



HOW THE BLIND ARE TAUGHT TO READ.

THE human hand has, time out of mind, afforded a theme whereon the philosopher, the physiologist, the psychologist, and the man of the world have alike delighted to descant. As an index to character it has been ever held to be of the highest importance, and the least observant of us must have noticed what great regard is paid to its treatment by every first-class portrait painter. The hands of Velasquez and Vandyck, of Gainsborough, Sir Joshua, and Millais, are features in their pictures without which the likeness would be shorn of half its *vraisemblance*. There is an individuality not only in the form of our hands, but in their action, more striking certainly than any other point of the human frame after the face: the capable hand and the incapable, the artistic and the mechanical, the complete and the elementary, they have all been expatiated on to an exhaustive extent; but, so far as I am aware, the hands of the blind have hitherto scarcely received that amount of attention and comment which they deserve. If, with the five senses all on the alert, the hand exhibits a marked character, how much more should it display when called upon to do the duty of sight as well as its own, when it has to convey to the brain through its own immediate function not only the feeling and texture of the object it touches, but also its appearance and meaning! Surely when the fingers have had, through sad necessity, that amount of long practice which endows them with eyes, they may be called without exaggeration "magic fingers," and any one watching the hand of an intelligent educated blind person reading off aloud the embossed mysterious hieroglyphics, as the characters on the page of his book appear to be to the uninitiated, will assuredly be impressed and readily attribute to something akin to supernatural agency the cunning in the touch. Even the simple handicraftsman, weaving a wicker-work chair, or making mats and brushes, without the aid of his eyes, is amazing to behold, but far less so than when, as I say, we see a blind person displaying through his touch an intimate acquaintance with the highest efforts of the human intellect. His capacity then, as an intelligent being, becomes little short of astounding to those who have never given much attention to these matters; for, among thoughtless people, there prevails an idea that blindness is generally accompanied by a low order of intellect, as though the inevitable slow and hesitating action of the sightless implied, or was due to, some sort of imbecility of brain. This, perhaps, is not unnatural

on the part of fatuous observers, for there is no doubt that the helpless, tentative behaviour of the sufferers suggests an all-pervading incapacity, and to this fact mainly is, very likely, due the universal pity which is lavished upon them—a pity perhaps exceeding any that is extended to the rest of the thousand natural shocks this flesh is heir to.

Now, in reality, as a rule perhaps the average brain power of the blind is quite equal to, if not a little above, that of the rest of mankind. The mind is, as it were, so completely thrown back upon itself by the absence of all outward distraction, that it follows as a matter of course that the blind must be, as a class, meditative. For this very reason, then, it must be at once apparent that it is of the highest importance for their welfare that the utmost facility should be afforded to them for acquiring knowledge, and for giving their minds ample and healthy matter to feed and dwell upon. If the pity referred to would take a truly practical and philanthropic shape, it should aim before all things at lifting the mind out of the Slough of Despond to which the dark veil that shuts them off from their fellow-beings will otherwise condemn them; and yet until quite recently, in England, little, or no effort had been made to do this in a way calculated to put the sightless intellectually upon the same level as other human beings. Until quite recently, and until the establishment of the Normal College for the Blind at Norwood, music, for instance, had never been taught upon a sound basis. There existed, comparatively, no means by which a person without eyes could acquire a thorough knowledge of the theory and principles of music, although no one would dispute that of all intellectual pursuits this is the most fitted for the sightless. The result consequently has been that, beyond what may be called a few public-house fiddlers, we have had no blind-born musicians of any general eminence. Again, until quite recently, beyond the Bible and a few tracts, there was no embossed literature extant by which the afflicted who had been taught to read could make acquaintance with any of the grand and noble—no, not even of the light and amusing works of ancient or modern authors.

