



ANECDOTES OF THE DEAF, DUMB, AND BLIND.

A
 LL knowledge is received through the medium of the senses, usually reckoned five in number—seeing, hearing, taste, smell, and touch or feeling; such, in fact, being the agents by which the mind is excited to receive or communicate ideas. A deprivation of one or more of the senses, as is well known, ordinarily leads to increased activity of the others, in consequence of the greater reliance placed upon them; nevertheless, it seems evident that any such deprivation must, less or more, cause a deficiency in the intellectual conceptions. A person who has been blind from earliest infancy can, by no process of feeling, hearing, or smelling, be made to have even moderately correct ideas of light or colours; neither does it appear to us that any one who has been always deaf can attain to anything like a proper understanding of sound. Deprivation of hearing from birth may be considered a double calamity, for it is naturally attended with deprivation of speech; and hence the deaf-mute, whatever be his acquirements, always excites our warmest compassion.

Which of the senses could be most conveniently spared, has probably been with most persons a subject of occasional consideration, and it is only when the merits of each are compared that we have a thorough notion of their value. Had we never possessed eyes, then should we never have beheld the glories of the sun, moon, and stars; the beautiful earth we tread, fields, flowers, colours, the magnificent ocean, or the face of those we love. Had we been deaf from birth, then should we never have heard sounds, music, language, nor have been able to hold com-

munication by speech; of the tones of affection we should never have been conscious. Had we been deficient in taste, we should have been exposed to injury in eating that which should be rejected as food; and along with a deprivation of the kindred sense of smell, we should have been constantly in a state of difficulty and danger. It would be needless to speculate on the deprivation of feeling, for we cannot conceive that life should exist for any length of time with such a deficiency. Great as we must deplore the misfortune of those who labour under an irremediable privation of any of the senses, we must in as great a degree admire that Providential care which provides a measure of compensatory happiness. Although stricken with blindness and shut out from being a spectator of nature's marvellous handiwork, how usually superior is the enjoyment of harmonious sounds, how exquisite the love of music! The deaf, too, have their enjoyments, and are at least blest with a pleasing unconsciousness of the loss which they sustain. Lamentable, indeed, is the fate of those who have been deprived of the two more important senses—seeing and hearing; yet that even blind deaf-mutes, with no other senses to rely upon than smell, taste, and feeling, may enjoy a qualified happiness, and be susceptible of moral cultivation, has been shown in several well-accredited instances. One of the most remarkable cases of the kind is that of James Mitchell, the story of whose blameless and interesting life we propose in the first place to lay before our readers.

JAMES MITCHELL.

JAMES MITCHELL was born in the year 1795 at Ardclach, a parish in the north of Scotland, of which his father was clergyman. He was the youngest except one of seven children, and neither his parents nor his brothers or sisters had any deficiency in the senses. Soon after birth, his mother discovered that he was blind, from his manifesting no desire to turn his eyes to the light. On inspection, it was observed that it was blindness caused by cataract; both the lenses were opaque, a cloudy pearl-like substance resting over the retina or seeing part of each eye. This was a sufficiently distressing discovery, but how much greater was the anguish of the poor mother when she soon after found that her infant was deaf as well as blind! Excluded from all ordinary means of direction, the child was guided only by feeling and natural impulse—an object so helpless as to require constant and careful attention. Fortunately, his constitution was otherwise sound: he learned to walk like other children, by being put to the ground and left to scramble to his feet, holding by any objects near him.

While between one and two years of age, he began to evince considerable acuteness in touch, taste, and smell, being able by

these to distinguish strangers from the members of his own family, and any little article which was appropriated to himself from what belonged to others. As he advanced in years, various circumstances concurred to prove that neither the auditory nerves nor retina were entirely insensible to impressions of sound and light, and that though he derived little information from these organs, he received from them a considerable degree of gratification. A key having accidentally come into his hand, he put it to his mouth; it struck on his teeth. This was to him a most important discovery. He found that the blow communicated a vibration through his head, and this, the nearest approach to sound, was hailed with delight; henceforth the striking of a key on his teeth became a daily gratification. As great was the pleasure he derived from any bright or dazzling object being held to his eyes. One of his chief amusements was to concentrate the sun's rays by means of pieces of glass, transparent pebbles, or similar substances, which he held between his eye and the light, and turned about in various directions. There were other modes by which he was often in the habit of gratifying his desire of light. He would go to any outhouse or room within his reach, shut the windows and doors, and remain there for a considerable time, with his eyes fixed on some small hole or chink which admitted the sun's rays, eagerly catching them. He would also, during the winter nights, frequently retire to a corner of a dark room, and kindle a light for his amusement. Such indeed seemed to be the degree of pleasure which he received from feasting his eyes with light, that he would often occupy himself in this manner for several hours without interruption. In this, as well as in the gratification of the other senses, his countenance and gestures displayed a most interesting avidity and curiosity. His father often remarked him employing many hours in selecting from the bed of the river, which flows within a few yards of the house, stones of a round shape, nearly of the same weight, and having a certain degree of smoothness. These he placed in a circular form on the bank, and then seated himself in the middle of the circle.

At the age of thirteen his father took him to London, where the operation of piercing the membrane of each tympanum of the ear was performed by Sir Astley Cooper, but without improving his hearing in the least. An operation was also performed on the left eye by Mr Saunders, but with little or no success. As there appeared still some hopes of restoring vision, his father a second time carried him to London in the year 1810, when fifteen years of age, and placed him under the charge of Mr Wardrop, an eminent surgeon. Mr Wardrop's account of the boy is so interesting that we shall give it in his own words. "This poor boy," says he, "had the usual appearance of strength and good health, and his countenance was extremely pleasing, and indicated a considerable degree of intelligence. On examin-

ing the state of his eyes, the pupil of each was observed to be obscured by a cataract. In the right eye the cataract was of a white colour and pearly lustre, and appeared to pervade the whole of the crystalline lens. The pupil, however, readily dilated or contracted according to the different degrees of light to which it was exposed. The cataract in the left eye was not equally opaque, about one-third of it being dim and clouded, arising as it appeared from very thin dusky webs crossing it in various directions, the rest being of an opaque white colour. The pupil of this eye did not, however, seem so susceptible of impressions from varieties in the intensity of light as that of the other, nor did he employ this eye so often as the other to gratify his fondness for light. I could discover no defect in the organisation of his ears. It was difficult, if not impossible, to ascertain with precision the degree of sight which he enjoyed, but from the preternatural acuteness which his senses of touch and smell had acquired, in consequence of having been habitually employed to collect that information for which the sight is peculiarly adapted, it may be with confidence presumed that he derived little if any assistance from his eyes or organs of vision. Besides, the appearances of the disease in the eyes were such as to render it extremely probable that they enabled him merely to distinguish some colours and differences in the intensity of light. The organs of hearing seemed equally unfit for receiving the impressions of ordinary sounds as his eyes were those of objects of sight. Many circumstances at the same time proved that he was not insensible to sound. It has been already observed that he often amused himself by striking hard substances against his teeth, from which he appeared to derive as much gratification as he did from receiving the impression of light on his eyes. When a ring of keys was given to him he seized them with great avidity, and tried each separately by suspending it loosely between two of his fingers, so as to allow it to vibrate freely; and after jingling them amongst his teeth in this manner, he generally selected one from the others, the sound of which seemed to please him most. A gentleman observing this circumstance, brought to him a musical snuff-box, and placed it between his teeth. This seemed not only to excite his wonder, but to afford him exquisite delight; and his father and sister, who were present, remarked that they had never seen him so much interested on any former occasion. Whilst the instrument continued to play, he kept it closely between his teeth; and even when the notes were ended, he continued to hold the box to his mouth, and to examine it minutely with his fingers, his lips, and the point of his tongue, expressing by his gestures and by his countenance extreme curiosity. Besides the musical snuff-box, I procured for him a common musical key. When it was first applied to his teeth, he exhibited expressions of fear mixed with surprise. However, he soon perceived that it was attended with no harm, so that he not only allowed it to

be renewed, but he soon acquired the habit of striking it on his own hand so as to make it sound, and then touching his teeth with it. One day his father observed him place it upon the external ear. He has also, on some occasions, been observed to take notice of, and to appear uneasy with very loud sounds. Thus, therefore, the teeth, besides being organs of mastication, and also serving as organs of touch in examining the food in the mouth, so that the hard and indigestible part may be rejected, in this boy seemed to be the best channel of communicating sound to the auditory nerve. His organs of touch, smell, and taste, had all acquired a preternatural degree of acuteness, and appeared to have supplied in an astonishing manner the deficiencies in the senses of seeing and hearing. By those of touch and smell, in particular, he was in the habit of examining everything within his reach. Large objects, such as the furniture of a room, he felt over with his fingers; whilst those which were more minute, and which excited more of his interest, he applied to his teeth, or touched with the point of his tongue. In exercising the sense of touch, it was interesting to notice the delicate and precise manner in which he applied the extremities of his fingers, and with what ease and flexibility he would insinuate the point of his tongue into all the inequalities of the body under examination. But there were many substances which he not only touched, but smelled during his examination. To the sense of smell he seemed chiefly indebted for his knowledge of different persons; he appeared to know his relations and intimate friends by smelling them very slightly, and he at once detected strangers. It was difficult, however, to ascertain at what distance he could distinguish people by this sense; but from what I was able to observe, he appeared to be able to do so at a considerable distance from the object. This was particularly striking when a person entered the room; as he seemed to be aware of this before he could derive information from any other sense than that of smell, except it may be that the vibrations of the air indicated the approach of some person. In selecting his food, he was always guided by his sense of smell, for he never took anything into his mouth without previously smelling it carefully. His taste was extremely delicate, and he showed a great predilection for some kinds of food, whilst there were others of which he never partook. He had on no occasion tasted butter, cheese, or any of the pulpy fruits, but he was fond of milk, plain dressed animal food, apples, peas, and other simple nutriment. He never took food from any one but his parents or sister.

