.

At the end of the year I lost sight of him, having myself ceased to take especial interest in surgery, but I have since heard from Mr. Simons that his symptoms continued with gradually increasing severity. He frequently passed fragments of stone by the urethra. The fistula remained permanently closed. His sufferings for the last three years were constant and extreme. He died January 8th of the present year.

Section-cadaveris fifty hours after death.—Present: Mr. Bindley, Mr. Simonds, and myself. The recti of the abdomen greatly developed. The kidneys and bladder, particularly the kidneys, were surrounded by a large quantity of very dense, firmly-adherent fat. Both kidneys, were plainly little besides large sacs; the left retained its general characters of form and colour; from its hylum passed the enormously dilated ureter, of the size and exact appearance of a full-sized small intestine. The right kidney had entirely lost its shape and colour. From the lower and narrowest part of the sac, which it formed, the ureter passed smaller than the one of the

opposite side, very irregular and thickened; it was also only half the length, owing to the want of convolutions. The left kidney and ureter combined, contained ten ounces of water; the right only six ounces. On slitting up the ureters and kidneys, we found the *right ureter* universally dark coloured, and its walls very thick and dense; it is somewhat contracted as it reached the kidney. The *right kidney* formed an enormous discoloured sac of dense membrane, but with its walls, thicker in the upper part, being there formed of the scanty discoloured remains of the kidney, hollowed by small supplemental pouches. The *left ureter* was uniform, its walls a little thicker than those of an intestine, its interior just that of an intestine, destitute of valvulæ conniventes. The kidney enclosed a large cavity formed by the dilated pelvis, which had enlarged at the expense of the proper renal tissue, which was spread out to form the wall of the cavity. There was abundance of healthy renal tissue in the aggregate. Three fingers abreast readily entered the ureter from the pelvis of the kidney. Under the microscope I found abundance of healthy cells, from the renal tissue. The bladder was greatly thickened, in parts nearly an inch thick, its walls discoloured; it did not present any ulceration nor pouches; it was contracted upon a large phosphatic stone, a part of the surface of which was as rough as a coarse rasp. The verumontanum was very prominent and large; just below it was a large aperture in the posterior part of the neck of the bladder, large enough to admit a goose quill with ease, leading into a cavity, which occupied each lateral lobe of the prostate. The prostate itself was enlarged and pressed into the rectum, about one-third of an inch in thickness of its proper tissue remained as a wall to the cavities. The urethra was capacious and healthy; no remains of fistula nor of abscess. The openings of the ureters into the bladder were not enlarged, so that at the bladder the ureters formed a kind of cul de sac. They contained urine loaded with pus.

Salivary Calculus.

Mr. PEMBERTON brought before the Society a salivary calculus weighing *ten grains*, half an inch in length, and a quarter of an inch in diameter at its broadest point, tapered at either extremity, irregularly tuberculated on the surface, and of general phosphatic appearance, extracted from the left Whartonian duct in a woman aged 35 years, who believed she had suffered from its presence for the last ten years. It having latterly excited irritation and suppuration, she applied for surgical advice.

BIOGRAPHICAL NOTICE OF THE LATE JOHN GREEN CROSSE, ESQ., F.R.S.

By G. M. HUMPHRY, Esq., F.R.C.S., CAMBRIDGE.

THE following remarks by Mr. Humphry, on the character of JOHN GREEN CROSSE, Esq., F.R.S., late Surgeon to the Norfolk and Norwich Hospital, were appended to a Biographical Memoir of that eminent surgeon, which appeared in the *Medical Times*:—

The most striking feature in Mr. Crosse's character,

was his intense and untiring energy. This existed in him to a greater degree than in any other person I have ever known, and contributed not a little to the well-deserved professional reputation he had earned. It showed itself in everything he undertook, and was pre-eminently displayed in the excessive zeal with which he prosecuted his professional studies and duties. I resided in his house for three years when he was in the prime of his physical and intellectual vigour, and it is no exaggeration to say that he was never idle. Early in the morning and late at night he was in his study, where his time was not spent in dilettanti pursuits, or in discursive easy reading, but in real hard work, always directed to some definite object. He had a good knowledge of the French, German, and Italian languages, and was conversant with the best writings on surgery in those countries. He prided himself on being acquainted with the latest views and improvements originated in all parts of the globe, and his reading in the chirurgical department of our profession was probably as extensive as that of any English surgeon of the day, if not more so. His assiduity in collecting information, examining references, and searching into the details of any particular subject that occupied his attention, was surprising. He would spare no pains to perfect his knowledge, would open a correspondence with all the eminent surgeons, would ransack every library, and investigate every museum within reach. Of this his published writings are a sufficient evidence, and his private manuscripts furnish more ample proof. Whatever he undertook he pursued with ardour and unremitting perseverance, throwing himself wholly into it. Having great reliance on his own maturely-formed opinion, he was not easily diverted from his purpose, and was only excited to increased efforts by the obstacles that occurred to thwart him.

