administration of the ergot of rye very injurious; even though we could satisfy ourselves that the contractions of the uterus were not irregular, yet the febrile state of the patient would at once point out the objection to the ERGOT as a remedy.

Mechanical obstructions, such as a contracted state of the os uteri, vaginal passage, or pelvis, or an oversized head, causing tedious labour, are instances, I believe, in which the most sanguine of the advocates of this remedy consider its administration most unjustifiable. Parturition, being a natural effort, ought not to be interfered with, unless nature's efforts are ineffectual, and then the means we possess, independent of this medicine, are sufficient in the hands of a skillful practitioner. I would say, with Denman, "May not many failures proceed from ignorance of the art? some of them may justly be imputed to our entertaining too high an opinion of the art, or the application in practice, when it is not absolutely required, and when its application is prejudicial; in too much confidence in our own means, and too little dependence on the natural efforts and resources of the constitution." We must not forget, in administering the ergot of rye, "*even though it be to save the valuable time of the medical practitioner,*" that a life may be sacrificed, and that too in the fairest and apparently most desirable cases for its use.

In some constitutions the different parts concerned in parturition are not equally inclined to dilate; sometimes the internal parts dilate in a free and easy manner, when the external are in a contrary state, particularly observable in first labours (in which cases the ergot ought never to be given); where it has been so injudiciously prescribed, the results have been, in an immense number of instances, still-born children.

A discussion of some length followed the reading of this paper.

Dr. TRENCH contended that the ergot of rye had little or no specific effect on the uterus. He had himself administered it without advantage, and was inclined to believe that, where delivery followed its use, more was to be attributed to the imagination of the mother than to anything else.

Mr. WORTHINGTON, jun. adduced cases of its successful employment, where the mother was not aware of its exhibition.

Mr. CURRIE agreed with Mr. Banner on the impropriety of using the ergot without due discrimination, and argued in favour of the forceps in tedious labour. He thought that the ergot might increase uterine irregularity where that already existed, and might also give rise to hæmorrhage, by emptying the uterus of its contents too speedily, and without allowing time for contraction.

Mr. BANNER opposed the views of Mr. Currie, as to the frequent use of the forceps; he thought that, like the ergot, they should be resorted to in a very few cases only.

Opinions as to *modus operandi* of the ergot were given by Dr. Vose, Dr. Baird, and Dr. Sutherland; and the meeting adjourned.

PRACTICAL OBSERVATIONS ON THE UTILITY OF DIVIDING BOTH INNER RECTI MUSCLES

FOR THE CURE OF STRABISMUS, WITH CASES.

BY P. BENNETT LUCAS, ESQ.

Surgeon to the Metropolitan Free Hospital, Lecturer on Surgery at the Hunterian School of Medicine, &c.

IN the treatise which I published some months since, on the cure of strabismus by operation, will be found three cases in which I divided the inner rectus muscle of each eye. In two of these, this proceeding was called for on account of the patients having laboured under *double* convergent strabismus; and in the third, on account of the eye *first* operated upon being much more *prominent* than its fellow; although, in this latter case, both eyes, after the first operation, were perfectly straight, and followed each

other's movements with the accustomed regularity and precision of eyes in a healthy condition.

Mary Anne Davis, the girl in whom I divided (for the first time) both inner recti muscles for convergent strabismus, I have seen within the last month; her eyes are perfectly straight, and the operation has been most successful. This patient was first operated upon on June 10th, 1840, in the presence of Mr. Pettigrew, Drs. Hennis Green, Pettigrew, and Mr. Sharpe, when I divided the inner rectus muscle of the right eye; on doing which, "it immediately occupied the centre of the orbital axis, and became more prominent than the other. The left eye remained turned upwards and inwards. I operated on the second eye three weeks after, when both organs became perfectly straight, and equally prominent."

The second case of this kind in which I operated was on June 12th, 1840, in the presence of Mr. Pilcher, Mr. Chaldecott, Mr. Cameron, and Drs. Wild, Pettigrew, and Walsh. After I divided the inner rectus muscle of the right eye in this case it became immediately straight, "and visibly more prominent than its fellow. The left eye, as was anticipated, turned in, which the patient was told to expect before the operation was performed." In nine days after the first operation, with the kind assistance of Mr. Pilcher and Mr. Chaldecott, I divided the inner rectus muscle of the left eye, when it became equally straight and prominent with its fellow, and both eyes moved naturally.

