A CASE
OF
CONGENITAL CATARACT,
WHERE SIGHT WAS ACQUIRED BY OPERATION, AT THE AGE
OF TWENTY-THREE YEARS.

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As I believe the following case of congenital cataract to have been relieved after the longest period of any on record, (the patient having been 23 years of age,) I beg to offer an account of it to the Fellows of this Society.

Fanny Morris, aged 23, a pretty, interesting, fresh-coloured girl, of small stature, was admitted into the St. Marylebone Infirmary, June 1st, 1840, with cataract in both eyes, which she had had from her birth, and she had been blind all her life, excepting having the consciousness of light from darkness. She could see no object whatever, and only knew the difference of one thing from another by the touch, and she could find her way about (where she was familiar) only by groping with her hands, and in other places she was always led.

She could distinguish no colours, and all the knowledge she had of objects around her, and of the utensils she made use of, was by feeling their form with her hands. The eyes vacillated, rolling about, and being in constant motion. The conjunctiva, the cornea, the sclerotic coat and the iris (the last being of a dark brown colour) were healthy, and the globe of the eye perfect. The lens and its capsule were completely opaque, being flaky, and of a white, pearly hue, resembling that species of cataract described by Beer as the capsulo-lenticular variety.

In about a month from her admission into the infirmary, I operated upon her left eye. Having placed her in a proper position, and the head being kept steady by an assistant, and the left eye being perfectly fixed, I plunged the needle just below the transverse diameter of the pupil, so as to avoid the long ciliary artery, into the posterior chamber. I then endeavoured, by carefully scratching the capsule at a particular point, to let out the lens, but the capsule was so hard and so firmly agglutinated to the lens, that I could not separate them : I therefore raised my needle, and dislodged them from the vitreous humour both together, bringing them down to the lower part of the posterior chamber, and when there, I pressed them back into the vitreous humour, out of the field of vision. They both remained embedded in its substance, and the pupil became quite clear. The needle was withdrawn. The eyes were then closed, and a bandage, moistened

with an evaporating lotion, bound round the head over them.

The patient went on favourably, having no pain nor inflammation, nor any other untoward symptom. In a week from the operation, the eyes were opened and exposed : she expressed that she was conscious of more light, but that all was confusion. They were again bound up and opened in another week, but although she was aware of more light, still all was confusion. On the third week, a piece of rag was waved before her eyes, when she immediately said, "I see something moving backwards and forwards." She was asked what it was : she could not tell. She was informed that it was a piece of rag, and that it was white. I then held up my fingers, and she was aware that bars of light were intercepted according to the number of fingers held up, but she did not know what they were, neither had she any idea of colour.

In another week the eyes were again opened, and she saw more distinctly, describing, as well as her power of language would permit, the form of things shown to her. This she might do more readily, because she knew several of them by feeling, and when she could not mention them by sight, she always asked to be allowed to take them in her hand. She also now appeared to have some idea of colour : for when the rag was waved before her, she said, "It is a piece of rag, and it is white." When anything dark also was shown to her, she was aware of the difference. I gave her the card upon which her

medicine was prescribed ; when she looked at it she said, " It is white ;" and, on feeling it, she said, " It is my card." On taking my hat into her hand, " It is quite different ; it is something dark."

At this period, and when she had not as yet seen the human face, (for her eyes were always bound up excepting at the times of my visits,) I took the opportunity of putting a mirror into her hand, and requested her to look at it : she did so ; and was extremely surprised and confused, and, blushing deeply, remarked, " I see something shining, but cannot make out what the other is." She then added, looking again, " I think it is a picture." Being questioned more closely as to what a picture was, she said she only knew it by the description others had given her of it. When she was informed that it was her own face, she expressed great astonishment, and could not comprehend what it meant. When anything shone, such as a pewter inkstand, a silver spoon, &c., she marked the difference from other objects by saying, " It is something shining."

In five weeks from the operation she could describe the dress the nurse wore, besides pointing out the different-coloured ribbons on the head-dress. In three months she had so greatly improved in sight, and in knowledge of objects, that there was hardly anything in ordinary use she did not know ; such as tea-cups, saucers, plates, knives and forks, the inkstand, &c., and when desired to go to the mantel-piece with various articles of this description, there was

hardly any of them she was not acquainted with. She had also gained a considerable knowledge of colours ; the different colours, whether blue, or red, or green, on the plates, she well knew, and on presenting her with a nosegay consisting of numerous different-coloured flowers, she named all of them correctly, with but little hesitation.

