indicate the best means of removing the separated lens, the size of the corneal opening required, and the advisability or not of an iridectomy; and again, in exceptional cases, the desirability of depressing, as has been explained more fully in my paper on Dislocation of the Lens. (BRITISH MEDICAL JOURNAL, December 30th, 1882.) A small corneal section has been made, the suspensory ligament has been detached, except adjacent to the section; a portion of iris has been removed, the edge of the capsule has been divided after the manner of Knapp, the cortical matter and nucleus have been pressed or scooped out, and the empty capsule previously detached, in great part has been removed at the same time or at a later date.

The lens, with its capsule entire, being removed by one or other of these methods, the upper lid is slightly rubbed and then raised, when, if the pupil be round, central, and of normal size, no application is used; if dilated, eserine is applied; and should the pupil show irregularity, eserine is continued for several days; a strip of isinglass plaster is first put over the lid, followed by a piece of lint dipped in carbolic glycerine, and over that a pad of cotton-wool; the whole is kept in position by as much pressure as is agreeable to the patient by a carbolic gauze bandage. If there be pain, which is rare, it occurs generally the first night, when relief is usually obtained by applying a leech, followed by an opiate pill or a hypodermic injection. The patient progressing, no treatment is required except the daily reapplication of the dressings for his comfort; he is allowed to get up the third day, and generally commences using his eye about the tenth or twelfth. If the various steps of the operation have been performed satisfactorily, a successful result is almost certain, provided the retina retains sufficient visual power; but, as in other operations, difficulties arise, which at times, with every care, mar these results.

The anæsthetic may act imperfectly, causing struggling or muscular spasm; or, when an anæsthetic is not used, the patient may have too little self-control, causing unsteadiness; in either case inducing too great loss of vitreous humour, or bruising the structures from the consequent difficulty of using the instruments with the required delicacy. In such circumstances, dislocation of the pupil is the least evil; as, although it disfigures the eye, it still allows of good vision. Pushing forward of the whole iris against the cornea is more serious, as it shows disorganisation of the vitreous structure, necessarily with diminution of sight, and often ending in total blindness. Prolapse of the iris is rare, primary iritis still more rare; but, at a later date, when much vitreous humour has been lost, permanent hyalitis, with secondary iritis, too often destroys vision by exudation of lymph. Suppuration I have never seen, unless, with other injuries to the eye, cortical capsular matter have been left behind.

Putting aside senile cataracts of old standing, with increased tension and diminished anterior chamber, this operation is suitable to almost all other cases of senile cataract, especially when joined with synechia, myopia, irido-choroiditis, and other conditions, where it is particularly desirable to avoid all irritation after extraction. I look forward to the time when, rendered safer by experience, it will be employed to remove cataract at a much earlier date, before the vitreous body and other structures of the eye have been weakened; so that, instead of allowing a patient to grope about waiting for his cataract to mature, we shall feel justified in advising its removal as soon as it becomes a decided inconvenience.

In concluding these remarks, I claim for my operation that it lessens external pressure, and prevents internal bruising; that it requires no specula, but provides an easy and safe mode of opening the lids; that it does not mutilate the iris; that the use of the scoop is the exception; that it seldom, if ever, ruptures the capsule, the preservation of which is the chief safeguard in all such operations; and that this mode of operating gives visual results equal, if not superior, to any other mode of extraction, with the impossibility of a secondary cataract.

In a future paper, I hope to give full statistics, with an analysis of the cases.*

* The various instruments mentioned were exhibited at the meeting.

SCARLET FEVER AT ACCRINGTON.—The borough of Accrington has just got rid of one of the most serious epidemics of scarlatina that has occurred in England for some years, and frequent reference to this outbreak has been made in our columns. The day-schools have been closed for over three months, the loss in school-pence alone being £1,000 in the same period. About one hundred and twenty children have died from the fever. The schools, including the Sunday-schools, have been reopened.

ON EXTRACTION OF CATARACT BY A SHALLOW LOWER FLAP; WITH A RECORD AND ANALYSIS OF 121 OPERATIONS.*

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AN apology is seldom necessary for recording a series of cataract-extractions, and I trust none will be needed for my bringing before you the mode of operation performed by me, and the results achieved in 121 cases. The days of old, when every one followed with military precision the method of extracting by the flap-operation, have long since vanished, and have given place to a period in which each one does that which seemeth right in his own eyes. The Graſian operation has been variously and ingeniously modified by different ophthalmologists, and it has been alleged that "nothing now remains of the original operation but the knife." Be this as it may, however, the introduction of this instrument, and its substitution for the older knives, has rendered a valuable service to the extraction of cataract.