But the imperfections which have been noticed in his organs of sight and of hearing were by no means accompanied with such defects in the powers of his mind as might be suspected. He seemed to possess the faculties of the understanding in a considerable degree; and when we reflect that his channels of communication with the external world must have afforded very

slow means of acquiring information, it is rather surprising how much knowledge he had obtained. Impressions transmitted through the medium of *one* sense might call into being some of the most important operations of intellect. Facts have been given to prove that this boy possessed both recollection and judgment. We are ignorant of the qualities of bodies which influenced his determinations and his affections. On all occasions, however, it was clear that he made his experiments on the objects which he examined with all the accuracy and caution that his circumscribed means of gaining intelligence could admit. The senses he enjoyed, being thus disciplined, acquired a preternatural degree of acuteness, and must have furnished him with information respecting the qualities of many bodies which we either overlook, or are in the habit of obtaining through other channels. Perhaps the most striking feature of the boy's mind was his avidity and curiosity to become acquainted with the different objects around him. When a person came into the room where he was, the moment he knew of his presence he fearlessly went up to him and touched him all over, and smelled him with eagerness. He showed the same inquisitiveness in becoming acquainted with everything within the sphere of his observation, and was daily in the habit of exploring the objects around his father's abode. He had become familiar with all the most minute parts of the house and furniture, the outhouses, and several of the adjacent fields, and the various farming utensils. He showed great partiality to some animals, particularly to horses, and nothing seemed to give him more delight than to be put on one of their backs. When his father went out to ride, he was always one of the first to watch his return; and it was astonishing how he became warned of this from remarking a variety of little incidents. His father putting on his boots, and such like occurrences, were all accurately observed by the boy, and led him to conclude how his father was to be employed. In the remote situation where he resided, male visitors were most frequent; and therefore the first thing he generally did was to examine whether or not the stranger wore boots. If he did, he immediately quitted him, went to the lobby, found out and accurately examined his whip, then proceeded to the stable, and handled his horse with great care and the utmost attention. It occasionally happened that visitors arrived in a carriage. He never failed to go to the place where the carriage stood, examined the whole of it with much anxiety, and amused himself with the elasticity of the springs. The locks of doors attracted much of his attention; and he seemed to derive great pleasure from turning the keys. He was very docile and obedient to his father and sister, who accompanied him to London, and reposed in them every confidence for his safety, and for the means of his subsistence. It has been already noticed that he never took food from any one but the members of his own family. I several times offered him an

apple, of which I knew he was extremely fond; but he always refused it with signs of mistrust, though the same apple, afterwards given him by his sister, was accepted greedily. It was difficult to ascertain the manner in which his mind was guided in the judgment he formed of strangers, as there were some people whom he never permitted to approach him, whilst others at once excited his interest and attention. The opinions which he formed of individuals, and the means he employed to study their character, were extremely interesting. In doing this, he appeared to be chiefly influenced by the impressions communicated to him by his sense of smell. When a stranger approached him, he eagerly began to touch some part of his body, commonly taking hold of the arm, which he held near his nose; and after two or three strong inspirations through the nostrils, he appeared to form a decided opinion regarding him. If this was favourable, he showed a disposition to become more intimate, examined more minutely his dress, and expressed by his countenance more or less satisfaction; but if it happened to be unfavourable, he suddenly went off to a distance with expressions of carelessness or disgust. When he was first brought to my house to have his eyes examined, he both touched and smelled several parts of my body; and the following day, whenever he found me near him, he grasped my arm, then smelled it, and immediately recognised me, which he signified to his father by touching his eyelids with the fingers of both hands, and imitating the examination of his eyes, which I had formerly made. I was very much struck with his behaviour during this examination. He held his head, and allowed his eyes to be touched with an apparent interest and anxiety, as if he had been aware of the object of my occupation. On expressing to his father my surprise at the apparent consciousness of the boy of what was to be done, he said that he had frequently, during the voyage from Scotland, signified his expectation and his desire that some operation should be performed on his eyes; thus showing an accurate recollection of his former visit, and a conception of the objects of it. During the first examination, and on several future ones, when I purposely handled the eye roughly, I was surprised to find him submit to everything that was done with fortitude and complete resignation, as if he was persuaded that he had an organ imperfectly developed, and an imperfection to be remedied by the assistance of his fellow-creatures.

Many little incidents in his life have displayed a good deal of reasoning and observation. On one occasion a pair of shoes were given to him, which he found too small, and his mother put them aside into a closet. Some time afterwards, young Mitchell found means to get the key of the closet, opened the door, and taking out the shoes, put them on a young man, his attendant, whom they fitted exactly. On another occasion, finding his sister's shoes very wet after a walk, he appeared uneasy till she changed

them. He frequently attempted to imitate his father's farm-servants in their work, and was particularly fond of assisting them in cleaning the stables. At one time, when his brothers were employed making basket-work, he attempted to imitate them; but he did not seem to have patience to overcome the difficulties he had to surmount. In many of his actions he displayed a retentive memory, and in no one was this more remarkable than in his second voyage to London. Indeed, as the objects of his attention must have been very limited, it is not to be wondered at that those few should be well remembered. He seemed to select and show a preference to particular forms, smells, and other qualities of bodies. He has often been observed to break substances with his teeth, or by other means, so as to give them a form which seemed to please him. He also preferred to touch those substances which were smooth, and which had a rounded form; and he has been known to employ many hours in selecting smooth water-worn pebbles from the channel of the river. He also seemed to be much pleased with some shells, and equally disgusted with others; and this latter feeling he expressed by squeezing his nostrils, and turning his head from whence the smell came. He showed an equal nicety in the selection of his food.

He sometimes showed a good deal of drollery and cunning, particularly in his amusements with his constant companion and friend, his sister. He took great pleasure in locking people up in a room or closet; and would sometimes conceal things about his person or otherwise, which he knew not to be his own property, and when he was detected doing so, he would laugh heartily. That he was endowed with affection and kindness to his own family cannot be doubted. The meeting with his mother after his return from this London visit showed this very strongly. On one occasion, finding his mother unwell, he was observed to weep; and on another, when the boy who attended him happened to have a sore foot, he went up to a garret room, and brought down a stool for his foot to rest upon, which he recollected to have so used himself on a similar occasion long before. He seemed fond too of young children, and was often in the habit of taking them up in his arms. His disposition and temper were generally placid, and when kind means were employed, he was obedient and docile. But if he was teased or interrupted in any of his amusements, he became irascible, and sometimes got into violent paroxysms of rage. At no other time did he ever make use of his voice, with which he produced most harsh and loud screams. It is not one of the least curious parts of his history that he seemed to have a love of finery. He early showed a great partiality to new clothes; and when the tailor used to come to make clothes at his father's house (a practice common in that part of the country), it seemed to afford him great pleasure to sit down beside him whilst he was at work; and he never left him until his own suit was finished. He expressed much

disappointment and anger when any of his brothers got new clothes and none were given to him. Immediately before he came to London, each of his brothers got a new hat, while his father considered his own good enough for the sea voyage. Such, however, was his disappointment and rage, that he secretly went to one of the outhouses, and tore the old hat to pieces. Indeed his fondness for new clothes afforded a means of rewarding him when he merited approbation; and his parents knew no severer mode of punishment than by obliging him to wear old ones.

With respect to the means which were employed to communicate to him information, and which he made use of to communicate his desires and feelings to others, these were very ingenious and simple. His sister, under whose management he chiefly was, had contrived signs addressing his organs of touch, by which she could control him and regulate his conduct. On the other hand, he by his gestures could express his wishes and desires. His sister employed various modes of holding his arm, and patting him on the head and shoulders, to express consent, and different degrees of approbation. She signified time by shutting his eyelids and putting down his head, which done once meant one night. He expressed his wish to go to bed by reclining his head, distinguished me by touching his eyes, and many workmen by imitating their different employments. When he wished for food he pointed to his mouth, or to the place where provisions were usually kept."