The case of single convergent strabismus in which I divided the inner rectus muscle of the *sunken* eye was that of Mr. Henry Mills. This patient had been the subject of convergent strabismus of the right eye since he was four years old. "The left eye was unaffected. On July 28th, 1840, I divided the inner rectus muscle, when the eye immediately became straight, but more prominent than its fellow."

"Aug. 7th. The effect of the operation was this day as follows:—Scarcely a mark of the incision was present; both eyes were straight, but at times the left eye appeared to have a slight inclination inwards. I mention this, although it appeared to some of those present that both eyes were perfectly straight. The right eye is much more prominent than its fellow, and forms a striking contrast to it in this respect. In the presence of Mr. Kraus, Mr. Cameron, and Mr. Earle, I divided the inner rectus muscle of the sunken eye, which at once made it equally prominent with its fellow, without producing the least deformity of it. The difference in the appearance of the patient was most remarkable."

"Aug. 16. Saw Mr. Mills this day; both eyes are equally prominent, and follow each other's movements with regularity." To this report I appended the following observation:—"The division in this case of the inner rectus muscle of the eye *which did not squint* has been attended with the most satisfactory results, and practically illustrates in the living subject some of the physiological views which have been advanced, in the preceding part of this essay, regarding the actions of the oblique muscles."

These three operations speak for themselves, both as to their happy results and as to the soundness of the views which prompted their performance.

Since August 7th, 1840, the date of the last operation quoted, I have in numerous cases of convergent strabismus divided both inner recti muscles with a different object from any already stated, viz. for the purpose of removing *all trace* of strabismus, when the division of the inner rectus muscle of the permanently inverted eye was not attended with *complete* success. I say with complete success, for in some cases the eye first operated upon will have an inclination inwards, and more rarely upwards and inwards, notwithstanding that its inner rectus muscle has been completely divided, as well as the portions of the sub-conjunctival and sub-muscular fasciæ in connexion with it. My attention was first directed to the division of both inner recti muscles for this latter purpose in consequence of perusing the able communications of Mr. Elliot, of Car-

lisle, in the Lancets of September 19th, and October 31st, 1840, in which that gentleman first mentioned his plan of dividing both inner recti muscles in cases where "the division of one adductor only was not instantly and completely successful;" and in which communications the writer forcibly exposes the inutility of dividing either the superior or inferior rectus muscle, for remedying the deformity which sometimes remains after the inner rectus muscle alone has been divided with the intention of curing single convergent strabismus. This proceeding of dividing the superior or the inferior rectus muscle to remedy the failures attending the ordinary operation for strabismus, and which was first practised and recommended by Mr. Liston, is worse than useless in its results, and betrays much ignorance of the anatomy and physiology of the powers by which the movements of the eyes are effected and regulated. The following cases illustrate the perfect success which attends the division of both inner recti muscles in single convergent strabismus.

CASE I.—Miss J. A., æt. 30, has convergent strabismus of the left eye. She can evert the affected organ as far as the centre of its orbit, but cannot retain it there longer than a few seconds, unless the unaffected eye is covered. When the turned-in eye is carried as far outwards as possible, the sound eye occupies its correct distance, thus obeying the laws which regulate the movements of both eyes in their healthy state; but after five or six seconds, when the squinting eye resumes its habitual position, then the unaffected eye pursues its movements altogether independent of its fellow. Miss A. has been the subject of strabismus since she was two years old. In the presence of Drs. Nugent and Boyd, Mr. Cameron, Mr. English, and Mr. Davenport, I divided the inner rectus muscle of the left eye and its fascial connexions, after which it became everted, but more prominent than its fellow. On examining the appearance and movements of both eyes, that operated upon had an inclination upwards and inwards; and squint still was present, though to nothing like the extent which existed before the operation. Having again carefully examined the seat of insertion of the inner rectus muscle, and ascertained that it was completely divided; and having also freely divided the sub-conjunctival and sub-muscular fasciæ in its vicinity, without producing any effects beyond those mentioned; I operated upon the right eye, and divided its inner rectus muscle, and freed its fascial attachments both upwards and downwards. Both eyes immediately became straight and equally prominent, and moved with their due healthy concordance.