Before proceeding to describe the operation performed in these cases, I would say that only in three instances (one further on excluded from consideration) has an anæsthetic been administered. In each of these, ether was given, though in one, owing to the excitement produced, chloroform was substituted. I have always avoided the use of anæsthetics, because the comparative brevity of the operation not only generally renders their employment unnecessary; but I fancy the dangers resulting from the movements of the patient less, instead of greater, than those from the sickness and retching after the administration of chloroform or ether, to say nothing of the general upsetting which, I think, must sometimes exert a deleterious influence. Passing reference may be made to the recently recorded statistics of Hasket Derby, both with and without anæsthesia, and to the superior results achieved under the latter.

As to the operation, no speculum or fixation-forceps is employed. The eyeball is steadied only by the operator's fingers in the following manner. The patient, lying flat on his back, either on the operating table or on a bed, the surgeon stands behind, and, with the fore and middle fingers of the left or right hand, according as it is the right or the left eye which is to be operated upon, gently draws upwards the upper lid. This being done, the middle finger is allowed to descend somewhat, until by gentle pressure on the inner side of the sclerotic, it steadies the globe. At the same time, an assistant draws away the lower lid, and fixes it against the malar bone. An ordinary Gräfe's knife is now used; sometimes, however, I employ one narrower and shorter, the operator using the left hand for the left eye, and the right for the right eye if he be ambidextrous, and the puncture made in the sclero-corneal junction just below the centre of the pupil. The knife is entered flat, or nearly so, and the counter-puncture having been completed, it is carried downwards for a little distance, and then the edge of the knife is turned directly forwards, and the section finished. The summit of the flap will thus lie about the middle of, or a trifle below, the centre of the space between the pupillary edge and the lower corneal border. The capsule is freely torn with a bent cystotome, and the lids freed from all moisture by portions of lint. The lens now finds a ready exit by means of pressure on the upper lid by the fingers, and by the same plan on the lower, but, generally speaking, with the vulcanite curette. Any remaining cortex is got rid of by gently rubbing the lid over the cornea, and what is well known as the "lid manœuvre," and the operation now finished, over each eye is placed a fold of lint, that over the one which has undergone extraction is moistened in cold water, and desired to be kept so for the next few days, and then a thin bandage† completes the dressing. The eye is, usually speaking, left undisturbed until the fourth day. At this time, a peep is made to see that everything is favourable; and, if so, the patient is allowed to sit up, for a little, on the fifth or sixth day.

With respect to the performance of iridectomy, it will be presently shown that, in less than half the cases, a portion of iris was removed. The rule I follow is simply this. Should the iris show signs of clinging about the wound after the escape of the lens, and not readily receding, a small piece is cut off; or, indeed, sometimes I excise a por-

* Read in the Section of Ophthalmology at the Annual Meeting of the British Medical Association in Worcester, August 1882.

† The bandage here referred to is the one first suggested, I believe, by the late Mr. Dunnage. It is of open texture, and at each temple two tapes are joined to its extremities at each angle; these pass over the ears, and, continued on each side as one tape, are carried round the head and tied in front.

tion before the removal of the cataract, or the rupturing of its capsule. If, for various reasons, I fancy there be a little more risk in the operation in a given case, an iridectomy is performed. Generally speaking, it is almost a matter of indifference as to whether a segment of iris be removed or not, as I am not certain that cases do better for the iridectomy. For cosmetic reasons, one would avoid it as much as possible.

Sponges, however clean, and however antiseptised, I have, for some time, entirely discarded, and in their places used portions of lint, either dry or moist. In a small number of cases, I adopted, with slight modifications, the antiseptic plan suggested by Alfred Gräfe, and which I recorded in the *BRITISH MEDICAL JOURNAL* (1880, vol. i, p. 241). The eye in these cases was well washed with a 2 per cent. solution of carbolic acid, and was then, until the time of the operation, covered over with a sponge wetted in the same solution. The instruments were dipped in alcohol and dried on lint before their use; only carbolised sponges were employed during the operation, and a pad of lint, soaked in a 4 per cent. solution of boracic acid, applied subsequently. The carbolic acid caused such irritation and swelling of the conjunctiva, with thick gummy discharge, that I was soon led to abandon its use, and in one instance substituted thymol for it. The convalescence of these cases, treated with such care, appeared to me somewhat prolonged; and I saw no reason to relinquish a procedure with which I was in no way dissatisfied, and to which I was accustomed, and I therefore returned to it. For some time, however, I have dipped the instruments into alcohol before use, and, still more recently, have adopted also a very modified antiseptic plan in substituting for the moistened lint pad one of salicylic silk, suggested by my friend Mr. McGill of Leeds for general surgical use, and which I have found very serviceable in various ocular and aural cases. Its lightness and softness makes it a convenient pad, and thus far I am pleased with its use. The importance of absolute cleanliness in the instruments, the nurse, the patient, and his surroundings, are points which are daily testified to, as of the highest importance towards attaining a high percentage of successes in cataract-extractions.