Mr Wardrop then details the particulars of the operation of *couching* the left eye, having abandoned the idea of extraction of the lens, which operation was rendered extremely difficult, in consequence of the struggles of his patient, who although evidently willing to submit to whatever was intended to be done, yet had not resolution when the operation was actually commenced. By confining him in a machine, however, the cataract was broken up, and so far displaced that he obtained a certain degree of vision. "On the fifth day," continues Mr Wardrop, "he got out of bed, and was brought into a room having an equal and moderate light. Before even touching or seeming to smell me, he recognised me, which he expressed by the fear of something to be done to his eyes. He went about his room readily, and the appearance of his countenance was much altered, having acquired that look which indicated the enjoyment of vision. He appeared well acquainted with the furniture of the room, having lived in it several days previous to the operation; and though, from placing things before him, he evidently distinguished and attempted to touch them, judging of their dimensions with tolerable accuracy, yet he seemed to trust little to the information given by the eye, and always turned away his head while he carefully examined by his sense of touch the whole surfaces of bodies presented to him. Next day he could distinguish a shilling placed on the table, and put his hand on it, as

also a piece of white paper the size of a sixpence. When taken out on the street, he was much interested with the busy scene around. A post supporting a scaffold at the distance of two or three yards chiefly attracted his notice, and he timorously approached it, groping and stretching out his hand cautiously until he touched it. On being taken to a tailor's shop, he expressed a great desire for a suit of new clothes, and it was signified to him that his wishes would be complied with; and being allowed to make a choice, he selected from among the variety of colours a light yellow for his breeches, and a green for his coat and waistcoat. Accordingly these were made, and as I solicited his father not to allow them to be put on until I was present, it was signified to him that he should have permission to wear them in two days. The mode by which he received this communication was by closing his eyelids and bending down his head twice, thereby expressing that he must first have two sleeps. One day after the clothes were finished, I called and requested that he should be dressed in them. This was intimated to him by touching his coat and giving him a ring of keys, one of which opened the door of the room where the clothes were kept. He gladly grasped the keys, and in an instant pitched on the one he wanted, opened the door, and brought a bundle containing his new suit into the room where we were sitting. With a joyful smile he loosened the bundle, and took out of the coat-pocket a pair of new white stockings, a pair of yellow gloves, and a pair of new shoes. The succeeding scene was perhaps one of the most extraordinary displays of sensual gratification which can well be conceived. He began by first trying on his new shoes, after throwing away the old ones with great scorn, and then with a smiling countenance went to his father and sister, holding up to each of them and to me his feet in succession, that we might admire his treasure. He next put on the yellow gloves, and in like manner showing them to his father and sister, they expressed their admiration by patting him on the head and shoulders. He afterwards sat down opposite to a window, stretched out on each knee an expanded hand, and seemed to contemplate the beauty of his gloves with a degree of gratification scarcely to be imagined. At one time I attempted to deceive him, by putting a yellow glove very little soiled in place of one of his new ones. But this he instantly detected as a trick, and smiled, throwing away the old glove, and demanding his new one. This occupation lasted a considerable time, after which he and his sister retired to another room, where he was dressed completely in his new suit. The expression of his countenance on returning into the room in his gaudy uniform excited universal laughter, and every means was taken to flatter his vanity and increase his delight. One day I gave him a pair of green glasses to wear, in order to lessen the influence of light on his eye. He looked through them at a number

of objects in succession; and so great was his surprise, and so excessive his pleasure, that he burst into a loud fit of laughter. In general he seemed much pleased with objects which were of a white, and still more particularly those of a red colour. I observed him one day take from his pocket a piece of red sealing-wax, which he appeared to have preserved for the beauty of its colour. A white waistcoat and white stockings pleased him exceedingly, and he always gave a marked preference to yellow gloves."

After leaving London, his father writes—"James seemed much amused with the shipping in the river, and until we passed Yarmouth Roads. During the rest of the passage we were so far out at sea that there was little to attract his notice, except the objects around him on the deck. He appeared to feel no anxiety till we reached this coast, and observed land and a boat coming alongside of the vessel to carry some of the passengers on shore. He seemed then to express both anxiety and joy; and we had no sooner got into the river which led to the landing-place, than he observed from the side of the boat the sandy bottom, and was desirous to get out. When we got to land he appeared happy, and felt impatient to proceed homewards. On our arrival that evening, after a journey of seventeen miles, he expressed great pleasure on meeting with his mother and the rest of the family. He made signs that his eye had been operated upon, that he also saw with it, and at the same time signified that he was fixed in a particular posture, alluding to the machine in which he had been secured during the operation. He has now learned to feed himself and to put on his own clothes. No particular object has yet attracted his attention in the way of amusement."

This short gleam of hope and sunshine soon closed upon poor Mitchell. Couching for cataract is seldom permanently successful. The cloudy pearl-like matter being for the most part only broken up, not altogether removed, again settles into a mass, and blindness once more ensues. Such was the case with the object of our memoir: his eye again became opaque, and he relapsed into a state of, as it was thought, irremediable blindness. The brief and partial view which he thus got of the world around him was all that he was destined to see of the face of nature, and all the recollections which he could treasure up of the green earth, the sun, and sky, to cheer his future life of loneliness.

In the following year he is described as incapable of distinguishing even a large object at the distance of only a yard or two; and though he recovered a little more vision a few months afterwards, he seems to have relapsed again into as great a state of darkness as before. In 1811 his father died. The day after, his sister took him into the room, and made him touch the corpse. The touch of the dead body surprised and alarmed him, though expressions of grief were not apparent. This was the first dead human body he had ever had an opportunity of examining: before this he had felt the dead bodies of animals, and

one day was seen amusing himself by attempting to make a dead fowl stand on its legs. On the day of the funeral a number of friends assembled to pay the last tribute to the honoured remains. The poor boy, unconscious of the full extent of his loss, glided about among the crowd, his curiosity excited by the unusual assemblage. Two of the observers state that when the coffin was first brought out containing his father's corpse, he clung to it, and seemed for the moment deeply affected. It is certain that he afterwards repeatedly visited the grave, and patted the turf with his hands.

The death of his mother a few years later, after the family had removed to the neighbouring town of Nairn, was a new source of grief; and the suggestion naturally rose in his mind that he should lose his sister also, and for some time he showed an extraordinary unwillingness to quit her even for an instant. His feelings of distress on this and other occasions were somewhat assuaged by a recourse to a new species of amusement. When he last visited London, he happened to be in the house of a friend of his father, who was in the habit of smoking; and a pipe being given to him, he smoked it and seemed much delighted. After his return home, a gentleman came on a visit to Ardelach, who was also in the habit of smoking, and having tobacco wished for a pipe. Miss Mitchell gave the boy a halfpenny, and permitted him to smell the tobacco. He understood her signs, went out to a shop in the neighbourhood where pipes were to be had, and returned with one in his hand. From this time the smoking of tobacco became a favourite indulgence, from which it was not considered necessary to divert him.

Numerous particulars are related of the subsequent life of Mitchell, but these it is unnecessary to repeat, and we confine ourselves to what follows, as interest in his conduct and habits in a great degree ceases from the time he obtained a view of the external world—a view which, however short, must have given him a distinct idea of light and colours, and also the appearance of animate and inanimate objects. His sister, in describing his condition after this period, mentions that “he continued to take an unabated interest in the employment of the various workmen in town; and in the progress of their work, particularly mason work, examining minutely what has been done in his absence, and fearlessly ascending the highest part of their scaffolding, in which he has hitherto been most providentially preserved from any serious accident. While the addition lately made to a house was roofing, I remarked him ascending the slaters' ladder and getting on the roof. Laying himself down, and fixing his heel in a rough part of the surface, he moved himself along, one foot after the other, until the fear of his slipping rendered me unable to remain longer to look at him. I believe such is his common practice whenever anything of the kind is carrying on. He is so perfectly inoffensive, that all classes contribute

towards his safety and even to his amusement, allowing him to enter their houses and handle whatever he has a mind to, as he never attempts carrying anything away with him or injuring it while in his possession. Indeed, except in one instance, I never knew him exposed to any unpleasant treatment in these unceremonious visits. It was in the case of a family who came to reside in this neighbourhood about three years ago, and who were quite unacquainted with his situation. When he went out as usual to the house (where with the former occupants he had been accustomed to range at pleasure), and began feeling the umbrellas and other articles in the lobby, with the intent, as they supposed, of carrying them off, they first remonstrated with him, and getting no reply, they then proceeded to turn him forcibly out of doors, which they effected after receiving as many kicks and blows as he could bestow in the struggle. He was afterwards seen by two gentlemen who knew him, bellowing with rage. They wished to get hold of him and soothe him, but found it impossible from the furious rate at which he was going; and although regretting his apparent irritation, they were not a little amused upon approaching the house to see a domestic peeping fearfully out at a half-opened door, and the other members of the family, which consisted mostly of females, at the various windows, whence they could obtain a view of the person who had been the cause of so much fear and trouble to them."

