

process at several points on the edges of the sore, and pain in it was reduced to a minimum. As for the case of the breast, the woman herself had so much improved in health, that it would have been difficult to recognise in her, the same thin, cachectic-looking creature of three months back, for her cachectic look had wholly disappeared, and no one by looking at her now, could have supposed that she laboured under a disease of such a serious nature, and which had progressed so far. The tumour itself was no larger than it was three months before, perhaps rather smaller, and several of the smaller sores had healed over entirely.

And now it was resolved to try the effect of carbolic acid in the above cases, and this was commenced on December 28th of last year. About this time, two other cases of cancer applied for advice. The one was an extensive tumour of the neck of the uterus, and implicating the whole of the vagina, accompanied by very great pain, and a most profuse and exceedingly fetid discharge. Indeed, so fetid was the discharge, that no one could stay even for a short time in the room with the patient. The other was an enormous schirrous tumour of the breast, of very rapid growth. It had been in existence only four months, and already it extended from the floor of the axilla almost to the sternum. The subject of it had been in one of the largest of our provincial hospitals, and had got nothing, either there or anywhere else, which gave her any relief from the extreme pain, and the horrible fetor of the discharge. The carbolic acid in the form of a very dilute lotion* was ordered in all four cases, with the following results.

In the case of the tumour behind the jaw, the lotion was about as effectual in relieving the pain as either the citric or acetic acid lotions. Applied in this weak state, its solvent effect was much the same as that of the citric acid; but applied in a more concentrated form, the effect was a most vigorous eating away of the tumour, and with much greater rapidity than by the two acids formerly used. But there were very feeble attempts at skinning under the use of the dilute carbolic acid in this case, and none of course when the strong acid was employed.

In the case of the mammary tumour, which had been treated before by the citric and acetic acids, the report was that the pain was as effectually controlled by the carbolic acid as by either of the other two; that under its use the "thick, serrated and everted edges" disappeared much more rapidly than with the other two; and that when the weak solution was employed, cicatrisation was seen going on over many of the sores, wherever the cancerous excrescences were eaten down to below the level of the surrounding skin. In the case of the disease of the uterus and vagina, the effect was equally striking; whenever the weak lotion was employed the pain almost entirely disappeared, and with it the horribly offensive discharge. The poor woman, from wishing herself dead, began to have her spirits raised, to eat and sleep well, and now no fetor was perceived by those in the room with her. And the general improvement in her appearance was beginning to be visible when a severe attack of hæmorrhage nearly carried her off, since which time her progress towards recovery has been very slight.

A like result was obtained in the fourth case, that of the large mammary tumour. The pain, instantly on the application of the carbolic acid lotion, disappeared as if by magic, and the fetor of the discharge was very much lessened. The tumour was

extirpated a few days after the application of the acid, and the case has gone on well since.

Two or three more cases of cancer of the breast had the carbolic acid lotion applied, but the patients live at a distance, and no report has been received from them.

I may mention that, on treating cancer-cells under the microscope with acetic and carbolic acids in varying degrees of dilution, I found that in about equal strength the carbolic acid dissolved the cells much more rapidly and effectually than the acetic acid, and caused the nucleus also to disappear almost entirely when applied in a concentrated state.

From the above experiments with the three acids, then, it appears that they have about an equal effect in removing pain in cancerous growths; that the carbolic acid has a powerful effect in correcting the offensive fetor of cancerous discharges; and that they all have a solvent effect on cancerous tissue—the citric acid least, the acetic next in degree, and the carbolic most powerful.

I hope that those who have tried these acids in similar cases, will publish their experience of their comparative efficacy, and that others may be induced to give one or all of them a fair trial.

REMINISCENCES OF A FOUR MONTHS' STAY WITH PROFESSOR A. VON GRAEFE IN BERLIN.

By A. SAMELSON, M.D., Manchester.

[Concluded from page 385.]

