

citing in it the process of absorption. The following remarks by Dr. Althaus are interesting, as exemplifying the absorptive action of electricity in cases of glandular tumours.

"Faradisation and galvanisation may be usefully employed for certain tumours, especially of the glandular kind, and some forms of struma; and are chiefly to be recommended where surgical operations are impracticable, on account of the seat of the tumour, or where the patient is averse to such operations. A striking case of this kind occurred a short time ago in the practice of Professor Langenbeck and Dr. Meyer of Berlin. The patient suffered from a hard glandular tumour, as large as the head of an adult, and lodged between the head and the right shoulder, filling up the space between the lower jaw, the mastoid process, and the linea semicircularis inferior of the occipital bone, and extending backwards in the direction of the vertebral column, which was dislodged towards the left side. The circumference of the left side of the neck was only six inches, while that of the right side was no less than fourteen. After fifty-six applications of the induced current, the tumour was reduced to one-half of its previous size, and by further treatment its bulk was still more diminished. In such cases, each operation should last for about an hour, and the treatment must be persevered in for a considerable time if beneficial results are to be obtained. Galvanisation seems, in the treatment of these affections, equally valuable as Faradisation."

[To be continued.]

## Illustrations

OF

## HOSPITAL PRACTICE:

METROPOLITAN AND PROVINCIAL.

ROYAL ALBERT HOSPITAL, DEVONPORT.

COMPOUND HYDATID CYSTS OF LIVER: PERFORATION OF DIAPHRAGM.

Reported by VIVIAN WEARNE, Esq., House-Surgeon.

CHARLES A., aged 49, a mason, was brought in dead on January 26th, 1864. The history of the case was that, after ascending a ladder with a hod of mortar on his back, he stumbled forward on reaching the scaffold, and expired immediately. Previously, he had made no complaints of being in ill health. He had been a temperate man, and enjoyed good health.

**AUTOPSY** forty-eight hours after death. The body was in good condition. The brain was congested, but normal. The heart was flabby; there was slight thickening of the mitral valves. The lungs were intensely congested, but swam in water. On the right side, the diaphragm encroached on the cavity of the thorax, extending as high as the fourth rib; on the left side, as high as the fifth rib. A white albuminoid substance was adherent to the thoracic surface of the diaphragm. On removing it, some jelly-like matter, followed by some small hydatid cysts, exuded through a perforation of the diaphragm. The liver was adherent to the diaphragm, stomach, duodenum, and vertebral column: it was very friable. The left lobe was occupied and replaced by a large collection of hydatid cysts. One large compound

hydatid cyst, of about the size of a child's head, had its base of attachment from the right lobe; on its under surface was a thin layer of liver-substance, about a quarter of an inch in thickness; this was the only remains of the left lobe. This cyst was filled with hydatid cysts and shrivelled hydatids. These secondary cysts, over two hundred in number, varied in size from that of a hen's egg to that of a pea. There were other large primary cysts; one, about the size of an orange, contained a clear fluid, with many hydatids in the fluid; another one contained only shrivelled hydatids. The whole formed a huge mass, and had formed adhesions to, and afterwards perforated, the diaphragm. The kidneys were healthy. The stomach was loaded with the contents of a recent meal, of healthy structure; it was adherent to the liver.

I would only remark on the slight derangement to the general health, from a disease which must have had its origin at some distant period. The congestion of the lungs was the immediate cause of death; whether it was caused by the perforation of the diaphragm, or by active exertion after a hearty meal by a man with a feeble heart, could not be ascertained.

## Original Communications.

"TIS SIXTY YEARS SINCE."

DR. GEORGE FORDYCE.

By THOMAS MARTIN, Esq., Reigate.

It is generally admitted that biography is one of the most pleasing and interesting, and perhaps one of the most useful, departments of our literature; and medical biography must be more especially so to members of the profession.

In the obituary of the *Gentleman's Magazine* for 1802 (p. 508) is a memoir of Dr. George Fordyce; and there is also an article in Dr. Aikin's *Biography* (vol. iv, p. 162) on the same eminent physician, medical writer, and lecturer. Either or both of these memoirs are sufficiently full and ample for the general reader; but the profession may have no objection to something more; and I am enabled, from personal knowledge of Dr. Fordyce as his pupil, to offer my recollections of additional facts and circumstances respecting him to the readers of this JOURNAL, in the following statement.