In 1826 Sir Thomas Dick Lauder thus relates an interesting visit which he received from Mitchell at Relugas, a distance of seventeen miles from Nairn:—"It was one day about noon, in the month of May, that I saw him pass the window of the dining-room where I was sitting, and immediately recognising him, I hastened to the house door, and met him in the porch, in the act of entering. I took him by the hand, clapped him gently on the back, and led him to the room I had just left, and taking him towards Mrs Cumin, who was the only person with me at the time, he shook hands with her. I then conducted him to a sofa, where he sat down; and being apparently a good deal tired, he leaned back in expectation of finding support, but the sofa being one of those constructed without a back, he was surprised, and instantly made himself master of its form by feeling it all over. I then took his hand and put it to his mouth, with the intention of making him understand that he should have something to eat. He immediately put his hand into his waistcoat-pocket, where he had some copper, as if with the intention of taking it out. * * My impression was that he meant to express that he could pay for food if it was given him. Miss Mitchell seems to think that it was an indication of satisfaction merely. I confess, however, that his action appeared to me to be so immediately consequent on mine, that I cannot yet doubt that it resulted from it. He may have misinterpreted my signal, and imagined that it referred to a pipe and tobacco;

and this may perhaps reconcile our difference of opinion. I lost no time in ordering luncheon, and in the meanwhile I gave my interesting visitor a cigar. He took it in his hand, smelt it, and then put it into his waistcoat-pocket with a smile of infinite satisfaction. I took another cigar from the case, and having lighted it, I put it into his hand. He carried it also directly towards his nose, but in its way thither the red glare of the burning end of it caught his eye (which is perfectly aware of light although not of form), and arrested his hand. He looked at it for a moment, turned it round, and having extinguished it between his finger and his thumb, he put it also into his pocket with the air of being much amused. I was then convinced that he had never before met with a cigar, and that he knew it only as tobacco. I therefore prepared another, lighted it, smoked two or three whiffs so as to make him sensible of the odour, and then taking his hand, I put the cigar into it, and guided it to his mouth. He now at once comprehended matters, and began whiffing away with great delight; but the fumes of the tobacco ascending from the burning end of the cigar stimulated his eye, and gave him pain, yet he was not to be defeated by this circumstance, for, retaining the cigar between his fore-finger and thumb, he stretched up his middle finger, and keeping his eyelid close with it, he went on smoking until I judged it proper to remove the end of the cigar from his mouth when it was nearly finished. By this time Lady Lauder came in, and I begged that the children might be brought. I took each of them to him in succession, and he patted their heads, but the ceremony, though tolerated, seemed to give him little pleasure. A tray now appeared, and I led him to a seat at the table. I put a napkin on his knee, and comprehending what he was to be employed in, he drew his chair very close to the table, as if to prevent accident to the carpet, and spread the napkin so as to protect his clothes. I helped him to some broth, and guided his spoon for two or three times, after which I left him to himself, when he leaned over the table and continued to eat the broth without spilling any of it, groping for the bread, and eating slice after slice of it with seeming appetite. The truth was, he had been wandering for some days, had been at Ardclach, had had a long walk that morning, and was very hungry. I then cut some cold meat for him, and he helped himself to it very adroitly with his fork, drinking beer from time to time as he wanted it, without losing a drop of it. After he had finished he sat for a few minutes, and then he arose as if he wished to go. I then gave him a glass of wine, and each of us having shaken him by the hand, he moved towards the door, where I got him his hat, and taking him by the arm, I led him down the approach to the lodge. Having made him aware of the obstruction which the gate presented, I opened it for him, led him into the road, and giving his arm a swing in the direction I wished him to

take, I shook hands with him again, and he moved away at a good round pace, as I had indicated. Some years ago Mitchell paid a visit to Relugas, but I was from home at the time, and as he was known to no one else, his awkward gait occasioned his being mistaken for a drunk or insane person, and the doors being shut against him, he went away. He never repeated his visit until the late occasion, but I am not without hope that the kind treatment he last met with may induce him to come here the next time he takes a ramble. His countenance is so intelligent, and its expression in every respect so good, that he interested every individual of the family, and delighted us all."

A gentleman who visited Mitchell in 1832, has thus described to us his interview. "When I called he was abroad, but in a short time he made his appearance, and was led into the room by his sister. His face was weatherbeaten, but he had the appearance of robust health. He was of middle stature, and at this time thirty-seven years of age. His countenance was mild and pleasant; with nothing of a vacant look, his features had that precise and distinct outline, especially his mouth, that indicates a reflecting mind. His head was well-formed, round, and what would be termed large. He was plainly dressed, but with that appearance of neatness and cleanliness which showed he had sufficient self-respect as to take the proper care of his clothes; indeed, as I afterwards learned, he is particularly nice regarding his dress. On examination, I found his eyes and his state of vision such as I had been led to expect; that is, he can distinguish bright sunshine from darkness, and perhaps white or brilliant objects from black ones, but this is the whole extent of his powers; he cannot distinguish the lines of form of bodies, or the lineaments or expressions of the human countenance. The left eye, which had been operated upon, is opaque and muddy over the whole pupil; with it I conjectured he saw little or none: in the other eye the opacity of the lens is somewhat circumscribed, especially on the inferior margin, and it is on this edge of the pupil that I could perceive an opening by which a few rays of light might enter. His sister thought that his vision had somewhat improved of late. When an object is presented to him, if it be bright and glittering, he holds it towards the inferior edge of this eye; but immediately after he puts it to the test of the organs of touch, taste, and smell, which evidently shows his still very limited extent of vision.

After having satisfied my curiosity regarding this highly interesting being, I rose to take leave. He seemed to be sensible of the movement, and also rose. His sister intimated that a shake of the hand would be acceptable, and I impressed upon him a most cordial adieu. I could not help thinking how different might have been my interview with this same person had it pleased God to have endowed him with the use of all his senses; how I might have been instructed by his intelligence,

amused with his cheerful active fancy, and warmed with that tide of benevolent feeling and affection, of all of which so many unequivocal traces were visible, even as it was. But no doubt his measure of happiness is full, however limited it may appear to us; and when the beautiful aspect and soft sounds of another world burst upon him, they will not be the less relished that he walked in darkness and in solitude in this."

To his inestimable guide and companion the following eulogium by the late Sir James Mackintosh is appropriately due:—"His sister is a young woman, of most pleasing appearance and manners, distinguished by a very uncommon degree of modesty, caution, and precision in her accounts of him, and probably one of the most intelligent as well as kindest companions that ever guided a being doomed to such unusual if not unexampled privations. Her aversion to exaggeration, and her singular superiority to the pleasure of inspiring wonder, make it important to the purposes of philosophy as well as humanity that she should continue to attend her brother. Separation from her would indeed be an irreparable calamity to this unfortunate youth. By her own unaided ingenuity she has conquered the obstacles which seemed for ever to preclude all intercourse between him and other minds; and what is still more important, by the firm and gentle exertion of her well-earned ascendant over him, she spares him much of the pain which he must otherwise have suffered from the occasional violences of a temper irritated by a fruitless struggle to give utterance to his thoughts and wishes."

We now take leave of this unfortunate being, who, as far as we know, still lives, and turn to the case of a blind deaf-mute, who has excited a lively interest in this country and in America.

LAURA BRIDGMAN.

LAURA BRIDGMAN was born in Hanover, New Hampshire, on the 21st of December 1829. For a few months after birth she was a sprightly infant with blue eyes, but being of a weakly constitution, and afflicted with severe fits, her parents had little hope of rearing her. When eighteen months old, her health improved, and she advanced considerably in intelligence; but soon she relapsed; disease raged violently during five weeks; and her eyes becoming inflamed, they suppurated, and their contents were discharged. At the same time she lost the sense of hearing. She was now, at two years of age, blind and deaf. But this was not all her misfortunes. The fever having continued to rage, after a few months her sense of smell was almost destroyed, and her taste was much blunted. She was also so greatly reduced in strength, that it was a year before she could walk unsupported, and two years before she could sit up all day. It was not until she was four years of age that her health was entirely restored;

and yet in what a condition was she placed—deaf, dumb, blind, and possessing only a slight consciousness of smell and taste! Every avenue of communication with the external world might be said to be gone, except feeling. The deprivations having taken place when she was an infant of two years of age, she consequently retained no recollection of having either seen or heard; and as her eyes were destroyed, any hope of restoring vision was out of the question.

“What a situation was hers!” observes Dr Howe, in the account of poor Laura’s case. “The darkness and the silence of the tomb were around her; no mother’s smile called forth her answering smile, no father’s voice taught her to imitate his sounds; brothers and sisters were but forms of matter which resisted her touch, but which differed not from the furniture of the house, save in warmth and in the power of locomotion, and not even in these respects from the dog and the cat. But the immortal spirit which had been implanted within her could not die, nor be maimed nor mutilated; and though most of its avenues of communication with the world were cut off, it began to manifest itself through the others. As soon as she could walk, she began to explore the room, and then the house: she became familiar with the form, density, weight, and heat of every article she could lay her hands upon. She followed her mother, and felt her hands and arms as she was occupied about the house; and her disposition to imitate led her to repeat everything herself. She even learned to sew a little, and to knit.