As to the advantages and merits attached to the operation here described, it would, in the first place, seem that the exit of the lens is more ready downwards than through an aperture situated above. This partly depends, no doubt, on the ease with which the lower lid is kept free from the wound, contrasting thus with the greater difficulty, except with the use of speculum, that the upper lid is retracted. The operation I have mentioned is, moreover, soon completed, and not fraught with any great discomfort to the patient, to which end the absence of speculum and forceps lends a conspicuous aid. There is thus also no necessity for an anæsthetic.

It has the merit, besides, of being easier of performance than many other modes of procedure, and, the flap being the section of a much larger circle than the circumference of the cornea, gives more space for the exit of the lens, than one made more peripherally would do. The section is confined entirely to the cornea, and, as has just been stated, yields an aperture of sufficient size without encroaching on the dangerous ciliary region. Escape of vitreous humour is only of rare occurrence; but this will be referred to again in the statistical analysis.

Various operators have during recent years advocated the removal of cataract downwards, with shallow flaps. Liebreich and Bader have both suggested and practised it. The operation I have described differs from the former of these, not to go into other points, in which the puncture and counter-puncture are made in the sclerotic, beyond the sclero-corneal junction. It resembles Bader's, in that the section is strictly corneal, but differs in the formation of the flap. Quite recently, Mr. Lloyd Owen, of Birmingham, has described an operation with the lower section, and by a small angular flap. This would seem more to resemble the operation I have practised for several years. The summit of the flap is, however, more peripheral, I fancy, than in the one I have described. Among the disadvantages said to belong to extraction, in the manner just mentioned, is the adhesion of iris to the wound. This undoubtedly does occur sometimes; but not so often, however, in my experience, as has been alleged, and probably not more frequently than when rags of iris were left entangled in the corners of a Gräfe section.

The importance of getting rid of the entire cataract is, of course, of the first moment, and any particles of cortex are generally readily removed by means of the "lid manœuvre." The introduction of instruments is strictly avoided; and, generally speaking, the only ones introduced during the operation are the knife and the cystotome; and, when a portion of iris is removed, it is seized by forceps as it lies prolapsed at the wound. Should the lens for any reason not readily escape, and it be necessary to facilitate its removal, I have

found Taylor's vectis of the greatest value; and I fancy an advantage will be noticed in having the instrument made entirely of platinum—the loop as well as the stem. By this means, it is not only possible to bend it into any position desired; but it is readily cleaned by passing it through the flame of a spirit-lamp.

Passing now to the record of cases, I may say that I had sometimes performed the operation prior to the time embraced in this series, but have no record save of the solitary one which stands earlier than the others.

I may here state that, in the cases of the very few young patients, three or four in number, in which the lens was expected to be of soft consistence, the cornea was more encroached upon in making the section, and which was consequently smaller.

Of the total number of one hundred and twenty-one operations, thirty-one submitted to the operation in both eyes—thus making the actual number of individual patients ninety.

Out of the thirty-one who had cataract removed on each side, only in four instances were they operated upon in both eyes at one sitting; in each of these, however, a satisfactory result ensued. Otherwise, a longer or shorter interval elapsed, after one operation, before the other was extracted. In two instances only, of the thirty-one cases of double extraction, sixty-two eyes, did a failure occur—viz., Nos. 11 and 116.

I think I may very fairly exclude from our consideration of the record of cases No. 49, a woman, aged 79, who, I only learnt after the operation, had been removed to the infirmary direct from the imbecile ward at the workhouse. Ether in this case was administered. Not long after the operation, whilst the nurse's back was turned, she commenced pulling off her bandage and pad of lint, and carefully reapplying them to her eyes after she had dipped them in her own urine. Of course, the case failed, suppurative setting in; but such a case is, I imagine, of no value in judging the relative success and failure in a given series of operations, and I therefore shall speak only of 120 operations; but of this number we must refer to eight as failures.

Of this series (120), there were 70 males and 50 females. Their ages were as follow: under 20, one; between 20 and 30, two; between 30 and 40, ten; between 40 and 50, ten; between 50 and 60, eighteen; between 60 and 70, forty-nine; between 70 and 80, twenty-nine; at 80, one.

There were 63 right eyes operated upon, and 57 left.

As to the season of the year, the first three months include 28 operations, the second 31, the third 31, and the last quarter of the year 30. It will thus be seen that the different seasons vary very little, the slight advantage in numbers occurring in the warmer six months. This appears to me somewhat odd, as I have been accustomed to suggest to patients, in accordance with the prevailing impression that the warmer months are not so favourable to cataract-operations, to wait for the cooler weather. That the season exerted in this series but little influence on the success or otherwise of the operation, will appear when one deals with the failures.

In fifty-five cases, iridectomy was performed at the time of the operation; in no instance did it precede it.

Vitreous humour is credited with loss in eleven cases. Four of these, however, were associated with the employment of the vectis to remove the cataract. The eleven cases are recorded as follows.

No. 19. Slight escape of vitreous humour.

No. 25. Slight escape; lens removed with vectis.