This excessive energy and perseverance was united with an unusual acuteness of observation, much power of suddenly concentrating his thoughts upon a given subject, and great rapidity in drawing his inferences; a rare combination of opposite qualities which could not fail to render him eminent as a surgeon. He was also a sharp scrutinizing observer of character, and could appreciate well the real value that should be attached to the symptoms detailed by a patient. Indeed, we seldom see united in one person so many requisites for the successful practice of our profession. Though generally quick in his diagnosis, Mr. Crosse would make a patient investigation of the particulars of a case when difficulties arose, and was capable of reflecting calmly and arguing clearly upon them. He was particularly decided in his opinion, and very ready in action, "always going," as he writes of another surgeon, "*by the shortest cut to his purpose.*" He was a skilful and successful operator, possessing much dexterity, a hand that never faltered, and an assurance that no casualty could shake. Several times have I seen him in very trying positions, but never was there evinced the slightest diminution of that coolness and steadiness which nature and sound knowledge had conferred upon him. Though bold and expeditious in the use of the knife when it was required, he was by no means an unsparing advocate for it, more particularly when it was to be employed for the purposes of mutilation. He would ply the knife freely to save,

but was most unwilling to employ it to remove a limb. In the general treatment of his patients the remedies employed were few and simple; in common with all other successful practitioners, he rigidly enforced care in diet. He gave very great attention to the minutiae of surgical treatment, paying regard to those points which many persons are apt to think beneath their notice. He was most careful in the application of splints and bandages; often have I known him spend hours at a visit in the accident ward of the hospital. In his operations, also, he was excessively nice about all the minor details. Every little point likely to promote the comfort of the patient, or the facility of the procedure, caught his eye, and received his attention. On these, as on most other occasions, nothing escaped him; and those who neglected such little matters, were sure to incur his sharp rebuke.

Though he was by no means deficient in intellectual power, Mr. Crosse's great strength did not lie in the comprehensive qualities of his mind—in a capacity for originating novel ideas and generalizing views, so much as in the combination of activity, industry, and acuteness which he displayed in a most extraordinary degree. These latter qualities are on the whole more conducive than the former to excellence in a practical science; and I think that, with a few brilliant exceptions, *e. g.*, Hunter, Bell, Lawrence, they are generally found to characterise the men who have attained to greatest eminence as surgeons. Those who are acquainted with the writings of Mr. Crosse, will have remarked the industry and research which they exhibit, the accuracy of detail—pushed sometimes even further than may seem necessary—and a clear terse style well suited to the subject. Much practice had given him great facility with his pen. In early life he used to derive a slender income from his contributions to journals, and in later years the time stolen from active professional duties and the legitimate periods of rest was, for the most part, spent in writing cases and in preparing articles for the press. He has left a vast mass of unpublished manuscript—the more valuable because it consists chiefly of the relation of facts. Knowing into whose hands this has been consigned I have no doubt it will be turned to such account as will most promote the reputation of the writer and the object he had in view.

He had gradually formed a very extensive library, and by great labour had collected and preserved sufficient specimens to constitute a rich and valuable pathological museum. He lost no opportunity of adding to these, his favourite stores. When a pupil, the money assigned to defray his personal expenses was laid out in books so unsparingly that he scarcely allowed himself the ordinary necessities of life, and any treasure on a bookseller's stall was sure to catch his keen eye, and to be deposited on his shelves. Every surgeon in Norfolk, and the neighbouring counties, will testify to the fact that he never omitted a chance of improving his knowledge in pathology, or of increasing his museum. He could always find time to attend a *post-mortem* examination, often riding many miles for the purpose. Never was he more cheerful than when engaged with his pupils in dissecting and preparing specimens, or in describing the preparations in his collection. He used to devote a certain time every day during the summer months to

his museum, and his industry, precision, and nicety of manipulation, were particularly displayed in this work.