At this time I was so fortunate as to hear of the child, and immediately hastened to Hanover to see her. I found her with a well-formed figure, a strongly-marked, nervous-sanguine temperament, a large and beautifully shaped head, and the whole system in healthy action. The parents were easily induced to consent to her coming to Boston, and on the 4th of October 1837, they brought her to the institution.*

For a while she was much bewildered, and after waiting about two weeks until she became acquainted with her new locality, and somewhat familiar with the inmates, the attempt was made to give her a knowledge of arbitrary signs, by which she could interchange thoughts with others. There was one of two ways to be adopted; either to go on to build up a language of signs on the basis of the natural language which she had already commenced herself, or to teach her the purely arbitrary language in common use; that is, to give her a sign for every individual thing, or to give her a knowledge of letters by combination of which she might express her idea of the existence, and the mode and condition of existence, of anything. The former would have been easy, but very ineffectual; the latter seemed very difficult,

* The Perkins Institution and Massachusetts Asylum for the Blind, at Boston, over which Dr Howe presides.

but if accomplished, very effectual. I determined therefore to try the latter.

The first experiments were made by taking articles in common use, such as knives, forks, spoons, keys, &c. and pasting upon them labels with their names printed in raised letters. These she felt very carefully, and soon of course distinguished that the crooked lines *spoon* differed as much from the crooked lines *key*, as the spoon differed from the key in form. Then small detached labels, with the same words printed upon them, were put into her hands; and she soon observed that they were similar to the ones pasted on the articles. She showed her perception of this similarity by laying the label *key* upon the key, and the label *spoon* upon the spoon. She was encouraged here by the natural sign of approbation—patting on the head. The same process was then repeated with all the articles which she could handle; and she very easily learned to place the proper labels upon them. It was evident, however, that the only intellectual exercise was that of imitation and memory. She recollected that the label *book* was placed upon a book, and she repeated the process first from imitation, next from memory, with only the motive of love of approbation, but apparently without the intellectual perception of any relation between the things.

After a while, instead of labels the individual letters were given to her on detached bits of paper; they were arranged side by side so as to spell *book*, *key*, &c.; then they were mixed up in a heap, and a sign was made for her to arrange them herself, so as to express the words *book*, *key*, &c.; and she did so. Hitherto the process had been mechanical, and the success about as great as teaching a very knowing dog a variety of tricks. The poor child had sat in mute amazement, and patiently imitated everything her teacher did; but now the truth began to flash upon her; her intellect began to work. She perceived that here was a way by which she could herself make up a sign of anything that was in her own mind, and show it to another mind; and at once her countenance lighted up with a human expression. It was no longer a dog or parrot; it was an immortal spirit eagerly seizing upon a new link of union with other spirits! I could almost fix upon the moment when this truth dawned upon her mind, and spread its light to her countenance; I saw that the great obstacle was overcome, and that henceforward nothing but patient and persevering, but plain and straightforward efforts were to be used. The result thus far is quickly related and easily conceived, but not so was the process; for many weeks of apparently unprofitable labour were passed before it was effected.

When it was said above that a sign was made, it was intended to say that the action was performed by her teacher, she feeling his hands, and then imitating the motion. The next step was to procure a set of metal types, with the different letters of the

alphabet cast upon their ends; also a board, in which were square holes, into which holes she could set the types, so that the letters on their ends could alone be felt above the surface. Then, on any article being handed to her—for instance, a pencil or a watch—she would select the component letters and arrange them on her board, and read them with apparent pleasure. She was exercised for several weeks in this way, until her vocabulary became extensive; and then the important step was taken of teaching her how to represent the different letters by the position of her fingers, instead of the cumbrous apparatus of the board and types. She accomplished this speedily and easily, for her intellect had begun to work in aid of her teacher, and her progress was rapid.

This was the period, about three months after she had commenced, that the first report of her case was made, in which it is stated that 'she has just learned the manual alphabet, as used by the deaf-mutes; and it is a subject of delight and wonder to see how rapidly, correctly, and eagerly, she goes on with her labours. Her teacher gives her a new object—for instance, a pencil—first lets her examine it, and get an idea of its use, then teaches her how to spell it by making the signs for the letters with her own fingers. The child grasps her hand, and feels her fingers as the different letters are formed; she turns her head a little on one side, like a person listening closely; her lips are apart, she seems scarcely to breathe; and her countenance, at first anxious, gradually changes to a smile as she comprehends the lesson. She then holds up her tiny fingers, and spells the word in the manual alphabet; next she takes her types and arranges her letters; and last, to make sure that she is right, she takes the whole of the types composing the word, and places them upon or in contact with the pencil, or whatever the object may be.'

The whole of the succeeding year was passed in gratifying her eager inquiries for the names of every object which she could possibly handle; in exercising her in the use of the manual alphabet; in extending in every possible way her knowledge of the physical relations of things; and in proper care of her health. At the end of the year a report of her case was made, from which the following is an extract:—'It has been ascertained, beyond the possibility of doubt, that she cannot see a ray of light, cannot hear the least sound, and never exercises her sense of smell, if she have any. Thus her mind dwells in darkness and stillness as profound as that of a closed tomb at midnight. Of beautiful sights, and sweet sounds, and pleasant odours, she has no conception; nevertheless she seems as happy and playful as a bird or a lamb; and the employment of her intellectual faculties, or the acquirement of a new idea, gives her a vivid pleasure which is plainly marked in her expressive features. She never seems to repine, but has all the buoyancy and gaiety of childhood. She is fond of fun and frolic, and when playing with the rest of the children, her shrill laugh sounds loudest of the group.

When left alone, she seems very happy if she have her knitting or sewing, and will busy herself for hours; if she have no occupation, she evidently amuses herself by imaginary dialogues, or by recalling past impressions. She counts with her fingers, or spells out names of things which she has recently learned in the manual alphabet of the deaf-mutes. In this lonely self-communion she seems to reason, reflect, and argue; if she spell a word wrong with the fingers of her right hand, she instantly strikes it with her left, as her teacher does, in sign of disapprobation; if right, then she pats herself upon the head, and looks pleased. She sometimes purposely spells a word wrong with the left hand, looks roguish for a moment and laughs, and then with the right hand strikes the left, as if to correct it.

During the year, she has attained great dexterity in the use of the manual alphabet of the deaf-mutes; and she spells out the words and sentences which she knows so fast and so deftly, that only those accustomed to this language can follow with the eye the rapid motions of her fingers. But wonderful as is the rapidity with which she writes her thoughts upon the air, still more so is the ease and accuracy with which she reads the words thus written by another, grasping their hands in hers, and following every movement of their fingers, as letter after letter conveys their meaning to her mind. It is in this way that she converses with her blind playmates, and nothing can more forcibly show the power of mind in forcing matter to its purpose than a meeting between them; for if great talent and skill are necessary for two pantomimes to paint their thoughts and feelings by the movements of the body, and the expression of the countenance, how much greater the difficulty when darkness shrouds them both, and the one can hear no sound!

During this year, and six months after she had left home, her mother came to visit her, and the scene of their meeting was an interesting one. The mother stood some time gazing with overflowing eyes upon her unfortunate child, who, all unconscious of her presence, was playing about the room. Presently Laura ran against her, and at once began feeling her hands, examining her dress, and trying to find out if she knew her; but not succeeding in this, she turned away as from a stranger, and the poor woman could not conceal the pang she felt at finding that her beloved child did not know her.

She then gave Laura a string of beads which she used to wear at home, which were recognised by the child at once, who with much joy put them around her neck, and sought me eagerly to say she understood the string was from her home.

The mother now tried to caress her, but poor Laura repelled her, preferring to be with her acquaintances. Another article from home was now given her, and she began to look much interested; she examined the stranger much closer, and gave me to understand that she knew she came from Hanover; she even endured

her caresses, but would leave her with indifference at the slightest signal. The distress of the mother was now painful to behold; for although she had feared that she should not be recognised, the painful reality of being treated with cold indifference by a darling child was too much for woman's nature to bear.

After a while, on the mother taking hold of her again, a vague idea seemed to flit across Laura's mind that this could not be a stranger; she therefore felt her hands very eagerly, while her countenance assumed an expression of intense interest; she became very pale, and then suddenly red; hope seemed struggling with doubt and anxiety, and never were contending emotions more strongly painted upon the human face. At this moment of painful uncertainty the mother drew her close to her side, and kissed her fondly, when at once the truth flashed upon the child, and all mistrust and anxiety disappeared from her face, as, with an expression of exceeding joy, she eagerly nestled to the bosom of her parent, and yielded herself to her fond embraces.

