

of the sciatic nerve, to the outer side of the knee, and down the leg as far as the ankle. The pain, which was agonizing, occurred in paroxysms, and seemed to increase by exercise of the limb, and to subside altogether at night, or on his assuming the recumbent posture.

No very marked relief was obtained from blistering in the course of the nerve, nor from the endermic use of morphia and opiate frictions; neither was the internal exhibition of narcotics any more successful, and the pains only wore off as his increasing debility obliged him to keep his bed. Mr. Tyrrell saw him occasionally at this period, and gave as his opinion that the neuralgia, as well as the amaurosis, were dependent on a tumour at the base of the cranium; and with this impression of the case, all acute treatment was relinquished, and only such medicines were given as the state of the digestive organs might require. There was now very great impairment of muscular power generally, but no paralysis nor loss of common sensibility. The left leg wasted visibly, at the same time that he was becoming generally emaciated. His appetite, however, continued good, and latterly it was found difficult to satisfy his wants; the bowels were so torpid as to require the almost daily administration of purgatives.

In November, 1842, he had several attacks of delirium, with excitement, like that of drunkenness, which were followed by stupor; these afterwards assumed much of the character of epilepsy, there being clonic convulsions, usually in the night, and occurring at intervals of a month.

From this time he remained in bed from sheer exhaustion, and sank into a state of apathy, with apparent moroseness of temper: he expressed himself well in conversation, but with much slowness, as if a great effort were necessary to collect his ideas; and when roused he seemed to have the full use of his mental faculties. The senses of taste and smell were not at all impaired; his hearing on the right side was very good, but vision was now completely extinguished, so that there was no perception of light left. There does not seem to have been any excitement of the sexual appetite, and all that could be elicited from the nurse on this point was, that he had lost all sense of decency. He lingered on in this state during sixteen months more: at the conclusion his urine and fæces were passed unconsciously; and during the oppressive weather of August, 1844, his appetite failing him, in a few days he expired.

An examination of the body was made sixteen hours after death. The bones of the skull were thin, and the diploe scarcely visible. The dura mater was healthy, and not unusually adherent. The vessels of the pia mater were much congested, and serum was effused extensively into the cellular tissue between the convolutions. The brain was extremely firm, and on dissection presented a great number of large bloody points. The lateral ventricles were distended with clear serum, of which four or five ounces were collected. The septum lucidum was broken down; the choroid plexuses were shrunk and pale, and had several small serous cysts formed on them. On removing the brain, the optic nerves were observed to be very small, and of firm consistence; on cutting away the attachments of the tentorium, a bulging of it was seen on the left side, and when this was punctured, about half an ounce of gelatinous fluid, of a greenish colour, escaped. The cerebellum was now raised up, and under its left hemisphere a tumour was discovered, lying on the petrous portion of the temporal bone, and firmly attached to the auditory foramen. There were also extensive connexions between it and the cerebellum, which was hollowed out to receive it. In attempting to dissect it out, so as to preserve its relations to the cerebellum, the morbid growth was found to have extended some way into the auditory canal, which was widened considerably, and the surrounding bone appeared to be eroded. The tumour, when removed, was an oval mass, compressed from above downwards, and having the following measurements:—Length, two inches, greatest width, one inch and a third, and vertically, one inch. Its surface was lobulated, and studded with small serous cysts, the colour of a darker tint than the brain, owing to the greater vascularity of its coverings; these consisted of the arachnoid membrane and a thin cellular layer, which were continuous with the investments of the cerebellum, forming the only bond of union between them. Situated in the angle between the lateral mass of the cerebellum and its large peduncle, it pressed also on the pons varolii. The seventh nerve, and the divisions of the eighth, passed under it to their respective foramina, without being at all flattened or displaced.