Much as we may admire these qualities, which he possessed in so large a measure that they could not fail to lead to eminence and success in any line of life which it might have been his lot to follow, and which were peculiarly adapted to the one he selected, it is still with greater pleasure that I can bear the most sincere testimony to the high moral feeling which guided his actions. This was particularly manifest in his professional conduct. No man could practice in a more honourable straightforward manner. He never shrank from the responsibility of expressing his opinion decidedly and openly. He would never pander to the fancies of his patients for the purpose of promoting his own interests. He had the most perfect abhorrence of any approach to quackery, deceit, or humbug. Relying with confidence on his real merits and integrity, he scorned the attempt to ingratiate himself by any of the accessories of mannerism or display too commonly resorted to by surgeons, who, though upright men, are less scrupulously sensitive upon such points. Indeed, Mr. Crosse carried this feeling so far that he often scarcely did himself justice; sometimes he even gave offence. It was, no doubt, from a feeling of the same kind that he did not always take the legitimate means to ensure himself against misrepresentation, and on this account, he was occasionally the subject of very undeserved imputation as to his motives. Moreover, he was most careful of the reputation of his professional brethren. He strongly felt the great responsibility which attached to him in this respect as a hospital surgeon, and as the referee in cases of difficulty. To the medical man himself he would not scruple to express his opinion decidedly, frankly, sometimes a little sharply; but I never remember to have heard him speak disparagingly of a fellow surgeon in his absence. Those who knew Mr. Crosse best will most unreservedly acquiesce in the statement here made; but who is so capable of judging the master correctly upon these points as the pupil?

Added to the intense earnestness of his character, there was a vivacity of manner, and a joyousness of spirit, which evinced themselves most especially in the prosecution of knowledge, which attached his pupils at once to himself and to their studies, and rendered him one of the very best of teachers. He was ever ready to impart information, and he did so in that clear concise style which marked all he said and all he wrote, and which was so conspicuous in his private correspondence no less than in his professional writings. He used to superintend his pupils in their reading, to examine them regularly, and to direct them in taking cases. The more important cases, both in public and private practice, he wrote out himself. He gave the pupils the opportunity of reading these notes, communicated his views to them, and united them with him in the search for further information. Thus yoked, as it were, with him, they could not fail to derive some impetus from his zeal. Cold and phlegmatic, indeed, must have been the student who was not fired with love for his profession by contact with such a man.

Though he never took any active part in political

matters, Mr. Crosse was an attentive and admiring observer of the progress of intellectual and social improvement. Few men take more delight in watching the advancing tide of general science, more particularly in its application to the arts and the conveniences of life, and in its bearing on his own profession. He rejoiced to have lived in the days of railways and the penny post, and used to say, that a nation must be great which enjoyed two such advantages. He felt strongly the evils attendant upon the isolated position in which the great majority of the members of our profession are placed; and exerted himself to the utmost to promote more free intercourse and harmony among them. It was with this view that he laboured successfully to establish the Norfolk and Norwich Book-club, the Pathological Society, and the Eastern Branch of the Provincial Medical and Surgical Association. To the Association he was particularly attached, and laboured very hard in its service. Perhaps his indomitable energy and perseverance were never more fully displayed than in the anxious and difficult task of organizing and upholding this great body. He continued to be the secretary of the Eastern Branch until his death; he would strain every nerve, and make great sacrifices, to attend the general as well as the local meetings. We may say that the crowning act of his public life was his officiating as President of the Association, in 1846, when the general meeting was held at Norwich. All who assembled there will remember the able and spirited manner in which he conducted the proceedings, the terseness of his remarks, his restlessness under anything like prolixity of detail, and the warm zeal he manifested for the advancement of medical science. The concluding motto of his stirring address upon that occasion, was the motto of his life—

"Fugit irrevocabile tempus."

On the next occasion of my seeing Mr. Crosse, at the meeting of the Suffolk Branch of the Association at Bury St. Edmunds, in June, 1848, it was too evident that a great change had commenced in him; the same active mind was there, but the physical frame had begun to show the destructive effects of the incessant wear to which it had been subjected. From that time we began to hear of his decline; and when he came to Cambridge, in August, 1849, on his way to London, there was an unwonted composure and tranquility, which seemed to tell that he had begun to enter into his rest. Still the old fire burned out, and he must needs go to the hospital to see a case of popliteal aneurism under treatment by pressure. He was very weak, but there was no evidence of any great amount of real disease; and, after a respite of a few weeks, he was able in some degree to resume his duties at Norwich; but the time was short ere he sank into his last illness. Now that active spirit is gone where no mortal coil will clog its yearnings after usefulness,—the golden bowl is broken, but the gems it contained are not altogether scattered to the winds; for he has left an enduring treasure both in his writings and in his example!