ral during gestation becomes pathological after delivery. It is probable that metria will be found the chief disturber of the natural processes in the subjects of subinvolution of the uterus. It is regretted that no clue exists to the residences of the parties whose cases are detailed in order that their future history might be ascertained.

CATARACT OPERATIONS.

By B. JOY JEFFRIES, A.M., M.D., Ophthalmic Surgeon
Mass. Charitable Eye and Ear Infirmary, and to the
Carney Hospital. Read before the Suffolk District
Medical Society, Oct. 28th, 1871.

I HAVE now employed Graefe's so-called peripheral linear operation, or a modification of it, in forty-two cases of cataract. This, in truth, is but a small number in comparison with the hundreds counted by our lamented master in ophthalmology or some of his immediate European followers. It is also naturally much too small a list to deduce statistics of vision from, or compare the method in this respect with the old corneal flap operation. It is, however, long enough to allow me, in all due deference, to enter the discussion now going on. My friend Dr. Loring has recently shown that a mistake has been made in recording the power of vision after this operation, namely, in placing "successful" too low, or at least below the standard that was adopted in registering the result of former *flap* operations. I do not see how we can make a fair comparison of *vision*, except by holding to the same standard in future as with the old flap.

The profession at large will not, nor can they be expected to take any interest in such an article as this, until relative or friend is blind from cataract, and seeks by operation the restoration of sight. Then the method chosen and its prospects of success become of vital interest. But a very great and perhaps somewhat extraordinary ignorance prevails not only among the laity, but also among professional men as to cataract itself. Where any knowledge exists, it seems to be that cataract is not a disease, or due to a disease, but simply an opacity of the crystalline lens, and if this can be successfully removed from the eye, the patient must needs see as well with that as with the other eye when not affected. Now, unfortunately, should the ophthalmic surgeon limit his operations to pure senile cataract, he would not relieve a large number of cases that can be helped in some degree, although his records of success would

be materially increased. Congenital, posterior polar or cataract with disease of internal membranes, and traumatic, embrace a pretty large number which we are, so to speak, forced to operate on, yet which we know will reduce the fraction in our column of vision when the cases are tabulated. For instance, a child has congenital cataract in both eyes, not enough in one eye to prevent reading, but sufficient in the other to allow only the discernment of large objects or the recognition of light from darkness. If, now, an operation does not give to this eye as good vision as the other, the operator is naturally blamed, although he may have cleared away all obstruction to the entrance of the rays of light to the retina, and his operative interference not have excited damaging inflammation. The retina, or recipient surface, and the optic nerve, or conducting apparatus, are at fault, i. e. they are not developed normally.

Or, again, a physician recognizes cataract in one of his patients, and sends him to the specialist for operation. The ophthalmoscope shows the latter that the cataract is due to or accompanied by disease of the choroid, which of itself would reduce the power of vision excessively, and, moreover, that the choroidal trouble may in great measure count against operative interference. Should, now, this latter be employed and all obstruction to the entrance of light be successfully removed, yet the surgeon gets blamed for not performing a miracle, namely, making the blind retina perceive. I will not dwell upon the fact of how utterly the specialist is in the hands of the patients he has operated on or their surroundings, or how they may readily spoil his best work, by neglect or total disregard of directions and precautions. These are matters the profession at least can well understand, and we are sure of their sympathy in them. Please let it be remembered that an eye with cataract is a diseased one, and that the operation causes a dangerous wound.

Thus much premised, I would say I am not content with the present adopted measurement of vision after cataract operation. What I should prefer to know is, does the ophthalmoscope show a perfectly clear opportunity for light to reach the retina, then only has the best been done for the patient. With our present plan, a patient may, with appropriate cataract glasses, be able to thread a needle or read good print after operation, yet his vision for 20 feet as ordinarily taken might be but $\frac{1}{6}$ or even $\frac{1}{8}$ of the normal. The record would put him among

the moderately successful, yet he has as good vision as many people pursuing their avocations and gaining their daily bread thereby. What I mean is that our standard and measurement of vision do not tell the whole story.

Aside now from the question of absolute visual power gained, or even granting that as good is not obtained, why have ophthalmic surgeons almost universally departed from the method known as the old corneal flap and adopted Graefe's peripheric linear or a modification of it? I would answer from my own experience, because they feel that Graefe's operation is safer. I turned to it myself as soon as I understood this fact. My first two operations were those in which I had performed a "corneal flap" on the other eye. The peripheric linear cut, even when modified as it has been so as to perhaps no longer deserve that name, gives us a wound in a blood-bearing tissue, and with the conjunctival flap generally made, is almost like a subcutaneous incision. I cannot but think that these are two causes of great import in its success.

As to the concurrent iridectomy or the tearing out of a piece of the iris to let the lens pass without bruising the iris tissue, it has been forcibly said, that this was a hole which nature would attempt to fill up. But nature does not attempt to fill it up when done to subdue glaucoma, or form an artificial pupil. The iridectomy leaves a clear passage for the lens nucleus to the wound and allows us opportunity to push up and out the dreaded cortical substance.

Such a cut as this operation makes, heals readily, quickly and firmly, before the eye, so to speak, wakes up to the fact that it has been interfered with, and before nature attempts the absorption of the remaining debris of the cortical substance of the lens. This I cannot but feel is the chief secret of the success of the operation. All the old cautions, warnings, and advised preparation of the patient, have faded away from the ophthalmic text books and the clinical teachers' lectures, showing, I hold, that we now have an operation which is safer and less to be feared. Besides this, Graefe's operation or a modification of it, is applicable in all cases of extraction. We can employ it where we should not dare to make a corneal cut for fear that it would not heal. The narrow catlin-like knife used may be more difficult to manœuvre, but we can make it cut where and as we please. A proof of this is that the instrument is frequently employed in preference to the lance-

shaped knife where an iridectomy alone or an artificial pupil is to be made.

I trust these few hasty remarks will enable the profession to better understand cataract operations in the light they must needs regard them. I can only say in conclusion, that my forty-two cases have taught me to have more confidence in Graefe's modified peripheric operation than in the corneal flap section, and that the chances for the patient's restoration to useful vision are greater, therefore I practise this method. Whether hereafter the concurrent or a previous iridectomy may be done away with, time must teach me. I am not willing to admit this at present. There are naturally many other points about this operation I would gladly speak of, but the ophthalmic journals and Society meetings are the proper places for such discussion.

MALIGNANT SMALLPOX TREATED WITH SULPHUR FUMIGATIONS, AND SULPHUROUS ACID INTERNALLY.

By F. HJALTELIN, M.D., Chief Physician of Iceland. Rekjavik.

EVERY summer, and even early in the spring, Iceland is generally surrounded by many hundred French fishing-vessels, which, to tell the truth, are never welcomed by the Icelanders; this spring, these vessels were still more dreaded than ever, because accounts had been received of a malignant smallpox, raging over the unhappy French country.

In the beginning of April last, several French vessels came into the harbor of Rekjavik, and in some of these a third part of the crew had been seized by smallpox, and some had died. A quarantine was at once erected in the neighborhood of our town, and, as the chief physician of this island, I had to treat the sick sailors, and see that the quarantine regulations were strictly followed. Many of the patients brought into the quarantine had the confluent smallpox, and were in great danger. I treated them all in the same manner, viz., on the plan of disinfection advocated by me a long time ago. Sulphur fumigations were used in the sick room and a mixture of sulphurous acid in water was given internally. The result has been most satisfactory, and I shall give a full account of the cases treated, in Dr. Dobell's Reports this year. As no cases of smallpox have, after the lapse of 30 days, occurred among the Icelandic population, either in the town