clude the probability of its expulsion, the *first* measure tried should be the shaking of the patient's body with the head in a depending position."

In the statistics compiled by Dr. Gross, inversion of the body alone is said to have been successful in five cases, and it is the only item against which no death is recorded. My patient adds one to the number. It does not appear whether or not the plan was tried in any of the other cases prior to the performance of an operation. It would be interesting, as bearing upon the question, to know this; also, in how many cases the proceeding has not succeeded, and if any fatal result, or impaction in the larynx, has ever followed as a consequence of its momentary adoption. I say momentary; as, unless the plan succeed at once, it would be but little likely to do so after laryngeal spasm has been set up by contact of the foreign body; and to prolong the trial after this would be a hurtful, and perhaps dangerous, proceeding. It is not, therefore, meant in this inquiry to imply a prolonged continuance or frequent repetition of fruitless efforts of this kind, or the adoption of the practice in all cases indiscriminately. With dyspnoea urgent, and the spasmodic cough severe and frequent, an opening in the larynx or trachea should at once be made. The amount of success which has attended these operations should remove all hesitancy or undue procrastination in their performance when the symptoms appear to require it, or when in cases admitting it (assuming it to be admissible in any) inversion has failed after a reasonable trial. The latter would be unadvisable when the substance is known to be of light weight and irregular outline. Such would not be likely by its weight to fall readily through the chink of the glottis, and would by its form be more liable to get entangled in the larynx. Metallic substances are certainly most favourable for inversion; and I should not hesitate to adopt it if a case of the kind again presented itself. Its propriety is more questionable in young children, in whom the aperture of the glottis is smaller, and its disposition to spasm even greater than in older persons. In Sir B. Brodie's case the plan failed. The violent symptoms during the last attempt compelled its discontinuance. On this occasion a platform with a hinge was used, the patient being placed in a *prone* position (the one also spoken of by Mr. B. Cooper as recommended) and secured by a strap across the shoulders. It has occurred to me, on considering the structure and action of the larynx at the rima glottidis, that this (the *prone*) is not so favourable for the exit of the intruder as the *supine* position. When the rima is relaxed and open—and it is only by taking it suddenly in this state that we can generally hope for success—the base or widest part of the aperture is behind, and it is towards this part that the coin or other substance would tend in the *supine* inverted position of the patient. It would, therefore, when it reached the glottis, be thus more favourably situated for expulsion than in the *prone* position, in which it would gravitate towards the narrow apex of the triangular outlet. Although, by adopting the *supine* position, the substance is not so favourably situated for exit through the mouth after passing the glottis, it would be generally found, as in my case, to be readily thrown forward when once expelled from the windpipe. In a case related by Mr. H. Lee (*Med.-Chir. Rev.*, 1856), a boy, into whose trachea a fourpenny piece had passed, was placed upon a counter, and the upper part of his body allowed to fall over the side, while his legs lay across it. Here the *prone* position was that evidently assumed. The experiment was unsuccessful. It produced "such violent coughing, with lividity of countenance," that it was given up. "It was repeated on different subsequent occasions, but always with the same result." The coin was afterwards discharged during a fit of coughing and sickness.

Another advantage of the *supine* position is that the patient can raise himself by his own effort, which his

natural instinct would impel him to do the instant laryngeal spasm was produced.

Dr. Watson mentions two cases (Drs. Duncan and Halford's) in which inversion answered (without tracheotomy); but the position, *prone* or *supine*, is not stated. In both it was a shilling that entered. After tracheotomy, *prone* inversion would, perhaps, be best, so as to favour expulsion through the wound, if the substance should fail to pass the glottis. If, however, the easier operation of laryngotomy be performed, as recommended by Mr. Lee, in order, not so much to allow of the exit of the substance through the wound, as to prevent spasmodic closure of the glottis, and thereby enable it to pass through the natural opening when the body is inverted—then, if the view here taken be correct, the *supine* position would be the one most likely to attain that end.

In some cases of doubtful diagnosis, this proceeding would probably assist to clear up the doubt. Such an instance, I think, was that already quoted from the BRITISH MEDICAL JOURNAL, in connection with Case I, in which, from the comparative quiescence of the patient, a doubt existed in the mind of the surgeon as to whether a foreign body was in the air-passages or not.