On the 1st of October, 1796, I attended the introductory lecture of Mr. Cline at St. Thomas's Hospital. There was a well filled theatre. The lecture was delivered with a calm dignity in appropriate and impressive language, and was listened to with deep and silent attention by all who were present; and at the conclusion there were no noisy demonstrations of applause, often so inconsistent with propriety and good taste. Mr. Cline was always listened to with profound attention by all who were present; and, at the conclusion of each session, his valedictory address to those students who were about to leave the school would produce even tears from some who heard him; but it never occurred to the students of that day audibly to applaud a medical or a scientific lecturer.

It was determined that my school should be that of the then united hospitals. I must, therefore, have a lodging near at hand; and I took rooms at 22, St. Saviour's Church Yard, next door to Dr. Haughton's

houses, now removed to give additional space to the Borough Market.

Intending to have the benefit of Dr. Fordyce's lectures, after hearing Mr. Cline's introductory, I waited on Dr. Fordyce at his house at the bottom of Essex Street, in the Strand, introduced myself to him, and entered as a perpetual pupil to his lectures on the Practice of Medicine, Materia Medica, and Chemistry. These lectures were commenced at seven o'clock every morning; and, being given in immediate succession, we were often in attendance until ten o'clock. To be in time, I often did not walk—I ran; and this early morning exertion, I have no doubt, contributed to my uninterrupted good health during my residence in the Borough.

The upper part of the house was appropriated to the use of the class, which was composed of three or four from the Borough, a good many from St. Bartholomew's, several from Dr. Marshall's school in Bartlett's Buildings, and others.

In addition to the morning lectures, there was, every Thursday evening, a lecture on chronic diseases in organs, previously lectured upon in the acute forms. On these occasions, we were allowed to meet half an hour before the lecture began for a sort of *conversazione*, when there would be a brilliant assemblage. Young men, half asleep in the morning from early rising, were radiant with vivacity and smiles. Those from Bartholomew's were eloquent as respected Mr. Abernethy, who was their idol; Marshall's pupils looked up to him as their *Magnus Apollo*, who brought a good deal of Barclay's Edinburgh with him to London. We from the Borough school had not much more to say, than that Cline—the admirable Cline—was above all praise.

Some wag occasionally sent a barrel-organ down the street to entertain us during the lecture; but the Doctor, having a very quick ear, sent the performer an angry message that, if he did not depart immediately, he would break his instrument all to pieces.

Before my time, the Doctor had a country house at Chelsea, where he used to entertain parties of his students with beef and pudding; but latterly he gave them plain dinners in Essex Street.

Dr. Fordyce was one of the most intimate friends of Dr. William Hunter; the trustees of whose celebrated Museum, in addition to Dr. Fordyce, were Dr. Pitcairn and Dr. Combe. These latter being dead, Dr. Fordyce, the only survivor, kept the keys of the cabinets and the book-cases, and occasionally gratified parties of his pupils with the inspection of this magnificent collection of works of Art and Nature, rich in gems, medals, coins, and minerals—for mineralogy was studied to good purpose, although the modern science of geology—the anatomy and physiology of the cuticular surface of the earth—was then unknown. In fact, this department of science, now so much cultivated, is new, scarcely more than half a century old. In the Museum were most valuable manuscripts; early printed books—Caxton's and Wynkin De Worde's, the productions of the chief continental presses, the *incunabula* of the fifteenth century; and all the most magnificent specimens of typography on vellum and paper of the fifteenth and sixteenth centuries—the tallest and finest copies of the Greek and Latin classics. There were beautiful works of Italian art, in a vast variety of forms.

The anatomical preparations were numerous, and were collected from several sources. They were used by Mr. Cruikshank to illustrate his lectures.

These treasures, it is well known, were lost to our metropolis. The government of the day, Lord Bute's ministry, having made a sad mistake by their apathy and folly in neglecting Dr. William Hunter's repeated applications, he bequeathed his Museum to

the University of Glasgow, after a term of years for Dr. Baillie's use. This sad blunder on the part of the government manifested that at that time they were never sufficiently mindful of the importance and interests of science.

Dr. Hunter continued to add to his collections almost to his dying day; and Mr. Chevalier was of opinion, that he had expended on them to the amount of a hundred thousand pounds.

