

Education of the deaf and dumb.

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Publication/Creation

[New York?] : [publisher not identified], 1846.

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EDUCATION OF THE DEAF AND DUMB.
130.

THE misfortune of those deprived of hearing and speech requires no reflection to awaken sympathy. There has even been, in times past, a tendency to exaggerate the depth and the hopelessness of their calamity. Within a comparatively recent period, and through the successful accomplishment of their education, the prejudice which long consigned them to neglect, has given place to a more genial sympathy, to an interest higher than mere compassion, and pleasing rather than painful. The condition of the deaf mute uneducated, needs not the aid of exaggeration to make it appear indeed deplorable. It is not, that he is cut off from the pleasures proper to the sense of hearing—that nature with her thousand voices is silent to him—that for him there is no voice of man or woman, no sound in childhood's mirth, none of those expressive tones which awaken responding vibrations upon the chords of emotion; that he knows nothing of the melody of song or the harmony of verse—nor even, that he is to such a degree, debarred the mere enjoyment of social intercourse. His calamity strikes deeper, as affecting his intellectual and moral being. Having capacities of soul, not inferior to those of other men, but deprived of the instrument of communication which they employ, he is, as a consequence of this isolation, bound to a condition of perpetual infancy—with the germs of intellect and elevated feeling unquickened; with no share of the inheritance we receive in the history and the accumulated wisdom of the past, in the results of ages of mental progress, handed down in a language of words; without the assistance which a cultivated language renders in aiding and developing thought; with knowledge limited to the range of his vision, and confined to the visible surface of what he sees; science and religion having for him no existence; the rites of worship

and many customs and institutions of society to him a mystery; not merely the revelations of Christian truth, but the existence of God, of the soul, and of a future beyond the grave, absolutely unknown—a heathen in a Christian land, and in the bosom, it may be, of a Christian family!

The education of deaf mutes is a subject, of the first importance to at least *one* in every two *thousand*† of the population of these United States; of deep concern to their friends, and to every friend of humanity. It is also full of interest for the curious and the philosophic inquirer. It is highly important in its relations to the science of mind, the philosophy of language, and the subject of education in general.

The means are not wanting for an experimental basis of inquiry. Since the opening of the school at Paris by the Abbé de l'Épée, in 1760, the foundation of the institution at Leipsic, under Heinicke, in 1778, and the commencement of instruction, in Edinburgh, by Braidwood, in 1764, which led to the establishment of the London Institution in 1792, there have sprung from these beginnings, more than *one hundred and sixty* schools and institutions now existing in Europe, and *ten* in the United States. The earliest established in this country, was the American Asylum at Hartford, through the agency and under the direction of the Rev. Thomas H. Gallaudet, opened in 1817. During the two centuries preceding this period, several pioneers in this work appeared, in different countries and at different times, who taught a few deaf mutes with success. The most noted are, Peter Ponce, a Spanish Benedictine monk who died in 1584, and who has the credit of being the earliest successful educator of deaf mutes; John Paul Bonet, who flourished in Spain not many years later; Dr. John Wallis, of Oxford, in England; and John Conrad Amman, a

* The Twenty-Ninth Report of the Directors of the American Asylum, at Hartford, for the Education and Instruction of the Deaf and Dumb; and Mr. Weld's Report, &c.

Twenty-Sixth Annual Report and Documents of the New-York Institution for the Instruction of the Deaf and Dumb, &c. New York. 1845.

† The census of 1840 makes the proportion 1 to 2,123. That the returns fall far short of the actual number is unquestionable. See the Eighteenth and the Twenty-Third Annual Reports of the New York Institution. In the latter the proportion is estimated at about 1 to 1,650.

physician, in Holland, who died in 1724. Bonet, Wallis and Amman, left treatises on the art. In later times, the subject has employed able pens, and given birth to many and voluminous productions, particularly in France and Germany. It engaged the earnest and long-continued attention, and the profoundest study, of such a mind as that of the late Baron Degerando, whose work in two octavo volumes, entitled *De l'Education des Sourd-muets de Naissance*, will probably long retain its place, as the great repository of facts and principles in relation to the subject.