A section of the tumour showed a dense structure of glandular firmness, made up of whitish arborescent fibres, leaving numerous interstices, which contained some gelatinous serum. The striæ of white tissue were speckled here and there with black points, which proved to be coagulated blood, and sections of minute vessels. One half was shown to Dr. Walshe, who

considered it to be a variety of encephaloid cancer, and rare, as occurring in the membranes, and not in the substance of the cerebellum.

In the thorax, the heart was found much enlarged, from dilated hypertrophy of the left ventricle. There were several patches of cartilaginous deposit at the bases of the mitral valves, and the aorta was somewhat dilated at its commencement, but healthy in its valves and lining membrane.

Old adhesions existed between the ribs and middle and lower lobes of the left lung; the latter organ was much congested, and the bronchiæ filled with frothy mucus.

In the abdomen, there was nothing worthy of notice beside the kidneys, which were in an advanced stage of granular degeneration.

June 17th, 1845.

#### MODE OF OPERATING FOR THE CURE OF CERTAIN FORMS OF CATARACT.

By Dr. SICHEL, Professor of Ophthalmic Medicine and Surgery, Paris.

SIR,—The following mode of operating for the extraction of certain forms of cataract being, I believe, new to the generality of British surgeons, and several cases thus treated, which have occurred under my personal observation, having been followed by excellent results, I enclose a translation of an article upon the subject, from the pen of Dr. SICHEL, of Paris, (*Gazette des Hôpitaux*, November, 1840.) That distinguished oculist having done me the honour to revise the same, I have great pleasure (with his permission) in introducing the subject to the notice of the profession, through the medium of your widely-circulated journal, and subjoin an account of two cases, the progress and treatment of which I had the opportunity of watching whilst attending the *clinique* of Dr. Sichel during the past winter.

I am, sir, your obedient servant,

JOHN TOPHAM, M.B. (Lond.) University Medical Scholar.  
Wolverhampton, July 25th, 1845.

Secondary capsular cataract is one of the most frequent sequels of the operation for cataract by extraction, and especially by depression.

In our "*Traité de l'Ophthalmie de la Cataracte et de l'Amaurose*," p. 606, we have exposed the causes which favour its production, the precautions which it is necessary to employ to avoid it, and the method of operating by depression, or by extraction through the cornea. We have not concealed the difficulties which its depression presents, nor the dangers which may accompany its extraction, even when this is practised through a narrow puncture of the cornea. This danger augments especially in the cases in which violent, obstinate, or frequent ophthalmies have preceded, or followed, the operation for primitive cataract. Extraction through the cornea is especially to be feared, when there are adhesions, pupillary contractions, partial opacities of the cornea, or a very great predisposition of this membrane to inflammatory action. We should particularly avoid this operative procedure when we have practised the operation for cataract upon one eye only, rather to remedy a deformity than to fulfil more positive indications—a circumstance which presents itself sometimes, not only in private practice, but even in the *cliniques*.

The operation for capsular secondary cataract by depression becomes especially difficult, and often altogether impossible, when the opaque membrane is adherent to the iris in one or several points. Then it cannot be completely depressed; it always reascends when it has contracted an adhesion to the inferior portion of the iris; floats up behind the pupil, which it partially obstructs; or fluctuates in this aperture, when it is attached to its superior edge. Often, very small and incomplete capsular shreds produce, in these circumstances, effects which we ought not to expect, and render the sight so feeble, that objects of medium dimensions are not clearly perceived, even with the aid of spectacles of a considerable magnifying power.

All the attempts which are made to depress or detach similar capsules, or floating shreds of capsules, are vain; the opaque membrane, being moveable and extremely light, escapes before the needle, or returns to its primitive position as soon as the instrument is withdrawn, though it may have been displaced laterally, or depressed.

