out, all or any of which may interfere with and modify the natural (if I may use the term) progress of the aforesaid fever, and interfere with it at any one of those numerous periods of its progress or series of links which form the chain of diseased processes! And thus it is that, from the very nature of the case, we are led to misinterpret the true value of the term experience in medicine.

Let us now see what may properly be called a practical fact in medicine, as deduced from, or as founded upon, rational experience; and then inquire how far our ordinary daily practice is founded upon such experience, and is, therefore, rational. Judged dispassionately, and, as I venture to think, according to the rules of sane reason, a fact in medicine, founded on rational experience, requires something of the following definition: it is the resultant of very numerous observations made by fitting and capable inquirers, who, after due investigation, have arrived each at a like conclusion, the conclusion not being contradicted by the observation of other equally capable observers. Every practical deduction, I will candidly confess, which will not bear this test, seems to me to fall under the title of *irrational*. The wide and uncontradicted acceptance of a fact alone gives to it a stamp of genuine value. Are we not, in truth, reasonably forced to the conclusion that the real virtues of a remedy have yet to be decided, when half the world applaud its use, and the other half find it inefficacious in a given disease—when men of the highest repute and of equal celebrity are totally opposed concerning its use? Whatever a man's own personal experience may induce him to think of the efficacy of any method of treatment of disease, it is, as I see it, manifestly illogical to permit his personal opinions of its use to degenerate into solid convictions, so long as the experience of other men of equal honesty and capacity has not confirmed, or, it may be, is even opposed to, his conclusions. So complicated are the terms involved in the problem!

[To be continued.]

AUSTRALIAN GOLD. Sir R. Murchison gives the following account of his prophesy of gold existing in Australia:—"Dr. Cumming is right in announcing that I did say, 'Job was a good geologist.' But if he added (as one report of his lecture has it) that I was led to anticipate the discovery of gold in Australia by the words of Job, he is entirely in error. The hypothesis which I formed respecting the probable existence of gold in Australia originated, and was proved to be true, in this way. In the year 1844, when fresh from the gold-bearing Ur al Mountains, I had the opportunity of examining a large collection of the rocks from the meridional chain of Eastern Australia, brought home by my friend Count Strzelecki, and I was so much struck by their resemblance to my Uralian rocks (also a meridional chain), that I publicly expressed my surprise, in addressing the Geographical Society, that no gold had yet been found in our distant colony. The more I reflected on the subject, the more I was led to the belief that gold would be found in Australia; and in 1846 I urged the unemployed tin-miners of Cornwall to emigrate and try there their luck in gold diggings. In 1848, having received small specimens of gold from two or three parties, I wrote to her Majesty's Secretary for the Colonies, and said that what had been a theory was then a realised fact, and expressing my opinion that Australia was about to become an auriferous region. This was three years before the so-called *discovery* of gold in Australia."

Illustrations

OF

HOSPITAL PRACTICE:

METROPOLITAN AND PROVINCIAL.

BIRMINGHAM AND MIDLAND EYE INSTITUTION.

THE SURGICAL TREATMENT OF SHORT-SIGHTEDNESS.*

MR. VOSE SOLOMON, after having operated upon *forty-two* myopic eyes, has drawn the following conclusions:

1. Intraocular myotomy is a safe and expeditious method of relieving myopia. This relief is not temporary.
2. In many cases it obviates the necessity for wearing spectacles.
3. It has never injuriously affected the range of accommodation.
4. It tends to render the myopic eye more healthy by improving the nutrition of the choroid, retina, and vitreous humour.
5. It sometimes arrests a rapidly increasing myopia, and cures the accompanying choroido-retinal irritation.
6. It must tend to prevent the increase of staphyloma sclero-posticum, by regulating the internal ocular circulation and lessening the convergence of the optic lines, and the straining efforts at accommodation which are said by Dr. Donders to be associated with the convergence.
7. The presence of a large staphyloma posticum does not neutralise the effect of the operation, nor does always that of opacities of the cornea.
8. The degree of myopia does not in all cases bear a close relation to the lateral diameter of the staphyloma, as judged by an ophthalmoscopic examination.
9. The earliest appearance of staphyloma posticum consists in an apparent flattening and scolloping of one side, generally the outer, of the optic nerve entrance.
10. At the present stage of the inquiry, Mr. Solomon is unable to assert that the operation is curative of staphyloma posticum. But, he considers, it follows from 4, 5, and 6, that it renders that disease less dangerous to vision.