The voluminous pamphlets named at the head of this article, comprise documents, which form an addition, not only of especial immediate interest, but of great permanent value, to the literature of this subject. The Hon. Horace Mann, Secretary of the Massachusetts Board of Education, in his Seventh Annual Report, embracing the results of his examination of European educational institutions, represented the schools for deaf mutes in Prussia, Saxony and Holland, as "decidedly superior to those in the United States;" because there, "incredible as it may seem, they are taught to *speak* with the lips and tongue," while here, the deaf mute, "as soon as he passes out of the circle of those who understand the language of signs, is as helpless and hopeless as ever."!! Mr. Mann had been well known as an able, eloquent and efficient promoter of common school education, and his opinion, thus put forth and zealously defended, could not be without influence. The ignorance of the general subject, and particularly of the mode of instruction here prevailing, apparent upon the face of these statements, and the manifest marks of hasty and superficial observation, of an unquestioning, eager credulity, and of an exaggerating imagination, were indeed such as could be easily exposed; as was immediately and effectually done, in an article in the *North American Review* of Nov., 1844. The two modes of instruction had also been in practice, and been the subject of ardent controversy, from the earliest establishment of schools for deaf mutes. The one introduced here from France, by Mr. Gallaudet, had been preferred, only after thorough inquiry into the merits of the other. Yet it was desirable, for the general advancement of the cause, as well as for the satisfaction of the public mind, that an extensive personal examination

of European schools for deaf mutes, should be made by one or more competent persons. This has now been done, by two gentlemen—Lewis Weld, Esq., Principal of the American Asylum at Hartford, and the Rev. George E. Day, once a Professor in the New York Institution for the Deaf and Dumb—under commissions from these institutions respectively; and their reports occupy the greater portion of the pamphlets named above. In addition to the indispensable qualifications of an acquaintance with deaf mutes, with their mental and physical characteristics, their natural language of signs, and with the subject of their education, possessed by both, Mr. Day had also a familiar knowledge of the German tongue, and Mr. Weld enjoyed the best assistance to make up for the want of this advantage. They each devoted several months wholly to the object; proceeding separately, and thus giving to the results greater value; and favored, with scarcely an exception; with every desirable facility at the schools they visited. The attention of both was directed particularly to the German schools. Mr. Day's observations were mostly confined to these. Mr. Weld visited also Belgium and Holland, and took time for a thorough examination of the principal schools in Great Britain and France. Mr. Day has produced a complete, well-digested, and most able view of the subject of deaf mute instruction in Germany, derived from published writings as well as his own observations. An excellent guide to the various points of inquiry, had been furnished him in the Letter of Instructions by Mr. Peet, then Principal, now President, of the New York Institution. Mr. Weld, following more of the journalizing method, has given with scrupulous fidelity and in an interesting manner, the results of his judicious inquiries; his conclusions deriving weight from his high character and long experience as an instructor. Both made it their aim to report facts bearing upon the general subject, and especially upon the question in relation to articulation, sufficient in number and variety, and in particularity of detail, to enable the reader to draw conclusions for himself. In this they have fully succeeded, and with such evidence of careful and thorough observation, skillful experiment, and candid and fair inquiry on their part, as is in the highest degree satisfactory. We propose to direct our

attention to the question which chiefly engaged their investigations, viz.: What is the method to be preferred in the education of deaf mutes?

This question involves the choice of an instrument, or instruments, of communication, as a substitute for hearing and speech acquired through hearing. Those which have hitherto been devised or employed, are the following:

1. *Natural signs*; by which we mean the language of imitative action, which the deaf mute instinctively adopts, and is naturally led by gradual steps to improve. In those schools in which it receives cultivation, it is found in a degree of perfection very far removed from the primitive rudeness it exhibits among uneducated mutes. As improved, it becomes in a degree conventional, chiefly by processes of abbreviation and of symbolical usage, and by the introduction of a very few purely arbitrary signs; without, however, losing its essential character as a natural language significant in itself.

