patient, and better than Earle's bed or the double inclined plane.

In addition to the ordinary circumstances attending a broken bone, there are two other points to be considered, *iz.*, the age of the patient, and the improbability of union taking place. When you have sufficient reason for thinking that the fracture is within the capsule, you will be wise to allow the patient to sit up as soon as the part is sufficiently quiet to admit of his doing so. At any rate you should watch for the intimations of failing health and bed-sores, and have regard rather to the means of maintaining his strength, than to the appliances for securing the position and rest of the fracture. All the directions which I have given you with reference to the diet and general management of elderly persons, who are the subject of injuries, apply with especial force to these cases.

I have told you that the only instances in which bony union of a fracture within the capsule is likely to take place, are those where the broken surfaces are interlocked together. You will do well to bear that in mind in the examination of suspected cases of this injury, because it might happen that rough handling would separate the broken bones, and destroy for ever the only chance of cure.

CASES OF

CONGENITAL DEFECTS OF THE IRIS.

By AUGUSTIN PRICHARD, M.D.,

Surgeon to the Dispensary for the Cure of Diseases of the Eye, in Bristol.

(Read before the annual meeting of the Bath and Bristol Branch of the Provincial Medical and Surgical Association, July 5th, 1849.)

Wishing to bring before the Society one or two rare cases of affection of the eyes, I have chosen as a short and interesting subject, the instances of "Abnormal congested conditions of the Iris," which have come under my own notice. I have access to the records of cases since the first establishment of the Eye Dispensary by Mr. Estlin, in 1812, to the number of forty-eight thousand.

Two cases have occurred out of this number, both of which I saw myself, in which there were no eyes. The lids were thick, but upon being opened there was no trace of any globe visible, nor could any hard substance be felt in the orbit indicative of the existence of the organ in a rudimentary state. I have never had an opportunity of dissecting a subject with this condition, nor of observing it in the adult.

A second congenital defect to which I shall allude is "Absence of Pigment" in the eye altogether. Albinos, or persons in whom there is no pigment in the body, occur in almost all countries, but either they are more frequent in dark-coloured races and hot climates, or they have been more the object of attention when appearing under such circumstances. Blumenbach says that he has seen sixteen cases in Germany. Among the 48,000 cases of diseases of the eyes, only

three have been brought to the dispensary with this peculiarity. It is well known that the pigmentum nigrum (or *fuscum*, as it is more appropriately called by many foreign anatomists) consists of cells containing dark granules. The cells are mostly of a very regular hexagonal form in the choroid; they are less regular upon the uvea or back of the iris. Hunter* considered that there was a white pigment in albinos, and Hassall, in his "Microscopic Anatomy," says:—"The pigment cells are stated to exist, but to be wanting in their characteristic coloured contents." I have searched in the choroid coat and posterior surface of the iris in the white rabbit—the only kind of albino I have been able to obtain—and have been able to discover nothing at all resembling pigment or epithelium cells. I have not described the appearance of the eyes; every one is sufficiently familiar with them.

It is now well established that cases have occurred in which the pigment has been deposited after birth; that is, where persons born as albinos have, after a time, ceased to be so. One case is recorded by Dr. Graves as having been seen by Dr. Ascherson; another rather doubtful one was enumerated by Michaelis, in the third volume of Blumenbach's "Medicinishe Bibliothek," and one came under Dr. Graves' notice.

I have been fortunate enough to meet with an example of this change in one of the three cases to which I have above alluded, as having been brought to the dispensary, and it is chiefly with a view to introduce this case, that I bring forward the subject of albinos. The following is an account of it:—

E. S., aged thirteen weeks, admitted June 18, 1845. The irides of both eyes are of a light grey colour; pupils circular, but of a deep red hue. She evidently dislikes the light, and rolls about the eyes continually from side to side. (This restless condition of the eye is peculiar to albinos.) Her hair is white. In the latter end of that year she was again brought. Her irides were blue, but the restlessness and intolerance of light remained the same.

July 21, 1847.—The eyes are of a bright blue colour; the pupil black if we look straight into it, but seen obliquely there is a luminous glare. Eyes still oscillating; sight good; skin much sunburnt. I have seen her again on the 30th of May of this year (1849.) Her hair is getting darker; she bears the light well; the pupils are, however, still a little less black than they are in perfectly natural and healthy eyes; her iris is of exactly the same bright blue colour as that of a younger brother who presents no defects.

I have seen two cases in which, as far as I could make out from the history, there was congenital adhesion between the margin of the pupil and the capsule of the lens (*synchia posterior*.) In both the sight was perfect, and there had never been any inflammation in the eyes. A small white point indicated the position of the adhesions. In one case there were two such points, apparently white opacities in the capsule, exactly opposite the margin of the iris, and opposite to each

* Observations on certain parts of the Animal Economy, p. 204.

other. I applied a drop of the solution of atropine, (a preparation useful when you desire to ensure a rapid dilatation of the pupil, but whose effects are too continued to render it in every respect a substitute for belladonna,) and when the pupil was dilated the two white points remained in their original position, with a thin shred of coloured iris running from each of them outwards to the rest of the membrane. In the other case, which I saw soon afterwards, there were three such white points at regular intervals from each other, at the edge of the pupil.