PROCEEDING to the *Affections of the Iris*, we first notice the case of a *foreign body*, which had entered the anterior chamber, and was seen to ride, as it were, on the pupillary edge of the iris, setting up an irritation which called for its removal. This was effected by linear extraction; whereupon the attempt was persistently made to readjust the iris, which, in the preceding manœuvre, had been variously touched and moved towards the incision. As the pupil, however, could not quite be restored to its circular shape, a piece of iris was finally excised. We take this opportunity of mentioning the wonderment expressed by an elderly gentleman from this country, who for a short period attended the operations at the Clinique, in these characteristic terms: "But how is it? They here perform iridectomy for everything!" And, in fact, iridectomy has here even replaced Mr. Critchett's ingenious method of iridesis. The latter, which was formerly practised by Von Graefe, has at his hands, as elsewhere, been found not to be a sufficiently innocuous proceeding, but apt to set up cyclitis. Of this we chanced to see an instance in the eye of a lady, on which an iridesis had been made, apparently in due style, by another surgeon. Cyclitic disease had resulted, which now required the performance of iridectomy at Von Graefe's hands. A very small incision, so performed as to secure a long channel for the iris to travel through, is the means of making iridectomy answer all the purposes for which iridesis has been recommended and had recourse to.

In all instances where either cosmetic or optical considerations require, and present circumstances permit, the excision of iris in an upward direction, this, in avowed imitation of the English example, is preferred. In the performance of iridectomy, unless synechia or other circumstances hinder, the iris is regularly made to follow the lance-knife out of the anterior chamber, in order to be spared the introduction of the forceps.

* R. Acid carbolic 3iiss-3ii; spiritus vini rectificati ℥i; aquæ ad lbs. ii.

In regard to the *Affections of the Lenticular System*, our remarks will be confined to the item of *Cataract*. According to Von Graefe's experience, diabetes is of much more frequent occurrence in cases of cataract than appears to be generally received. He does not in his practice regard immaturity as an essential obstacle to the removal of cataract. The retrogressive condition of the latter is by him considered much more to darken the prospect of thorough success; and a form which he appears prognostically to dread more than any other is that of posterior cortical cataract, from its being mostly accompanied by other and more serious morbid changes. Among the local circumstances of inauspicious significance, it is especially the small-sized cornea which is looked upon with misgiving. In capsulo-lenticular cataract, the opaque capsule is pretty frequently removed by itself, immediately before the extraction of the lens. As regards instruments, in the bent cystotome, with its fleam, in the one specimen looking to the right, in the other to the left, we saw a most useful auxiliary for upwards extraction. The curette preferred for most purposes is a curved spoon, the construction of which is a sort of compromise between Waldau's and Critchett's instruments. Repeated introduction of the curette into the anterior chamber, which has here always been held in abhorrence, is most religiously abstained from. A very light but efficient kind of manacles, consisting of two firm bands, an inch wide, buttoned about the wrists, and fastened by a tape to the foot-end of the bed, is employed after cataract-extraction, to ward off injury by the patient's own hands.

A proceeding which seems to be in special favour with Von Graefe, and which we have witnessed in a pretty large number of cases, is the formation of what he calls a *diametral pupil*. This is obtained by superadding an upward iridectomy, mostly just before the act of extraction, to the iridectomy downwards performed some weeks previously; or *vice versa*, as the case may be. A large vertical gap is, in eyes thus operated upon, seen to replace the former pupil. The proceeding is pointed out as the best means for thorough extinction of the action of the sphincter. It is needless to say that the plan is not wantonly adopted, but only resorted to in suitable cases. It appeared to us as a thing very apt to be carped at; but remembering, as we do, those unfortunate cases of extreme vulnerability occasionally met with in cataractous eyes, in which such a measure is most likely to prevent mischief, we think that others, remembering as much, will probably become not only lenient critics, but thankful imitators too. We give the following case. The patient had had extraction performed on his left eye. The imperfect result was ascribed to the influence of syphilis, which had not entirely left the system at the time of the operation. The right eye, now about to be operated upon, had likewise been the subject of iritis, as a residue of which, a synechial band appeared skirting the top of the large gap which appeared within the lower half of the iris, the product of a first iridectomy. A second and equally extensive one was now superadded, whereupon the capsule was dilacerated, and the cataractous lens attempted to be removed with the spoon. It issued in two parts, which, put together, showed the nucleus and the cortex immediately surrounding it to have come away complete. Much remaining surface-matter, however, was gradually expelled by pressure on the sclerotic with the spoon. The adhesion referred to had, in the act of dilaceration, been torn across with the sharp hook which, in this case, was preferred to the cystitome. Whenever the eye happens to jerk whilst the spoon is being introduced, the caution is observed and enjoined, quickly to

follow the movements of the former, as the only chance of avoiding rupture of the hyaloid fossa.