2. *Methodical*, also called *systematic signs*; an instrument artificially constructed upon the basis of natural signs, to be used for dictating and also for translating written language *verbatim*. In its elements, it consists chiefly of natural signs, with grammatical signs for the different modifications of words radically the same, and is designed to correspond throughout, both in terminology and construction, with the language which the deaf mute is to be taught by its aid, each word being denoted either by a single sign, or an appropriate combination of signs. This method originated with De l'Épée, and was carried further towards perfection by his successor, Sicard.

3. *Written language*; to give a knowledge of which must obviously be, in every system of deaf mute education, an object of primary importance.

4. *The manual alphabet, the finger alphabet, or dactylology*, as it is variously called; consisting of alphabetic characters, formed by different positions of the hand and fingers, by which words are represented according to the usual orthography. Of this there are two varieties: the two-handed alphabet, used in Great Britain, and that made with one hand, generally adopted elsewhere.

5. *Reading on the lips*; a method of understanding the speech of others, through motions of the lips and other vocal organs, perceived by sight. These

visible motions are called, by Degerando, *the labial alphabet*.

6. *Articulation*; or speech mechanically acquired, by having the attention of the learner directed to motions, positions and vibrations of the vocal organs, and to peculiar impulses of certain sounds upon the air. These motions, &c., are named by Degerando, *the oral alphabet*, as embracing elements which have no place at all in the labial alphabet, and as being recognized by the deaf mute through the sense of feeling, while the other is addressed to the eye.

In addition to these six distinct means of communication, more or less use is generally made of *pictures* and *models* in elementary instruction; in the system adopted in some schools, they hold a prominent place. Three other instruments are to be named, which have been favorite projects with some teachers; neither, however, has been found generally useful in any shape yet devised. They are *syllabic dactylology*, or a short-hand manual alphabet, for the end of rapid communication; a system of *stenography* for the deaf and dumb, which should correspond to a syllabic dactylology; and *mimography*, a method of hieroglyphic or picture writing, for reducing to writing the language of natural signs.

Of these instruments, articulation and reading on the lips have been the first to suggest themselves as the means of imparting to the deaf mute a knowledge of the language of words. In the earlier period of the art they were invariably employed. They were adopted as a fundamental means, and indeed, as the chief aim of instruction, by Heinicke, who had derived from Amman the most absurd and exaggerated notions of the absolute dependence of thought itself upon the living voice; and their use has remained to the present time a characteristic of the German schools. In Great Britain, the same method was adopted by Braidwood; but for the last thirty years has been gradually falling into disuse. At the London Institution alone, articulation and reading on the lips are taught, professedly that is, to all the pupils; in some other schools to a portion only, and in others are wholly discarded.

In France, a system fundamentally different was introduced by De l'Épée. It started in his mind with the philosophical principle, that to no one class of signs is confined the privilege of immediately representing thought, that the connection

between words and ideas is wholly conventional, and might as well be established directly with written as with spoken words. In the vernacular pantomime of the deaf and dumb, he found already provided a medium for explaining or translating written language. This language of action he undertook to cultivate and to methodize, so as to fit it more perfectly for this use. His error in depending too much upon his artificial system of methodical signs, has been since corrected. Natural signs, used for the development of mind, the communication of knowledge, and for the explanation of written language, and cultivated so as to be adequate to these ends, form the essential characteristic of the method derived from De l'Épée, and now in use in all the schools in France and many in other parts of Europe, and all in the United States. Methodical signs have even been formally discarded at the Royal Institution, where the system originated, but the advantage of their judicious use is insisted on by eminent teachers in this country and elsewhere.

There is no institution for deaf mutes, not even in Germany, in which natural signs are not used more or less as a means of instruction, but they exist in various states of development, and everywhere imperfect in comparison with schools on the French system. In some of the latter, on the other hand, articulation is a collateral branch of instruction for a portion of the pupils, and was even taught successfully by the Abbé de l'Épée himself.

The manual alphabet is discarded in the German schools, with two or three exceptions, as interfering with the use of oral language. Elsewhere it is in universal use.