No. 30. Fluid vitreous, resulted in phthisis bulbi.

No. 34. Slight escape.

No. 41. Escape of vitreous humour; vectis employed.

No. 57. Escape of lens immediately on completion of section; small loss of vitreous humour.

No. 58. Iris fell over knife whilst making section; and was cut through; the pupillary margin remained, and attempts at its removal resulted in loss of vitreous humour.

No. 67. Quantity of vitreous humour escaped.

No. 70. Escape of vitreous humour.

No. 76. Small loss of vitreous humour; vectis was employed.

No. 106. Vectis used; lens removed in capsule; small escape of vitreous humour.

Excluding the cases in which the vectis was employed, as the insertion of such an instrument, or other for like purpose, almost necessitates the loss of vitreous humour, there remain seven instances which must be fairly credited to this series of cases. This is a small number, something over 5 per cent.; and it may be mentioned that only in No. 30, which resulted in failure, and No. 70, which recovered excellent sight, was there escape of vitreous humour in any quantity. Most of these instances also occurred in the earlier cases; and, with one

TABLE.

No.	Sex, Age, and Date of Operation.	Right or Left Eye	Incidents of Operation.	Secondary Operation.	Result.	REMARKS.
1	F. 47. Mar. 1877	R.	...	...	V = $\frac{3}{8}$, reads J. 1	Same case as No. 7.
2	M. 58. June 1877	R.	...	...	Good	Tremulous iris. Vision excellent on leaving infirmary, July 27th. Iridectomy for acute glaucoma, of five days' duration. V = shadows. Iridectomy satisfactory as to pain and tension; no return of vision.
3	M. 72. June 1877	R.	...	...	Good; noscholar; sees time by watch	
4	M. 58. May 1877	L.	...	...	V = $\frac{3}{8}$, reads J. 1	Other eye had been successfully operated on elsewhere previously.
5	M. 60. July 1877	L.	...	...	V = $\frac{3}{8}$, reads J. 1	Same case as No. 18.
6	M. 67. July 1877	R.	...	...	Failure (<i>vide remarks</i>)	Healthy but irritable man. Suppuration at edges of wound. Left the infirmary within a week of the operation; dispute with nurse.
7	F. 47. Sept. 1877	L.	A good deal of soft cortex	...	Reads J. 1. (V = $\frac{3}{8}$, July 1883)	Same case as No. 1.
8	F. 55. Sept. 1877	R.	Iridectomy	Capsule needed December 3rd	V = $\frac{3}{8}$, reads J. 1	Other eye successfully operated on previously elsewhere.
9	M. 76. April 1878	R.	Iridectomy (small)	...	No scholar; says, with glasses, he sees as well as ever	Same case as No. 15.
10	F. 64. April 1878	R.	...	...	V = $\frac{3}{8}$, reads J. 1	Same case as No. 11.
11	F. 64. May 1878	L.	...	...	Failure	Panophthalmitis. May 20th, enucleation. Same case as No. 16.
12	F. 66. April 1878	L.	...	...	V = $\frac{3}{8}$, reads J. 1	
13	F. 63. Aug. 1878	R.	...	...	V = $\frac{3}{8}$, reads J. 1	
14	M. 63. Aug. 1878	L.	...	...	V = $\frac{3}{8}$, reads J. 1	Same case as No. 19.
15	M. 76. July 1878	L.	Iridectomy	...	No scholar; says he sees as well as ever he did with glasses	Same case as No. 9.
16	M. 17. July 1878	L.	Iridectomy	...	Has never seen to learn to read. With + 2 $\frac{1}{2}$ makes out fingers on watch, and is improving Oct. 26, 1879	Purulent ophthalmia in infancy. Right eye wasted, never seen with left. Pyramidal cataract; notched and peggy teeth.
17	M. 62. Sept. 1878	R.	Iridectomy	...	V = $\frac{3}{8}$, reads J. 1	Antiseptic series. <i>Vide</i> BRITISH MEDICAL JOURNAL, 1880, vol. 1, p. 241. Same case as No. 21.
18	F. 47. Sept. 1878	R.	...	...	V = $\frac{3}{8}$, reads J. 1	Antiseptic.
19	M. 63. Oct. 1878	R.	Slight escape of vitreous	...	V = $\frac{3}{8}$, reads J. 1	Antiseptic. Same case as No. 14.
