The chancre, hitherto indolent, becomes, when gangrene sets in, painful and irritable; its surface is dotted with black spots, and cannot better be compared than to the aspect of the sore consequent on furunculus.

Indurated chancre, whatever be its particular form, is also remarkable by the extreme frequency of the occurrence of secondary symptoms after it.

Irregularities of Chancre in general during its Period of Cicatrisation.—Deviations from the typical form are not only observable in the incipient stage and further progress of chancre, but also in its period of cicatrisation. Excessive, exuberant granulations, may induce a fungoid appearance, or even become the cause of vegetations. In neither case has the surgeon to cope with a special sore, but with accidental deviations, depending on imperfect treatment or total neglect. During granulation, the patient being under the influence of the syphilitic diathesis, chancre may put on the aspect of mucous tubercle; hence the error of many writers, who have considered this form of constitutional disease as a primary result of infection. For a shorter or a longer time induration persists after complete cicatrisation.

I feel confident that in one half of the chancres no cicatrix whatever remains to bear witness to the previous infection; but when a cicatrix remains, it may be elevated, depressed, or on the same level with the surrounding tissues, according to the degree of granulation, and the extent of destruction undergone by the dermis.

M. Cullerier and myself were both called to give medical evidence in an important trial at Versailles. A gentleman stood inculpated of having communicated syphilis to his wife; the accused party presented no trace whatever of primary or secondary disease. We were called upon to state if it was possible that primary syphilis might disappear without leaving any trace whatever of its previous existence. M. Cullerier answered in the negative; I was of a contrary opinion. In the particular case, collateral evidence proved that I was right, and a verdict of "guilty" was returned.

In support of my opinion, I may say that I have seen many cases similar to the following:—A patient presented a sore on the penis, which inoculation showed to be a chancre; and the results of the inoculation in the thigh still existed, when all trace of the chancre on the genital organs had vanished.

EXTRACT OF INDIAN HEMP.

Mr. Savory has communicated to the "Pharmaceutical Journal" the following formula for preparing the extractum cannabis Indicæ:—Take of gunjah (finely bruised), four pounds, avoidupoise; rectified spirit (0·838), five gallons, old m.; macerate the gunjah in two gallons of the spirit for seven days, then strain off, and add one gallon more of the spirit; let this stand four days, and strain; mix the two tinctures, and filter; then boil the hemp in the remaining two gallons for fifteen minutes, and filter *while hot*. Let all the tinctures be mixed; then distil off the spirit and evaporate the remainder in a water bath to the consistence of an extract. Produce—twelve ounces.

ON THE PROPRIETY OF OPERATING IN CASES OF CATARACT, WHERE ONLY ONE EYE IS AFFECTED.

By THOMAS NUNNELEY, Esq.,

Lecturer on Anatomy, &c., at the Leeds School of Medicine, and Surgeon to the Eye and Ear Infirmary, Leeds.

[Read at the Anniversary Meeting of the Provincial Medical and Surgical Association, Aug. 2, 1843.]

In presuming to bring the following short communication under the notice of the members of the Provincial Medical and Surgical Association, two circumstances have been fully impressed upon my mind, which I trust it will be found I have not violated. The first is, that whoever presents himself before the meeting, should remember the persons who constitute it, as well as the objects for which the Association was instituted, and by which its proceedings ought to be characterised, which will, I apprehend, lead him to select subjects of a practical nature, rather than to present to the meeting a lengthened or elaborate dissertation, which, however important the matter treated of may be, or however learnedly handled it may prove, is, I consider, much more fitted for the instruction of the student or the study table of the more advanced man, than for occasions like these; where persons who have already acquired the principles of their science, and are actually engaged in the arduous duties of active practice, have met for the purpose of asking each other the results which experience in the application of those principles has taught them, and how each may thus benefit by the information of the many.

The second point, which is intimately connected with the former, indeed follows from it, is, that regard should be had to the claims of others and the business of the society, so that too much time should not be occupied by a single communication. Indeed, so necessary do I hold this latter consideration to be, that, at the risk of being thought abrupt, I shall at once enter upon the subject, to which I request the attention of my auditors; nor shall I add to its length by many quotations from those authors whose names I may mention.

