There is well-marked lamellar cataract in both eyes. In each lens there are two opaque layers with clear lens matter intervening between them, beautifully seen by oblique illumination. Only occasional and partial glimpses of the fundus can be obtained, but the choroid seems normal. There is not sufficient vision for any satisfactory test of the accommodation.

CASE II. I. B., a well-grown boy of thirteen years, has rather prominent eyes, with full-sized corneæ, and normal tension, but the iris is entirely absent in both. In the right eye the cornea is quite clear, and, though there are floating opacities in the vitreous, the details of the fundus can be seen fairly well. The lens, which is of normal size, is opaque and white, and is dislocated upwards, so that only about its lower half is seen beneath the corneo-sclerotic junction. The ophthalmoscope shows a hypermetropia of $\frac{1}{2}$, which, assuming $+\frac{1}{2}$, to represent the loss of refractive power induced by aphakia in the emmetropic eye, indicates a structure of the ball corresponding to a myopia of $-\frac{1}{2}$. The choroid and retina appear normal in structure, but the optic disk is atrophied and greatly distorted, the vertical diameter being twice that of the horizontal, and the retinal vessels crowded to its inner edge; vision is only quantitative. There is no nystagmus.

In the left eye there is a diffused haziness of the cornea, which, together with a greater opacity of the vitreous than in the other eye, makes the details of the fundus invisible. The lens, which presents the same form of cataract as that in the right eye, is still further out of position, and only a narrow edge of its periphery extends below the margin of the sclerotic. The lenses seem to be held in their unnatural position by some attachment of their upper margins, while the lower are free, and they swing backwards and forwards, as if on hinges, with the movements of the balls. In the left eye the lens has caused an absorption of the tissues, against which it rests until the choroid has disappeared from above it, and the sclerotic is very much thinned and slightly staphylomatous. When the cone of light, concentrated by a convex glass, is thrown upon it from below, the outlines of the lens become distinctly visible through the sclerotic.

Though irideremia (iris and eremia, absence), or aniridia, is an extremely interesting anatomical curiosity, it can scarcely be said, in the present state of our knowledge, to teach any useful lesson in embryology or pathology. Numerous hypotheses have been suggested to account for its occurrence, but most of them are more fanciful than philosophical, and perhaps none of them are more rational than that maintained long ago by Von Ammon, who, in view of the late appearance of the iris, after the choroid is fully formed, considered its absence as simply the result of an arrest of development of the uveal tract. It is a curious fact that this anomaly is almost invariably symmetrical. According to Manz,¹ but one case has been reported in which it occurred in one eye only. Another point of interest in the history of this defect is its decided tendency to hereditary transmission. A number of cases of inheritance have been reported; one (quoted from Von Ammon by Lawrence) in which one member of the first generation was affected, three of the second, and five of the third.

The fact that cataract is very generally associated with irideremia has given some support to a suggestion that the iris is concerned in the nourishment of

the lens, and to an ingenious theory of the causation of irideremia, which supposes that the iris has been crowded out as it were, by the lens remaining too long and too closely in contact with the cornea during embryonic life. This coincidence of cataract with irideremia is, however, not constant, as cases are recorded in which the lens was transparent. One is reported by Dr. Reuling,² in which vision was sufficiently acute to enable the observer to determine that the power of accommodation was unimpaired.

The normal intraocular tension found in cases of irideremia has been adduced to prove that the aqueous humor is not secreted by the iris, but chiefly, if not entirely, by the ciliary processes. In the rabbit the ciliary processes are connected with the iris, and when both are removed the eye becomes very soft and the aqueous humor is never regenerated.³ This, so far as it goes, gives support to the advocates of sclerotomy instead of iredeotomy in glaucoma.

Partial congenital luxations of the lens are usually upwards, as in Case II., and frequently occur without defect of the iris. In the left eye of this patient the lens is so far out of place that it would be entirely concealed if the iris were present, and this case might then be readily mistaken for one of the very rare anomalies of congenital aphakia.