CASE II.—Mr. Robert Bellringer, æt. 44, in consequence of a stunning blow which he received on the head when a child, became afflicted with convergent strabismus of the right eye. The organ is turned deep into the inner canthus, so as to conceal more than half the cornea. He can evert it, for a few moments, as far as the centre of the orbit, but no farther. At this time both eyes are straight; but the moment he endeavours to evert the right eye to a greater extent, the effort is expended upon the left, which immediately becomes inverted. When both eyes are allowed to move without effort, the right one remains buried in its inner canthus, whilst the left obeys its natural movements. The sight of the squinting eye is so defective that he cannot read with it, and he cannot say whether the strabismus was consecutive on the impairment of vision or the contrary. Assisted by Mr. Cameron and Mr. Davenport, I divided the inner rectus muscle of the right eye; after which, upon comparing both, it had still an inclination inwards. I again examined the eye operated upon, and ascertained that the inner rectus muscle was completely divided. Notwithstanding that the sub-conjunctival and sub-muscular fasciæ were in their natural condition, loosely attached to the eyeball and highly elastic, I also divided these structures with no other effect than to render the eye more prominent. I immediately divided the inner rectus muscle of the left eye and the fasciæ, to the same

extent as in the first operation, when both eyes became perfectly straight, equally prominent, and followed each other's movements with due regularity.

When a double convergent strabismus exists, the necessity of dividing both inner recti muscles for its cure, and the physiological grounds on which such operations are based, admit of too obvious an explanation to require further comment. On reading the interesting papers of Mr. Hocken, in the Medical Gazette, on the pathology of strabismus, I regretted that I had not, in my treatise on strabismus, directed the attention of the reader in a more especial manner than I have done, to the movements of the eyes of those patients whose cases I have given as labouring under this form of strabismus; as their detail shows that "the appearance of the eyes themselves," as urged by Mr. Hocken, in formation of a correct diagnosis, was not neglected, under the head, "convergent strabismus." I stated that I had met patients, with double strabismus, "who would for several hours use but one eye in viewing objects, whilst the other remained buried in the inner canthus; but the moment the hand was placed over the apparently straight eye, the organs, as it were, *changed places*, and that which was before straight became inverted, and the other occupied a natural position in its orbit;" and to ascertain the state of both eyes and the actual amount of deformity which existed, I urged the necessity of placing the hand obliquely over one eye so as to hide all objects in front of it, but sufficiently raised at the temporal margin of the orbit to observe its movements, and to decide accordingly; but I did not lay the same stress upon observing the movements of both eyes uncovered, or "of the eyes themselves." In the detail of the two cases of double convergent strabismus which follow these directions, and which were perfectly cured by operation, these remarks occur:—

"**CASE XX.**—Mr. Mills. When he looks directly forward with *either* eye, the other turns inwards and slightly upwards, so as to conceal about one-third of the cornea; but the right eye more.

"**CASE XXI.**—Mary Anne Davis. When she looks at an object with *either* eye, the other turns upwards and inwards, so as fully to conceal two-thirds of the cornea. The strabismus is even more intense in the right eye."*

As the same phenomena generally present themselves in intense cases of single convergent strabismus when the eyes are examined individually, too much stress cannot be laid on the propriety of being guided in forming our judgment of the presence of double convergent strabismus "by the appearance of the eyes themselves."

Since August 7th, 1840, when I first performed the operation on Mr. Henry Mills of dividing the inner rectus muscle of a straight but *sunken* eye, to render it equally *prominent* with its fellow, I have performed a similar operation in two cases, and with equally happy results; and from the best attention which I can give this part of my subject, supported by practical experience and the authority of others, I have no doubt whatever but that the majority of prominent eyes which have resulted from the new operation for strabismus, have had their origin in the abuse of that operation; more especially in the pernicious proceeding practised and promulgated of dissecting cleanly the inner surface of the eye, supposed to be alone affected with convergent strabismus, when the division of its inner rectus muscle failed in producing the result expected. That the fasciæ to which I have given the names of sub-conjunctival and sub-muscular, play an important part in regulating the delicate movements of the ocular muscles, there can be little doubt, and in my next communication I propose to consider more fully the properties of these fasciæ, the support which the globe of the eye receives from the cellulo-adipose structure in which it is situated,

