

OCCASIONAL NOTES OF THE QUARTER.

Dr. Howe on Laura Bridgman.

In the forty-third Annual Report of the Massachusetts Asylum for the Blind, Dr. Howe gives an interesting description of the method which he employed for the instruction of Laura Bridgman, who was totally blind and deaf, and who had only a very indistinct sense of smell. We quote Dr. Howe's description entire:—

I found in a little village in the mountains a pretty and lively girl, about six years old, who was totally blind and deaf, and who had only a very indistinct sense of smell; so indistinct that, unlike other deaf-mutes, who are continually smelling at things, she did not smell even at her food. This sense afterwards developed itself a little, but was never much used or relied upon by her. She lost her senses by scarlet fever so early that she has no recollection of any exercise of them. Her father was a substantial farmer; and his wife a very intelligent woman. My proposal to try to give regular instruction to the child seemed to be a very wild one. But the mother, a woman of considerable natural ability, animated by warm love for her daughter, eagerly assented to my proposal, and in a few days little Laura was brought to my house in Boston, and placed under regular instruction by lessons improvised for the occasion.

I shall not here anticipate what I intend to write about her, further than to say that I required her by signs, which she soon came to understand, to devote several hours a day to learning to use her hands, and to acquiring command of her muscles and limbs. But my principal aim and hope was to enable her to recognise the twenty-six signs which represent the letters of the alphabet. She submitted to the process patiently, though without understanding its purpose.

I will here give a rough sketch of the means which I contrived for her mental development. I first selected short monosyllables, so that the sign which she was to learn might be as simple as possible. I placed before her, on the table, a pen and a pin, and then, making her take notice of the fingers of one of my hands, I placed them in the three positions used as signs of the manual alphabet of deaf-mutes, for the letters *p e n*, and made her feel them, over and over again, many times, so that they might be associated together in her mind. I did the same with the pin, and repeated it scores of times. She at last perceived that the signs were complex, and that the middle sign of the one, that is the *e*, differed from the middle sign of the other, that is *i*. This was the first step gained. This process was repeated over and over, hundreds of times, until, finally, the association was estab-

lished in her mind between the sign composed of three signs, and expressed by three positions of my fingers, and the article itself, so that when I held up the pen to her she would herself make the complex sign; and when I made the complex sign on my fingers she would triumphantly pick up the pen, and hold it up before me, as much as to say "This is what you want."

Then the same process was gone over with the pin, until the association in her mind was intimate and complete between the two articles and the complex positions of the fingers. She had thus learned two arbitrary signs, or the names of the two different things. She seemed conscious of having understood and done what I wanted, for she smiled, while I exclaimed, inwardly and triumphantly, "εὐρήκα! εὐρήκα!" I now felt that the first step had been taken successfully, and that this was the only really difficult one, because by continuing the same process by which she had become enabled to distinguish two articles, by two arbitrary signs, she would go on and learn to express in signs two thousand, and, finally, the forty and odd thousand signs or words in the English language.

Having learned that the sign for these two articles, *pin* and *pen*, was composed of three signs, she would perceive that in order to learn the names for other things she had got to learn other signs. I went on with monosyllables, as being the simplest, and she learned gradually one sign of a letter from another, until she knew all the arbitrary, tangible twenty-six letters of the alphabet, and how to arrange them to express various objects: knife, fork, spoon, thread, and the like. Afterwards she learned the names of the ten numerals or digits; of the punctuation and exclamation and interrogation points, some forty-six in all. With these she could express the name of everything, of every thought, of every feeling, and all the numberless shades thereof. She had thus got the "open sesame" to the whole treasury of the English language. She seemed aware of the importance of the process; and worked at it earnestly and incessantly, taking up various articles, and inquiring by gestures and looks what signs upon her fingers were to be put together in order to express their names. At times she was too radiant with delight to be able to conceal her emotions.

It sometimes occurred to me that she was like a person alone and helpless in a deep, dark, still pit, and that I was letting down a cord and dangling it about, in hopes she might find it; and that finally she would seize it by chance, and, clinging to it, be drawn up by it into the light of day, and into human society. And it did so happen; and thus she, instinctively and unconsciously, aided in her happy deliverance. After she had mastered the system of arbitrary signs, made by the various positions of the fingers used by deaf-mutes and called dactylology, the next process was to teach her to recognise the same signs in types, with the outlines of the letters embossed upon their ends. Thus with types, two embossed with *p*, two with *n*, one with *e*,

and another with *i*, she could, by setting them side by side in the quadrilateral holes in the blind man's slate, make the sign of *pen* or *pin*, as she wished; and so with other signs.