The variety of actual, and the still greater variety of possible, combinations of these instruments, each admitting different modes of use, and in some instances, one presenting advantages incompatible in a greater or less degree with those offered by another, makes it impossible to determine by actual trial, and difficult to determine without trial, the precise mode of instruction which is preferable to every other, rendering the question, in short, not a little complicated. In considering them separately, the point to be settled at the outset is, their actual *availability* as instruments of communication. To what extent, then, are *articulation* and *reading on the lips* attainable

by deaf mutes, so as to be *available* in use?

It is absolutely necessary here to distinguish the different classes of those ranked as deaf mutes, determined by the *degree* of their deafness, and also the *period* of its commencement. It is not generally understood that a degree of deafness, which, occurring in adult life, is regarded as no more than a quite serious inconvenience—requiring that the voice of a person speaking be somewhat louder than usual, in order to be understood—would, if existing from birth or early infancy, interfere essentially with the acquisition of language, and without great pains on the part of friends, leave the child to fall into the class of those regarded as deaf mutes, with a knowledge of language limited to a few words and short phrases, and the ability to articulate these but imperfectly. This will not appear wonderful when we consider, that to adults thus partially deaf, most of the common conversation in their presence is unintelligible, and much of it absolutely inaudible, and even when understood, is often imperfectly and but partially heard. From this to absolute deafness, there is, among deaf mutes, every intermediate grade. There are also cases in which the sensibility of the auditory nerve is wholly or nearly unimpaired, and the deafness is the result of something out of order in the apparatus for conveying vibrations of the air to the nerve. The individual can hear his own voice, or any sound—as that of a tuning-fork, for instance, or the tick of a watch—conveyed by contact with the bones of the head, with, it may be, perfect distinctness, while external sounds are yet for the most part inaudible; and has an essential advantage for regulating the voice, and gaining a correct and an agreeable articulation, and especially for retaining purity and propriety of speech when once acquired. Hearing of this description may exist without being easily detected.

Again, deafness—with constant deprivation of speech, total or partial, so as to place the individual in the class of deaf mutes—occurs at various ages, from birth to as late in some cases as *eight* years. Even when total deafness occurs at a much later period, the speech will be greatly impaired, without diligent cultivation, and in a degree, even with the utmost pains to preserve it, may, in some instances, be almost wholly lost. It is obvious that, where speech is

still retained in part, there is a foundation for its further improvement; and so far as lost, the revival of a power once possessed is a different task from newly imparting the same. Of instances favorable in these respects, there are more or less in all institutions for deaf mutes, and enough for the purpose of exhibition where articulation is taught. In any apparent case of success in the acquisition of spoken language by a deaf mute, the ascertainment of the fact on these points is absolutely essential to the formation of any conclusion of value.

From information derived from carefully prepared statistical tables,* it will be sufficiently correct for our purpose to state, that as many as *one-half* of the whole number of deaf mutes are such from birth; half of the remainder, or *three-quarters* of the whole, from a period under two years of age, and *eleven-twelfths* under five years. Of three-quarters of the whole, then, few could have made a beginning, and none more than barely a beginning in learning to speak; of the others, deaf from under the age of five years, a large part would be in the same predicament. Few of these do, in fact, retain any considerable knowledge of speech. The same is true, even, of a considerable portion of the remaining *twelfth* of the whole. We have thus only a small fraction retaining much knowledge of speech. Of the different degrees of partial deafness, we have no statistical statements; but we know, that the proportion of those who can distinguish articulate sounds at all by the ear is very small. Besides those having an advantage in these respects, there are rare instances of those, deaf from birth, possessing extraordinary quickness of perception, and superior discrimination and force of mind, combined with uncommon command over the muscular organs, which will enable them to pass far beyond the limits of possibility for their companions of only average powers.

In reviewing the facts in evidence, let us take first those rare instances in which a degree of success is reached, far transcending that ordinarily realized, even by the best portion of those instructed in oral language.