These two cases are of themselves of no practical surgical importance, but there may be instances where a knowledge of the possibility of such a congenital state may be of essential service in the aid of diagnosis and treatment.

Two cases of that rare affection termed "Irideremia," a complete absence of the iris, have occurred, and both within the last few years. In one, brought because it was supposed not to see, when six months old, there was not a trace of iris visible in either eye. The posterior chambers were fully exposed, and presented the red glare round the edge of the lens, which is generally seen in such cases; it had, however, in its left eye, an additional defect, which rendered its appearance most remarkable. This was a central cataract; a central spot of opacity, upon the anterior capsule of the lens, with some slight opacity of the middle of the lens itself. The mother was healthy. The child evidently disliked the light, which was too strong for it, as it had no iris to guard over the quantity of rays to be admitted to its retina. No treatment was adopted. I saw it once afterwards, and it had become more used to the light, but, of course, the condition was otherwise unaltered.

In the other case, admitted in 1847, there was a point of considerable interest. It was an illegitimate child. The mother was healthy, with blue eyes, the servant of the father, who, as she said, had dark but perfect eyes. The child's grandmother, and two of its uncles, (on the father's side,) had very defective sight, and the mother, who seemed a sensible person, stated that their eyes exactly resembled those of the child. In the child there was no iris in either eye, and as, in the other instance, it suffered from the natural consequence,—namely, intolerance of light, and also presented the same red luminous reflection from the deeper seated parts of the eye. I never saw this case a second time. The child was very ill, and apparently wasting, and in all probability died shortly afterwards. The case, however, is interesting in a medico-legal point of view, as I imagine it fixes the paternity, at any rate, upon that family, although of course it does not determine the individual among them who really was the father.

The only other condition with which I shall occupy the meeting is "Congenital Fissure of the Iris," four or five cases of which have been admitted among the 48,000. I have seen one or two cases elsewhere. The state has been termed "Coloboma Iridis," and is a continuation of the pupil from its natural central

position, generally downwards, and a little inwards. Von Ammon, of Dresden, the editor of the *Zeitschrift für Ophthalmologie*, has described the dissection of a case of this kind, in which he found the fissure running back through the ciliary processes and choroid. It is sometimes to be found in both eyes, but according to my experience most frequently in one only. The fissure is sometimes lateral. The following is a very interesting case illustrative of these conditions:—

On the 21st of June, 1820, a woman brought her second child, Ann Hall, when a fortnight old, to the dispensary to consult Mr. Estlin. (I saw nothing of the case at that time, as it was within a few years of my own birth, but in consequence of the peculiar subsequent history, I have referred to the admission book, from which I extract the entries.) It was marked as a case of "Purulent Ophthalmia," coming on the day of birth. There was no discharge when it was brought, but the corneæ were so clouded by opacities, that the pupils could not be seen through them. Some slightly astringent lotion was ordered. The mother has since informed me that there never was any discharge from the eyes..

June 25th, 1820.—"Cornea covered with an uniform dark cloud; no iris or pupil to be seen."

January, 1821.—(The child being about seven months old.) The account adds,—"Sees well; no apparent affection; cornea clear."

The child grew up, was married, and had two children, the second of which was brought in its turn, when four days old, by its grandmother, to the dispensary. The corneæ of both eyes were covered with a dense prominent white opacity; no iris in the pupil visible; no discharge. The eyes had been in this condition since its birth. In about six months these corneæ also began to clear, but very slowly. I see the child continually; he is now six years old, and has a considerable opacity remaining, but he has useful sight.

The condition of the eyes of the mother and the child is the following:—The mother's sight is good; cornea quite clear; the left pupil and iris in a natural and healthy state; in the right there is congenital fissure *downwards*, the more common form of coloboma iridis. The whole edge of this irregular pupil contracts actively upon the sudden admission of light to the eye.

In the child the right iris is split *laterally and horizontally* towards the external canthus of the eye, the internal part of the cornea being opaque. In the left eye there is a large central opacity in the cornea, but there is *no iris* at all. Upon looking into the eye around the margin of the corneal opacity, a red luminous appearance presents itself, similar to that which I have alluded to as seen in other cases of absence of the iris. This last is, therefore, a complex case of congenital and inherited corneal opacity, with fissure of the iris (coloboma) of one eye, and absence of the iris (irideremia) of the other.

Among so large a number of patients, now amounting nearly to 50,000 since the commencement in 1812, (about thirty thousand of which I have seen myself,) there have, of course, been many other cases of con-

genital affections and deformities of the eye besides those to which I have alluded, but I have restricted my notice on the present occasion to those which concern the iris, for fear of occupying too much of the valuable time of the meeting.