* *Vide* "Practical Treatise on the Cure of Strabismus, or Squint, by Operation and by milder Treatment," pp. 48—50.

and the danger to the perfection of the new operation of injudiciously meddling with the cellular attachments of the eyeball, and of its muscles, after any of the latter have been divided without the effect anticipated being produced. And in doing so, I shall avail myself of the works already published on strabismus; of the able paper from Dr. Jacob, in the Dublin Medical Press, "On the Paralytic and other Nervous Diseases of the Eye;" and of the communications which have appeared in the several medical periodicals since I first introduced into this country Dieffenbach's treatment of strabismus, and so materially simplified the operation of that learned professor.

12, Argyle-street, Feb. 6, 1841.

WORCESTER INFIRMARY.

A REPORT OF CASES ATTENDED AT THIS HOSPITAL.

By CHARLES HASTINGS, M.D. F.G.S. &c.

From January 1st, 1840, to January 1st, 1841.

IN CASES.

	Quarter ending Mar. 31st.		Quarter ending Jun. 30th.		Quarter ending Sep. 30th.		Quarter ending Dec. 31st.		TOTAL.	
	Cases.	Died.	Cases.	Died.	Cases.	Died.	Cases.	Died.	Cases.	Died.
Amaurosis	...	...	...	...	1	...	...	...	1	...
Amenorrhœa	3	...	1	...	2	...	4	...	10	...
Anasarca	1	...	1	...	1	...	2	...	5	...
Aneurism	...	...	...	...	1	...	1	...	2	...
Ascites	3	...	1	...	...	...	1	...	5	...
Bronchitis	2	...	3	...	...	...	...	...	5	...
C. Bronchitis	...	...	...	...	...	...	1	...	1	...
Cardiac disease	1	...	1	...	3	...	3	...	8	...
Carditis	...	...	1	...	2	...	...	...	3	...
Cephalalgia	...	...	2	...	2	...	1	...	5	...
Chlorosis	...	...	...	...	...	...	1	...	1	...
Cough	2	...	2	...	1	...	3	...	8	...
Colica Pictonum	...	...	1	...	...	...	...	...	1	...
Constipation	...	...	...	...	...	...	1	...	1	...
Delirium Tremens	...	...	...	...	1	...	1	...	1	1
Dyspnœa	5	...	3	...	2	...	2	...	12	...
Dyspepsia	1	...	1	...	1	...	1	...	4	...
Emaciation	1	...	1	...	...	...	1	...	3	...
Enlarged Glands	...	...	...	...	...	...	1	...	1	...
Enteritis	...	...	...	...	1	...	1	...	2	1
Epilepsia	...	...	1	...	...	...	...	...	1	...
Erythema	...	...	...	...	2	...	...	...	2	...
Febris	...	...	8	4	...	...	2	...	10	4
Gastritis	2	...	...	...	2	...	...	...	4	...
Hæmopoe	2	...	...	...	1	...	...	...	3	...
Hepatic Diseases	...	...	2	...	1	...	...	...	3	...
Hepatitis	1	...	1	...	3	...	1	...	6	...
Hypertrophia	1	...	...	...	...	...	...	...	1	...
Hydrothorax	1	...	...	...	...	...	...	...	1	...
Hysteria	...	...	...	...	...	...	1	...	1	...
Inflamed Legs	1	...	...	...	...	...	...	...	1	...
Irregular Action of the Heart	...	...	...	...	...	...	1	...	1	...
Larynx, diseased	...	...	1	...	...	...	...	...	1	...
Lepra	...	...	1	...	1	...	1	...	3	...
Liver, diseased	...	...	...	...	1	...	1	...	2	...
Limbago	...	...	...	...	2	...	...	...	2	...
Lungs, diseased	2	...	...	...	2	...	...	...	4	...
Menorrhagia	...	...	1	...	2	...	3	...	6	...
Oedema	2	...	...	...	...	...	...	...	2	...
Palpitation	...	...	...	...	2	...	1	...	3	...
Paralysis	1	...	...	...	1	...	2	...	4	...
Pericarditis	1	...	...	...	...	...	...	...	1	...
Peritonitis	...	...	...	...	1	...	...	...	1	...
Phthisis	1	1	1	...	3	...	1	...	6	1
Pleuritis	2	...	...	...	...	...	...	...	2	...
Pneumonia	1	...	2	...	1	...	2	...	6	...
Prolapsus Uteri	1	...	...	...	...	...	...	...	1	...
Psoriasis	1	...	...	...	1	...	1	...	3	...
Rheumatism	4	...	5	...	3	...	3	...	15	...
Chronic Do.	2	...	1	...	3	...	2	...	8	...
Splenic Disease	...	...	1	...	...	...	...	...	1	...
Synochus	1	...	...	...	2	...	...	...	2	...
Valvular Disease	...	...	...	...	...	...	1	...	1	...
Vertigo	1	...	...	...	...	...	...	...	1	...
Vomiting	1	...	...	...	...	...	...	...	1	...
TOTAL	47	1	43	4	52	1	47	1	189	7