Mr. Weld mentions (p. 42) the case of a gentleman in London, "of superior talents, who had been a teacher for six

years, and had previously had the advantage of the best instruction for ten years," besides the constant and devoted attention of an intelligent female relative. Mr. W. says:

"He spoke more agreeably than any congenitally deaf person I had before seen, though still his voice was not a pleasant one. I could understand more than half he said, in common conversation, readily; but the other half was often unintelligible. He could also understand me, when speaking deliberately, and with special care, to perhaps a greater extent; yet there was frequent need of resorting to signs, dactylology, or writing, and we soon by tacit consent used one or the other of these means of communication, more than speech."

He met in London, also, a lady, deaf likewise from birth, but who had enjoyed still greater advantages—all indeed that abundant wealth and parental affection could furnish—who used only articulation and reading on the lips in her ordinary intercourse with others. Her voice, however, was very unnatural and disagreeable. "These two," he says, "were by far the best examples of the use and the understanding of articulation, among the really deaf and dumb from birth, that I met with where the English language was spoken." Mr. Day gives much the same account of the first of these cases, (p. 92,† note); and says also, (p. 177), that he met in Germany with "a few instances in which pupils born deaf, so far as was known, articulated better than would be expected," but in every such case, it appeared, on inquiry, that extraordinary advantages had been enjoyed, as in the examples above mentioned.

Such advantages are, however, not always attended with even this degree of success. Mr. Weld met a gentleman, who had been fourteen years a pupil of the London Institution, one of the most celebrated articulating schools in the world, and had enjoyed the best advantages at home. He was a barrister by profession, being employed as chamber counsel, and in the management and settlement of estates, and had made extraordinary attainments in general knowledge, having more or less acquaintance with sixteen languages. Yet his ability to articulate was so imperfect, that he spoke but little in his interviews with Mr. Weld, the attempt being evidently

* See particularly the Twenty-Eighth Report of the American Asylum.

† We use the New York edition, and not the one printed for the Assembly.

embarrassing; and they both preferred to conduct the conversation by writing, or the manual alphabet.

Of those not born deaf, Mr. Weld mentions (p. 91) a person, who lost hearing at the age of a year and a half, and who had been for twenty years connected, as pupil and teacher, with the institution at Leipsic.

"In this case there was an ability to articulate and to read on the lips, which was valuable to the possessor, in an unusual degree, and an amount of general knowledge which fitted him for agreeable intercourse with society, and made him a useful and happy man.

"Another case of this general kind, was that of a young lady, an assistant teacher at Cologne, who spoke, wrote, read and taught well, as I understood. But she lost hearing at six years of age, and therefore did not owe all her knowledge of language, or of other things, by any means, to the instructions of the institution. These were extraordinary and very interesting cases, the only ones I recollect, of deaf mutes being employed as teachers in the German schools. I met with several others who were superior in their acquisitions, and almost always so, I think, in the circumstances under which they had been enabled to make them, especially some one or two among the pupils of almost every school."

The case of Habermaas, so often mentioned, was of this kind. He became deaf at the age of *four* or *five* years, and had previously learned to speak well.

Mr. Weld also saw a gentleman at Paris, and a lady at Geneva, of whom he gives the following account (p. 70):

"Neither was a deaf mute from birth. The one became so between four and five years of age, and the other at six. Both were educated in Paris; both had enjoyed the advantages of much private instruction; both were highly intelligent, and in their intercourse with their familiar friends and daily associates, used oral language principally; resorting, however, to dactylology, signs or writing, to a greater or less extent, when holding intercourse with others. Still, these were favorable examples of the success of teaching those to articulate and to read on the lips of others, who became deaf in childhood."

Mr. Weld was introduced to several individuals, who had been educated at a British school in which articulation is taught to a portion of the pupils. Three of these were able to articulate well; they could read on the lips but little. One had lost hearing at *twelve* years of age, another at *five*, and the third was born with imperfect hearing which he

still retained. Two of these, at least, had enjoyed more than usual advantages of instruction.

What is the average success in acquiring articulation, realized by the more successful portion of the pupils in the German schools, we learn from the following statements of Mr. Day.