Very exceptionally only, and then for the most part at the urgent desire of the patient, extraction is performed on both eyes in one sitting. We were told by Professor von Graefe himself of the case of a high dignitary, in which the faultless progress of the operation on one eye induced him forthwith to extract the lens from the other; this was equally accomplished without a hitch, when, nevertheless, both eyes were lost, so far as regards useful vision, by speedily supervening supuration—an event which, manifestly arising from systemic causes, could not further be accounted for but by this vague assumption. On the other hand, we witnessed ourselves a most successful bilateral extraction in a Swedish parson, some 60 years old, of commanding presence, who, loth to extend his stay or undertake the long journey a second time, insisted upon having both eyes operated upon in immediate succession. Another case of bilateral operation, for congenital cataract, in a child, was the following. On the left eye, linear extraction from the outer side was resorted to; the iris prolapsed; dilaceration was effected with the hook; the capsule was found tough, and but very little lenticular substance was present, which, too, could not be completely evacuated. By dint of friction on the closed eyelids, the iris returned; but the pupil, noways duly black, did not quite resume its former regularity either. After this, dissection, freely performed, was the method chosen for the left eye. Here, from a likewise very tough capsule, a much larger quantity of lenticular matter came forth, which now pressed the iris forward into the anterior chamber. Before the case was dismissed from the couch, a piece of iris was excised from the right eye.

Perhaps, further, of some interest are the following three cases of unilateral extraction. In the first, a middle-aged man, the operation was performed on the left eye, and, as usual, without chloroform. In this case, owing to the patient exerting his orbicularis muscle just at the most critical moment, some vitreous humour, though but a very moderate amount, escaped; and the pupil could not entirely be freed from cortical masses. The case, though not an extraordinary one, was instructive, in the operator's own opinion, as showing the usefulness of chloroform, if time will permit of its employment. The next case is that of a noble lady, of 65 years of age, whose left eye had, at the hands of an eminent German professor of ophthalmology, undergone the operation of iridectomy for glaucoma, in the course of which—chloroform not being used, which Von Graefe likewise but exceptionally employs in glaucoma—the capsule was injured. The traumatic cataract thus produced afforded evidence of the unmanageableness of the patient, whose case was beforehand pointed out to us as a most unpromising one. Before the anæsthetic told upon her, she gave continual vent to her anguish. A large upward iridectomy was made; and the capsule, although accessible from the original injury, was expressly dilacerated afresh. While inserting the spoon, the operator called our attention to this as the critical moment. The nucleus, together with a moderate quantity of cortical substance, came away, but was immediately succeeded by some vitreous humour; the play of the orbicularis just supervening when the cataract made its exit. Thorough narcosis had, again, not been induced. In this case, the operator held that the zonula had been ruptured before the operation. Only a scanty amount of vitreous humour, however, had escaped. The corneal wound was well adapted; but the pupil was not quite black, because occupied by blood.

Several times the eyelids were now widely separated, and the patient directed to look downwards, which did not lead to any further escape of vitreous humour. The right eye of the patient was the seat of chronic glaucoma, with a contracted field of vision; whilst in the left eye the visual field was normal; and on that account the operation was ventured upon. The case did well. In the third case, one of accidental cataract in a youth, in which chloroform was dispensed with, a glistening foreign body became visible after dilaceration and the escape of some soft lenticular substance. The foreign body was, together with some more solid cataractous matter, very carefully removed by the spoon, and the pupil remained perfectly clear.

In the hospital, I saw still a female patient, operated on before I arrived, with a pupil partly occupied by capsular remains, in the cataract extracted from whose eye a *cysticercus* had been found by Von Graefe—an occurrence of which we hear that no instance has yet been recorded.

We have seen every method of operation for cataract which is still in use practised at the Clinique, except, of course, reclinacion and depression; and we may perhaps add, except the method of Jacobson, as chiefly characterised by the induction of thorough chloroform narcosis prior to the steps of the operation. But what we have likewise failed to witness within the space of more than four months at Von Graefe's clinique is even a single case of flap-extraction. To account for this, at first sight, certainly very strange omission, we have to enter on the exposition of a method of operation recently excogitated and practised by Von Graefe, which, it is our belief, will be very generally appreciated, and, if approved by experience, form another solid accession to the wealth of ophthalmic surgery. At the last meeting of the Ophthalmological Congress at Heidelberg, Von Graefe has, we hear, made a communication on the subject; a substantial treatise on which will be published in the forthcoming volume of the *Archiv für Ophthalmologie*.* We have been fortunate enough to witness, as it were, the incubation of the new method; attend at its first trials; and observe its gradual perfection and thorough establishment.