Original Communications.

RARE CASES IN MIDWIFERY.

By EDWARD COPEMAN, M.D., Physician to the Norfolk and Norwich Hospital.

[Continued from page 496 of last volume.]

CASE IV. *Obstructed Labour from Congenital Hydrocephalus.* On December 20th, 1859, I was summoned to another lady under somewhat similar circumstances to those described in the preceding case. She was 27 years of age, and was now in her fifth labour at full period. She had been suffering severe pains for several hours before I was sent for, and became alarmed because she had never before experienced any particular difficulty in childbirth. On making a careful examination, I ascertained the cause of obstruction to be a large tumour of the scalp, in which I believed I could discover fluctuation; each pain had the effect of rendering it very tense without advancing its position, and in the intervals between the pains it was comparatively flaccid. I ex-

* See also BRITISH MEDICAL JOURNAL for May 1860.

pressed my belief that it was a hydrocephalic head, and advised puncturing it, to which the surgeon attending her readily assented. At his request, I passed a sharp pointed bistoury through the most prominent part of the scalp, and made an incision about an inch in length. Several pints of clear fluid immediately escaped, and then a few pains soon effected delivery. Of course the child was dead; and as we had prognosticated, the cranium was imperfect, and the scalp formed a very large sac which had contained the fluid let off by means of the puncture.

In the former case, the scalp was sufficiently tight upon the cranium to prevent our being able to detect the presence of the fluid, which was contained chiefly in the cavity of the uterus higher up than the presenting part of the head; but here the sac itself was the presenting part, and the sense of touch was sufficient to find out the nature of the case. This patient also quickly recovered.

CASE V. *Difficult Labour from Hip-Presentation.* I was called on November 23rd, 1852, to Mrs. M., aged 34, a primipara, at full term. The membranes had ruptured on the evening of the 21st, since which time pains recurred at intervals, and were very frequent yesterday. Her surgeon was in attendance during the whole of the 22nd, and all night, and summoned me at eleven on the morning of the 23rd. The uterus was fully dilated, the right hip presenting, the back of the child being towards the right side of the sacrum and its abdomen towards the left of the pubes; the left hip lodged upon the brim of the pelvis in the situation of the left sacro-iliac symphysis. No advance had been made for many hours; the pains had been very strong, but were now short, and interrupted by the fears of the patient, who had become extremely restless and apprehensive. I endeavoured to reassure her, and gained her confidence sufficiently to enable her to bear her trial with fortitude, under the hope that all would be right in the end. I forewarned the husband, however, that the child's life was in great jeopardy. After a while, and not without a great deal of trouble, I passed a fillet round the right groin, and assisted the pains; but the resistance was great, and I was afraid to use much traction, for fear of injuring or fracturing the child's thigh, and it was no easy matter to make sure of the tape not being so placed as to hurt the parts of generation. The pains were but feeble, and after an hour or two we gave ergot with some effect; but the labour progressed so slowly, that it was not until six o'clock p.m. that I could get the breech into the world, notwithstanding the presenting hip had long before protruded through the os externum. The outlet of the pelvis was narrow; the perinæum resisting and thin, so as to make us afraid it would give way, but it escaped uninjured. At this period of the labour, there was an entire cessation of pain, and no pulsation in the cord; and when at last I was able to get the head born, the child could not, even by the most persevering efforts, be made to breathe. The placenta was soon expelled, and I left the patient in a comfortable state, after a very tedious and severe labour borne with the most astonishing fortitude. When I first went to her, she begged for chloroform, but I declined giving it, because the pains were too short and feeble, and I feared it might cause the cessation of all natural effort to effect delivery. On the following day, the patient was going on well, but lamented the loss of her child. On examining the child, I found the whole of the presenting portion of the hip livid from long continued pressure, with an abrasion of surface where the tape passed over the groin.

She made as good a recovery as if nothing difficult or unusual had happened.