The next process was to teach her that when a certain kind of paper was pressed firmly upon the ends of these types, held close together and side by side, there would be a tangible sign on the reverse of the paper, as *pin* or *pen*, according to the position of the three types; that she could feel this paper, distinguish the letters, and so read; and that these signs could be varied and multiplied, and put together in order, and so make a book.

Then she was provided with types having the outlines of the letters made with projecting pin-points, which, when pressed upon stiffened paper, pierced through, and left a dotted outline of each letter upon the reverse side. This she soon ascertained could serve for writing down whatever she desired, and be read by herself; and also could be addressed to friends, and sent to them by mail.

She was also taught to write letters and words with a lead pencil, by the aid of the French writing-board, which is the most simple, most effective, and cheapest method ever yet invented. This apparatus is made out of a piece of stiff pasteboard of the size of a common sheet of letter paper, and has grooved lines or channels, about the eighth of an inch deep, running, an inch apart, transversely across the pasteboard plate. This pasteboard is inserted between the two pages of a common sheet of letter paper, and the first leaf is pressed with the forefinger into the grooves. This leaves depressions or channels, the upper and lower edge of which can be felt by the pencil-point, and this, a little pressed, leaves it marked with an *o*, or an *l*, or a *t*. The sides of the grooves also give to the paper which is pressed between them rounded edges, so that the pencil can slide upwards and downwards over and under them, and also be guided from left to right.*

It would occupy more space than can be spared here to explain how, after she had learned the names of substantive nouns, or names of things in the concrete, she came to understand words expressive of the various material or moral qualities thereof. The process was slow and difficult, but I was so aided by her native shrewdness and her love for learning new things that success followed. For instance, she knew that some girls and women of her acquaintance were very sweet and amiable in their tempers, because they treated her so kindly, and caressed her so constantly. She knew, also, that others were quite different in their deportment; that they avoided or repelled her, and were abrupt in their motions and gestures while in contact with her; and might be called, therefore, sour in their tempers. By a little skill she was made to associate in her mind the first person with a

* I commend this simple apparatus, not only to blind persons, but to those who are incapacitated from using their sight in writing. With a very little practice one can write with it easily and legibly. It is so small and light that it can be carried in a portfolio. It may be had at our store, 20, Bromfield Street, at cost price—from fifteen to twenty-five cents, according to quality.

sweet apple, the other with a sour apple, and so there was a sign for a moral quality. This is a rough illustration; but it is hard to explain the process by which any children come to understand the names of things in the abstract, or moral qualities. Success came of faith, and patience, and reliance upon her having the native desire and capacity for acquiring a complete arbitrary language, which desire had now become quickened to a passion for learning new signs. Moreover, I was greatly aided from the start by young lady teachers, who became in love with the work, and devoted themselves to it with saintly patience and perseverance. Then great assistance was given by the blind pupils, many of whom learned the manual alphabet and took every opportunity of using it and conversing with Laura. Thus early in the process the material and moral advantages of language began to show themselves. Without it the girls could only manifest their interest in Laura and their affection for her, as one does with a baby, by caresses, sugar-plums and other gifts, and by leading her up and down, and helping her in various ways. With it they began human intercourse through regular language.

And so she went on, diligently and happily, for a score or more of years, until at last she acquired a large vocabulary of words, and could converse readily and rapidly with all deaf-mutes, and all persons who could use these signs. She could read printed books readily and easily, finding out for herself, for instance, any chapter and verse of Scripture. She could also read letters from her friends in pricked type, or by the Braille system of points. She could also write down her own thoughts and experiences in a diary; and could keep up a correspondence with her family and friends by sending to them letters in pencil, and receiving their answers either in pricked letters, which she could read by the touch, or letters written with ink or pencil, which could be read to her by some confidential seeing person.

Thus was she happily brought at last into easy and free relations with her fellow creatures; and made one of the human family.

I take this opportunity to say that Laura is now forty-four years old. Her father has recently died; and the little property which he thoughtfully left for his widow, and this, the most dearly beloved of his children, has been very selfishly, ungenerously, and, as I think, unlawfully misappropriated by some relatives; so that Laura and her aged mother must bear such unkind treatment in the old homestead, that they continue to live in it only through the lack of means of living elsewhere.