When we had witnessed at the Clinique a number of cases subjected to modified linear extraction, performed advisedly in strict accordance with the practice and precepts of Critchett and Bowman, we heard Professor von Graefe broach the idea—to throw or fling (as he colloquially expressed it) the lens out of the eye without the intervention of the cumbersome and anything but inoffensive spoon. Within less than a fortnight after this, we found him supplied with the instruments in his opinion requisite for the realisation of his idea. Thus provided for, proceedings commenced; and by rapid degrees perfecting and completing his armoury, in the course of about three months (at the end of which the long vacation set in) he had performed the new plan upwards of sixty times, at about forty of which we had the good fortune to be an intensely interested spectator. We have thus seen the hand of the operator, in the execution of a novel act, become more and more firm, until it had attained to the freedom habitually attending his surgical handiwork. During the first period of trial, we frequently heard him remind the bystanders that what they were witnessing were yet "*des essais*." As regards the nature of the cases, perhaps only the first half of them were specially selected for the purpose. The object being a thorough and extensive trial of the merits of the new scheme,

very soon every description of cataract, which else would have fallen within the scope of either flap- or spoon-extraction, was subjected to the new proceeding. In this, the administration of chloroform was but seldom deemed necessary.

The steps of the operation, as performed in my presence, were as follows. The eyelids having been separated by the stop wire retractor, and the conjunctiva at the bottom of the cornea seized with toothed forceps, the point of the knife devised by Dr. Waldau for the removal of prolapsed iris, the edge looking upwards, is inserted in the sclerotic, at the distance of half a line from the margin of the cornea and about half a line below the plane of its vertex. When the point has been moved straight on so far as to appear in the anterior chamber, it is directed downwards, and pushed on towards the pupil. As soon as the point is seen above the pupil, it is advanced in an upward direction until it has reached the spot directly opposite in a straight line to that where it first appeared in the anterior chamber; carried onward a little further, it is made to emerge through the sclerotic at the same distance as its insertion was from the cornea. The knife is now pushed on in an horizontal direction towards the great angle, until its edge has entirely cut through the corneo-scleral junction, when it is turned edge forward to divide the wall of conjunctiva which is still before it. For, the incision falling quite in the limbus corneæ, and often, we believe, lying altogether in the sclerotic, causes the conjunctiva to rise above the knife as if distended by emphysema, and thus a conjunctival flap to be formed. More or less bleeding, sometimes considerable, from the conjunctiva, is the immediate consequence. The length of the incision, according to Von Graefe's measurement on the dead subject, is from four and a half to five lines—i.e., somewhat larger than any which can be produced by the largest lance-knife as employed in the Moorfields method; moreover, the course of the incision is more strictly linear than that of any obtainable by the lance-shaped knife. The next step in the operation is the laying down with iris-forceps of the conjunctival flap over the top of the cornea, in order to fully expose the incision. Thereupon the hand of the assistant glides under that of the operator to take hold of the fixing forceps, whilst the surgeon now seizes a pair of delicate forceps and scissors to remove a moderate piece of iris. This done, and the fixing forceps having been resumed by the operator, he clears the pupil, if necessary, from blood effused in front of it, lacerates the capsule extensively with the curved cystitome, and mostly endeavours to effect the exit of the cataract by gentle pressure with a Daviel's curette on the sclerotic above the incision. If this remain unsuccessful, he pushes a bent hook on the flat about two lines deep into the posterior cortex, whereupon the point of the hook is turned forwards, and, by a slight upward movement of the instrument, the cataractous lens is lifted out of the wound. This being accomplished, the fixing forceps and retractor are expeditiously removed from the eye. After a moment's waiting, the eyelids are again separated by the hands of the surgeon; and whatever is found to remain of cortical substance in the pupil, is, by alternate sliding over the globe of the upper and lower lids, made to issue as completely as possible. The reversed conjunctival flap having been returned to its original position, and the wound cleared by forceps of the filamentous coagulum which is very generally found to overlies it, the eye is closed and dressed with the protective bandage. The after-treatment does not in any respect differ from that generally observed after extraction. Of the

* The paper has since appeared, and a translation of it is in course of publication in the *Ophthalmic Review*.