In explaining the much more frequent entrance of foreign bodies into the right than into the left bronchus, Dr. Stokes, while properly attributing the chief influence to the position of the septum between them, also mentions "another explanation, founded on the different directions of the two tubes, the *right* being *more vertical* than the *left*," and the statement is repeated in the *Lectures* of Dr. Watson. This does not seem correct anatomy. The right bronchus, passing off directly into the lung, takes a nearly transverse course. The left, having to descend beneath the arch of the aorta, has to take a more vertical direction in order to reach its destination. The point is, perhaps, of but little moment, yet worth correcting, especially when endorsed by such eminent names. Mr. Bryant, in the last number of *Guy's Hospital Reports*, says that when a foreign body has passed into the bronchi, the *left* is its most common seat. This is not, I believe, in accordance with general experience.

TEN YEARS OF OPERATIVE SURGERY IN THE PROVINCES.

By AUGUSTIN PRICHARD, Esq., Surgeon, Clifton, Bristol.

[Continued from p. 998 of volume for 1860.]

V.—OPERATIONS ON THE EYE.

I HAVE arranged the operations on the eyes under the fifth general division of my operative cases; but, upon looking over them for the purpose of further classification, I find that they are so numerous that any particular account of each case is quite out of the question. They are probably more in number than all my other operations put together; and since, according to my own experience, the tabular form does not give a reader any inducement to persevere in his studies, I have avoided it, and have written most of them out *seriatim*, as briefly as possible, merely indicating the sex by the letters M and F. Many of the cases may appear trivial to my experienced readers; but they shall be very short, and are comparatively few; for the greater number of the minor ones have escaped any accessible record. I have in these papers been anxious to give a true idea of our surgical proceedings in connexion with a provincial hospital, and have therefore included slight as well as severe, and unsuccessful as well as successful cases.

It is necessary to subdivide my ophthalmic cases into ten groups; and, even with this classification, it has been requisite to omit all the little tumours of the lids, serous cysts, operations for pterygia, and fistula lacrymalis. The groups are, the Extraction of Cataract (in one eye and in two—first the successful, and then the un-

successful cases); Needle Operations; the Removal of Hard Capsule and Dislocated Lens; the Formation of Artificial Pupil; the Mixed Cases, or those requiring several various operations, which will not allow them to be included under the former heads; Operations for Staphyloma; Strabismus; Extirpation of the eye; and lastly, Operations for Ectropion, Entropion, Trichiasis, and Ptosis.

The period of time in which these eye operations were performed extends further back than the ten years.

Extraction of Cataract. CASE CLXIV. M., aged about 50. (This was my first cataract case.) Left eye amaurotic from a blow; right lens dull; pupil large and inactive. Made an upper section, which was enlarged with the scissors; and the cataract escaped readily. He was bled in the evening for pain in the head,* and recovered well, and was able to work for years.

CASE CLXV. M., aged about 60. Double cataract. I operated on the left eye by lower section. He recovered without a bad symptom, and went home in two weeks with excellent sight and an active pupil.

CASE CLXVI. M. Double cataract, of recent formation; the centre only of the right lens being opaque. I made a lower section of the left cornea, the eye rolling inwards, and the point of the knife catching the conjunctiva. The section was satisfactorily completed. The softer part of the lens was left in the pupil; and, on attempting to remove it, there was a gush of vitreous humour to such an extent that it was necessary to fasten up the eye at once. This I do always in the old fashioned way, with a strip of court plaster and light compress, treating both eyes alike, although only one has been operated on. He made an excellent recovery, and could see to read small print with a two-and-a-half inch lens.

CASE CLXVII. F., aged 75. Double cataract. She said that she lost the sight of the right eye suddenly. I made the upper section in the right eye; but, as the iris flapped in front of the knife, I withdrew it, and completed the section easily with the convex-edged narrow knife. She went on well until the seventh day, when she told me that she could not see, and was very ill. I ordered her a purgative, and the next day she was all right. She recovered with good sight.

CASE CLXVIII. M., aged 60. His left eye was amaurotic, and he had a cataract operation performed some years before by Mr. Estlin, but without advantage. I operated on his right eye by upper section, and a very dark hard cataract was suddenly jerked out upon his cheek. On the fifth day, he struck his eye accidentally; but, with this exception, he went on well. His pupil was drawn upwards to the line of cicatrix, and he was able to see to walk about alone, and ultimately to read. Eighteen months afterwards, this eye also became amaurotic, and the iris tremulous.

CASE CLXIX. M., aged about 60, with double cataract and sunken eyes. Upper section in right eye. He made a fast recovery, and had good sight.

CASE CLXX. F., aged 58. Had two sisters who became blind from cataract, and recovered their sight by operation. I made the upper section in the right eye, the knife shaving the iris. Soft part of lens removed by a curette from the pupil. Went home on the eighteenth day with good sight, but the eye still weak.

