

to discover a new planet in the heavens, and so inscribe his own name imperishably on the scroll of astronomic fame.

During the past year, Death has laid his hand on some of our most eminent. Alison, with his Christian goodness, kind heart, fine intellect, philosophic thought, and sober judgment; Blackall, with his patient perseverance and shrewd sagacity; Todd, with his sharp, clear mental vision, indomitable energy, and warm, cordial, impulsive nature; Wilson, with his untiring industry, exceeding love of science, poetic imagination, and ardent eloquence; Addison, with his acute perception and classic mind;—of these we now possess only the works, the memory, and the bright example.

Touching medical politics, many things of interest have taken place within the past year, and will, no doubt, come under your consideration; but, as I do not feel justified in acting as your mouthpiece on these subjects, I pass them by. On another subject, only partially pertaining to medicine, I believe I shall express the opinion of all present when I state, in reference to the bodily phenomena produced at what are called religious revivals,—the screams, convulsive movements, semi-unconsciousness, followed by the agitated, gloomy, or wayward mind and enfeebled body, or by melancholy or even mania,—we have but another example of those nervous epidemics of which the history of medicine in connexion with religion presents so many. The phenomena induced are simply the result of emotional excitement of the brain, whether brought on by bodily sensations, mental feelings, or mere instinctive sympathy, and may be occasioned in any way which sufficiently rouses the nervous system, whether it be by exciting preaching, directed exclusively to the fears and the feelings, and not at all to the intelligence and judgment; by Mesmeric proceedings; by self-inflicted mental agitation; by the sight of others affected; in short, by any of the ordinary causes of hysteria. As a matter of medical experience not connected with religious revivals, we find such phenomena generally presented by the feeble, the frightened, the nervous, and those who are deficient in strength of mind and self control. We do not see them in those who are robust in body and mind, well informed and self-restrained. Whatever may prove to be the case when the exciting cause has been religious preaching—and upon this we offer no opinion—in other instances with which we are all so familiar, we have no reason to think that such emotional manifestations usually improve the moral character, whilst we are certain that they always tend to injure the health. Surely a grave responsibility rests with those who, whatever their goodness of intention, do their utmost to foster and provoke the occurrence of these emotional riots in the minds and bodies of the ignorant and impressible, under the idea that they witness a specially Divine operation in phenomena which are amongst the least elevated of all which the human mind can display. Religion deserves the highest, and not the lowest.

It might be expected that I should say something respecting Torquay in a medical point of view; but I refrain from doing so, because, as my additional experience serves but to confirm my conviction of the benefit derivable from the climate of Torquay in cases suitable for it, such as pulmonary diseases, renal affections, irritable dyspepsia, inflammatory conditions of any of the mucous membranes, and the disorders of advancing life and old age,—I could scarcely do justice to my theme without exposing myself to the suspicion of being, however unintentionally, a partial, and therefore a prejudiced witness. And I have another and a better reason in the circumstance that Dr. Barham has selected for his Medical Address the subject of Climate in relation to Medicine.

Torquay possesses three medical institutions—an Infirmary, a Consumption Hospital, and an Institution for Ladies of reduced means suffering from Affections of the Chest.

The Hospital for Consumption admits fifty in-patients at once, twenty-five of each sex. It is open for eight months in every year, from October 1st to June 1st. It restricts its advantages to such cases as are in an early stage, or afford reasonable prospect of undergoing arrest. Suitable cases can return for as many seasons as may be requisite to complete their restoration. In these and in some other respects, the Torquay Hospital for Consumption is unique.

For the Erith House Institution for reduced Ladies, a new and appropriate building is now in course of erection. When completed, it will accommodate twenty occupants, who will each contribute a guinea per week towards their expenses.

Each of these institutions is supported entirely by voluntary contributions; and no one of them, I regret to say, is as well supported as it deserves.

And now, shall I attempt to describe the natural beauties

of this fair corner of Old England, the South Hams of Devon? Its smiling meadows, rich fallows, and breezy uplands; its blooming orchards, ferny combs, and bosky dells; its soft red rocks and sharp grey limestones? Dartmoor in the background, with its granite tors and heathery downs, its rippling brooks and brawling streams, its Druid relics, Phœnician mines, old British huts, and Roman camps? Shall I attempt to paint the picturesque site of fair Torquay, its craggy rocks and coral strands; the luxuriant glories of its Flora; the clearness of its air; the blue translucence of its bay; the cerulean depth of its Italian sky? Nay, these are subjects on which we would rather listen to your opinions than attempt to express our own. And I will merely add that, as you have done us the honour of selecting for this year's meeting the "Queen of the South", you will not doubt the warmth and sincerity of your welcome when you remember how largely her prosperity depends upon your loyalty.