One of the most remarkable incidents in the life of Dr. Fordyce was the experiment he made, in conjunction with Sir Charles Blagden, on their own persons, by subjecting themselves to high temperatures in heated rooms. These experiments were made three times. On the third occasion, they ventured so high as 260° of Fahrenheit's thermometer; that is to say, to 48° above the heat of boiling water. Eggs and beef-steaks, placed on a tinued iron frame, were roasted as at a kitchen-fire, and as they themselves would have been, but for the conservative influence of the living principle. During the time they were exposed to this excessive heat, the pulse indicating the action of the heart was doubled in quickness; but in other respects these gentlemen, having completed their experiments, were not the worse for the trial they had undergone. The particulars are stated in the *Philosophical Transactions*, vol. lxxv.

In the year 1788, the College of Physicians published a new edition of the *Pharmacopœia*. Sir George Baker was then the President of the College. He was not only the most learned physician, but, as respected classical and general literature, one of the most learned men of his time. He and the other heads of the College entrusted to Dr. Fordyce the task of reforming the Codex, which he cheerfully undertook; and that edition bore abundant proof of the knowledge, skill, and judgment with which he completed and brought into effective utility the component parts of each formula. In fact, it was a perfect model of pharmaceutical and chemical talent. The new nomenclature also denoted the principal ingredient in each formula.

In Dr. Fordyce's lectures on the Practice of Medicine, he did not profess to follow any recognised theory or system; although he seemed to take Cullen's *First Lines* as a model, and he had attended Cullen's lectures. He enunciated certain principles as he went on, and introduced a good deal of physiology, or what he called the "natural history of the human body"; and the *methodus medendi* was the result of his own experience. Certainly he had no blind devotion to any given nostrum or any particular theory; he prescribed according to what he considered to be the indications. He was always anxious to reduce the pulse from being hard and wiry to a soft pulse; and this a good deal by relaxants, of which the chief were, in the first instance evacuants of the stomach and bowels, and then antimonials. His endeavour was to correct the secretion, and induce a return to harmonious action of the various internal organs. He did not hesitate to use the lancet in appropriate cases and in moderation, and much in the way that Dr. Clutterbuck afterwards was remarkable for. He was sometimes satisfied with emptying the bowels, and then giving the "Darby and Joan", with an appropriate diet, more or less supporting; and of the materia medica, he gave a good deal of sarsaparilla and of Peruvian bark. His practice, on the whole, was very successful. He was the senior physician of St. Thomas's; the other physicians being Drs. Lister and Ainslie, and Dr. Wells (celebrated for his researches on dew) assistant-physician.

On reflection and recollection, I cannot conceive of a physician who could be more judicious in practice;

prescribing for each case according to the circumstances and peculiarities, for which he had a quick discernment; and certainly he was not addicted to any "extremes in practice".

His Thursday evening lectures on Chronic Diseases were equally the result of a wise and judicious application of his experience as to diagnosis, prognosis, and treatment. He always insisted much on the importance of discriminating between inflammation and irritation; and disapproved of the word *fever* being applied to mere quickness of pulse. He insisted also on the necessity of distinguishing between patients from Spitalfields and those from the country.

The syllabus of Dr. Fordyce's lectures on the Practice of Medicine was an octavo volume of 376 pages, a copy of the sixth edition of which I have before me. It comprehended a sketch of human physiology, or, as he styled it, the "natural history of the human body"; and, I have no doubt, was then conformable to the newest and best elements of that branch of science.

In the history of the phenomena of diseases of the general system, or of particular organs, he seemed to have a pleasure in incorporating as much physiology and pathology as he could to illustrate his subjects.

In the doctrine of diseases, he was very clear on the subject of fevers, respecting which he was writing the results of his observation and experience on the symptoms, the distinctions, the diagnosis, the prognosis, and indications of cure, with the appropriate remedies. The same course of procedure he followed with respect to inflammations; and interspersed are fifty-five formulæ of medicinal compounds.

The Thursday evening lectures on Chronic Diseases were always, with their attendant circumstances, looked to with especial interest and pleasure. Dr. Fordyce's lectures on the *Materia Medica* were chiefly drawn from the *Pharmacopœia*, making more or less use of the *Materia Medica* of Cullen. The lectures on Chemistry were more pharmaceutical than scientific. He, however, rendered due homage to Black, Priestley, Cavendish, and others.