three hooks in progress of time devised for the removal of the lens, the sharp one, calculated to penetrate into the nucleus, is but seldom called in use; the object of the new plan being rather to promote the gliding of the lens, if possible, by mere external pressure, than to draw it out of the wound. Again, of the two blunt hooks, the one presenting some surface, though differing in its mode of action from the sharp hook, is yet, for the same reason, but rarely employed; so that there remains only the blunt hook which is slender throughout as the instrument ordinarily used in lieu of the discarded curette. It is needless to say that, in the event of rupture of the hyaloid fossa, resulting in the escape of vitreous humour before the removal of the cataract, extraction is nevertheless insisted upon. It is then effected with the necessary despatch by means of the spoon.

Of the sixty operations before referred to, not one was an utter failure—i. e., ending in the entire loss of vision; though we cannot doubt the success obtained in the various cases must have varied in degree. According to recent news, Von Graefe has performed upwards of one hundred operations on the new plan; and, amongst this total, there are no more than five or six cases requiring an after-operation, the remainder having furnished quite satisfactory results. The advantage of the proceeding appeared, in Von Graefe's view, mainly to consist in the precisely linear character and the peripheral situation of the incision, enhanced in value by its considerable length, and further by its subconjunctival position. As a point of much importance, in regard to the immediate consequences, we have heard him state that the prejudicial proliferation of the intracapsular cells, so habitually observed after scoop-extraction, appeared to be in a great measure discontinued by the new proceeding.

As regards the technical steps of the latter, various points are, according to Von Graefe's own admission, borrowed from the proceedings of others—viz., Desmarres and Jacobson. What we know to be original is the mode of performing the incision on the one hand, and the supersession of the obnoxious spoon by the less offensive hook on the other. We have endeavoured to describe the operation as we have seen it performed. It may be and is not unlikely to have been modified in various points since. As the coming year will see the new method put to the test far and wide, the voice of the profession will ere long begin to be heard on its merits.*

We have but little to convey respecting the diseases of the deeper parts—viz., the vitreous body, choroid, retina, and optic nerve. The operations for *Glaucoma*, hitherto performed by Professor von Graefe, amount to upwards of nine hundred; in none of which a mishap, such as lesion of the capsule, has occurred. The employment of the Calabar bean extract has sometimes (as but very recently in the neglected case of the wife of a celebrated physician) been found useful in inducing a slight enlargement of the exceedingly narrow seam of iris not unfrequently met with, which in itself, however, is never considered an obstacle to operation, as the removal of a fair portion of iris remains always possible. The remark was made, that in some cases the operation proves unsuccessful because the lens, from rupture of the zonula, is luxated and leans against the iris, when extraction must be performed before a satis-

* From a communication received a month since, I learn that, in his last fifty cases, Professor von Graefe has been able entirely to dispense with the hook, effecting the removal of the cataract by mere external pressure (the so-called "slide-manœuvre"). Chloroform had of late been hardly employed at all in the operation, and escape of vitreous humour occurred in five or six per cent. of the cases only.

factory result can be obtained. The employment for the incision of a Beer's knife is disapproved of, as well as the caprice of invariably performing the iridectomy upwards, in consideration of the danger involved in a sudden rotation of the eye in that direction; since, as a rule, chloroform is not administered in the operation.

In regard to *Opacities of the Vitreous Body*, it was urged that a certain description of them—those, viz., of a membranous character—are apt, from the difficulties of ophthalmoscopic examination, which, at all events, should be conducted by subdued lamplight, to be mistaken for folds of detached retina. At Von Graefe's hands, great success has attended the operative division of such-like veils suspended in the vitreous humour. In the performance of this operation, as well as in that of perforating the retina when detached from the choroid, the ophthalmoscope has recently been called in requisition. A Liebreich's ophthalmoscope, fixed in a spectacle-frame, enables the operator to guide his instrument within the vitreous space by the light reflected from the fundus. For the purpose of operating in this manner, it is necessary to place the lamp at a rather considerable distance, in order to lessen the angles of the reflex images.

The condition of the field of vision is, as in all other instances of amblyopia, from whatever source, also in the case of *Retinal Separation* invariably tested in both daylight and subdued lamplight, when the results of both kinds of examination are confronted. Often the photometer devised by Professor von Graefe is called in use to exactly determine the quantity of perception. After the division of detached retina, the eye is, within a very short delay, again submitted to examination, in order to control the immediate effect of the operation.