Original Communications.

THE VARIATION IN SIZE OF COMPLEMENTARY OPTICAL SPECTRA.

By J. ZACHARIAH LAURENCE, F.R.C.S., M.B.Lond., Surgeon to the South London Ophthalmic Hospital.

I HAVE this morning observed some curious facts, which, as far as I am aware, are not generally known. If the eyes be for a little while kept fixed on a petal of a red geranium stuck on to a piece of white paper, and then suddenly transferred to a second blank sheet of white paper, the following phenomena will be observed.

1. If the second piece of paper be regarded at the same distance from the eyes as the first was, a green spectrum of the geranium-petal will be seen, of exactly the same size and form, as of the original petal.

This fact is familiar to every one. The following ones are, I believe, less so.

2. If the second piece of paper be regarded from a greater distance than the first was, the green spectrum will be larger in proportion to distance.

3. If the second piece of paper be held closer to the eye than the first was, the green spectrum will be proportionately less.

4. No distortion or inversion of the spectrum takes place. This fact may be ascertained by cutting out unsymmetrical figures of red geranium petals.

As I am at present engaged in the determination of the exact variations in size of the spectra that correspond to given distances, I shall reserve for a future occasion the explanation of the above interesting observations.

80, Devonshire Street, Portland Place, August 6th, 1860.

HÆMORRHAGE FROM THE NAVEL, SEVENTEEN DAYS AFTER BIRTH.

By THOMAS O'CONNOR, Esq., March, F.R.C.S.

On the 24th of February last, I was called to A. B., an illegitimate child, who had hæmorrhage from the umbilicus. The first impression which I had, of course, was that it was a case of secondary hæmorrhage, caused by some accident to the cord; perhaps that an officious nurse had disturbed the ligature before absorptive separation had been completed. Acting on this idea, I drew out the end of the cord with a common dissecting forceps, and examined it carefully; but finding it perfectly healed, I was satisfied that the blood did not come from it. The hæmorrhage was trifling in amount, and had ceased before my arrival. I felt puzzled considerably, and carefully examined the surface of the child's body, but could detect no appearance to enlighten me. As the child was illegitimate, and had, moreover, a wan, unhealthy, and ill-fed appearance, it occurred to me at last that the blood on the compress might have been placed there to mask some criminal proceeding in some other way; and this suspicion seemed to be warranted by the character of the unfortunate mother, who had the reputation of a violent temper as well as of habitual immorality and unscrupulousness. I was, therefore, determined to watch the case closely. As the mother had a scanty supply of milk, I had some suitable food prepared, of which two or three teaspoonfuls were given to the child. A dry compress was placed on the navel, and secured with plaster and a bandage.

On visiting the patient after an interval of eight hours, I found there had been no return of the bleeding. This latter visit occurred at ten o'clock at night. At six next morning, I was sent for, there being a return of the hæmorrhage; this time to the amount of perhaps from an ounce and a half to two ounces. On removing the bandages, I again drew out the cord, and, after a careful examination, failed to discover the source of the bleeding, which had ceased before I arrived on this as well as on the former occasion. The child was so exhausted, however, that it refused to take food; and, in defiance of my efforts to rouse it by ammonia and æther, it sank in half an hour.

A *post mortem* examination, twenty-four hours after death, revealed the following appearances.

I made an incision through the integument, commencing two or three inches above the umbilicus, and extended it downwards to the umbilicus. Close beneath and external to the projection formed by the union of the amnion or external investment of the cord with the common integument, I observed a minute aperture, just large enough to admit the sharp point of a small probe, situated in the centre of a vesicle of about the size of a vaccine vesicle on the sixth or seventh day. I enlarged this opening, and introduced a grooved probe, to guide my knife. In cutting upon the probe, my incision extended through a granular tufted substance, resembling in appearance and structure the material of the placenta, surrounded by a fine areolar tissue, which formed for it a delicate sheath; this structure occupied the usual situation of the umbilical vein. Following this upwards towards the liver, I found that it extended to within half an inch of the transverse fissure, where it terminated. A group of capillary vessels issuing from it at this point formed by their convergence the umbilical vein, which then pursued the usual course and termination of that vessel; namely, giving branches to the right and left lobes, a branch which united with the portal vein, and the ductus venosus, which led backwards to the vena cava. No blood was effused on the intestines, which lay immediately behind and in close contact with the sheath already described as investing this structure. All the branches of this stunted umbilical vein, including the ductus venosus, were free from clots and pervious. The probe passed freely through them, no progress having been made towards their obliteration by the course which nature invariably adopts in closing vascular channels which are no longer required; namely, by first coagulating the blood within them, a circumstance which would be difficult to understand, except on the supposition that the hæmorrhage must have been going on for some time before I was consulted. If so, it was concealed by the mother and nurse; but, assuming the statement of these, the only available witnesses, to be correct, the absence of coagula in the umbilical vein and its branches, eighteen or nineteen days after birth, remains as a singular difficulty, considering that the direct current of blood through them ceased at the moment of birth, or at least as soon as a ligature was cast around the cord. The gravitation of the recurrent stream towards the external surface, instead of passing through the sheath internally, and becoming extravasated into the peritoneal cavity, is explained by the circumstance that the external aperture already adverted to occupied the centre of a vesicle. Whatever produced this condition weakened the external barrier, and consequently the resistance in this direction. The mucous membrane of the stomach and intestines, small and large, were healthy. The liver was remarkably small, but in structure firm and healthy. The other abdominal viscera were healthy; so also were those contained in the chest; but a structure similar in every respect to that already described was found connected with the pia mater, extending over a surface corresponding to the anterior fontanelle, and prolonged backwards to the extent of an inch beneath the interparietal suture, unconnected with the arachnoid.