After the reading of the preceding paper, Dr. W. F. NORRIS said:—

"Through the kindness of Dr. Harlan, I have had an opportunity of making an examination of the eyes of the patients whose cases have been described. On first inspection of one of the cases I thought I could detect a slight peripheral remnant of the iris, but more careful examination, aided by the ophthalmoscope (oblique light), showed that every vestige of iris was wanting, that this appearance was due to the shadow cast by the limbus conjunctivæ corneæ on the periphery of the anterior chamber.

"It has occurred to me that at least some of the cases which have been reported in the older books as partial irideremia, might possibly be due to this similar appearance in the days when the above-mentioned methods of examination were unknown."

BOSTON CITY HOSPITAL.

SURGICAL CASES IN SERVICE OF DR. GEORGE W. GAY.

REPORTED BY R. A. KINGMAN.

I. PERINEAL SECTION.

THOMAS M., forty-four years old, was admitted with a stricture of the urethra and fistulæ in the perinæum. Had gonorrhœa twenty years ago, and for the last eight or nine years has noticed his stream of urine constantly diminishing in size. Two years ago he had two swellings appear just below the scrotum, which finally burst and formed permanent openings, through which urine has escaped ever since.

September 17th he was etherized, and the urethra thoroughly explored. It was found to be extremely irregular in shape, and to contain several very tough strictures, which would admit only a small bougie.

After enlarging the meatus by cutting, a Keyes's straight staff was introduced and carried down to the

² Am. Journ. Med. Sci., January, 1875.

³ Deutschman, Grafe Archiv, v., 26, No. 3.

¹ Handbuch, Augenheilkunde II., page 90.

perinæum, where an incision one and a half inches long was made upon it. A probe-pointed director was carried through this opening into the bladder. The Otis operation of cutting and stretching was now performed upon the anterior portion of the urethra, and a No. 16 English steel sound passed without much difficulty. A silver catheter was introduced through the entire urethra into the bladder and strapped in. Perinæum dressed with a poultice.

September 20th. Catheter removed. After September 24th no urine was passed through the perineal incision, and patient could make a good stream through the penis. He was catheterized every two or three days, and the bladder irrigated with warm water, on account of cystitis, from which he had been suffering for a long time.

October 6th a No. 15 steel sound was easily passed, and October 10th he was discharged, the perineal wound being healed.

II. TREPHINING FOR EPILEPSY.

Robert M., sixteen years old, was born in New Brunswick, where he has always lived, having come to Boston only a few days since for the express purpose of undergoing the above operation. He was admitted to the hospital September 17th, and was placed in the large tent ward.

Four years ago, as he was stooping with his hands thrust backwards between his legs, a boy caught hold of his hands and pulled him so that he fell forwards, striking his head on a projecting knot in the wooden floor, and losing consciousness. Shortly after he began to have epileptic fits, which continued for a year, occurring sometimes as often as three times a week, but from which he has been free for the past three years.

Two months ago, without any fresh cause, he began to have a sense of oppression and tenderness in a circumscribed spot on the top of his head, with a growing inability to sleep. His mental condition has undergone a marked change, so much so that at times he appears quite insane. During the few nights he was in the hospital before being operated upon, he was extremely delirious, sitting up in bed, raving and crying till after midnight, when he would become quieted under the effects of chloral and bromide of potash. Complained of severe headache. He and his friends anticipated a return of the convulsions. His memory and temper were much impaired.

September 23d he was etherized, and a careful examination of the skull was made. It appeared somewhat flattened on the vertex, but no depression could be discovered. The place in which he localized his disagreeable sensations and tenderness was exactly in the middle of the vertex, and accordingly Dr. Gay trephined at this point, removing a piece of bone one inch in diameter. The operation was done with full Lister precautions, a powerful carbolic spray being used, and the head being subsequently almost entirely enveloped in carbolic gauze. So far as could be determined, there were no abnormal changes in either the bone or the dura mater. Although the operation was performed directly over the longitudinal sinus, the membranes of the brain were uninjured. The flaps were merely allowed to fall together, no sutures being inserted.