CASE CLXXI. F., aged 67, a little fat old woman, with sunken eyes and double cataract. Right eye affected two years, and the left nine months. I made the upper section in the right eye, extracting a large hard flat amber cataract. (Mr. Estlin then operated on the left eye.) She went home with fair sight, but with weak eyes.

CASE CLXXII. F., aged 58. I operated on the right

eye, and Mr. Estlin on the left; some vitreous humour escaping with the cataract in the latter eye. She was bled at night for headache, and made a slow recovery; good sight.

CASE CLXXIII. M., aged 60, a corpulent publican, who had had paralysis. I operated on both eyes at the same time. With the right cataract (upper section from behind), a considerable quantity of fluid vitreous humour escaped. Made also the upper section in the left eye, standing in front of the patient. The cataract escaped with no vitreous humour. The next day, he had a severe attack of gout in the knees; but he recovered his sight in both eyes, and died of apoplexy about eight months afterwards.

CASE CLXXIV. M., aged 71, an extraordinary old man, who had chorea affecting one side of the body, and paralysis of the other from birth. He was constantly making (involuntarily) the most strange grimaces and contortions of the body, and this he said had continued all his life. He had been married and had a healthy family. It was with great difficulty his head and face could be kept steady. I made an upper section in the right eye, and extracted a dark amber cataract. On the fifth day he opened his eye, which appeared quite strong, and saw to tell the time by my watch in a dull light, and on the sixth day he went home quite well. I never had a case which progressed more quickly.

CASE CLXXV. M., aged 60. I made the upper section in the left eye standing in front of the patient. Lens escaped readily, and he recovered well, with good sight.

CASE CLXXVI. M., aged 65. Operated on both eyes, the right by the upper section, and the left by the lower. During the cure, the left lower lid irritated the corneal flap, and rendered necessary two applications of the nitrate of silver to it. Recovered with good sight in both.

CASE CLXXVII. F., aged 60. Operated on both eyes. In the right the corneal section was small, and the lens showed no disposition to emerge until I had enlarged it with a pair of scissors. She had no very unfavourable symptoms, but her eyes remained weak. She went away, and returned in six months, when I found that she had entropion of both eyes, and prolapsus iridis of the left eye. I took a piece of skin from her lid, and applied nitrate of silver to the prolapsed iris, and she soon recovered and went away with good sight in both. She was also the subject of an immense bronchocele.

CASE CLXXVIII. F., aged 60, a rheumatic subject, liable to headache, with double cataract, sunken eyes, and prominent brows. I operated on both eyes; she had pain in her head at night, but was not bled. When she recovered, she had very good sight in the left eye, and closed pupil and but little sight in the right.

CASE CLXXIX. M., aged 60, lost the left eye by a blow, and the right eye had been getting gradually dim, when he became suddenly blind. I operated on the right, and made a good upper section. He went on well for nearly a week, when pain, especially at night, occurred, and he had severe inflammation of the eye, requiring active leeching. After three weeks, finding the cornea bulging, and the wound not healed, I passed the curette through the white scar, thinking to remove some debris of the cataract, but nothing came away, and the eye healed more quickly. He went away with but little sight in this eye; and when I saw him, six months afterwards, he had closed pupil. I cut his iris with the small iris-knife, and he had immediately a new pupil, which became circular, and he went away with a four-inch glass and good sight.

CASE CLXXX. F., aged 65. Operated on the left eye, making a lower section. He went home with good sight in eighteen days. The pupil was a little drawn down.

CASE CLXXXI. M., aged 57, whose father was operated on for cataract eleven years before. Double cataract. I operated on the right eye, making the upper section,

* In the days of my apprenticeship to the late Mr. Estlin, it was my duty to see all his operative cases in the night, about twelve hours after the operation; and I had the general direction to bleed whenever there was pain in the head, and it always removed it.

which required to be enlarged with the scissors. Recovered with good sight, without a bad symptom.

CASE CLXXXII. M., aged 72. Double cataract. Mr. Estlin extracted the right and I the left lens. He had a good deal of inflammation in both eyes, which eventually subsided; and, when he returned home to Wales, his sight was improving, but it was still imperfect.

CASE CLXXXIII. F., aged 60, had been gradually becoming blind for four years. I made first the upper section in the left eye (standing in front), and enlarged it a little with a scissors, and the lens with a considerable quantity of vitreous humour gushed forth, and it required some management to replace the corneal flap. I then made the upper section in the right eye, and the lens and a small quantity of vitreous humour escaped with a little pressure. He went home well, with good sight in both eyes.

CASE CLXXXIV. F., aged 50., with fully formed cataract in each eye. I made an upper section in the right eye, and extracted a soft white lens. Went home with good sight.