"A considerable number of those who lost the power of hearing after three years of age, so far as they have fallen under my own observation, are able to a good degree, to make themselves understood. Their articulation, indeed, is not that of other men; it is imperfect, and more or less unnatural; it is necessary for them to make considerable use of pantomimic signs, and now and then to resort to writing, but still the power of speaking they actually possess, provided it can be retained, must be admitted to possess a certain degree of value." (p. 173.)

"On the whole, then, it may be said, that those pupils in the German schools who succeed to any considerable degree in speaking, were either already to some extent in possession of spoken language before they lost the power of hearing, or are only partially deaf, or in addition to extraordinary aptitude for learning, have received a degree of attention, very far beyond what it is possible to devote to most of the deaf and dumb. Without affirming that all the pupils who belong to these classes, are favorable specimens of what can be done in articulation, I feel safe in expressing the opinion, that a considerable number would be able to make themselves understood by their friends and those with whom they daily associate. In a very few instances, the attainment might be somewhat greater; but as a general rule, this is the farthest limit ever reached, in return for the time employed, and effort expended, in teaching articulation, in the German institutions for the deaf and dumb." (p. 177.)

What proportion do those thus successful bear to the whole? Says Mr. Day (p. 178): "Of those, to whom, in consequence of peculiarly favorable circumstances, articulation promises to be of use, and of whom success, in the modified sense just explained, can be predicated, the proportion may be *one-fifth*." Of the London Institution, he says (p. 92): "According to a very intelligent gentleman who had been ten years connected with that institution, not *one-fourth* can be taught to speak." Of another school in Great Britain, "whose present venerable head has held that situation more than thirty years," says Mr. Weld (p. 39): "Out of *seventy* pupils, not more than *ten* now receive any instruction of this kind. Formerly, articulation was

taught, or attempted to be taught, to all the pupils of the school. * * * But though his success was fair, he considered that he could spend his time to much greater profit in 'giving them knowledge,' and therefore made the change above mentioned. He said also, that though a portion of them retained articulation tolerably after leaving him, many do not. Their friends often cannot understand them well, if at all, and hence their attempts are relinquished."

From the description, we infer that the school at Edinburgh is here referred to, and that Mr. Kinniburgh is the gentleman whose testimony is given.

How far can the great majority of the deaf and dumb succeed in acquiring articulation? In the German schools, according to Mr. Day, (p. 178,) "about *one-tenth* of the whole can make no proficiency whatever," and deducting the *one-fifth*, or *two-tenths*, already mentioned as more successful, there remain "*seven-tenths*, or the great mass, though differing somewhat in their attainments, yet only able, as a general thing, to make themselves understood in the articulation of frequently repeated sentences, and single words, and to whom this limited acquisition can be of very little worth." A German teacher made to Mr. Day the following admission, (p. 168,) "The deaf mute will and must, after his dismissal from school, communicate with those about him, in a great measure, by means of signs; now, if we can furnish him with words which he can drop in to explain his meaning, all is accomplished which we can reasonably expect." Says Mr. Weld (p. 53):

"The time and labor spent on the subject of articulation in certain of the schools, are productive of little real benefit. Though I met with many who had been trained to attempt it, I scarcely found one, except those under peculiar circumstances, as previously mentioned, to whom it was of special value, and hardly met with an intelligent individual, not connected with some school, who looked upon the subject with favor. By such persons it was considered as almost worthless, if not disgusting."

To read well on the lips, requires such a rare power of rapid and accurate perception, and depends so much upon uncommon quickness of apprehension,

joined to a thorough and familiar acquaintance with language, in order to guess the whole from a part; * that it is absolutely beyond the reach of most. In the words of an eminent German teacher, "As for reading on the lips, it is for the most part an affair of good luck." The teachers of the German schools, in addressing their pupils orally, find it necessary to keep up a running accompaniment of pantomimic signs. The following is from Mr. Day (p. 182):

"On an average, about one-third of the most advanced class, with the aid of the signs employed by the teacher, and the frequent repetition made use of, appear to understand the most of what the instructor says; another third appear to lose a considerable part; while the remainder only seize the most common words, and are obviously much of the time at a loss as to what is going on. It will be remembered that this is a general estimate, and in some cases would not be sufficiently favorable."