After this the beads were all unheeded; the playthings offered her were utterly disregarded; her playmates, for whom but a moment before she gladly left the stranger, now vainly strove to pull her from her mother; and though she yielded her usual instantaneous obedience to my signal to follow me, it was evidently with painful reluctance. She clung close to me, as if bewildered and fearful; and when, after a moment, I took her to her mother, she sprang to her arms and clung to her with eager joy.

The subsequent parting between them showed alike the affection, the intelligence, and the resolution of the child. Laura accompanied her mother to the door, clinging close to her all the way until they arrived at the threshold, where she paused and felt around to ascertain who was near her. Perceiving the matron, of whom she is very fond, she grasped her with one hand, holding on convulsively to her mother with the other, and thus she stood for a moment; then she dropped her mother's hand, put her handkerchief to her eyes, and turning round, clung sobbing to the matron, while her mother departed with emotions as deep as those of her child.

Her social feelings and her affections are very strong, and when she is sitting at work or at her studies by the side of one of her little friends, she will break off from her task every few moments to hug and kiss them with an earnestness and warmth that is touching to behold. When left alone she occupies and apparently amuses herself, and seems quite contented; and so strong seems to be the natural tendency of thought to put on the garb of language, that she often soliloquizes in the *finger language*, slow and tedious as it is. But it is only when alone that she is quiet; for if she become sensible of the presence of any one near her, she is restless until she can sit close beside them, hold their hand, and converse with them by signs. In her intellectual character it is pleasing to observe an insatiable thirst

for knowledge, and a quick perception of the relations of things. In her moral character it is beautiful to behold her continual gladness, her keen enjoyment of existence, her expansive love, her unhesitating confidence, her sympathy with suffering, her conscientiousness, truthfulness, and hopefulness."

Since this account was given to the world, other reports have been issued, from which we learn that Laura continues a contented and improving inmate of the asylum for the blind at Boston. She now writes a legible hand, and can express all simple ideas in words, uniting nouns with adjectives and verbs in a manner perfectly intelligible. She writes with a pencil in a grooved line. At first she was puzzled to comprehend the meaning of the process to which she was subjected; but when the idea dawned upon her mind, that by means of it she could convey intelligence to her mother, her delight was unbounded. She applied herself with great diligence, and in a few months actually wrote a legible letter to her mother, in which she conveyed information of her being well, and of her coming home in ten weeks. It was indeed only the skeleton of a letter, but still it expressed in legible characters a vague outline of the ideas which were passing in her mind.

We are told that she has latterly improved very much in personal appearance as well as in intellect; her countenance beams with intelligence; she is always active at study, work, or play; she never repines; and most of her time is gay and frolicsome. She is now very expert with her needle, she knits easily, and can make twine bags and various fancy articles very prettily. She is very docile, has a quick sense of propriety, dresses herself with great neatness, and is always correct in her deportment. In short, it would be difficult to find a child in the possession of all her senses, and the enjoyment of the advantages that wealth and parental love can bestow, who is more contented and cheerful, or to whom existence seems a greater blessing, than it does to this bereaved creature, for whom the sun has no light, the air no sound, and the flowers no colour or smell.

Mr Charles Dickens, who visited the asylum in the course of his journey in the states a few years ago, mentions, in his "American Notes," that he had an interview with Laura, whose condition greatly interested him. We take the liberty of extracting a few passages from the account of his visit.

"The thought occurred to me," he observes, "as I sat down before a girl blind, deaf, and dumb, destitute of smell, and nearly so of taste; before a fair young creature with every human faculty, and hope, and power of goodness and affection, enclosed within her delicate frame, and but one outward sense—the sense of touch. There she was before me, built up, as it were, in a marble cell, impervious to any ray of light or particle of sound, with her poor white hand peeping through a chink in the wall, beckoning to some good man for help, that an immortal soul

might be awakened. Long before I looked upon her, the help had come. Her face was radiant with intelligence and pleasure. Her hair, braided by her own hands, was bound about a head whose intellectual capacity and development were beautifully expressed in its graceful outline and its broad open brow; her dress, arranged by herself, was a pattern of neatness and simplicity; the work she had knitted lay beside her; her writing-book was on the desk she leaned upon. From the mournful ruin of such bereavement, there had slowly risen up this gentle, tender, guileless, grateful-hearted being. Like other inmates of that house, she had a green ribbon bound round her eyelids. A doll she had dressed lay near upon the ground. I took it up, and saw that she had made a green fillet such as she wore herself, and fastened it about its mimic eyes. She was seated in a little enclosure, made by school-desks and forms, writing her daily journal. But soon finishing this pursuit, she engaged in an animated communication with a teacher who sat beside her. This was a favourite mistress with the poor pupil. If she could see the face of her fair instructress, she would not love her less, I am sure.

I turned over the leaves of her diary, and found it written in a fair legible square hand, and expressed in terms which were quite intelligible without any explanation. On my saying that I should like to see her write again, the teacher who sat beside her bade her, in their language, sign her name upon a slip of paper twice or thrice. In doing so, I observed that she kept her left hand always touching and following up her right, in which, of course, she held the pen. No line was indicated by any contrivance, but she wrote straight and freely.

She had, until now, been quite unconscious of the presence of visitors; but having her hand placed in that of the gentleman who accompanied me, she immediately expressed his name upon her teacher's palm. Indeed her sense of touch is now so exquisite, that having been acquainted with a person once, she can recognise him or her after almost any interval. This gentleman had been in her company, I believe, but very seldom, and certainly had not seen her for many months. My hand she rejected at once, as she does that of any man who is a stranger to her. But she retained my wife's with evident pleasure, kissed her, and examined her dress with a girl's curiosity and interest. She was merry and cheerful, and showed much innocent playfulness in her intercourse with her teacher. Her delight on recognising a favourite playfellow and companion—herself a blind girl—who silently, and with an equal enjoyment of the coming surprise, took a seat beside her, was beautiful to witness. It elicited from her at first, as other slight circumstances did twice or thrice during my visit, an uncouth noise which was rather painful to hear. But on her teacher touching her lips, she immediately desisted, and embraced her laughingly and affectionately."

We learn from the further account of Mr Dickens, that there

was in this institution a boy named Oliver Caswell, who had been deaf and blind since he was a few months old, and was now at thirteen years of age in a state resembling that of Laura Bridgman. By the same kind attentions, he was learning to read by the touch, and to communicate his ideas by the fingers. With respect to Laura, adds our author in conclusion, Dr Howe "is occupied now in devising means of imparting to her higher knowledge, and of conveying to her some adequate idea of the Great Creator of that universe in which, dark, silent, and scentless though it be to her, she has such deep delight and glad enjoyment."

MISCELLANEOUS CASES.

OF the performances of persons who have been blind from early infancy—their remarkable tact in finding their way unassisted, their accurate memory of events and places, their skill and taste in music, their dexterity in many operations in science and art, and their acquirements in other respects, numerous anecdotes might be related. The following will be read with a degree of interest, as exemplifying the abilities of this unfortunate class of individuals:—

John Metcalf.—The case of this person has always been spoken of as bordering on the marvellous, though as he did not lose his sight till he was six years of age, and after he had been at school two years, the wonder is considerably lessened. John was the son of poor parents, and was born at Knaresborough in Yorkshire in 1717. After recovering from the disease which deprived him of sight, he continued to take part in boyish sports with his companions as formerly, roamed fearlessly over fields, walls, and ditches, learned to ride on horseback, to take a hand at whist, bowls, and other games. Swimming was another of his accomplishments, and he performed feats in this department which astonished everybody. On one occasion, when two men were drowned in the Nidd, he was employed to dive for their bodies, and succeeded in bringing up one of them.

Music, the usual resource of the blind, was not neglected by Metcalf. Before he reached the age of sixteen, he had acquired such proficiency on the violin, as to be engaged as a performer both at Knaresborough and at Harrogate, where he was much liked and caressed. With his earnings as a musical performer, he bought a horse, and not only rode frequently in the hunting-field, but ran his horse for small plates at York and elsewhere. On one occasion he engaged, for a considerable stake, to ride his own horse three times round a circular course of a mile in length against another party. As it was believed that Metcalf would never be able to keep the course, large odds were taken against him; but by the ingenious plan of stationing persons with bells at different points, he not only kept the circle, but won the race.

At the age of twenty-one, John Metcalf was six feet one inch and a half in height, and extremely robust in person. He was so lively in spirits, and so quick in his motions, that few perceived his want at a casual glance; nor durst any one presume so far upon his defects as to ill-use or insult him. Not deterred by his privation, he paid his addresses to Miss Benson, the daughter of a respectable innkeeper at Harrowgate, to whom he was married. After assuming this serious engagement, he continued to perform during every season at Harrowgate, increasing his income by keeping a chaise or two for hire. Being indefatigable in his search for means of bettering the condition of his family, he also travelled, at intervals of professional leisure, to the coast for fish, which he brought to the markets of Leeds and Manchester. Such was his quickness and ingenuity, that no accident ever happened to himself or his horses on these journeys.