The uncommon occurrence of *Removal of a Cysticercus from the Vitreous Space through the Sclerotic*, after previous extraction of the lens, which took place during my stay, I was unfortunately, by illness, prevented from witnessing. The entozoon, which I saw after the operation, was presented to Dr. Desmarres of Paris, whose presence had been held by Professor von Graefe to be a fit opportunity for the performance of an act so interesting from its rarity.

As regards *Amblyopia*, in its various forms, there is the less occasion for dwelling on the subject, as the essential points of Von Graefe's views and practice are just now being published in the *Ophthalmic Review*. As of recent origin, we may mention the contrivance recommended by Von Graefe for the use of amblyopic patients in the visual exercise ordered them in suitable cases; it consists in the combination of two convex glasses, fixed at an inch distance from each other in a tube which is provided with a handle. The two lenses are by their combined focuses to represent a single convex lens of shorter focus. The advantage of the combination is, that it enables the patient to read at a greater distance, while the spherical aberration is lessened. For the recovery of joint vision, where a chance remains, the use of the stereoscope is prescribed, as lately recommended by Jamsin. The rather frequent occurrence in *actors* of a bad form of amblyopia, mostly, it appears, of spinal origin, although not exactly like that attending *tabes dorsalis*, seems to have inclined Von Graefe to regard it as a form *sui generis*, arising apparently from a co-operation of causes peculiar to the calling of the patients.

In some cases of *Amblyopia, with Concentric Contraction of the Visual Field*, we have had the opportunity of verifying the good effect of repeated blood-letting from the temple by means of Heurteloup's artificial leech. In *Neuro-retinitis*, characterised by

the well known *plaques*, the employment of this remedy is, however, expressly warned against as likely rather to do harm than good.

Of *Syphilitic Retinitis*, two forms are distinguished. In the one generally known, the retinal opacity appears as though it were splashed from the locality of the papilla, and is often exactly limited to the inter-spaces of several neighbouring vessels, beyond the extreme of which nothing morbid is to be found. The whole appears, so we believe Von Graefe has it, as if a greasy finger had been carried over the affected part. The other form, very rarely seen, is characterised by a delicate white stippling, which skirts the vessels in close proximity to the macula lutea, but does not extend so far as the papilla. In this form, the morbid change is held principally to consist in the sclerosis of nerve-fibres.

A phenomenon of interest ophthalmoscopically, because rarely met with, to which we had our attention once directed, was the appearance of an *ecchymosis* in the fovea centralis.

In reference to the defects of refraction, we have only to relate the proceeding observed in the selection of glasses in cases of *Astigmatism*. The first step is to determine whether the astigmatism is positive or negative. The patient is directed to look at the largest among Jaeger's test-types, suspended about twenty feet distant; alternately convex and concave cylindrical glasses (say of 14 inches' focus) are rotated before his eye, in order to ascertain the position of the glass which affords the best correction of the defect. The positive or negative nature of the astigmatism thus determined, stronger or weaker glasses are tried for the purpose of ascertaining its quantity. If now the acuity be found not yet to be normal, the question remains to be solved in the ordinary way, whether the patient's eyes, while provided with the appropriate cylindrical glasses, are, besides, ametropic in one or the other sense. This being likewise established, glasses of the proper focus are ordered, to be ground spherically on the one and cylindrically on the other surface.

Injuries of the Eye are at Berlin, it appears, observed in less number than in our great manufacturing centres. Accordingly, sympathetic ophthalmia also seems to be of less frequent occurrence—amongst the town population at least. We saw a case, but rarely occurring, though not unexampled we were told, in which, during some operation, an eyelash had slipped into the anterior chamber, and set up iritis, which was followed by sympathetic iritis in the fellow eye. The eyelash was removed, and the patient, a boy, made a good recovery. In another case, a piece of metal had pierced the cornea, so that its extremity was discovered to project from the posterior surface of the cornea into the anterior chamber. Its removal, insisted upon and finally achieved, was perhaps, of all the operations we have witnessed at the Clinique, the one most trying the endurance of the operator, who found it necessary, before dismissing the patient from his hands, to perform an iridectomy as the last step of the operation. In his judgment, the occurrence was one of sufficient gravity to make it the subject of a clinical lecture. The case did very well. A most singular case of accident also occurred, in which a solid and rather sharp-edged piece of iron, three-quarters of an inch long, was extracted from the eye, in which it had lodged for eight or ten days unnoticed, although the traumatic cataract had, on account of the irritation it caused, been removed from the organ. The foreign body was first detected by its point pressing against the sclerotic, which it caused to bulge out much in the shape of a partial staphyloma. Lastly, we were shown a case of accidental cataract, the effect of some

concentrated mineral acid, without there being a trace observable of an injury inflicted either upon the cornea or the sclerotic. Professor von Graefe remarked that a number of cases of the same origination had in course of time come under his notice.