In these cases I have often obtained complete success by a particular expedient. I pushed the opaque and moveable capsule behind that portion of the pupillary margin nearest the point of adhesion, repeating this operation until the opacity ceased to return, or only regained incompletely its primitive seat; then I ordered the patient to keep himself carefully laid upon the side towards which I had pushed the membrane. By its weight

alone, however minute it may be, the moveable capsule depresses itself still further, and remains depressed laterally: it becomes adherent to the posterior surface of the iris, and does not re-ascend, when the patient, after reclining for some days upon the side, lies upon his back, or resumes the vertical position. By this simple procedure I have often obtained complete success; unhappily, such is not always the case. It fails—

First. When the capsular fragment is too small, or adherent to one point of the middle of the pupillary margin, and is too removed from the lateral edges.

Second. When the capsule has several adhesions so firm that the needle is not able to detach them.

Third. When the capsule is floating, and retained by a single, long, very thin, and extensible filament, which cannot be broken through by the needle. In these cases, extraction becomes indispensable; but it is necessary to avoid the dangers attached to the section, and even to the very limited puncture of the cornea, when this puncture must necessarily be followed by the occasionally repeated introduction of blunt instruments, such as hooks or forceps, the manœuvres of which contuse more or less the lips of the wound, and produce a tendency to suppuration, and to the formation of more or less thick, opaque, extensive, and misshapen cicatrices.

The extraction of secondary capsular cataract through the cornea becomes always very critical, on account of the difficulty of seizing the opaque, non-adherent membrane, from before backwards, by the aid of the forceps or the tenaculum; it escapes most frequently backwards, and is not laid hold of but after many fruitless attempts. A prolapsus of the iris, followed by staphyloma of that membrane, by irregularity, contraction, and even, sometimes, obliteration of the pupil, may be the grievous consequence of this method. To completely avoid these inconveniences we have often thought of practising the extraction of the opaque capsule through the sclerotica.

We are aware that Bell and Earle, in England, M. Quadri, in Italy, and still more lately, M. Siro-Pirondo, in France, have proposed and practised upon the living subject (with the exception of the last) the extraction of primitive lenticular cataract through the sclerotica. If their attempts have not had a success sufficient to encourage any other surgeons to imitate them, and have occasioned the first three of these surgeons to abandon this method, this seems due, in part, to the general inconveniences of a tolerably extensive wound of the globe of the eye, to the inflammation which must needs follow it, and to the escape of a voluminous body, such as the crystalline, between the lips of the wound. On the other hand, the danger of this method has appeared to me to result from the vertical direction given to the section of the sclerotic by the surgeons who have practised it upon the living body. It follows from this, in effect, that the contractions of the external rectus always separate the outer lip of the wound from the internal one, which is adherent to the cornea; that these contractions, compressing at the same time the humours contained in the ocular tunics, communicate to them a tendency to escape through the lips of the wound—dangerous circumstances, the concurrence of which must powerfully augment the chances of inflammation, of suppuration, and destruction of the eye. It occurred to me that nothing of this kind would happen if, in place of a voluminous crystalline, we extracted but a thin capsule, or a fragment of this membrane; or, in place of an extensive section, we only made the smallest puncture possible; and if, moreover, in place of being vertical, the opening of the fibrous membrane be made transversely—i. e., parallel to the fibres of the external rectus muscle, whose contractions then would not further separate the lips of the wound one from the other. The hyaloid being always more or less torn, and the vitreous body to a greater or less extent softened or liquefied, as a result of the operations of cataract practised by the needle, I thought that it would be necessary, at the same time, to practise puncture of the sclerotic as high as possible; that we ought to choose the most slender forceps, and to avoid all sudden, too extensive motion of this instrument, for fear of producing at the same time a wide separation of the lips of the wound, and an immediate and too violent contraction of the ocular muscles. By these means, we should prevent an extensive loss of the contained liquids, loss followed by sinking in of the eye, with or without violent inflammation. I intended, in consequence, to put this project into execution on the first favourable occasion. The following cases will prove that this novel operative method, executed alter the rules which I had traced *à priori*, has in effect the advantages which I had supposed, and that it is permissible to hope that, after repeated trials, we shall recognise it for a really useful acquisition in the domain of surgery. Let us add, that this method will be applicable whenever the depression of secondary capsular cataract is impossible, with the exception, nevertheless, of cases of extensive and too intimate adhesions, and of remarkable narrowness of the pupil—

cases in which it will be requisite to have recourse to the operation of artificial pupil.