The next day the head was redressed under the spray, and was in a good condition. He says he feels much better than before the operation.

Ice cap ordered to head. The wound was dressed

daily for a week, and then every two days. October 3d, wound was healed, and head was dressed merely with cotton batting.

October 8th, sat up and went out-doors. Since the operation he has had no pain, has slept well, and seems bright and intelligent. Temperature never higher than 98.3° F. Two days after operation, was sitting up in bed reading.

Discharged October 10th, free from his old symptoms.

This boy continues perfectly well up to the present date, April 6, 1882, according to a letter this day received from the family.

III. TREPHINING FOR EPILEPSY; NO IMPROVEMENT.

William J. McG., twenty-three years old, single, was admitted for an operation on a phimosis which he claimed to be of traumatic origin. He gave no history of venereal disease, or of any important sickness. His speech was noticed to be slow and slightly hesitating, but no importance was attached to it.

A week after the operation of circumcision he experienced a severe convulsion of marked epileptic character, which was followed by a considerable period of unconsciousness. During the remainder of the day he complained of headache and of "feeling nervous." Occasional trembling and twitching of the limbs was remarked. On being questioned he admitted having had similar attacks previously, during which he had fallen to the ground, and after which he had found his tongue wounded. He recalled an injury received two or three years ago from a stone which struck him on the head and produced a large wound. According to his story there was a fracture of the skull at the same point, and on examining the head an apparent depression was felt under the cicatrix. It was located near the junction of the sagittal and lambdoidal sutures. About six hours after the first fit he had another one. Urine normal, except faint trace of albumen. His face assumed a flushed and somewhat livid appearance, and the mouth was drawn slightly to the right side.

Two weeks later the same condition of things persisted, though no more fits had occurred. The mind was sluggish and the memory poor. At that time the patient desired, and the friends consented to, trephining as offering a possible means of relief, medical treatment having hitherto been unavailing. Accordingly Dr. Gay performed the operation November 18th, in the same manner as upon the last patient, the wound being similarly dressed. The next day the patient said he felt better, having lost to a large degree his "nervous feelings" and headache. The wound progressed nicely, healing almost entirely by first intention.

November 27th, wound nearly healed and in good condition, there being no collection of fluid to produce any pressure upon the brain. In the afternoon patient had a slight fit, in which the tongue was bitten, and after which he was somewhat stupid.

December 2d, had another fit. Wound closed.

He was discharged, December 12th, in much the same condition as before the operation.

IV. POPLITEAL ANEURISM; LIGATURE OF FEMORAL ARTERY; GANGRENE OF FOOT; AMPUTATION OF LEG; RECOVERY.

Frank H., thirty-six years old, colored, was admitted September 6th. Patient had been well up to three months ago when he began to notice pain in the left

knee and a swelling in the popliteal space. He continued to work as a porter in a family hotel until one week ago, when the pain had become so severe as to keep him awake at night and disable him from fulfilling his duties.

Examination showed a large swelling behind the knee, quite firm, yet slightly fluctuating, slight degree of pulsation with heart beat, painful, very sensitive on pressure. The tibial pulse was somewhat weakened and delayed. A bruit was heard over the tumor and for about two inches up the popliteal artery. Knee somewhat flexed, and only slight degree of motion. September 12th, patient went home to arrange some matters of business, and returned September 15th, for operation.

The following day he was etherized, and the femoral artery was tied at the apex of Scarpa's triangle with a double catgut ligature. Pulsation and bruit in the aneurism were entirely controlled. The edges of the wound were united with silk sutures, and a dressing of tr. benzoin. co. was applied, after which the whole leg was thickly enveloped in cotton wadding, the cotton in its turn being covered with oiled paper. Patient was put immediately to bed, and the leg was surrounded by heaters and well covered in by the bedclothes.

Four days after operation the aneurism was notably smaller and softer, and gave rise to no pain. Sensation in the toes was somewhat lessened at first, but had then become nearly normal. The pad of compress cloth over the wound was wet with compound tincture of benzoin three times a day.