Many bodies hitherto considered to be elementary—that is, never having been decomposed—he had no doubt were compound bodies, and would some day prove to be so. For example, he had no doubt that the alkalis were compound bodies; and, shortly afterwards, Sir Humphry Davy touched them with his magic wand, and proved them to be so.

In lecturing, as well as in conversation, he retained his broad Scotch accent, apparently never having wished to get rid of it; but the delivery of his lectures was always attractive, from its being characterised by correctness and propriety of language. I always considered myself fortunate to have lived in the time of my venerable friend Dr. Fordyce, and to have enjoyed the benefit of his professional wisdom and knowledge; and, so long as I am spared, shall entertain for his memory sentiments of the highest honour and gratitude; presuming also that these few reminiscences of an eminent teacher may not be unacceptable to the readers of this JOURNAL.

In reference to the Borough school of the years 1796, 7, and 8, I may mention that tobacco-smoking was entirely unknown among all the officials of the hospitals, the medical staff and students, and, as I believe, among the patients, excepting a few old sailors and soldiers, who smoked their pipe after dinner. The subject was never mentioned, or in any way adverted to. We had a few Americans and West Indians, and one Dutchman (Dr. Outyd); but they never took the liberty of smoking, or ever mentioned the subject.

## PRACTICAL REMARKS ON THE TREATMENT OF CONGENITAL CATARACT.

By GEORGE LAWSON, Esq., Assistant-Surgeon to the Royal London Ophthalmic and the Middlesex Hospitals.

IN the treatment of congenital cataract, the extent of the opacity of the lens, and its form, whether nuclear or striated, will influence very materially the mode to be adopted. In certain cases, the opacity is entirely nuclear; the eye, in a moderate or rather bright light, possesses very imperfect vision; but in twilight, or with the eye shaded, the sight is very materially improved. Such an eye, examined by oblique illumination after the pupil has been fully dilated with atropine, will exhibit a nuclear opacity of the lens, whilst its circumferential matter is quite transparent. The size of the central opaque portion varies considerably; and upon its extent will depend, in a great measure, the choice of the operation to be performed.

If it be not large, and a clear circumference exist, the operation of *iridodesis*, first introduced by Mr. Critchett, is called for. By altering the shape of the pupil, a clear portion of the lens is exposed, sufficient to allow the rays of light to permeate and to form a correct image on the retina. This application of the operation of artificial pupil to the treatment of certain cases of congenital cataract is an undoubted advance in ophthalmic surgery. It is an operation which, if properly performed, is perfectly free from danger. If, from an error of diagnosis or any other cause, it fail to give the benefit anticipated from it, it in no way precludes any other mode of proceeding which may be deemed advisable. If it succeed, as in well selected cases it will, it enables the patient to see and perform all his ordinary duties without the aid of spectacles; but this is not all, for the patient, seeing through his own lens, possesses a power of accommodation for near and distant objects; whereas, if he had to use spectacles, he would only have two distinct points of vision, his near or reading, and his distant sight.

There is yet another congenital state of the lens in which the operation of *iridodesis* is followed by very excellent results. The central and posterior part of the lens is opaque, but very limited in extent, and there are marginal striæ, but between these striæ there are clear and tolerably large interspaces, and the vision is materially improved when the eye is shaded sufficiently to cause a moderate dilatation of the pupil. Such an eye is qualified for the operation, but it requires to be performed with neatness and dexterity, for the new pupil must be made to correspond exactly with one of the large intervals between the striæ.

The operation of *iridodesis* having been decided on, the question is, in what position should the artificial pupil be made?

There are many points which influence the answer.

1. Supposing the eye to be a healthy one, with a normal fundus, a good range of movements of all the muscles, with control over their action; perfect steadiness in fixation, and without any of the oscillatory movements which are not uncommon in congenital cataract; a good field of vision, and a nuclear cataract, but with a perfectly transparent, broad, circumferential portion—then the position of the pupil which gives to the patient the best sight is slightly downwards and inwards.

2. If the lens exhibit opaque striæ, the choice of the situation of the pupil will be influenced by them. An interval as large as can be found between the striæ will be best suited, and the pupil should be