If the results in some of the schools on the German plan, seem more favorable than this, it is to be ascribed to the fact that those schools are to a great extent select—pupils being chosen for admission, with reference to their aptness for the peculiar kind of instruction to be given them, or afterwards dismissed for the want of it. Thus, as appears from Mr. Weld's Report, (p. 88,) at the institution at Zurich, from one-fourth to one-third only of the applicants are selected, while one-fifth of all admitted, and of late years one-third, have been dismissed for incapacity. From the school at Riehen, near Basle, almost one-third, and from that at Pfortsheim, in the Grand Duchy of Baden, more than one-fifth have been dismissed on the same ground. Something like this is true, says Mr. Weld, of many of the German schools, and to an extent, of the London Institution, while in the school at Paris and those in this country, not over one in fifty is dismissed as incapable.

That the Germans, with their skill and science, should succeed in enabling some of their pupils who became deaf at six, eight, or twelve years of age, to articulate passably and to read well on the lips, certainly need not surprise us, when we have among ourselves persons

* The motions of speech are to such an extent invisible, or else similar to each other, differing also in different persons, that deaf mutes never become able, in ordinary discourse, to do more than make out a few of the words and guess at the remainder. "This" says Mr. Day, (p. 187,) "was distinctly told me by the most accomplished reader on the lips, whom I saw in Prussia."

deaf from childhood, who by their own private efforts, assisted only by members of their families, have made equal, or superior, attainments in these accomplishments, as well as in general knowledge. We could name a lady in Connecticut, totally deaf from the age of twelve years, who retains her speech almost perfectly, with some unpleasantness of tone, and rarely, if ever fails, to understand what is spoken to her in a somewhat slow and distinct manner, and has a knowledge of language and an extent of general information superior to the majority of well-educated women. She can even do what, Mr. Day says, is not pretended of any deaf mute in Germany, that is, understand a discourse from the pulpit. This, a few years since, she could always do in the case of her own pastor, and give a correct and full account of the discourse afterwards. We may name also, John R. Burnet of New Jersey, entirely deaf from the age of eight years, self-educated, who presented himself to the public in 1835, as the author of "Tales of the Deaf and Dumb, with Miscellaneous Poems," and has contributed able articles to some of our leading Reviews; and whose abilities as a writer of prose or verse are of a superior order. He can also speak, indistinctly indeed, but so as to be readily intelligible to his familiar acquaintances; without, however, any power of reading on the lips. James Nack, of New York, deaf from about the same age, produced a volume of well written poetry* in 1827, and retains, if we are not mistaken, the power of speech in a similar degree. We know a young lady, deaf from the

age of five years, who has a good education, obtained partly at one of our institutions and partly at home; and has retained articulation and acquired the power of reading on the lips, so as to converse, with some of her friends, chiefly in this way.

The reader is, by this time, ready to understand, how it is, that transient visitors at the German schools are led to favor us with such exaggerated reports.† An eminent Prussian instructor remarks, in a note to Mr. Weld, (p. 71,) "There are certain teachers who do not protest against the illusions of visitors, unacquainted with the subject, who judge only in consequence of the presentation of some excelling pupils." Such visitors also mistake certain common expressions easily learned, and set exercises familiar to the pupils, for fair specimens of their general attainments. Their excited imaginations deceive them. "I can hardly forbear smiling," said a distinguished German teacher to Mr. Day, (p. 164,) "when hearing the remarks of the visitors to the school, especially if they have witnessed nothing of the kind before. It is not uncommon for them to exclaim, 'Why! he speaks! I hear him myself!' and to be so far carried away by the novelty of the thing, as to form the most exaggerated notions." To persist in setting up the testimony of casual visitors against such evidence as we have now before us, must be deemed an affront to the understanding of the public.