**CASE 1.—Partial secondary capsular cataract of the right eye—Lenticular cataract of the left eye.**

The patient is a woman aged fifty-three years, both of whose eyes were formerly affected by cataract. The operation of depression has been performed upon the right eye; but, as is frequently the case, a portion of the anterior crystalline membrane has remained after the depression of the lens, and now forms an impediment to vision, which requires an operation for its removal.

The portion of the capsule thus remaining behind the pupil has become opaque, and presents the following appearances.

In the centre of the pupil of the right eye, there is a portion of membrane, of a greyish-white colour, quite opaque, and presenting an appearance of striæ upon its surface. Its form is triangular, the base being directed towards the inferior portion of the pupil. It is adherent to the posterior surface of the iris by each of its angles, leaving only a very narrow interval at each side unobstructed, and permeable to the light; so that the use of the right eye is entirely lost, and even when the pupil is dilated by belladonna, the patient can only see indistinctly, and objects of small dimensions cannot be perceived at all by her. She sees less plainly than is ordinarily the case in similar circumstances, and it is probable that there is some degree of amaurosis present.

In the opposite eye, there is a cataract of a greenish colour, the general consistence of which seems to be hard, but between the central nucleus and the anterior portion of the capsule there appears to be a space filled with a limpid fluid. This may, however, be due to the circumstance of a portion of the lens not having yet become opaque.

The operation of extraction through the sclerotica was performed by M. Sichel, January 15th, 1845.

The patient being seated upon a low chair in front of the operator, and the eye having been fixed by means of a pair of forceps, as in the operation of strabismus, a knife, having a flat, triangular shape, with cutting edges and point, was pushed through the sclerotic, at such a distance from the margin of the cornea as to avoid injury of the ciliary processes.\* The point of the instrument was introduced at the level of the transverse axis of the eye, and was pushed directly through into the substance of the vitreous humour. An incision having been thus effected in the direction of the fibres of the external rectus muscle, the knife was withdrawn, and a pair of slender forceps, denticulated at the point, being introduced through the aperture, the opaque capsule was seized at its lower portion, where this membrane was larger and most firmly adherent. Owing to the firm attachments which it had formed with the posterior surface of the iris, it was found very difficult to separate the membrane from its connexions. The difficulty of extraction was likewise increased by the great unsteadiness of the patient. Upon placing the membrane thus removed, in water, it became evident that adhesions had existed between it and the posterior surface of the iris. The inner angle of the capsule exhibited well-marked appearances of vascularity, and each of the angles was stained by portions of the dark pigment of the urea. A considerable effusion of blood followed the operation, and a small portion of this liquid penetrated into the internal chambers of the eye.

On holding up the hand before the patient's face, and desiring her to look at it, she discerns the nature of the object presented to her, but still sees very indistinctly.

The operation of depression was now performed upon the left eye, but it was only after repeated attempts that the lens became stationary below the level of the pupil. The patient was very unruly, and the conjunctiva was obliged to be held fixed, by means of a pair of forceps, in order to keep the organ steady.

Directly after the operation, the woman could see tolerably well with the left eye, but in the course of an hour the crystalline body became again elevated, so as to obstruct the inferior two-thirds of the pupil. The lids of the right eye were placed in opposition, and maintained thus by means of strips of adhesive plaster. Compresses of lint, wetted with cold water, were directed to be kept applied during the following days, and mercurial ointment, mixed with extract of belladonna, was ordered to be rubbed upon the temple. Scarcely any inflammatory symptoms supervened, and the employment of the means indicated above, joined to the administration of purgatives, completed the antiphlogistic treatment. The blood effused into the anterior chamber became gradually absorbed.