CASE CLXXXV. M., aged 60., with long standing cataract in each eye. I operated on the left, and when he recovered, he had good sight; but after a time the capsule became opaque, and the pupil was drawn down. I therefore operated on the right eye with a needle, reclining and breaking up the lens. Some inflammation came on, and he was leeches once or twice; but ultimately the eye recovered completely, and he went home with very good sight.

[To be continued.]

Reviews and Notices.

ON DIPHTHERIA. By E. H. GREENHOW, M.D., F.R.C.P.L., Physician to the Western General Dispensary, etc. Pp. 274. London: John W. Parker and Son. 1860.

DIPHTHERIA is another of the innumerable evidences of the truth of the wise man's dictum, that "there is nothing new under the sun." We are apt to regard this affection (with its modern title) as a *disease of the generation we live in*. A certain indistinct history of the disease, it is true, some years ago came to us from France; but in Great Britain diphtheria was, until lately, little more than a clinical curiosity. The last few years have, we need hardly say, totally changed this disposition of things. We have had to make frequent and painful acquaintance with the disease, to investigate its nature, to look up its history, and to endeavour its arrestment (if this might be). Naturally enough, under such circumstances, our professional brethren have, some of them, made a special study of the epidemic, and have given the profession the benefit of the result of their investigation.

Dr. E. H. GREENHOW has thus favoured us; and we are glad that he has done so. The natural tendency of his studies has been in the direction of epidemics, their causes, nature, and special visitations; and we therefore are sure to have in him a satisfactory guide to a knowledge of this epidemic also. For diphtheria is truly an epidemic, even though it be also endemic and sporadic. Like cholera (and here we follow Dr. Greenhow) the disease is no novelty here; it has had its being here ages ago, has vanished, and now has reappeared in this country once again and in the present century. It was described by physicians of former long-past ages; but our fathers and grandfathers knew it not. Aretæus has

described it,—so says Dr. Greenhow at least. In the sixteenth and seventeenth centuries it prevailed in Spain, Italy, Sicily, and other European countries. In the middle of last century, it visited England, France, Italy, Sweden, Germany, and even North America. Then it seems to have lain *perdu* for a season, until it again manifested itself about the end of the first quarter of this century. During the last three or four years it has prevailed, in epidemic form, on the Continent, in England, North America, and distant Australia.

Dr. Fothergill gives the first notice of the disease in this country in 1748, in an "*Account of the Sore Throat attended with Ulcers*." Other physicians of that date also described the affection, Drs. Huxham, Starr, etc.; and the extracts given by Dr. Greenhow from the writings of these worthies, leave little doubt that they had indeed diphtheria to deal with. The history of diphtheria in the nineteenth century dates from Tours, in a communication from M. Bretonneau to the French Academy of Medicine. In fact, to the epidemic in question, Bretonneau first applied the term *diphtherite*. His memoirs on the subject have become, thanks to the Sydenham Society, classical works with us. From Tours the disease seems to have spread over, or to have arisen, in various parts of France. Louis described it in a paper "*On Croup in the Adult*." The acquaintance of living English physicians with the disease in its epidemic phase, at least, was commenced at Boulogne during its outbreak there in 1855. This epidemic lasted until 1857, and carried off 366 persons, 341 of whom were children under ten years of age. It was said to have especially attached itself to the English residents there; but probably the saying was a mere vague rumour.

In 1856, Dr. Greenhow marks its first appearance in England in Whaplode Grove, in Lincolnshire. It also appeared at Leek and Birmingham about the same time; and it is important to note, that the disease seems to have commenced spontaneously in several centres remote from each other. In London, the first case noticed was in 1857. A curious coincidence here has been suggested; viz., that during this visitation of diphtheria other diseases (especially those of the zymotic sort) assumed a diphtheritic type, and not only amongst men, but also amongst animals. We must not, however, suppose that because the disease has been raging as a true epidemic among our people, that its onset is simply and solely of an epidemic kind. Dr. Greenhow affirms that the records of our medical literature clearly show that diphtheria, like cholera, has always been present with us in a sporadic way, *i. e.*, when not raging as an epidemic. Sometimes it has adhered so pertinaciously to certain limited spots, even to single houses, as to give it an endemic character. He gives numerous illustrations of this peculiar character of the affection; its extension through one part of a poor-law union, for example, and its entire absence in the other part,—a fact which reminds us of the vagaries of the cholera on the opposite banks of a river.

In the days of Huxham and of Fothergill, as in our own, scarlet fever appears to have run hand-in-hand with diphtheria. We must not, however, as some have done, therefrom conclude that there is any actual identity between the two affections, notwithstanding that scar-