Cataract is one of those affections which are so frequently met with in all parts of the country, that there is probably no individual here present who has not oftentimes met with it among his patients; and, from the importance of the organs involved, has not considered the best means of removing it. When both eyes are affected, there appears to be no difference of opinion as to the propriety of an operation of some kind being undertaken at one time or another, and either upon one eye or upon both. But the state of opinion as to the propriety of interfering by any operative measure when only one is involved, is most contradictory. Into the general question of the nature of cataract, the advantages of the different kinds of operation hitherto proposed, the period of disease at which the operation is most advantageously to be undertaken, and whether both eyes ought to be operated upon at the same time, or only one, I do not purpose in the least to enter; although some of these

points are far from being settled, farther elucidation, especially comparative facts, being still wanting; and to some of these I may possibly at a future time venture to draw the attention of the Association. I shall, at present, strictly confine myself to the question—supposing one eye only cataractous from any cause, ought the surgeon to interfere by operation for removing the opaque lens? General opinion, at least practice, would, I apprehend, say, no. My experience and reasoning would induce me to answer, yes. If we search the records of medical literature, we find the utmost discrepancy of opinion; and the advocates for and against operation are so nicely balanced, that when the circumstance of several writers on the eye not mentioning the case is taken into consideration, and especially some well-known and esteemed recent writers upon ophthalmic surgery deciding in the negative, the balance of authority would probably be thought by most to sanction the usual custom of not interfering with the opaque lens. In favor of operating may, amongst others, be mentioned the names of Maitre Jan, St. Ives, Dr. Smith, Mr. Carmichael, Mr. Travers, and Mr. Saunders. Sanson states that he has seen Dupuytren operate, and has himself operated many times, when only one eye has been affected, without any ill effect following.

Velpeau also says, that M. Roux, M. Luzard, and himself, have all operated when only a single eye has been affected, without any inconvenience, and that if the patient himself earnestly desires to have the operation performed, it ought to be done. Baron Wenzel, though he does not in every case advocate the operation, yet many of his cures were those where only one eye was affected; and lastly, since this was written, I have seen a paper by Mr. Middlemore strongly advocating operation.

On the contrary, against operation, may be quoted, as decidedly and strongly opposed to it, Warner, Walther, B. Bell, Hey, and Pott; the two last especially mentioning traumatic cataract, which they consider an affection of the capsule alone, and consequently, they think, often spontaneously disappears. Mr. Lawrence and Mr. Mackenzie both state the general rule of not operating, which they appear to have thought satisfactory, and to have determined their practice; as I think it is evident from their expressions, they had not personally inquired into the question.

Among those who either do not allude to the question, or whose opinions are neutral, we may mention Scarpa, Wardrop, Sir W. Adams, Dupuytren (although Sanson says he has seen him operate), and Tyrrell, who, so far as I can ascertain, do not mention the case; while MM. Richter and Beer may be claimed by either party, though perhaps more fairly by those who do not interfere, as they at one period decidedly advocated the practice, and that as the result of much experience, but subsequently, without stating why, they recommend the general practice of not interfering; their authority, very possibly, in a great measure, being the cause of the prevalence of the general rule.

Mr. Guthrie reminds me of the man in one of Mathews's amusing characters, who, when asked if it would rain, replied, that it was very possible it might, but then, on the contrary, it was also very possible

that it might not; for he tells us he has several times performed the operation, one eye only being affected, both satisfactorily and the reverse. And, lastly, Mr. S. Cooper, after alluding to various opinions, concludes by saying, "On the whole, I consider this question, which is a very important one in practice, by no means decidedly settled; and, as far as the evidence of various writers upon it extends, I think those who are in favor of operating upon a cataract, though the other eye is sound, have the best of the argument." Mr. Cooper speaks of argument; and this it really seems to be with both parties, rather than actual practice.

Those who deny the propriety of operating, state that one eye is quite sufficient for all useful purposes; that the operation itself endangers the unaffected eye; and, moreover, maintain that the more successful the operation is, the worse the patient is off; for, in consequence of the removal of the crystalline lens, the foci of the two eyes become so very different, that all objects appear confused and double. In opposition to which, the advocates of an operation assert, that two eyes are better than one; that the existence of cataract in one eye is of itself apt, sooner or later, to induce it in the other; and that, although the difference of focal length in the two eyes may be very important as a matter of theory, in practice it is not found to be so, because the difference may be easily remedied by a convex lens placed before the affected eye; and even that, in course of time, in many cases at least, the eye accommodates itself to its altered condition, so as to refract the rays of light in accordance with the sound eye.