Laura has for many years contrived to earn a little money by making bead baskets and other trinkets; and she has the interest of two thousand dollars bequeathed to her by her excellent friends, Mrs. Abby, and her daughter, Abby M. Loring. She has also a home during the cold season at the Institution; but still she barely receives enough for necessary articles of dress, whereas she has a feminine delight in personal ornamentation: she loves to have showy and

fashionable dresses, bonnets, and the like, and trinkets for her dressing table; and it would give me great pleasure to gratify her innocent taste to a reasonable, and even to a little unreasonable, degree.

Any persons disposed to make any addition to the Loring Fund, can do so by remitting to me, or to the Treasurer of the Institution, with explanations of their wishes.

During many years Laura passed most of her time in exercises such as those above described; new ones being devised as she proceeded. She spent as many hours daily in her studies and mental work as was consistent with her health; but all the rest of the time was given to gymnastics, or learning to handle domestic implements, as the broom, the dish-cloth and the needle; to sew, to knit, to braid, to occupy herself in simple house-work, sweeping floors, dusting furniture, making beds; finally, to more difficult kinds of work, as crochet-work and the like.

In all these things she succeeded so well, that she is now capable of earning a livelihood as assistant to any kind and intelligent house-keeper who would accommodate her work to Laura's ways.

The method of instruction was, of course, novel, and the process long and tedious, extending over several years, until she came to be able to read and understand books in raised letters; to mark down variously shaped signs upon a grooved paper, and so write letters legible by the eye; to attain a pretty wide command of the words of the English language, to spell them out rapidly and correctly, and so express her thoughts in visible signs and in good English. To make all this fully understood by specimens of her style as she used the language of childhood, will require a good-sized volume; and I confine myself now merely to saying that in the course of twenty years she was enabled to do it all. She has attained such facility for talking in the manual alphabet, that I regret that I did not try also to teach her to speak by the vocal organs, or regular speech. The few words which she has learned to pronounce audibly prove that she could have learned more.

I propose to give later a minute account of the instruction of this dear child, and the condition into which it has brought her: but I must limit myself here to an expression of the thought and principle which gave me courage to begin, and perseverance to finish the work.

The report, which is long and elaborate, contains several other interesting observations. Here is one. A blind child, during the vacation, contracted St. Vitus' dance. After a week or two another child manifested the disease, and soon afterwards another. It was necessary to send them home to prevent others being infected by the imitative tendency. Separation soon cured them. The children being blind, it was not through sight that they were infected; but a knowledge of the strange symptoms was gained by close contact

of the pupils while at their school-desk, in seats, in walks, in sports, &c. Dr. Howe's report will amply repay perusal, but we are glad to learn from it that he purposes writing a book devoted to a full account of the method which he devised to instruct Laura Bridgman, and a blind and deaf boy, Oliver Caswell.

Compensation for the lack of a Sense.

In the same Report, Dr. Howe relates the following instance of the greater keenness to which the remaining senses may be brought when one sense is absent:—

Julia Brace, a deaf and blind mute, a pupil of the American Asylum, had a fine physical organization and highly nervous temperament. In her blindness and stillness her main occupation was the exercise of her remaining senses of smell, touch and taste, so that through them she might get knowledge of all that was going on around her. Smell, however, seems to be the sense on which she most relies. She smells at every thing which she can bring within range of the sense; and she has come to perceive odours utterly insensible to other persons. When she meets a person whom she has met before she instantly recognizes him by the smell of his hand, or of his glove. If it be a stranger she smells his hand, and the impression is so strong that she can recognize him long after by smelling his hand, or even his glove, if just taken off. She knows all her acquaintances by the smell of their hands. Surprising things are told of the nicety of her sense. She was employed in sorting the clothes of the pupils, after they came out of wash, and could distinguish those of each friend. If half a dozen strangers should throw, each one, his glove into a hat, and they were shaken up, Julia will take one glove, smell it, then smell the hand of each person, and unerringly assign each glove to its owner. It is even said that if, among the visitors, there is a brother and sister, Julia can pick out their gloves by a certain similarity of smell, but cannot distinguish the one from the other.

This would seem to indicate that not only has each person an individual odour peculiar to him, as he has a peculiar configuration of his nose or chin, but that there is, besides, a family odour, which is strong enough to be perceived, even when the individual odour is not.

He gives another instance illustrating the remarkable acuteness of the sense of hearing in a blind boy:—

Many years ago, an ingenious locksmith applied to me for the "loan" of a blind boy, as he said, who had quick ears and a silent mouth. On giving satisfactory answers, he got his "loan." He