September 23d the wound was found to have healed by first intention throughout a greater part of its extent, there being a little suppuration in the more superficial parts of the incision. Patient complains that the leg feels cold, though it is warm to the touch. Poultice applied to the wound.

October 6th there is some tenderness on dorsum of left foot, but no swelling of foot or leg. Two days later patient was allowed to sit up and to move about a little on crutches.

October 10th he insisted on going home to attend to important matters, and was discharged against advice, going out with crutches.

October 20th he was readmitted, on account of commencing gangrene of the left foot. A line of demarcation was beginning to appear just below the ankle, and the foot already exhaled an offensive odor. Dressed with charcoal poultice.

October 28th, the line of demarcation having formed below the ankle, the leg was amputated near the middle. The tissues seemed in good condition and well supplied with blood, though there was little hæmorrhage from large vessels. After the operation the wound was doused with carbolic solution, and dressed with Lister gauze, to be changed daily.

For a week there was scarcely any discharge from the wound, the temperature remained at about 103° F., and the patient was slightly delirious. November 6th the discharge had increased and the flaps were beginning to slough, so that a few days later the dressing was changed to a charcoal poultice.

November 20th the slough entirely separated, leaving the end of the tibia exposed. Patient has become extremely emaciated, and has a large bedsore, though his general condition seems to be rather better than for some days past.

From this time he steadily improved till December

10th, when his temperature ran up to 103° F., and he began to complain of pain in the posterior part of the stump. On examination, a sensitive swelling was found which involved nearly the whole of the posterior aspect of the leg and extended a short distance above the popliteal space. A few days later, fluctuation having been distinctly felt, an incision was made by Dr. Cheever, who was then on duty, and this was followed by the discharge of a large amount of sanious pus, together with fragments of old blood clots. The flow was increased by pressure over the old aneurismal sac.

Convalescence from this date went on uninterruptedly, the bone being all covered in, the abscess contracting down to a small sinus, and the bedsore healing readily. He was discharged February 1st, with the stump healed, the knee flexed at a right angle, and a small sinus communicating with the old sac.

Reports of Societies.

QUARTERLY MEETING OF THE RHODE ISLAND MEDICAL SOCIETY.

A QUARTERLY meeting of the Rhode Island Medical Society was held in Providence, March 16th, the President, Dr. O'Leary, in the chair.

The following gentlemen were elected delegates to the St. Paul meeting of the American Medical Association: Drs. W. E. Anthony, G. P. Baker, Ariel Ballou, Otis Bullock, F. B. Carpenter, E. T. Caswell, J. H. Eldridge, G. W. Jenckes, Job Kenyon, Eugene Kingman, A. A. Mann, J. H. Morgan, G. A. Pike, and H. E. Turner. The President was authorized to complete the list and fill vacancies.

EXPERT TESTIMONY.

DR. JOB KENYON, Chairman of the Committee on Expert Testimony, referred to the lack of interest among members of the Society as a contributing cause of the indifference of the General Assembly to the matter of expert testimony, and suggested that the Fellows sign a petition asking for such legislation as will mitigate the annoyances which medical witnesses now suffer. Later in the day such a petition was prepared and numerously signed by the Fellows.

DR. S. S. KEENE read the report of the Board of Censors and gave notice that he intended at the next meeting to move an amendment of the by-laws regulating admission to the Society, so that an examination before the Board will be necessary.

Drs. Gardner T. Swarts and Joseph N. Baratta, of Providence, were elected Fellows.

CANCER OF OS UTERI WITH HYDRONEPHROSIS.

DR. LLOYD MORTON, of Pawtucket, reported a case of cancer of the os uteri with hydronephrosis. The patient was a stout American woman, aged sixty-two. During the past seventeen years she had frequently called on Dr. Morton to prescribe for what he termed the passage of biliary calculi. Twelve years ago she had an obscure steady dull pain in the right side extending to the groin.

In September, 1881, she complained of menorrhagia, and said it had existed at intervals since the previous March. The diagnosis of uterine cancer was not established until February, 1882. March 1st, she was seized with inflammation of the left kidney followed