The above table is intended to show the cases of each disease as they occurred in the different seasons, and the number of deaths. The subjoined tables present the number of cases, and of deaths, which occurred in each month,

distinguishing those under the age of twenty years, from those above that age, and also whether they were in males or females :—

	MALES.				FEMALES.			
	Under 20 yrs.		Above 20 yrs.		Under 20 yrs.		Above 20 yrs.	
	Cases.	Died.	Cases.	Died.	Cases.	Died.	Cases.	Died.
January	3	...	8	1	5	...	1	...
February	...	...	4	...	2	...	5	...
March	...	...	10	...	1	...	3	...
April	...	...	2	...	1	...	10	...
May	1	...	12	2	...	...	7	...
June	...	...	4	...	...	...	9	...
July	...	...	5	...	2	...	6	...
August	...	...	2	...	...	...	10	...
September	...	...	9	1	6	...	5	2
October	...	...	2	...	1	...	12	...
November	...	...	11	...	6	1	4	...
December	...	...	2	...	1	...	...	...
Total	4	...	71	4	26	1	88	2

	TOTAL MALES.		TOTAL FEMALES.		OF BOTH SEXES.	
	Cases.	Died.	Cases.	Died.	Cases.	Died.
January	9	1	15	...	24	1
February	4	...	7	...	11	...
March	9	...	5	...	14	...
April	1	...	5	...	6	...
May	11	2	12	2	23	4
June	1	...	7	...	8	...
July	10	...	11	...	21	...
August	2	...	6	...	8	...
September	11	1	16	...	27	1
October	3	...	9	...	12	...
November	13	...	16	1	29	1
December	1	...	5	...	6	...
Total	75	4	114	3	189	7

MEN.

SERVANTS.

1. Rheumatism.
1. Amaurosis.
1. Fever.
1. Gastritis.
1. Hepatic.
1. Phthisis.
1. Ascites.

SHOEMAKERS.

1. Larynx, diseased.
2. Cardiac diseases.
3. Dyspepsia.
1. Eruption.

MILLER.

1. Bronchitis.

WOOLCOMBER.

1. Hæmoptoe.

COLLIERS.

1. Carditis.
1. Diseased Lungs.

STONE-MASON.

1. Phthisis.

WHEELWRIGHTS.

1. Hæmoptoe.
1. Dyspnœa.
1. Fever.

PAINTERS.

1. Aneurism.
1. Colica.
1. Rheumatismus.
1. Paralysis.

GLOVING.

4. Cough, diseased lungs.
1. Anasarca.

LEATHER STAINING.

2. Dyspepsia.
1. Cardiac.

LEATHER PAIRING.

1. C. Rheumatism.

TANNING.

2. A. Rheumatism.

LABOURERS.

6. Rheumatismus.
1. Ascites.
2. Anasarca.
1. Pleuritis.
1. Diseased lungs.
1. Hydrothorax.
1. Pericarditis.
1. Epilepsia.
1. Erythema.
1. Lumbago.
1. Lepra.
1. Gastritis.

IRON-FOUNDER.

1. Cephalalgia.

BOATMEN AND NAVIGATORS.

1. Rheumatism.
1. Ascites.
1. Anasarca.
3. Fever.

OSTLERS.

1. Delirium Tremens.
1. Dyspnœa.

TRAVELLER.

1. Phthisis.

SOLDIER.

1. Ascites.