Now, I apprehend, the propriety of operating or not must be mainly determined by the latter of these arguments—viz., the state of vision after the operation; for, I suppose, although it be granted a person sees sufficiently well with one eye, no one will deny that, *ceteris paribus*, two eyes are better than one; and from the well known fact that when the functions of any organ or structure is long suspended, the power of exercising the function becomes ultimately lost, it is, as a mere result of precaution, extremely important to keep the affected eye in such a state of activity, that in case any accident or disease happen to the other, its powers, even though somewhat impaired, may then be taken advantage of; which can only be safely and effectually secured by having removed the opaque crystalline lens, and permitted the light to keep up the activity of the retina. The fear of the sound eye being injured or lost by the operation upon the cataractous one, though possible, is, I consider, hardly deserving of notice; because, when the operation is properly performed, it must be so rare, as to be rather amongst the possibilities than the probabilities. While, on the other hand, the sympathy between the two eyes, not only in their healthy state, but in their morbid condition, is so strong, that those who have been accustomed to watch ophthalmic affections will at once admit the validity of the argument of removing any diseased condition of one eye lest the other also partake of it, for the singularity is, that when disease exists in one eye, not only is the other apt to become impaired, but for the corresponding structure to assume the very same morbid condition. Thus, if the conjunctiva in one eye

is affected, that of the other is also very apt to assume the same diseased action; if the cornea, the cornea; if the iris, the iris; the lens, the lens; and so on; while it is also incontrovertible that the morbid condition of the eye primarily affected being removed, that of the one sympathetically or secondarily involved is also frequently remedied. Indeed, cases are on record where cataract having been removed from one eye, commencing cataract, or even amaurosis, in the other has been cured; and there must have been many, if not identical, at least analogous, instances. Indeed, in some cases where I have operated upon an eye in which cataract was fully formed, being only in an incipient state in the other, I have strongly suspected the progress of this latter has been much delayed by the removal of the opaque lens of the opposite eye.

Now, although every one may not be inclined to think the remote risk of the sound eye being lost from injury or accidental affection very great, nor the danger of sympathetic disease so imminent as to justify our incurring any immediate hazard to it by operative interference with the affected eye, yet no person will deny, that if in reality there is no such danger to the sound eye by operating upon the affected one, the possibility of these remote contingencies are solid arguments in favor of active measures being at once resorted to. The last argument, of confusedness of vision being the result of an operation, is so very plausible, and, indeed, imposing, that it is this which has, I presume, principally determined the general practice of not interfering when only one eye is affected, and which, I confess, formerly decided my practice; for I have sent many persons away without doing anything which, with what I have since seen, especially in the three cases to which I shall now shortly allude, I should certainly not do. Indeed, the fact itself that traumatic cataract sometimes disappears, as mentioned by Pott and Hey, as an argument against operating, is, in reality, a strong argument in favor of it; for, if not in all, at least in such of those cases where traumatic cataract disappears, the capsule of the lens has been ruptured, and subsequently has been absorbed, thus occurring what it is the object of an operation to accomplish; yet in these cases no mention is made of inconveniences resulting from the cure; and when the lens has been so displaced as to press upon the iris, everybody agrees as to the necessity of manual interference, lest not only the one eye be altogether lost, but the other be implicated in the change. The following cases show that, in point of fact, the double or confusedness of vision so much feared, does not occur, and that the patient sees as accurately and distinctly as he ever did:—

Robert Jennings, aged fifteen, a mechanic, applied to the Eye and Ear Infirmary in May, 1841, with lenticular cataract, fully formed in the right eye. There was no adhesion, no inflammation of the iris, or other texture. He states that some weeks before, while chiselling some brass, a portion struck his eye, since which he has gradually lost the sight of it. There does not appear to have been any wound of the cornea, nor rupture of the capsule. The iris being fully dilated, a needle was passed through the sclerotica, and the lens well broken up, portions being brought into the anterior chamber. This was twice repeated, at intervals of about two months. At the