20	F. 63. Oct. 1878	L.	A good deal of soft cortex	...	Reads J. 6	Antiseptic. A small point of iris adhered to wound. Same case as No. 13.
21	M. 62. Oct. 1878	L.	...	...	V = $\frac{3}{8}$	Antiseptic. Same case as No. 17.
22	M. 56. Oct. 1878	L.	...	...	V = $\frac{3}{8}$, reads J. 1	Antiseptic.
23	F. 69. Oct. 1878	L.	...	May 1879. Iridectomy	J. 20, and improving	Antiseptic. Thymol used instead of carbolic acid for this case. Pupil was closed, and adhered to wound, owing to fretting of wound by intumed lower lid (entropion). Same as No. 31.
24	M. 70. Nov. 1878	R.	Iridectomy	...	Failure	Decrepid old man. Suppurative iritis (?). Eye lost.
25	F. 39. April 1879	L.	Lens removed with "Vectis"; slight escape of vitreous	...	V = $\frac{3}{8}$, reads J. 1	
26	M. 45. Mar. 1879	R.	...	...	Not mentioned	
27	M. 71. Aug. 1879	R.	...	...	Failure (<i>vide remarks</i>)	Decrepid; not acute perception of light; other eye atrophy of optic nerve and floating films in vitreous. Result, phthisis oculi. After operation, patient's powers seemed to fail.
28	M. 62. Sept. 1879	R.	Iridectomy	...	V = $\frac{3}{8}$, reads J. 1	Same case as No. 5.
29	M. 63. Oct. 1879	R.	Iridectomy	...	Good result	Followed by a little iritis. Left infirmary on account of illness of wife, and did not return to be tested visually.
30	M. 67. Oct. 1879	L.	Escape of fluid vitreous	...	Failure (<i>vide remarks</i>)	Perception of light not perfect. Blind in other eye from nerve-disease. Result: hyalitis, and wasting of globe.
31	F. 70. Nov. 1879	L.	Iridectomy	...	V = $\frac{3}{8}$	Same case as No. 23.
32	M. 55. Dec. 1879	L.	Iridectomy; small nucleus; quantity of soft cortex	...	V = $\frac{3}{8}$	Same case as No. 41.
33	M. 70. Jan. 1880	R.	Iridectomy	...	V = $\frac{3}{8}$, reads J. 8	} Same patient, who is an Albino. Vision was always defective. He says he sees now as well as ever he did.
34	M. 70. Jan. 1880	L.	Iridectomy; slight escape of vitreous humour	...	V = $\frac{3}{8}$, reads J. 8	
35	F. 69. Feb. 1880	R.	Iridectomy	...	V = $\frac{3}{8}$, reads J. 1	
36	F. 55. April 1880	R.	...	...	Excellent result, apparently; did not return to be tested	
37	F. 78. April 1880	L.	Iridectomy	...	V = $\frac{3}{8}$	Same case as No. 74.
38	M. 62. May 1880	R.	Iridectomy	...	Good	Died shortly after leaving the infirmary; suffered from slight iritis after the operation.
39	M. 48. June 1880	R.	Iridectomy	...	V = $\frac{3}{8}$, reads J. 1	
40	M. 45. June 1880	R.	Iridectomy; a good deal of soft cortex	Opaque capsule, needed Oct. 25, and repeated Dec. 28, 1880	V = $\frac{3}{8}$	Same case as No. 53.
41	M. 55. June 1880	R.	Iridectomy. Vectis employed to remove lens, escape of vitreous, and some cortex left	July 19th. Paracentesis for + T Feb. 7th, 1881; capsule needed	When last seen, could read good-sized type	Same case as 32. Operation was followed by a good deal of irritation, which was slow in subsiding.
42	M. 74. June 1880	L.	Iridectomy	...	V = $\frac{3}{8}$	Same case as next.
43	M. 74. July 1880	R.	...	...	Read J. 19, improving	Some debris left in operation, and followed by iritis. Same case as No. 42.
44	M. 34. July 1880	L.	Iridectomy	...	V = $\frac{3}{8}$, reads J. 1	Traumatic cataract, two years' duration.
45	M. 60. Aug. 1880	R.	...	...	V = $\frac{3}{8}$, reads J. 1	Same case as No. 22.
46	M. 69. Aug. 1880	L.	Iridectomy	Iridectomy for closed pupil	Sees J. 4; poor scholar	Operation followed by iritis.
47	M. 64. Sept. 1880	R.	...	...	V = $\frac{3}{8}$, reads J. 1	Same case as No. 109.
48	F. 68. Oct. 1880	R.	Iridectomy	...	V = $\frac{3}{8}$ (a good deal of opaque capsule)	Same case as No. 56.

TABLE—continued.