January 28th.—The opaque lens has now regained its original situation in the left eye, and a second operation was performed

\* The instrument employed is the lancet-shaped knife of Jaeger, used by that oculist in the operation for artificial pupil.

for its depression to-day. The crystalline body was easily depressed, but some shreds of the capsule remained behind, being situated near to the margin of the pupil, particularly at its lower portion. These filaments appear to be attached to the depressed lens by one of their extremities. The operation being terminated, the patient was directed to remain in the erect or sitting posture, until the evening, and when she retired to bed, to recline with her head raised above the general level of the body by means of pillows. After the operation, the lens still continued to float behind the pupil, but it gradually became spontaneously depressed, its volume, at the same time, slowly diminishing, until the opacity completely disappeared from behind the pupil, leaving this aperture perfectly clear.

March 28th.—The patient was discharged to day. The pupil of the right eye is now perfectly regular, and the faculty of vision is restored so completely, that, with the aid of spectacles, the woman can discern the situation of the hands of a watch, and can read ordinary-sized print. The vision of the other eye is not benefited by the operation practised upon that organ, for the patient cannot distinguish light from darkness when the opposite eye is closed. There is no doubt that the cataract on this side was complicated with amaurosis. Dr. Sichel stated that he had often observed incomplete amaurosis, complicated by cataract, to become complete after an operation, even without very pronounced symptoms of traumatic inflammation.

#### CASE 2.—*Secondary capsular cataract of the left eye.*

The subject of this case is a young man, twenty years of age, of plethoric habit. This patient was operated upon January 8th, 1845, by Dr. Sichel, for a soft lenticular cataract of the left eye, the lens being broken up by the needle. The cataract was of the semi-fluid variety, and the anterior surface of the capsule presented a rough and elevated surface in the lower two-thirds of its extent, forming a true vegetation of this membrane. The disease had been gradually increasing since its first appearance four years ago.

*Present condition.*—All traces of the lens have now disappeared, but there is still the crystalline membrane, opaque in its whole extent, situated behind the pupil of the left eye, and adherent to the iris by its inferior and external margins. This membrane appears to possess a greater density in its lower third than at the upper portion, the latter allowing the passage of an amount of luminous rays sufficient to enable the patient to distinguish light from darkness. The iris obeys readily the stimulus of light.

The patient being seated near a window, the light falling obliquely upon the left side of his face, the operator commenced by pinching up a fold of the conjunctiva at the inner angle of the eye, by means of a pair of forceps; the motions of the organ being thus under control, a knife, similar to the one described as having been used in the first case, was plunged directly through the sclerotica, at a distance of about four lines from the outer edge of the cornea. A longitudinal incision, about four lines in length, was thus made, simply by pushing the knife onwards into the vitreous body, till the broadest part of the instrument arrived between the lips of the wound. A cataract needle being introduced through the incision, the opaque portion of capsule was detached, and attempted to be pushed directly backwards; but considerable difficulty was experienced in effecting this object, and a small portion of the upper part of the membrane became separated during this stage of the operation. The needle having been withdrawn, a pair of slender forceps were introduced through the same aperture. This was also found to be a thing difficult of execution, as the edges of the wound, obstructed by effused blood, were firmly closed by the contraction of the rectus muscle. The forceps were introduced into the posterior chamber of the eye, having their blades closed, but as soon as the extremity of the instrument approached the margin of the opaque capsule, these were allowed to open by their own elasticity, and they were passed, one before the other, behind the membrane. This was now seized between the blades, and withdrawn, together with the instrument, by a sudden traction, in a straight direction, through the sclerotic incision. During the operation, a considerable quantity of blood became effused into the interior of the eye, a portion of the aqueous humour having escaped, and its place becoming occupied by blood.