end of five months the whole of the lens was absorbed, but there remained a band of the anterior capsule, about as broad as a coarse thread, passing across the eye. To give them a chance of being absorbed, nothing was done until April, 1842, when, as it appeared rather thicker, I determined to divide it if I could, but if, as I suspected, it should prove too tough, to withdraw it. On the iris being dilated to a mere rim, the remains of the capsule was seen shrunk up with ciliary ligament. The band proving too tough to give way, I passed through the needle aperture a fine hook, and withdrew the band, in doing which the circle of capsule also became detached; as much as I could easily, I withdrew through the aperture, and cut off. No inflammation followed, and the next day he was at his work (which, I should state, he had not discontinued). The following is the entry in my note-book on May 7, just fourteen days after this last operation:—

Quite well in every respect; not the least trace of capsule; at the upper and outer part of the iris it is a little puckered at the pupil, near where the remains of the capsule had been extracted, as though a slight adhesion had there occurred, but its motions are good and active. I have very carefully examined the condition of vision. The sight of the eye, with a two-inch lens, is good, indeed, nearly perfect, as he is able to read without any hesitation whatever is placed before him. He has no confusion when at his work nor in the street; indeed, his answers to my questions, "Do you now see as well as ever you did?" and "Could you tell that anything had been the matter with the eye?" are, "I see as well as ever I did in my life, and I do not feel any difference between the two eyes. If I were not coming here I should not know anything was the matter." I do not suppose the right eye is at all employed in ordinary vision, as on closing the left, without a lens, he cannot see clearly unless an object be very distinct. Near to the eye all appears black.

July 27, 1843. I have this day examined Jennings, whose sight continues perfect; he has been constantly at his work, and says he can see to do it as well as any of the work-people.

The second case was complicated with rupture of the capsule, and partial dislocation of the lens.

William Harrison, aged seventeen, applied at the Eye and Ear Infirmary, November 13, 1841. Eleven days previously, while repairing a heckling comb, he broke off a large tooth, which struck his eye, since which he has felt great pain, but has done nothing. At present he cannot see with the eye; there is great pain and aching in the eyeball, iris, and side of the head; the eye is injected; there is a superficial wound of the lower part of the cornea; the anterior capsule of the lens has been ruptured, and the lens itself is pressing upon the nasal side of the iris; the lens is partially opaque; the motions of the iris are very sluggish, but there is not much inflammation of it, nor any adhesion. The needle was passed through the sclerotica, the iris being well dilated, and the lens freely broken up. Venesection, blister to the nape of the neck, darkness, local application of belladonna, blue pill, and opium, with purgatives, were prescribed. The inflammation and pain immediately subsided. On the 30th, as absorption appeared not to be going on

rapidly, the needle was again introduced with good effect.

Jan. 29, 1842. Absorption has gone pretty well; no inflammation of the eye; has, since the last report, suffered much from pain and weight in head, occasioned probably by going to his work, and sauntering about the street. Needle again used, and completely passed through remainder of lens.

July 9. Pain in the head, which continued for some time, is now perfectly gone; a portion of the capsule, with a very thin layer of lens adhering to it, having remained stationary for several weeks, during which time he has been at his work; I have to-day completely detached the remains of the capsule, which is very thin, indeed, not thicker than natural, and by no means very opaque; iris completely natural in every respect.

16. Has been at his work all the week; did not present himself before because he was so well, and did not like to leave it; not any pain or inflammation; lens and capsule all disappeared, except a portion of the size of a small pin's head, which is in the anterior chamber.

23. A few days since struck his eye with a file, which rendered it very painful for two days; he has continued at his work; iris perfectly natural; there is still a small portion of the capsule moving about the anterior chamber, which is less than it was on the 16th. I have carefully examined his vision; he can see large objects when near indistinctly, much better at a distance; small objects, when near, does not see; cannot distinguish a line of print with the affected eye, but with a cataract-glass, of one inch and three-quarters' focus, can read easily, and without hesitation. There is not the least confusion in his sight now when at his work; at first there was some little.