No.	Sex, Age, and Date of Operation.	Right Eye.	Left Eye.	Incidents of Operation.	Secondary Operation.	Result.	REMARKS.
49	F. 79. Nov. 1880	L.	...	...	...	Failure (suppuration)	Ether was given in this case. Patient came direct from imbecile ward at workhouse—unknown at time of operation. She removed bandages from eyes, soaked them in urine, and then reapplied them, and was demented and uncontrollable. Ether was given.
50	M. 70. Nov. 1880	L.?	...	...	...	Failure (Panophthalmitis)	Old choroidal patches. Traumatic cataract. Same case as No. 49.
51	F. 68. Dec. 1880	R.	Iridectomy	...	...	V = $\frac{1}{16}$	
52	M. 39. Jan. 1881	R.	Iridectomy (cataract fluid)	...	...	V = $\frac{1}{16}$	
53	M. 45. Jan. 1881	L.	Iridectomy	...	Capsule needed in April 1881	V = $\frac{1}{16}$	
54	M. 35. Feb. 1881	L.	Iridectomy	...	...	Fair sight; no precise record, beyond it is known to be successful	Traumatic. (?)
55	F. 69. Feb. 1881	R.	Iridectomy	...	...	Satisfactory, and leaving infirmary, did not return	
56	F. 69. Feb. 1881	L.	Eserine inserted at completion of operation	...	...	V = $\frac{1}{16}$, some opaque capsules still remaining	Same case as No. 45.
57	M. 63. Mar. 1881	R.	Tremulous iris. On completion of section, immediate escape of lens in capsule, and a very little vitreous	...	...	V = $\frac{1}{16}$	
58	M. 73. Mar. 1881	L.	Iridectomy. On making section, iris was cut through; and, after removal of the cut portion, a small papillary portion was found left; in attempting its removal, vitreous escaped	Iridectomy for closed pupil	...	V = $\frac{1}{16}$, and improving	Operation followed by iritis and closing of pupil. Patient suffered from ectropion, and consequent welling up of tears against wound.
59	M. 34. Mar. 1881	R.	...	...	...	V = $\frac{1}{16}$	Soft lens; urine free from sugar. Same case as No. 97.
60	F. 64. April 1881	R.	Iridectomy	...	...	V = $\frac{1}{16}$	Same case as next.
61	F. 64. May 1881	L.	...	...	...	V = $\frac{1}{16}$	Same as No. 60.
62	M. 71. May 1881	R.	...	...	...	V = $\frac{1}{16}$	Same case as No. 64.
63	M. 60. May 1881	R.	...	...	...	V = $\frac{1}{16}$, reads J. 1	Other eye lost years ago—accident(?).
64	M. 71. May 1881	L.	Iridectomy	...	Capsule needed May 22, 1882	V = $\frac{1}{16}$. Better result after needling capsule not recorded	Same case as No. 62.
65	F. 36. May 1881	L.	Iridectomy	...	...	V = $\frac{1}{16}$	Same as next case.
66	F. 36. June 1881	R.	Iridectomy	...	...	V = $\frac{1}{16}$	Same case as No. 66.
67	F. 78. July 1881	L.	Quantity of vitreous escaped	...	...	V = $\frac{1}{16}$, reads J. 1	Same case as next.
68	F. 78. July 1881	R.	A good deal of soft cortex. On removing this by lid-manœuvre, a bead of vitreous presented in wound, but did not escape	...	...	V = $\frac{1}{16}$, reads J. 1	Same case as No. 67.
69	F. 66. Mar. 1881	L.	...	...	August 2nd, Iridectomy	Reads J. 16	
70	M. 72. Feb. 1877	L.	Escape of vitreous humour; incur-sion of eyeball before completion of section	...	...	July 1882. Is still alive, and nephew tells me sees capillary	
71	F. 54. Feb. 1877	L.	...	...	...	Reads J. 1	Same case as next (at same sitting).
72	F. 54. Feb. 1877	R.	...	...	...	Reads J. 1	Same case as No. 71
73	M. 57. April 1877	R.?	...	...	...	V = $\frac{1}{16}$	
74	F. 75. June 1877	R.	...	...	Vide Remarks	Reads J. 16 (vide remarks)	Prolapse of iris. Punctured once or twice without benefit; repeated and subsequent shrinking of eyeball. Same case as 37.
75	F. 70. Aug. 1875	R.	...	...	...	Reads J. 1	
76	M. 65. June 1877	L.	Lens removed with Vectis. Small escape of vitreous	...	...	Reads J. 1	Other eye operated on elsewhere unsuccessfully.
77	F. 56. July 1878	R.	...	...	...	V = $\frac{1}{16}$, reads J. 1	
78	F. 57(?) Oct. 1878	R.	Iridectomy	...	...	Reads J. 1	Same case as next (both eyes operated upon at the same time).
79	F. 57(?) Oct. 1878	L.	Iridectomy	...	...	Reads J. 1	Same case as No. 78.
80	F. 74. Oct. 1878	L.	Iridectomy	...	...	Reads J. 1	
81	F. 65. July 1878	L.	...	...	...	Reads J. 1	
82	M. 64. Dec. 1878	R.	Iridectomy	...	...	Reads J. 1	Same case as next (both eyes operated upon at the same time).
83	M. 64. Dec. 1878	L.	Iridectomy	...	...	Reads J. 1	Same case as No. 82.
84	M. 63. Aug. 1876	R.	Iridectomy	...	...	V = $\frac{1}{16}$, reads J. 1	Same case as next (both eyes operated upon at the same time).
85	M. 63. Aug. 1876	L.	Iridectomy	...	...	V = $\frac{1}{16}$, reads J. 1	Same case as No. 84.
86	F. 64. Feb. 1879	L.	...	...	...	Reads J. 1	Had small cancer in breast at time of operation. Died a year or more after; desired operation rather than remain blind.
87	F. 78. Feb. 1879	R.	Iridectomy	...	...	Reads J. 1	
88	M. 68. Aug. 1879	L.	...	...	...	V = $\frac{1}{16}$ (?)	
89	M. 65. Oct. 1879	R.	Iridectomy	...	...	V = $\frac{1}{16}$, reads J. 1	Same case as next.
90	M. 65. Oct. 1879	L.	Iridectomy	...	...	V = $\frac{1}{16}$ (16?), reads J. 1	Same case as No. 89.
91	F. 70. Jan. 1880	R.?	Iridectomy	...	...	Reads J. 1	
92	M. 56. April 1880	L.	Iridectomy	...	...	V = $\frac{1}{16}$, myopic always	Ether administered; excitement; chloroform substituted.
93	F. 65. June 1880	R.	Iridectomy	...	...	V = $\frac{1}{16}$	
94	M. 77. Sept. 1881	R.	Iridectomy	...	...	V = $\frac{1}{16}$	
95	M. 80. Sept. 1881	L.	Iridectomy	...	...	V = $\frac{1}{16}$	
96	M. 74. May 1881	L.	Iridectomy	...	...	Failure, panophthalmitis	
97	M. 34. April 1881	L.	...	...	...	V = $\frac{1}{16}$	Same case as No. 59.
98	F. 78. Sept. 1881	R.	Iridectomy; considerable hemorrhage at time of operation	...	...	V = $\frac{1}{16}$	Same case as No. 100.
99	F. 64. Sept. 1881	R.	Iridectomy	...	...	V = $\frac{1}{16}$	
100	F. 78. Sept. 1881	L.	...	...	...	V = $\frac{1}{16}$	Same case as No. 98.
101	M. 61. Oct. 1881	L.	...	...	...	V = $\frac{1}{16}$	
102	M. 24. Oct. 1881	L.	Soft cataract	...	...	V = $\frac{1}{16}$	
103	M. 66. Oct. 1881	R.	...	...	...	V = $\frac{1}{16}$	