CASE OF STRANGULATED FEMORAL HERNIA.

TO THE EDITOR OF THE PROVINCIAL MEDICAL AND
SURGICAL JOURNAL.

SIR,—A case of strangulated femoral hernia, which presented an entire absence of several of the customary and characteristic indications of that serious calamity, having lately come under my observation and management, I beg to offer the subjoined description of it for insertion in the *Provincial Medical and Surgical Journal*.

I remain, Sir, your faithful servant,

THOS. HENRY STARR, M.D.

Leamington Spa, July 19, 1849.

I was sent for on Sunday afternoon, June 10th, to visit Miss Lefanu, a maiden lady, aged 58, residing in this town. I found her suffering from what, at first, appeared to be an ordinary bilious attack, to wit:—She complained of incessant nausea, and had vomited during the night and fore-part of the day a considerable quantity of greenish matter, which she said had a bitter taste. The tongue was loaded with a white creamy fur. There was much thirst, and frequently recurring severe pain in the epigastrium and right hypochondrium, the latter being not dissimilar to that which occurs during the passage of gall-stones. The pulse was slightly accelerated, but otherwise preserved its natural tone, being neither hard nor full. The countenance seemed flushed, in short, the symptoms taken collectively, denoted a moderate state of feverish excitement. The bowels had not been relieved since Saturday morning, and then but imperfectly; they were, moreover, subject to habitual constipation.

I laid my hand upon the abdomen, and found it singularly soft, and *free from distension*, whilst tenderness was in no degree, either directly or indirectly, referred to the seat of the hernia, indeed my attention was in nowise attracted by my patient to the existence of such a contingency.

I ordered a mustard cataplasm to be applied to the epigastric region, and prescribed a pill, with five grains of calomel, to be taken at once, and in the course of two hours to be followed by a draught of infusion of roses, with half an ounce of sulphate of magnesia, and half a drachm of tincture of henbane.

Monday, June 11th.—On seeing Miss Lefanu this morning, I found she had passed a very restless night, and although the medicine was apparently retained, at all events, for an hour or two, the bowels had not been acted on. The nausea was at this time unremitting, and the vomiting occasional. The pulse and the other symptoms were much the same as they were the day before.

On making a more searching examination, I detected

a somewhat inelastic circumscribed swelling, between two and three inches in diameter, at the summit of the right thigh, and rising, as it were, on the abdomen over the edge of Poupart's ligament. I instinctively came to the conclusion that I had to deal with a strangulated femoral hernia, although I found a total *freedom from local pain or tenderness, as also from abdominal distension*, indeed the general bulk and surface of the abdomen were peculiarly compressible, whilst pressure there created no uneasiness whatever.

Having made several essays at the taxis without success, and foreseeing the probable necessity for an operation with the knife, I requested my friend Mr. Burke, an able surgeon in this place, to see the case with me. After a careful examination of the tumour, Mr. Burke expressed his belief in the existence of a hernia, but at the same time was, like myself, not a little puzzled to account for the complete exemption from tympanitic distension, and local pain or tenderness. His attempts to reduce the rupture were conducted with skilful nicety in reference to the direction and anatomical relations of the parts. He persevered for at least half an hour, and made use of as much force as was compatible with safety to the structures implicated. His efforts, nevertheless, proved as fruitless as those I had previously made.

A copious enema of thin gruel and castor oil was now administered, after which we directed eight leeches to be applied to the swelling, these were succeeded by the apposition of a bladder of crushed ice to the part affected. All these expedients were unattended with the wished-for result; and the taxis was repeated, but without advantage.

It was now getting late in the evening, and as our patient, apart from the nausea, seemed to suffer merely from occasional epigastric uneasiness, and otherwise evinced no signs of exhaustion, we deferred operating until the next day, thereby giving her a further chance, (though a faint one,) for the reduction of the hernia, without having recourse to the knife. This delay would not, I conceive, have been justifiable, if symptoms of active inflammation had been present, but the peculiarly sluggish character of the case, as the event proved, quite sanctioned our decision, and tended also to show that in pathological science, as in other branches of human knowledge, there is no general rule without some exception.

As for the employment of the infusion of tobacco, I cannot but express my unqualified reluctance to such a step, being strongly of opinion that by the poisonous prostration which it occasions, if it sometimes promotes the reduction of hernia, it more frequently impairs the powers of life without that effect, and so tends to prevent the successful progress and issue of the surgical operation. I may likewise remark, that although Sir Astley Cooper was inclined to favour the tobacco enema, he distinctly says in his lectures, that "its effect in hernia depends much upon whether the hernia is situated near muscle or tendon;" and adds:—"In femoral hernia, which is covered before by a strong fascia, and where there is a hard bone resting against it posteriorly, the tobacco has not the same effect as in umbilical or inguinal hernia."