CASE VI. *Profound Coma, the Consequence of Flooding after Delivery.* Mrs. W., aged 30, was confined on

August 1, 1855, with her seventh child. I was given to understand that previously to marriage she was very hysterical; and that she had had several severe illnesses, which had been treated by blood-letting. She was confined in the evening, and her labour was natural; but after the expulsion of the placenta, and when all seemed right, she had sudden and profuse hæmorrhage, requiring the introduction of the hand for the removal of clots, after which it ceased. But she almost immediately afterwards became insensible, with scarcely a pulse, and with every sign of extreme depression; in which state she remained for many hours without hope of recovery on the part of her medical attendants and friends. I saw her the morning after delivery; she had then a feeble pulse at 130; contracted pupils, cold surface, and was still insensible; and her threatening symptoms continued for several hours without any sign of amendment; but before I left in the evening, some slight consciousness returned, and she seemed to have what I might call hysterical coma. There had been no recurrence of hæmorrhage since the first gush; and I looked upon the length of time which had elapsed without her getting worse, as an indication that she would rally. Nourishment and wine were given frequently—perhaps, rather too frequently, as the stomach rejected it occasionally. Medicine was avoided; counterirritation had been freely employed, and she had a turpentine enema. I thought she ought to be disturbed as little as possible; and had the gratification of hearing next day that she was much better.

This lady's recovery was slow; her nervous system gradually recovered its steadiness *pari passu* with the reestablishment of the circulation, and eventually she got quite well.

CASE VII. *Peculiar Nervous Affection after Labour; Anæsthesia.* I was summoned to a lady, aged 31, who had been confined some few months before my visit on September 29, 1851. During her pregnancy, she had suffered much from excessive leucorrhœa; and both before and after her labour, she manifested signs of mental disturbance bordering on insanity. After her confinement, she became very depressed in spirits; said she had an inclination to destroy herself; and in whatever she did she reversed the order of propriety: for instance, when dressing her child, she put on the outer garments first. After a while these symptoms ceased, and were succeeded by numbness in her feet, gradually extending up the legs to the body and as high as the waist, to which extent I found her labouring under almost complete anæsthesia. She had no feeling in the vagina; scarcely knew when she wanted to pass urine or motions, and could not tell when she had finished doing so. I was informed that a few years before, she had an amaurotic affection, which was treated by setons in the nape of the neck; but at the time I saw her, her vision and all her senses except that of touch were perfect. Sensation remained in the head, neck, and upper limbs, but she could not feel the child at the breast. The anæsthetic affection commenced about three weeks before. Her surgeon had blistered the loins and chest, and had given her steel and galbanum internally. Her appetite was good, complexion natural, intellect undisturbed, pulse regular but weak. There was no evidence of organic disease of the brain; and the state of her general health scarcely to be complained of. I advised the cold sponge bath, followed by frictions with turpentine to the lower limbs; a turpentine enema once daily; a dose of Griffith's mixture three times a day; and, these failing, electro-galvanism to the affected parts.

On October 1, I find the following entry in my case-book:—"The above treatment has been carefully carried out, with the exception of the enemata, which have not yet been administered, and the galvanism, which has not been required. She has had one relief from the bowels to-day, and has passed water; being aware both

of the necessity for the acts and the accomplishment of them. There is also some return of sensation in the vagina, and in the lower limbs, leading me to entertain considerable hope of recovery." Our favourable expectations were realised by the result, and the patient eventually recovered.

[To be continued.]

Transactions of Branches.

SOUTH MIDLAND BRANCH.

A CASE OF SUFFOCATION BY THE FUMES OF LIVE COALS.

By J. ODY, M.B., Market Harborough.

[Read Oct. 17th, 1861.]

I HAVE the honour to bring under your notice the particulars of a double case of poisoning by the fumes of live coals, in which one of the sufferers perished, while the other recovered.

The narrative of this unfortunate occurrence may, perhaps, be the more interesting, inasmuch as such events are rare in this country, and as we have, in this instance, unusual information as to the circumstances attending the accident, the description of the symptoms by the survivor, and the result of a *post mortem* examination of the body of the deceased.

On Saturday, Jan. 15th of the present year, a young labourer and his wife, recently married, after supping together on pig's fry and potatoes, retired to rest about ten o'clock, taking upstairs with them a shovelful of live cinders and coals, which they placed on the hearth of their bed-room, under an open chimney. About a quarter before eleven, that is, three quarters of an hour later, a youth went to bed in the adjoining cottage; the two chambers being only divided by a wall a single brick thick. He almost immediately became aware of groans and unusual noises next door, as of people retching,—at first in the woman's voice only, but presently in the man's voice also. An alarm was raised; and, after some delay occasioned by various attempts to attract the attention of the couple within, an entrance was effected into the cottage. About ten minutes are supposed to have elapsed from the groans being first heard to an entrance being forced into the cottage. Fainter groans had been heard almost to the last moment; but, on the neighbours going upstairs into the bed-room, they found the woman lying, already dead, upon the bed, while the man lay quite insensible on the floor at the further side of it, rolled in the bed-clothes. On being raised on to the bed, he shortly began to recover; but some time elapsed, notwithstanding the free admission of fresh air into the apartment, before he regained his consciousness.