Enucleation, in the rapid performance of which, though chloroform is regularly administered, Von Graefe appears to take some pride, is usually effected in two minutes. Yet he prefers to make the conjunctival incision close to the cornea, as securing a better condition of the stump, although the operation can be accomplished more expeditiously by dividing the conjunctiva nearer to the insertion of the muscles. The suture, after the removal of the bulb, is dispensed with. Immediately before the division of the optic nerve, the stump of the external rectus is laid hold of with strong forceps. In case of enucleation on account of malignant tumour, the nerve is advisedly cut a few lines further back than usual. In one case, before the nerve came to be divided, the retina was plainly felt to have undergone ossification: in the division, the nerve was heard to crack under the scissors.

During our stay, the rare case was once seen of *Congenital Anopia*—i.e., total absence of eye-globes.

In fine, we have to refer to a disease which perhaps cannot as yet be classified. We mean *Exophthalmia Gotthe*, of which several instances occurred. The insufficient relaxation of the levator palpebræ muscle—a symptom first pointed out by Von Graefe—is the phenomenon on which he relies for diagnosis in incipient or yet indifferently marked cases. We took an opportunity of bringing such a one, in a young lady, before him, when he judged it to undoubtedly be an instance of the malady in question. The remedy preferred is iron; besides, a trial of the continuous electric current is advised, which is said to have proved successful in Remak's hands. In the case just referred to, iron was for a time employed, apparently with good effect, when the patient removed for a while to a country-place, affording natural and slightly chalybeate baths, of which a number were taken while concurrently she made use of whey in the morning. Nothing, however, availed so much as course of thorough milk-diet, thanks to which she returned after a couple of months almost perfectly cured; at all events, able to work again, and very stout, whilst she had been extremely thin when she left. The catamenia also, which had been absent for nearly a year, have since returned.

I have thus brought my fragmentary recollections to a close; and it only remains for me, in a few words, to sum up my impressions. Far from underrating any desert, and without disputing the positive claims of mediocrity itself, in our present state of being, I think we have but the more reason to take it as a special favour in life's vicissitudes, if we are admitted for a space to dwell in the atmosphere of genius. Professor von Graefe cannot, in regard to his inquiry and experience, be upbraided with reticence. He has published a great deal; has fed many a studious mind with useful and suggestive lore; and has, by his literary productions alone, helped to call forth a host of earnest and industrious labourers, practical as well as scientific. But there is, in the immediate outpourings of his mind, a pregnancy, an inspiratory power, which, during the short period of little more than twelve years, has perhaps done for science and humanity as much as his writings. And having so far dwelt on the intellectual manifestations of a great mind, what is to be our comment on the ethical character of its working? We shall not endeavour to improve upon his friend, Mr. W. Bowman, who, with inimitable felicity, has vindicated for Pro-

essor Von Graefe "the transparent candour of his disposition."

[The reading of this paper, which was finished in November last, before the Manchester Medical Society, was unavoidably postponed from the December meeting of the latter to its next ordinary meeting in February; hence the tardy publication.]

ERRATA. The following corrections should be made in the former part of Dr. Samelson's paper.

Page 383, col. i, line 18 from bottom, for "homogeneous", read "homonymous".

Page 385, col. i, line 32, for "cornea", read "zonula".

Reviews and Notices.

TRANSACTIONS OF THE ETHNOLOGICAL SOCIETY OF LONDON. Vol. IV. New Series. London: 1866.