Obviously, for a complete and thorough education, universality of system is indispensable; and yet this is far from being the condition, even at the present day, under which the blind receive their instruction; for in the thirty odd institutions existing for their tuition, &c., in the United Kingdom, about one in three has a method and alphabet of its own. Embossed literature is more or less costly to produce, and

thus inevitably it lies beyond the easy reach in most cases of those for whom it is intended, being, as they are by the very nature of their calamity, unable at the best to earn much more than a bare subsistence. Supposing that one or two systems of embossed alphabets only were in use, the founts of type for producing them, although expensive, would suffice for the whole nation ; but as matters at present stand there are five or six distinct alphabets in constant requisition, each, so to speak, frittering away the subsidies of the philanthropic which, carried into one channel alone, would be more than enough to reduce to a reasonable price the books for the blind, instead of its remaining, as it has hitherto been, all but prohibitive. Nor is this the only evil consequent upon this diversity ; the literature, besides being dear, has remained up to within the past few years extremely limited in its range. Some reform in these respects having been acknowledged as imperative, a certain body of blind gentlemen, less at a disadvantage than the majority of their fellow-sufferers in respect of means, undertook a few years ago to set about it. They constituted themselves into a society for the promotion of the higher education and employment of the blind, and the advancement of their general welfare. They investigated minutely every appliance in existence for education by touch, coming, after long and patient deliberation, to certain decisions as to the best apparatus for learning reading, writing, ciphering, geography, music, &c.

Now, the outcome of all their painstaking research is the unanimous opinion that Braille's dotted system is by far the most valuable of all the embossed types, at any rate for the education of the young, and for supplying the ordinary wants of every person of moderate capacity or intellectual ability. Some of its advantages have been set forth as follows, in a popular periodical, by one of the members of the council of the society of gentlemen in question :—

“In the first place, it is the only one which can be written by a blind man so that he can afterwards read what he has written ; it is the only one which lends itself completely to musical notation ; it occupies far less space—a most important matter—than all others ; and, equally important, it is by far the least expensive in the manufacture of its type, or stereotype plates, and in its printing.”

Here, again, is the same writer's description of the method of writing :—

“By writing is here meant a process which, to the blind, supplies the place that, with the seeing, is held by pen-and-ink writing, and consists, by the use of a little guiding frame and a small blunt-pointed style, in the production of certain combinations of elevated dots. The writer, starting from right to left, reverses the form of each letter of his alphabet by what may be called *repoussé* work with the aid of the style, so that when the paper is turned over the series of dots come into relief, and can be read off by the finger in their proper shape and combination from left to right ; and it is astonishing to observe how little practice is

necessary to acquire the habit or trick of reversing the combination or shape of each group of dots which form each letter. When the pupil is writing, indeed, he has to learn to do nothing more in this respect than every compositor has to do when he is setting up ordinary type, only the blind man makes his own letters as he goes.”

Above and beyond the steps which the British and Foreign Blind Association for Promoting the Education and Employment of the Blind, as the society is called, has taken to introduce the general adoption of the Braille system, it has likewise brought about, and is still bringing about, all sorts of improvements in raised maps, in ingenious contrivances for teaching arithmetic and (still by means of the Braille type) musical notation. Every matter intimately connected with the welfare of the sightless is taken cognisance of, investigated, weighed, and valued, in a way hitherto hardly attempted, inasmuch as a leading characteristic of the association is the fact that all the members of the council are themselves blind, or so nearly blind as to be unable to read by sight.

When it is remembered how very limited, at the best, is the field of remunerative employment for the blind, it will be seen that music, beyond all other pursuits, is the one in which they stand at the least disadvantage. A man can never make a basket, a brush, or a mat without his eyes as quickly, even if he make it as well, as one possessed of those valuable organs ; but there is no earthly reason, if he be once properly taught, why he should not sing a song, play the piano, or any other instrument, just as well, nor any reason why he should not compose just as good music. This is so obvious that it requires no insisting on, nor farther argument in favour of the necessity of cultivating to the utmost natural musical ability whenever found among the blind. By the same token, it is obvious that only in the higher and intellectual occupations of life can the sightless vie with the seeing, which fact again points to the necessity of making the most of those faculties which, under proper cultivation, may put the unfortunates, mentally at least, on a level with the rest of the world.

Happily the vigorous efforts which are now being made by the British and Foreign Blind Association, and those of the Royal Normal College and Academy of Music for the Blind, at Norwood, are rapidly bringing this desirable end about. When the labours of these two institutions shall, with the assistance of all who sympathise with and desire the welfare of the blind, have thoroughly revolutionised their mental condition through the improved means of educating them, we shall more fully recognise than even we do at present the marvellous cunning that lies in their hands, and admit readily that it is no exaggeration to say that they are verily endowed with magic fingers.

W. W. FENN.

C a s s e l l ' s F a m i l y M a g a z i n e .