TABLE—continued.

No.	Sex, Age, and Date of Operation.	Right or Left Eye.	Incidents of Operation.	Secondary Operation.	Result.	REMARKS.
104	F. 55. Oct. 1881	L.	Iridectomy ...	Capsule needled, subsequently to result given with improvement, May 15th	V = $\frac{2}{3}$	Same case as 108.
105	F. 53. Nov. 1881	L.	...	...	V = $\frac{2}{3}$	
106	M. 63. Nov. 1881	L.	Iridectomy. Vectis used, and lens removed in capsule; small escape of vitreous	...	V = $\frac{2}{3}$	
107	M. 20. Dec. 1881	R.	...	...	Good operative result	Poor light-perception before operation; condition unaltered.
108	F. 56. Dec. 1881	R.	...	...	V = $\frac{2}{3}$	Same as 104.
109	M. 68. Dec. 1881	L.	...	...	V = $\frac{2}{3}$	Same case as No. 47.
110	M. 48. Dec. 1881	L.	A good deal of soft cortex	...	V = $\frac{2}{3}$	Same case as No. 112.
111	F. 45. Jan. 1882	R.	...	...	V = $\frac{2}{3}$	
112	M. 49. Jan. 1882	R.	...	...	V = $\frac{2}{3}$	
113	F. 62 (?). Jan. 1882	R.	...	...	V = $\frac{2}{3}$	Same as case 110.
114	F. 36. Feb. 1882	L.	...	Iridectomy	...	Other eye operated on elsewhere; lost by glaucoma. Followed by iritis, with result of closed pupil. Under treatment at time of report.*
115	F. 50. Mar. 1882	L.	...	...	V = $\frac{2}{3}$	Same case as No. 18.
116	M. 63. Mar. 1882	R.	...	...	Failure	Suppuration at edges of wound; shrinking of globe.
117	M. 36. Ap. (?) 1882	L.	Iridectomy	...	V = $\frac{1}{10}$ (vide remarks)	Left infirm with capital result; got drunk twice or three times daily for some time, and readmitted with pus in ant. chamber. This has cleared; and up to time of writing vision is as stated, and improving.
118	M. 62. Jan. 1882	R.	Iridectomy	...	Good (vide remarks)	Visited for me by my late clinical assistant, Mr. Banham; and at time of making report, found patient dead, but learnt that "the operation was satisfactory".
119	M. 77. April 1882	R.	...	...	V = $\frac{2}{3}$, reads J. 1	
120	M. 65. Jan. 1882	R.	Iridectomy	...	Reads J. 16	
121	F. 77. April 1882	R.	...	...	V = $\frac{2}{3}$	Patches in choroid (?).

exception, there has not been such an accident for a considerable time. In all cases in which there was loss of vitreous, a good result ensued, except in No. 30.