Monday, July 31, 1843. I have this day found out Harrison; he has discontinued for some time his employment of mechanic, in consequence of his master having given up the branch upon which he worked, and being unable to get into another situation of the same kind, employment having been for long lamentably bad; he is now an assistant in a dye-house. It is altogether impossible to distinguish any difference in the appearance of the two eyes. He is perfectly competent for his present situation, but says that he thinks he could not well act as a pattern dyer, because, in order to distinguish accurately the exact shade, it is necessary to place the objects very near to the eyes in a strong light, and look closely, and when he has done this for some time his eyes ache, and there is a glimmering, as he terms it, and he sometimes sees the side of his nose, but it is only in such cases that he perceives anything indistinctly. Linen yarn was hanging near when I saw him, and he could with perfect accuracy discriminate the threads; where a small filament was floating in the wind at one place, and at another two, he at once said, "Where was the single and the double portions?"

John Hewitt, aged twelve, applied August 13, 1842. While chopping wood, ten days before, struck his right eye with a portion which flew up. There is a wound of the superficial layers of the cornea, but it is not cut through. The anterior capsule has been slightly ruptured, and the lens, which is beginning to

be opaque, is rather pressing upon the outer edge of the pupil. The whole eyeball is inflamed, but not very acutely, and there is considerable aching and pain. So much has been sung in praise of the wonderful properties of hydrocyanic acid, that I determined to give it a fair trial in this case, but, as there was some inflammation, which, if not subdued, would certainly destroy the eye, I thought it only prudent to subdue this before trusting to a means I was very sceptical of. This was effected in ten days, after which, for more than a month, prussic acid was daily dropped into the eye, during which time the lens gradually and steadily became more and more opaque, until it was quite white. Let it not be said the acid was not fairly tried, for, after the first day or two, never less than three drops, sometimes more, were put in; the iris of each eye became dilated, and on one occasion the lad was so much affected by it, that I was rather alarmed, and had to give ammonia freely.

The same plan, in breaking up the lens, was then pursued as in the others. It was also necessary, in order to render the pupil perfectly clear, to remove a portion of the capsule by the hook, as in the case of Jennings. At present there remains some opacity of the cornea, where it was wounded. Unless the iris be much dilated, no remains of the capsule are to be seen. The iris, by a point, adheres to the cornea where it was wounded.

The sight is in the same condition as that of Jennings. At first, on questioning him, he said there was some confusedness of vision, but there is not the least now. With a cataract lens, he can see as well with one eye as with the other; without it he does not see near or small objects. Both eyes being opened, he says he can see as well as ever he did.

I have thus briefly related these three cases, instead of merely stating the results, in order to show how very trifling were the effects produced by the breaking up the opaque lens; not being sufficient to prevent, for more than a few hours, the persons returning to their work, and sometimes, although against most decided orders to the contrary, I strongly suspect not even this.

Considering, then, on the one hand, the ease with which the operation may be performed; the little or no disturbance produced, either to the other eye or the general health; that in many cases of traumatic cataract, where the capsule is ruptured, the lens is ultimately removed, even when the surgeon does not interfere; and that what has been so much feared, and in my opinion constituted the only valid argument against the operation, the difference in the refractive powers of the two eyes producing confused or double vision, in reality does not occur; and considering, on the other hand, the arguments above mentioned in favor of operating, I think we are fairly justified in recommending that, not only in traumatic, but in all cases where a young person, one who is under middle age, has cataract in one eye, the lens should be broken up, and removed by absorption, which is the kind of operation (much as I prefer, under ordinary circumstances, extractive), in my opinion, best adapted to this class of cases. In conclusion, I would beg to observe that, in explaining why no indistinctness or double vision results, I would by no means be understood as adopting the explanation given by some, of

the eye accommodating itself to its altered state, and adjusting itself to the focal length of the other eye—a power which I cannot see the possibility of it possessing; for although we may grant that the cornea may perhaps become so much more convex, yet this can scarcely take place to such an extent as to compensate for the want of the dense double convex lens, whose especial function it is to converge the rays of light. On the contrary, I think it certain, that in viewing small bodies or near objects the impression made upon the eye from which the lens has been removed is so very weak, from the necessarily feeble and undefined image formed, that the sensorium, in having the sensation from the perfect image transmitted to it, takes no cognizance of it, even supposing the impression be strong enough to excite the retina and optic nerve to action; precisely as is the case with the eyes of many persons who squint, as was long ago shown by Dr. Reid and others.

A CASE OF TRACHEOTOMY,

PERFORMED FOR THE EXTRACTION OF A STONE FROM THE RIGHT BRONCHUS, AND TERMINATING SUCCESSFULLY.