When the rebellion broke out in 1745, Metcalf's stirring spirit led him to join the English army as a musician, and he remained with them up till the victory of Culloden. He then returned home, but not until he had formed a plan of future employment from what he had learned—for we can scarcely say observed—in Scotland. He adopted the idea that a number of the cotton and worsted manufactures of the north would sell well in England, and accordingly he made one or two journeys back to Scotland for these stuffs, which he disposed of in Yorkshire. Among a thousand articles, he knew exactly what each cost him, from a peculiar mode of marking. Still this trafficking did not prove suitable for a permanent line of life, and in 1751 he commenced driving a stage-wagon, twice a-week in summer and once in winter, between York and Knaresborough. This employment apparently drew his attention to the subject of roads, and fixed him in the pursuit which finally gained him his chief celebrity, and proved a source of no slight advantage to his country. During his leisure hours he had studied mensuration in a way peculiar to himself, and when certain of the girth and length of any piece of timber, could reduce its contents to feet and inches, or could bring the dimensions of any building into yards and feet. In short, he had formed for himself accurate and practical modes of mensuration. At this time it chanced that a new piece of road, about three miles long, was wanted between Fearnby and Minskip. Being well acquainted with the locality, he proposed to contract for it, and his offer was accepted. The materials for the road were to be taken from one quarry, and there, with his wonted activity, he erected temporary houses, hired horses, fixed racks and mangers, and set the work a-going with great spirit. He completed the road much sooner than was expected by the trustees, and in every way to their satisfaction.

Thus commenced the most remarkable portion of this man's life. Metcalf soon undertook other road contracts, and, strange

to say, succeeded in laying down good lines where others were hopeless of success. In Yorkshire, Lancashire, Cheshire, and Derbyshire, during a period of nearly forty years, he pursued the employment of road-making and bridge-building, being by far the most noted and esteemed follower of such occupations in those parts. The large bridge at Boroughbridge, and various others, might be named as proofs of his abilities and success. An anecdote is told which will exhibit the ingenious way in which he overcame difficulties which staggered other surveyors. Among the numerous roads for which he contracted was one on the Manchester line between Blackmoor and Standish-Foot. The original surveyor took the new line over deep marshes, which, in the opinion of the trustees and all concerned, seemed only passable by cutting or digging the earth till a solid bottom was found. This plan appeared to Metcalf tedious and expensive, and he attempted to prove to the trustees that such was the case; but they were fixed in their original views, and only permitted the blind road-maker to follow his own way, on condition that he should afterwards execute their plan if his own failed. Metcalf began to his task. The worst part of the line was on Standish Common, where a deep bog existed, which it seemed impossible to cut a road through. Metcalf set his men to work in cutting a line, and draining off the water, as far as that was possible. So little progress, however, was at first made, that everybody laughed at the poor blind man, who, it was thought, would have given up the task in despair had he had his eyes like other people. Nevertheless he proceeded unweariedly, until he had levelled the bog across, and he then ordered his men to collect heather or ling, and bind it in round bundles which they could span with their hands. These bundles were laid down close together on the cut line, and successive bundles laid over them again, after which they were covered and pressed down with stones and gravel. The issue was, that this portion of the road, when completed, was so remarkably firm and good, that it needed no repairs for twelve years, while other parts required frequent repairs. Even in winter it was perfectly dry.

It was Metcalf's custom, in making purchases of wood, hay, or stones, to span the articles with his arms, and then calculate the amount mentally. Having learned the height, he could tell with great accuracy what number of square yards were contained in a stack of grain, of any value between one and five hundred pounds. His memory was astonishing, and it was no doubt principally by this faculty that he was enabled to traverse so many towns, and ride along so many roads. While in York, on one occasion, a friend of his, the landlord of the George inn, asked him as a personal favour to guide a gentleman towards Harrowgate. This place lay in Metcalf's own way, and he agreed to the request upon condition that his blindness was kept a secret from the gentleman. The pair accordingly started,

both on horseback, and Metcalf taking the lead. By a little dexterity, Metcalf contrived to pass some gates without leading to a suspicion of the truth, and finally the travellers entered a forest beyond Knaresborough, where there was as yet no turn-pike. Evening came on, and by asking his companion if he saw lights in particular directions, Metcalf brought the journey to a safe close, though in those days a man with all his eyes about him might well have strayed from the path. On landing at the Granby inn, the two travellers took some warm liquor, after which Metcalf retired. Having noticed some difficulty on the part of his companion in lifting the glass, the gentleman remarked to the landlord that his guide had surely taken drink since his arrival. "I judge so," added he, "from the appearance of his eyes." "Eyes! bless you, sir, don't you know that he is blind?" "Blind!" cried the traveller; "surely that cannot be; he acted as my guide." "I can assure you, sir, he is as blind as a stone; but you shall judge for yourself." Metcalf was called in, and his late companion, yet trembling with agitation, exclaimed, "Had I known your condition, sir, I would not have ventured with you for a hundred pounds!" "And I," said Metcalf, "would not have lost my way for a thousand!"

The nicety of touch which Metcalf had acquired was very wonderful. He could play at cards with no other guide; and when persons were by on whom he could depend, he frequently played for serious stakes, and won through the advantage of his uncommon memory. Even when no friend was near him, it would have been very difficult for an opponent to have taken unfair advantage, such was his acuteness of ear and powers of observation. One occasion is mentioned where he won eighteen guineas from strangers at cards.

In the summer of 1788, Mr Metcalf lost his wife, who had brought him four children. He had before this realised a handsome sum by his road and bridge contracts, but he lost considerably in his old days by some cotton speculations into which he was led by his enterprising spirit. In 1792, he gave up his extensive engagements, and settled at Spotsforth, near Wetherby, in his native county. Here, having retained as much of his fortune as to secure a comfortable independence, he spent his latter days in happy ease in the bosom of his family. He died in the year 1802.

Of the attainment of skill in the arts by the blind, we have perhaps a still more remarkable case in that of the late Mr Strong of Carlisle. Although blind from birth, he acquired a thorough knowledge of diaper weaving, and was an adept in various mechanical arts; among other things, he constructed many articles of household furniture, and the model of a loom with a figure working it. The following anecdote is related of him while a boy of fifteen years of age. He concealed himself one afternoon

in the cathedral during the time of service; after the congregation was gone and the doors shut, he got into the organ-loft, and examined every part of the instrument. This had engaged his attention till about midnight, when, having satisfied himself respecting the general construction, he proceeded to try the tones of the different stops and the proportion they bore to each other; this experiment was not to be conducted in so silent a manner. In short, the noise alarmed the neighbourhood, and some people went to see what was the matter, when Joseph was found playing the organ. The next day he was taken before the dean, who, after reprimanding him for the step he had taken in order to gratify his curiosity, gave him leave to play it whenever he pleased. In consequence of this, he set about making a chamber organ, which he completed without the assistance of anybody. He sold this instrument to a mechanic in the Isle of Man, where it is still to be seen. Soon after this he made another, on which he played both for amusement and devotion.

In Scotland some interesting cases of blind persons arriving at dexterity in the arts could be produced. We have seen many figures of fair proportions and of delicate finish come from the hand of a blind man—his only instruments being the blades of a common pocket-knife. The daily work of another whom we knew was the fashioning of ornamental spoons, paper-folders, and the like, by which he gained for himself a more than comfortable livelihood. We believe the Laurencekirk snuff-boxes were originally executed by a blind man, and certainly nothing could surpass them for accuracy of form and beauty of finish. What is more wonderful, there is (or was lately) residing in a country town in Scotland, a blind person who follows the profession of an optician. This respectable individual grinds and polishes lenses of all shapes with the most perfect accuracy, and fits them to the exact focal distances with an aptitude which could not be surpassed by any one possessing the most perfect vision. That a person altogether blind is thus able to supply a customer with exactly the kind of spectacles he requires, is surely a fine instance of the compensatory powers in the human faculties and energies. The ingenious individual to whom we refer possesses a touch so delicate that he can detect not only the most minute flaw on the surface of a lens, but can tell where the form departs in the least from the required convexity or concavity. We have likewise heard it mentioned that he can by feeling distinguish decided colours in cloth, such as black, red, green, or blue, from others of a fainter tint.