Fanny Morris had not only obtained a knowledge of form and colour in so short a time, but, in less than six months, she had an accurate knowledge of distance. If she was told to fetch anything at different distances, she immediately did it ; and when desired to go to the beds of different patients in the ward, she could do it quickly, and without the slightest hesitation, and could point out each by their names. She had also a correct knowledge of measurement : on several occasions I have asked her the exact measurement of one object from another, and her answer has been, “ It is so many yards,” and she has always been nearly right. When taken to different spots in the ward, and asked the measurement from that place to the wall, or any other particular point, she would stand and look at the place or object fixed on for two or three minutes, and then would give so correct an answer, that (on measuring the distance) it would almost exactly agree with what she had said : this has been done several times, and in different rooms. In addition to these faculties, she also obtained a knowledge of number and time ; she can count by eyesight any given number up to 100 ; and has an idea of time by being conscious of

the time of day, and the hour of the clock. At this present time her eyesight is so good, that she can hem a pocket-handkerchief and see to thread her own needle ; it being only nine months since the operation.

The patient in Mr. Cheselden's case (read before the Royal Society) was 13 years old, and in Mr. Ware's, 7. In the present case the patient attained the age of 23 before the operation was performed. On comparing the three cases, it may be observed that there is a marked difference in each. In Mr. Cheselden's, the patient, after the operation of couching, had not at first the slightest idea of distance : he thought everything touched his eye, at whatever distance it might be held. He could in a strong light distinguish different colours, such, as black, white and scarlet, before he was couched ; but, after the operation, he did not for some time perceive any difference between them. He knew the form of things by feeling, but not by sight : and it was a long time before he gained an accurate knowledge of the difference of objects when he had acquired sight. Everything appeared to him larger than it was : of which by comparison and experience alone he was enabled at last to form a correct judgment. He was surprised that those whom he loved most, did not appear most agreeable to his eyes, expecting that they would be the most beautiful. He had the same feeling as related to taste, and was astonished that a small picture could represent a large body, saying, " It should have

seemed as impossible to him as to put a bushel of anything into a pint measure." He had also but little idea of size, thinking the whole house could not look larger than his own room.

In Mr. Ware's case, the child could distinguish colours, but nothing else. It appears that he acquired sight almost immediately from the operation; for on the second day he could distinguish a table with a green cloth upon it. A day or two after that, he knew a letter that was shown to him; and he could point out several other things, both by name and colour.

In the case here related, the acquisition of sight was very gradual. At first all was confusion. The third week she began to distinguish objects, and to be conscious of the difference of one thing from another; and was aware when a piece of rag was waved before her eye that something was moving backwards and forwards. In a month she knew that a piece of rag was white: that her prescription card was white, and that black was opposite to white, being, according to her own expression when she was shown my hat, "quite different." In five weeks she was acquainted with the difference of colours: for she could describe accurately the nurse's dress, which happened to be composed of three colours, white, red, and blue. Her knowledge both of form and colour rapidly improved, for in three months she could mention any article in ordinary use, and point out the difference in these respects of each, and knew the numerous colours of the different flowers of a large nosegay.

Form and colour are simple ideas. Distance, measurement, feature, number and time, on the contrary, require two operations of the mind ; first, the simple sight of them ; and, secondly, a judgment to know their difference. In distance we see several objects, and judge that one is nearer to us than another. In measurement we see the object at certain distances, and judge of the different distances of one thing from another by the number of yards, feet and inches they are apart. In feature we make a comparison between two or more people. In number we first see each thing, and then count them ; and in time we know there is day and night, and that the whole comprises twenty-four hours, consequently we make a measurement by the division of it into hours, minutes, and seconds. That the patient should so soon have distinguished colours and form we can understand, because it requires only one operation of the mind : but that she should (without being taught) so soon have acquired a correct knowledge of distance, measurement, the distinguishing one person from another, number and time, is very extraordinary. Distance and feature was her next acquirement. In three months from the operation, I told her to go to the different beds of the patients in the ward. The beds I wished her to go to were, the last, the last but one, the third or fourth from her, &c. She did so without hesitation. She could also tell me the name of each individual in the beds, and could distinguish the features of each person, even if twenty people were assembled

together. In rather less than six months, I thought I would try whether she had any idea of measurement. As I have stated before, I took her to different parts of a large ward, and asked her the measurement from one part to the other, at several distances. To my astonishment she answered me with great accuracy. I tried the same experiment in other rooms, with the same result. I then asked her how many things she could count: she immediately went to the mantelpiece, and counted twenty, saying, "If you wish it, sir, I can count up to 100." I inquired if she knew what time meant. She said, "I know the time of day when the clock strikes, but I cannot tell what time it is when I see the clock." These questions I repeatedly asked her, and her replies were always nearly the same. I endeavoured to find out by what operation of mind she obtained this knowledge. She could not tell me. I also tried to discover what her first impressions were on seeing the human face, and other things; her respondencies were so confused and ambiguous, that I am convinced she had formed no idea. In fact, although so correct in the faculties I have mentioned, being totally uneducated, and brought up with the ignorant, she was of weak intellect, and had never reflected beyond the little occurrences by which she was immediately surrounded.