By EDWIN CASSON, Esq.,

Surgeon to the Bradford Infirmary.

[*Read before the Provincial Medical and Surgical Association, Thursday, Aug. 3, 1843.*]

April 12, 1843. Rebecca Beaumont, a private patient, aged six, was playing with a small pebble in her mouth, when it accidentally passed into the trachea. When first seen, it was observed that, upon her making a strong effort to cough, a noise was heard in the trachea, as if a foreign body were passing up the tube to a certain point and then falling. Percussion was performed, and both sides of the chest were equally sonorous; but when the stethoscope was applied, the respiratory murmur could be heard only on the left side. The passage of air into the right lung was completely obstructed. There was not much dyspnoea, nor did the child complain of any pain; the most distressing period was when she made an effort to cough; the substance then appeared to be just large enough to fill the trachea, and brought on a sense of suffocation.

13. Passed a rather tranquil night, but towards morning had a violent fit of coughing, which produced symptoms of suffocation for some time; respiration quickened; pulse 130; little or no action of the respiratory muscles of the right side; slight pain in the chest about two inches below the clavicle; on applying the stethoscope, respiration could now be heard slightly in the upper part of the right lobe of the lung, but not at its lower and sternal side, which I suppose was caused by the substance having passed lower down the right bronchus. Six leeches to be applied, and a dose of castor oil given; afterwards the following medicine:—

Tartar emetic, half a grain;
Ipecacuanha wine, twenty minims;
Saline mixture, four ounces. A tablespoonful to be taken every third hour.

Chloride of mercury, six grains;
Ipecacuanha, one grain. To be divided into six powders, one to be taken between each two doses of the mixture.

To be kept in the recumbent posture, perfectly still and quiet.

Evening: Breathing quick, but less pain; appears more composed; skin moist; bowels relieved; pulse 100.

14 (Good Friday), Nine, a.m. Had a comfortable night; symptoms more favorable; coughed several times, but only once to move the stone so as to induce suffocation, when it was heard to pass up and down the trachea several times.

Noon: Not quite so well; respiration quicker; pulse 120. To give the medicines more frequently, and apply warm fomentations.

4, p.m.—Cough more frequent; sense of suffocation very severe. The friends now began to despair of the child's recovery, and were, therefore, willing that she should undergo the operation, the necessity of which had before been explained to them.

Having provided the instruments most likely to be required, I placed the child upon her father's knee, and sat on a chair opposite, one of my friends holding back her head firmly against the shoulder of her father, her extremities having been previously secured; I then made an incision from near the thyroid gland downwards to the sternum, about one inch and a half in length, cutting through the integument and cellular substance. I next carefully divided the fascia, which was firmer than I had expected, and, from the position of the neck, had the appearance of a partially inflated bladder. Underneath I could perceive a congeries of veins; these I was fortunate enough, with a little dissection, to push to one side, as well as a branch of an artery that crossed the trachea obliquely upwards to the thyroid gland. Placing the index finger of my left hand upon the upper edge of the sternum, and pressing my nail against the trachea so as to steady it, I then pierced it with a small pointed scalpel between two of the rings, and cut upwards until I had divided three of them; for the moment I both heard and saw the stone pass swiftly up and down. Finding that the opening was not sufficiently large, I again placed my finger, not only as a guide for the scalpel, but also to keep down the thymus gland, which rose up at almost every expiration, and forced before it some cellular tissue, preventing me from dividing another ring. This being done, and the opening into the trachea enlarged, I introduced the smallest sized lithotomy scoop, and caught the stone during an expiration, but was not able to extract it before I was compelled to withdraw the instrument to allow the patient to breathe. Having failed in another attempt, though the stone was all the time playing between the scoop and rima glottidis, and my friends distended the opening by drawing outwards both sides of the trachea with a pair of small double hooks belonging to a strabismus case, I afterwards introduced a pair of dressing forceps downwards into the right bronchus, but with no better success, though I occasionally felt it beat up against the point of the instrument. I then made use of a small pair of polypus forceps; but though I laid hold of the stone, it slipped before I could withdraw them. Seeing that the little patient soon recovered after each attempt that I made, and that the more the passage was obstructed the greater was the muscular action during expiration, and the more forcibly was the stone dislodged from its position,