The vectis was employed to facilitate the escape of the lens in four cases.

Secondary operations are recorded as performed in twelve cases. The number, 10 per cent, is small, but I dare say other cases would have received additional benefit by a further procedure. The operations consisted of iridectomies, needling opaque capsule, and puncturing prolapsed iris.

This last condition (prolapse of iris) occurred once only, No. 74. Pressure had little influence over it; and, some time after the operation, there remained a small cyst at one extremity of the wound. Sight was very fair. Puncture with a needle did some good, and it was repeated. Still, a considerable time after the operation, sight still remaining very fair, I yielded to importunity, and again punctured, with the result that the eye dwindled quickly to a small stump.

Failure is recorded in eight cases. One of these (No. 6) left the infirm before the expiration of a week after the operation, with the wound sloughy-looking; nothing more being seen of him. None of these patients were younger than sixty, and four were seventy and over; the exact ages being 67, 64, 70, 71, 67, 70, 74, and 63. Two of them occurred in May, and two in November; the other cases coming in July, August, October, and March—the cold and warm seasons being equally balanced as to the time of the occurrence of the failures. In three instances, there were complications which rendered a satisfactory issue a somewhat remote possibility. They are thus recorded.

No. 24. Decrepid old man, aged 70; failing, want of vigour.

No. 27. Decrepid, aged 71; not acute perception of light; other eye, atrophy of optic nerve, and floating films in vitreous body. Result: phthisis oculi; after operation, the patient's powers seemed utterly to fail.

No. 30. Perception of light not perfect. Blind in the other eye from atrophy. Escape of fluid vitreous, hyalitis, and wasting of globe.

In the last two cases, the blind condition of the opposite eye induced me to afford the chance of operation. With respect to the first, however, I have no record of what induced me to operate on, as he is above described, such a highly unpromising patient.

Taking the whole series of eight failures together, they yield a loss of $6\frac{2}{3}$ per cent.; or, if the three above detailed be exempted, it will cause a reduction to 4 per cent.

Referring to the successful cases, it may be mentioned that the results recorded were nearly all ascertained a brief period after the operation. Knapp has pointed out, in his very elaborate reports of cataract operations (*Archives of Ophthalmology*), that a better visual result is noticeable at a more remote period; this I have myself observed when, for instance, $\frac{2}{3}$ has risen to $\frac{3}{4}$. The cause of this difference is no doubt, the consolidation of the wound, and the ob-

literation or diminution of any irregular astigmatism which at the outset is present. These results are, moreover, only recorded with spherical glasses; in no case has the astigmatism been corrected and accounted for. As far as they are given, the results are perfectly accurate; but it is to be regretted that, in some instances, circumstances have prevented their being recorded with the exactness the majority have permitted.

The result in this series of cases may be summed up thus: Ninety-nine good and ten moderate results; one good operation result; two are unmentioned, one being uncertain and the other still under treatment (Nos. 26 and 114); and eight failures.

They may be tabulated thus: Successes 109, and good operative result 1, 110 = 91.6 per cent.; failures 8 = 6.6 per cent.; or, excluding the 3 complicated cases 5 = 4.1 per cent. One case uncertain; one case still under treatment, 2—1.6 per cent.; total 120.

An albino, who underwent the operation in both eyes successfully (Nos. 33 and 34), is included in this series.

Eserine was only used in one or two cases at the time of operation.

* Subsequent iridectomy, followed by suppuration of globe.

SLAUGHTERHOUSES.—At a recent meeting of the Slaughterhouse Reform Society, held at the office of the Royal Society for the Prevention of Cruelty to Animals, in Jermyn Street, Dr. Richardson, the President of the Society, delivered an address, in the course of which he stated that the primary object of the Slaughterhouse Reform Society was to suggest means of slaughtering animals in the most painless manner, but as the originators progressed in their work, they found the necessity of many more reforms. They therefore determined to come before the public with a much more extended programme, and among the objects they had in view were the following: to establish in London a model slaughter-house, from the designs of which others might be constructed; to advocate the erection of public *abattoirs*; to illustrate and teach the most rapid, skilled, and humane methods of slaughtering animals; to improve the method for the dressing of carcasses of animals, so that the flesh might enter the market in the purest condition; to insist on the importance of those engaged in the slaughterhouses having proper conveniences for washing and cleansing themselves; to bring into use the completest means of removing the offal, blood, and other organic substances, so that it might be removed with expedition; and to institute a systematic and scientific inspection. On the motion of the Hon. Rollo Russell, the following resolution was passed: "That the sum of £1,300 having now been subscribed to establish a small model *abattoir*, the committee of the society be empowered to take such steps as they think desirable for the attainment of the object." Other resolutions were passed approving of the objects of the society, and thanking the subscribers for their support.