There are, we believe, few districts in England and Scotland which have not produced proficients on the violin who were blind; and in a like manner Ireland can show its illustrious catalogue of blind performers on the national harp. Among the most remarkable harp players of a past age, was the famous Hempson, who died in 1807 at the age of 112, having been born

in 1695. Hempson lost his sight when three years old, and being taught the harp while still a youth, he devoted himself with extraordinary ardour to the playing of the old national airs. Travelling from place to place with his harp, and playing at the houses of the nobility and gentry, where he was very acceptable, he visited most parts of Ireland and Scotland; and in 1745 had the honour of playing before Prince Charles Stuart at Holyrood. Latterly, when no longer able to travel, he lived in the house of his daughter; and such was his attachment to his harp, that he kept it constantly beside him in bed. A gentleman who visited him in 1805, when he was 110 years of age, mentions that, gratified with a call from an old friend, he started up in bed, and tuning the ancient companion of his wanderings, played some of the fine old airs of Ireland with indescribable feeling and delicacy. Hempson left few successors, the national instrument having gone almost out of use in Ireland. There is still, however, one blind Irish harper—we might call him the last of the minstrels—Mr Patrick Byrne, who makes a livelihood by playing to parties, and for this purpose he travels, like Hempson, through different parts of England and Scotland, as well as his own country. Byrne is a well-informed, modest, and agreeable man, and is a delightful performer on his instrument. Such is his confidence in himself, that he walks everywhere without a guide: he successfully gropes his way through the streets of the largest cities to the houses he intends to visit.

Of all the exploits in the way of travelling by blind persons, we imagine none excels those of Mr James Holman, usually styled the blind traveller. Mr Holman was bred to the naval profession, in which he had hopes of gaining distinction, when at twenty-five years of age his prospects were irrecoverably blighted by an illness leading to loss of sight. After the distressing feelings which accompanied the first shock of his bodily privation had in some degree subsided, the active mind began to seek for occupation and amusement, and finally pitched on locomotion. Acquiring an insatiable thirst for moving about, and if not seeing, at least hearing from description on the spot what each place and scene was like, he began to travel into foreign countries. Thus, between 1819 and 1821 he travelled through France, Italy, Savoy, Switzerland, parts of Germany bordering on the Rhine, Holland, and Belgium, of all which countries he has published a lively description. In 1827 he undertook a far grander expedition—a voyage round the world, which occupied him till 1832. What he heard and felt during this hazardous enterprise, which took him through Africa, Asia, Australia, and America, has also been described in a published narrative extending to several volumes.

Nothing more strikingly exemplifies the pliancy of the human faculties than the pleasure which this unfortunate gentleman derives from his examinations of remote and obscure parts of the globe, in the midst of numerous dangers and difficulties. Speak-

ing of an exploring expedition on the coast of Africa in which he was concerned, and which required him to march for several days inland to visit a tribe of natives, he observes—"I have ever throughout life, but perhaps more particularly since the loss of my sight, felt an intense interest in entering into association with human nature, and observing human character in its more primitive forms: this propensity I have previously had opportunities of enjoying in some of the countries most remote from European knowledge, amidst the wilds of Tartary and the deserts of Siberia; and I can refer to the indulgence of it many of my more pleasurable emotions. I believe the intensity of my enjoyment under the system I have adopted equals, if not surpasses, what other travellers experience who journey with them open. It is true I see nothing *visibly*; but, thank God, I possess most exquisitely the other senses, which it has pleased Providence to leave me endowed with; and I have reason to believe that my deficiency of sight is in a considerable degree compensated by a greater abundance of the powers of the imagination which enables me to form *ideal pictures* from the description of others, which, as far as my experience goes, I have reason to believe constitute fair and correct representations of the objects they were originally derived from." We may safely aver that after the success which has attended Mr Holman's efforts, no man need be afraid to travel over the world blindfold.

It may have been remarked by those who have given attention to the physical disabilities of the blind, the deaf, and the dumb, that blindness alone is much less a disqualification in point of mental aptitude than congenital deafness. The difference arises from the impossibility of conveying intelligence to the mind by spoken language. The blind can be made to comprehend many things by means of oral communication, which the deaf cannot readily acquire by any species of literature. Spoken language is the means pointed out by nature to communicate ideas, to express emotions and sentiments of every kind; literature, at best, is only an auxiliary, and fails to convey the refinements of expression, the delicacies of feeling, utterable by the tongue. On this account, it may be doubted if the most accomplished deaf and dumb scholar can be made to possess a nice perception of philosophical reasoning, or be able to write with force, eloquence, and precision. In ordinary circumstances, deaf-mutes, even after lengthened instruction, fail to write with grammatical accuracy; so much do they lose by never having heard spoken language, and their ignorance of the value of sounds. We have seen, in the foregoing notices, that blindness does not prevent the attainment of a certain proficiency in arts requiring a knowledge of the beautiful and the exact in form. The deaf-mute from birth, however, rarely attains this distinction. We hear of a hundred blind musicians and poets for one congenitally deaf painter, sculptor, or author.

Among the long roll of blind poets who have gained a deathless fame for their effusions, two distinguished names will readily occur to remembrance—those of Homer and Milton. Happily for themselves these renowned followers of the Muses had not been always blind, and having made good use of their eyes in youth, they had little difficulty in presenting finished pictures of natural scenery and other visible objects of creation which are to be found in their compositions. Blind Harry, an eminent Scottish poet of the era of Chaucer, was less fortunate, as he was blind from birth, yet has presented many vivid descriptions of natural scenery. Dr Blacklock, the early friend and patron of Burns, blind from infancy, left behind him poetical compositions remarkable for their taste and feeling. But of modern blind poets none has excelled Carolan, the celebrated Irish musician and lyrical writer. A piece which he composed in his native Irish on the death of his wife—an event he did not long survive—has been generally admired. From a translation we extract the following lines.

“Once every thought and every scene was gay,
 Friends, mirth, and music, all my hours employed—
 Now doomed to mourn my last sad years away,
 My life a solitude, my heart a void!
 Alas, the change!--to change again no more—
 For every comfort is with Mary fled;
 And ceaseless anguish shall her loss deplore,
 Till age and sorrow join me with the dead.
 Adieu each gift of nature and of art,
 That erst adorned me in life's early prime!
 The cloudless temper, and the social heart!
 The soul ethereal, and the flights sublime!
 Thy loss, my Mary, chased them from my breast,
 Thy sweetness cheers, thy judgment aids no more;
 The Muse deserts a heart with grief oppress,
 And lost is every joy that charmed before.”

How far the deaf may be made to acquire an idea of sounds, has been a subject of much conjecture. In comparatively few cases is the auditory nerve entirely destroyed, and it is often only in a state of dormancy or secluded by superficial disease from the action of sounds. We have seen how the unfortunate boy Mitchell delighted in tingling a key or tuning-fork on his teeth. The greater number of those who are ordinarily considered deaf are keenly alive to sensations produced by music, when the instrument is brought in contact with their persons. We are told of a lady in Paris who tried an experiment upon a young woman who was both deaf and dumb. She fastened a silk thread about the girl's mouth, and rested the other end upon her pianoforte, upon which she played a pathetic air; her visitor soon appeared much affected, and at length burst into tears. When she recovered, she wrote down upon a piece of paper that she had experienced a delight which she could not express, and that it had forced her

to weep. Another anecdote of the power of music over a pupil at the institution for deaf-mutes in Paris has been mentioned to us. The hand of a girl was placed on the harmonica—a musical instrument which is said to have a powerful influence over the nerves—whilst it was playing; she was then asked if she felt any sensation; she answered that she felt a new sensation enter the ends of her fingers, pass up her arms, and penetrate her heart.

It is mentioned in a German journal, that, in 1750, a merchant of Cleves, named Jorrisen, who had become almost totally deaf, sitting one day near a harpsichord where some persons were playing, and having a tobacco-pipe in his mouth, the bowl of which rested against the body of the instrument, he was agreeably surprised to hear all the notes in the most distinct manner. By a little reflection and practice he again obtained the use of this valuable sense; for he soon learned by means of a piece of hard wood, one end of which he placed against his teeth, to keep up a conversation, and to be able to understand the least whisper. He soon afterwards made his beneficial discovery the subject of an inaugurate dissertation, published at Halle in 1754. The effect is the same if the person who speaks rests the stick against his throat or his breast, or when one rests the stick which he holds in his teeth against some vessel into which the other speaks.

Various devices have been adopted to teach the blind to read, the most successful being that in which raised letters are employed; the touch of the fingers answering the purpose of sight. To perfect this species of printing for the blind, several kinds of letters, all more or less arbitrary in form, have been tried, in each case with some degree of success. In our opinion, however, no kind of letter is so suitable as the ordinary Roman capitals; because they have the advantage of being intelligible to the seeing without any special instruction, and can be at once adopted by persons who have lost their sight after having been taught to read. Under the fostering care of a benevolent gentleman (Mr Alston), a number of books in Roman capitals has been printed for the use of the asylum for the blind in Glasgow, as well as for general sale; and we believe they have been very generally acceptable. In this literature for the blind is the entire Bible, several works of piety, and some volumes of elementary science and general knowledge. On this plan of raised figures susceptible to the touch, maps and globes for teaching geography have been formed for the use of the blind, and are now introduced into all well-conducted asylums. It need scarcely be added, that by means of the literature and other apparatus we mention, the blind are now in most instances instructed in the more familiar branches of learning; and with the industrial exercises which they acquire, they enjoy a position in society and scale of intelligence very different from that which was occupied by their less fortunate predecessors.