WE welcome with pleasure this new volume of *Transactions*, published by the Ethnological Society of London, and strongly recommend its careful perusal and study to our readers, many of whom, we feel assured, must be interested in ethnological researches. It contains a series of highly interesting papers, twenty-seven in number, read before the Society, during the presidency of Sir John Lubbock. Of these, four are from its present venerable president, Mr. Crawford, the Nestor of the Society; but with whom advanced age gives no evidence of declining mental vigour. The subjects are: 1. On the Supposed Stone, Bronze, and Iron Ages of Society; 2. On the So-called Celtic Languages in reference to the Question of Race; 3. On Cannibalism in Relation to Ethnology; and 4. On the Physical and Mental Characteristics of the Negro. Mr. Crawford is an earnest and able advocate for the polygenetic hypothesis of the origin of man; and, in all these papers, we need scarcely say, that the views which he holds are set forth, with great force of argument, and supported with a vast array of facts, as might well indeed be expected from a man of Mr. Crawford's great learning, and from his vast and varied experience of mankind, acquired in those Eastern countries, where peculiarities of circumstances influencing the character of man are in their greatest activity and most strikingly exemplified.

We are glad to notice that Professor George Busk and Mr. R. Dunn are contributors to the volume. They are both Vice-Presidents of the Society. Professor Busk has two papers: 1. An Account of the Discovery of a Human Skeleton beneath a Bed of Peat on the Coast of Cheshire; 2. Description of Two Andamanese Skulls—respecting which, he justly remarks that they constitute a very interesting and important addition to our knowledge of the cranial configurations of the Andaman Islanders.

Mr. Dunn's paper is on Civilisation and Cerebral Development; and we cannot help thinking that those of our readers who were interested in the abstract which appeared in our pages at the time when the paper was read before the Society, will now be glad of the opportunity of studying this paper *in extenso*. The influence of civilisation upon the development of the brain in the different races of man, is a most interesting and important inquiry; and it

is one, judging from what has been contributed by him to our own pages, that is well suited to the author's habits of thought and inquiry.

The volume abounds with papers of interest, but on which, we regret, our space will not permit us to dwell. We may mention those of Mr. Wallace, on the Progress of Civilisation on Northern Celebes; of Dr. Rae, on the Esquimaux; and of Mr. Markham, on the Arctic Highlanders—as well worthy of careful perusal. The erudite paper, On the True Assignment of the Bronze Weapons, by that distinguished archaeologist, Mr. T. Wright, the Honorary Secretary of the Society, has already called forth another, in reply, from Sir John Lubbock, the author of *Prehistoric Times*, and is full of archaeological interest. But the paper of all, perhaps, the most calculated to excite the greatest interest, in the mind of the general reader, is that on Stonehenge, by Professor S. Nilsson of Sweden. He says truly that there is something mystical and solemn in these remains of antiquity. They have been attributed to the magic arts of Merlin, as the Cathedral of Lund in Sweden was supposed to be erected by Finn the Giant. Whether he has hit upon the true interpretation, the reader must judge for himself; and we strongly recommend to his serious and deliberate study Professor Nilsson's theory on the origin of Stonehenge, as a temple dedicated to the Sun by a people who were worshippers of Baal.

DR. J. MOORE NELIGAN'S PRACTICAL TREATISE ON DISEASES OF THE SKIN. Second Edition, revised and enlarged. By T. W. BELCHER, M.A., M.D. Dub.; B.M., M.A. Oxon.; Fellow, Censor, Examiner in Materia Medica and Medical Jurisprudence for Arts, and Honorary Librarian, King and Queen's College of Physicians in Ireland, etc. Pp. 526. Dublin: 1866.

THIS volume, Dr. BELCHER informs us, contains the substance, generally the very words, of the edition issued in 1852 by the late Dr. Neligan; but an addition of above a hundred pages has been made, and "the discoveries of medical science and the opinions of the best authorities" from 1852 to the present year, have been added in their proper places. The result of Dr. Belcher's own experience has been given where it has specially confirmed or differed from that of Dr. Neligan.

Among the additions made to the work, are notices of the following diseases: rubeola, scarlatina, variola and its allies, furunculus, anthrax, malignant pustule, and lepra Hebræorum; and a full description of elephantiasis, morphia (of Brazil), frambœsia, morbus Tauricus (the leprosy of Astrachan), Aleppo evil, ngerengere, pellagra, and morbus Addisonii.

The previously useful treatise of Dr. Neligan has been decidedly improved by the process of revision and addition which it has undergone at the hands of Dr. Belcher; and we can cordially recommend it to our readers as one among the modern works of merit on skin-diseases from which they may derive profitable information.

SCURVY appears to be on the increase in our mercantile navy, rather than on the decrease. Its existence, of course, proves that the sailors, hygienically, are improperly treated—ill-fed, or ill-lodged.