The patient was ordered eighteen drops of laudanum, to be taken in three doses, and was directed to have cold water applied to the eye by means of pieces of lint.

Twenty-four hours after the operation, the situation of the wound in the sclerotic was scarcely to be perceived. The conjunctiva covering the outer portion of the eye, was considerably injected. There was slight change in the colour of the iris, showing the commencement of inflammatory action; the pupil was dilated; the blood effused into the anterior chamber was nearly absorbed.

Upon looking carefully into the pupil, a minute shred of semi-opaque membrane is perceptible at its upper portion. This, however, is of exceedingly small dimensions, and can offer no serious impediment to vision.

The patient can discern large objects when these are placed before his eye, but cannot yet see distinctly.

To be bled from the arm to sixteen ounces, to take a purgative, and to use frictions of strong mercurial ointment, mixed with extract of belladonna.

The antiphlogistic treatment was continued, and the inflammatory action gradually subsided.

The patient was discharged on the 14th of March, the pupil being at that time perfectly regular. The minute shred of capsule still remains in the eye, but is so small as to be perceived with difficulty, even on a close examination. The sight is so far restored, that, by the aid of spectacles, the man can discern the hour upon a watch, by means of the eye which has undergone operation, and can walk about by himself without the assistance of spectacles, the healthy eye being closed.

#### THE TREATMENT OF STRANGULATED HERNIA.

By WILLIAM B. MCGEAN, M.D., M.R.C.S.L.

I READ with much pleasure the communications from Mr. Macilwain on "Strangulated Hernia," published some time ago in your pages, and particularly his subsequent observations in THE LANCET of March 15th, on the manner of conducting the operation, and the after treatment; but I confess that I felt grieved at the following statement:—

"I will now conclude by a case or two in illustration of my own practice, premising only that when the strangulation has existed for any time, I seldom do more than fairly try the taxis, and, this failing, perform the operation."

Were we to follow Mr. Macilwain's advice in this respect, operations in hernia would be increased tenfold, and those means by which we so often succeed in reducing the tumour might become generally neglected. Indeed, my chief object in troubling you with this communication is to state my experience (however limited, and it is small) of the good, and oftentimes surprising, effects of opium in reducing strangulated hernia. I well remember two cases that I have had in my own practice within the last two years, where existed old hernias, suddenly become strangulated, in one case attended with symptoms of great severity, by intense pain in the tumour, cold perspirations, vomiting, and obstinate costiveness. In the other, the strangulation had existed for three days, likewise attended by bad symptoms, although not to the extent of those in the first. In both of these cases I tried, with great care and perseverance, the taxis, cold applications, and the warm bath, and, in one, the tobacco enema, all unsuccessfully. As a last resource, previously to recommending an operation, I administered sixty minims of the tincture of opium, repeating the dose, in one case, at the interval of half an hour, the repetition of it in the other being unnecessary. In both cases, the remedy was attended with the most decided success. In the former, the tumour receded of its own accord; and in the other, with the assistance of the taxis, used gently (as may be presumed from the pain) by the patient himself. I report these two cases without comment, at present, but gladly solicit any remarks on the treatment.

Ashbourn, August, 1845.

#### REVIEWS.

*Practical Notes on Insanity.* By JOHN B. STEWARD, M.D.  
London: Churchill, 1845. pp. 122.

THE condition and treatment of insane persons having recently very fully engaged public attention, any work bearing such a title as the above will be read with double interest, especially coming from the pen of a gentleman who has been engaged for ten years in the medical administration of an extensive county asylum; for really useful additions to our present stock of information on the subject are much needed. But what principles have we found in the volume, with which the author desires our concurrence? At page 2, he observes, "that the course he has marked out for himself not requiring the usual divisions of insanity, the reader will, throughout the following pages, find the terms *insanity* and *mania* used synonymously." Thus all the recognised forms of insanity are jumbled together under the synonyms, "insanity" and "mania," a commingling of cerebral