At the inquest, he stated, that "he and his wife awoke nearly simultaneously, after having been asleep but a very short time." His wife, he went on to state, "said she felt poorly. I asked what was the matter; did she feel sick? she said 'Yes.' At her request, I struck a light without getting out of bed; the candle and matches were at hand on a chair by the bed-side. I felt well at first, but by this time, I felt sick also, and told my wife so. I retched once or twice, but brought up very little. I then felt my strength fail me: I experienced a weight across the forehead, giddiness and noise in the ears. I lay down with my head over the side of the bed, and shortly became insensible." At this moment we may conclude that he rolled off the bed, dragging the bed-clothes with him. He also stated, that the cinders did not give out any smoke, but cast a nice glow across the room, and that his wife was sitting up in bed, retching, at the time of his last recollection of her.

Except that the bed-clothes were replaced, the body

of the woman was allowed to remain as first discovered until my arrival, two hours later. It was then warmer than I expected to find it, particularly when the severity of the weather was taken into account.

She lay on her back, with the head inclined a little to the left side. The features were composed, the face pale, except a portion of the left cheek, which presented a violet mark, as did also the under surface of the right arm, where it rested on the bed. The conjunctiva was brilliant, free from suffusion; the pupils widely dilated. The lips were pale; also the tongue, which was retracted within the mouth. There was a small quantity of vomited food between the lips, but none appeared to have passed beyond them.

A *post mortem* examination of the body was made thirty-six hours after death, and revealed unmistakable signs of death by suffocation—by apnoea. No signs of violence were discoverable externally. The whole surface of the back, and other depending portions of the body, were marked with the same dull pink colour as the left cheek, also the opposed surfaces of the knees, etc. The chest was first opened. There were some few old adhesions on the pleuræ; no effusion into the pleural cavities. The lungs were pale, crepitant, and, to all appearance, healthy, at their upper and anterior portions, but gorged with fluid blood below and behind. The heart was of natural size and structure; its right cavities were full of fluid blood, the left contracted and empty. The heart and lungs were removed together for more perfect examination. The trachea and bronchi were found to be full of a frothy mucus stained with blood; their mucous membrane was of a florid pink colour, obviously from vascular injection of the capillaries. Portions of vomited food were found as far even as the smaller ramifications of the bronchi. At least a pint of dark fluid blood flowed into the thorax after the removal of the heart and lungs. The stomach contained some flatus, and about six ounces of food, viz., pig's fry and potatoes. The outer surface was pale and unaltered; the inner surface, towards the greater curvature and pyloric end, was of a rose-pink colour, and its mucous membrane at the same part was slightly softened, obviously by *post mortem* digestion. The intestines were stained here and there by their contents. The bladder was empty. On examining the head, the absence of blood in the large vessels of the scalp and dura mater was very remarkable; but it must be remembered that a considerable quantity of blood had flowed into the thorax, from the divided veins of the neck. There was no effusion either of blood or of serum on the surface of the brain, nor into its substance, nor into the ventricles. The choroid plexus was pale and of natural appearance. The substance of the brain also appeared healthy; the centrum ovale, when first made, was quite free from signs of unusual vascularity, but numerous red points, of the size of large pin-heads, obviously formed by exudation of fluid blood, soon made their appearance.

REMARKS. These poor people considered themselves perfectly safe when they placed the cinders on the hearth under an open chimney. But various circumstances concurred to bring about a fatal event.

1. The chimney of the upper room had unfortunately a downward instead of an upper current of air; as was made manifest by the forcible deflexion of the flame of a candle held under it. This is no uncommon state of things, as many of us must have experienced to our great discomfort, when detained in the poor man's cottage. The reason of this downward current is, that there being, perhaps, only one outer door and no passages or other reservoirs of air, the whole building may be regarded as one chamber divided by an imperfect diaphragm, viz., the floor of the room above; the imperfection being the aperture for the stairs. When, therefore, a large fire is lighted in one chimney-place, the air of both apartments, that is, of the whole build-