Pathology. I have some hesitation in offering any remarks upon the pathology of this disease. After a good deal of thought, I can think of no better explanation than that it was an instance of *aneurism by anastomosis* formed in the abdomen by the breaking up of the umbilical vein into an infinite number of capillary tubes, inextricably packed together, which subsequently became dilated into irregular pouches; that some of these pouches became filled with coagula which were partially organised, giving to the whole structure that placental tufted appearance which it exhibited. The same explanation is of course applicable to the appearance in the pia mater. As, however, I had no opportunity of submitting the parts to microscopical examination, this view is offered as suggestive rather than explanatory.

Transactions of Branches.

CAMBRIDGE AND HUNTINGDON BRANCH.

OBSTRUCTION OF BOWELS IN TWINS, WHICH, IN EACH CASE, DEPENDED UPON CONTRACTION OF THE LOWER PART OF THE ILEUM.

By EDMUND CARVER, M.B. Cantab., Surgeon to the Huntingdon County Hospital.

[Read at Cambridge, July 10th, 1860.]

MATILDA and Selina Lonridge, daughters of a gipsy, and twins, born at full period, were first seen on the third day after birth. They had passed no meconium, and vomited constantly feculent fluid. The breast-milk, even from the first, was not retained on the stomach; and they were emaciated, evidently starved. The abdomen in each was much distended and tympanitic. A bougie was passed up the rectum in each child; and, although it passed up quite far enough, still it appeared grasped by the gut somewhat in the same way as in stricture. Matilda died on the fourth day, the day after the commencement of feculent vomiting. Selina died on the sixth day.

In the first case, there were no signs of inflammation of the peritoneum or bowels. The duodenum and jejunum, with part of the ileum, were very much distended with gas. The cæcal end of the ileum, for about twelve inches, was much reduced in size, and contained a quantity of semi-hardened feculent matter, of a very peculiar odour. The cæcum was so little developed as to be with difficulty discovered, the chief guide being the appendix vermiformis. The small and large intestine at this point were of the same size, about that of a goose-quill. The large intestine contained nothing but a little tough mucus, and, under the finger, had the feeling of a cord; it was pervious throughout, admitting easily a probe of moderate size. The opening into the cæcum between the small and large intestines, with difficulty admitted a small probe; the valve, as far as could be judged, was present.

In the second case, there was a similar condition of the lower part of the ileum, cæcum, and colon; and there was, in addition, acute peritonitis with ulceration and perforation of the lower part of the ileum and cæcum. The upper portion of the small intestines was enormously distended and thickened; and in the ileum were alternate dilatations and contractions, which were not present in the first case.

British Medical Journal.

SATURDAY, AUGUST 11TH, 1860.

THE TORQUAY MEETING.

It must be no small attraction that is capable of drawing upwards of a hundred medical men from all parts of the island to a distant spot upon its sea-coast. The Torquay Annual Meeting may, therefore, be looked upon as a very successful gathering of the members of our Association, and a proof of the vigour with which its proceedings are carried on. We apprehend that few will be found to deny the high character of the meeting in a scientific point of view; for we question if the annals of the Association can show an instance where the abundance and merit of the papers have surpassed those read in this charming watering-place. It may indeed be said that England is alive to her utmost extremities with scientific expositors of our noble science, when in this distant angle of her broad lands we listened to the thoughtful address of the President, Dr. Hall, and to those of Dr. Barham, Mr. Square, and Mr. De la Garde. If we pay this tribute to local medicine, it is no more than is fully deserved. But, if the Association derives strength from these scientific watchers on its farthest