An incident took place at the meeting of the American Institute of Instruction last summer, at Hartford, which shows how liable even educated and scientific

* That persons in this condition should be able to write poetry, as well as prose, is not surprising. The notions of accent, quantity and rhythm remain, after all reminiscences of sound are lost; they may attach themselves to the mere movement of the organs of speech, and other characteristics of verse be perceived by the same means. The articulation of persons born deaf is never so perfect as to be adequate to any thing of the kind. In France there have appeared one or two good writers of poetry, deaf from childhood, but educated as deaf mutes. We have, however, in New York, a writer of poetry profoundly deaf from birth—an absolutely solitary instance of the kind, as we believe. We refer to John Carlin, a young artist of genius, and highly successful in his line as a miniature painter—two or three of whose poetical lucubrations have appeared in the New York Commercial Advertiser. He knows nothing even of articulation, and has no perception whatever of the effect of rhythm or rhyme, yet can construct both correctly. His verse is wholly a mechanical and artificial work, as respects the production of the external form, though informed with the genuine spirit of poetry, and not deficient in smoothness to the ear. He has acquired this talent as the result of some instruction and much study.

† Some of these stories were happily hit off, in a paragraph in the "Radii"—a highly respectable newspaper, printed and edited by a deaf mute, at Fort Plain, in this State—by alluding to the wonderful *cork leg*, celebrated in song, made by an artist in Rotterdam, whose powers so far outstripped those of the natural member, that it could never be stopped or overtaken. Nothing could be more exactly parallel.

A remark made by Dugald Stewart, who gave a decided preference to the method of Si-eard, is here not altogether out of place: "To teach the dumb to speak, (although, in fact, entitled to rank only a little higher than the art of training starlings and parrots,) will always appear to the multitude a far more wonderful feat of ingenuity, than to unfold silently the latent capacities of the understanding."

men are to pass without inquiry the most essential points in cases submitted for their investigation. A boy was introduced by Mr. Mann, represented as a deaf mute who had been instructed by his father. And, truly, he could articulate well, and had also an uncommon ability to read on the lips. Certainly, there may be something in Mr. Mann's assertions respecting the German schools—was the general conviction. At the afternoon session, however, a gentleman connected with the American Asylum begged leave to call up the lad again; when it was demonstrated that the boy *could hear*, and understand perfectly, with no aid from the eyes, what was spoken in a full tone of voice, at a short distance. How much better he could once hear, we are not informed, but he had unquestionably obtained his knowledge of speech and of language by the ear.

How far and how easily *is the language of action available*, as a means of communication for deaf mutes?

Many persons are sceptical as to the capabilities of such a language for expressing more than what is palpable to sense, or what pertains to the most common uses of life. But the most refined and artificial tongues grow from beginnings like this; the most purely intellectual ideas ever formed by the mind of man, or that have even floated in the dreams of the transcendentalist, find their expression in terms which, in their origin, denoted a purely physical phenomenon. Why then may not a language of action, having the same ground, be inherently capable of a similar development?

The lowest stage in which the language of action may be viewed, embraces the pointing out of objects in sight, the natural expression of real emotion, and the indication of wants by means of the most common and familiar actions. In these forms no one can be at a loss how to make use of it.

A step higher is taken by personating an individual and describing his actions

by imitative signs. In doing this, other persons and things also to which these acts bear a relation, will at the same time be indicated, and may thus, by mere implication, be set before the imagination with as much distinctness as if portrayed with the minutest accuracy. You cannot represent a person as milking a cow, or driving a yoke of oxen, without calling to mind these animals. By the simple action of casting a fishing-line, you present to view the rod, the line and the water; and by other acts, you may picture the bait, the hook, the fish, the bank, or the boat; the more extended and minute the pantomime, the more in number and the more specific will be the objects implied. By skillfully imitating a coachman on his box, as he manages the reins and flourishes the whip, you may not only raise the idea of the reins, the whip, the coach and the horses, but you may show whether he has four or two in hand, and even the rate at which he travels, the kind of road he passes over, and the freaks of the animals. In such imitative action, periods of time may be indicated, by the skillful introduction of actions appropriate to particular times, as night, morning, noon, evening, the Sabbath, winter or summer. By proceeding from a known starting point, the actual time of real occurrences may be communicated. A person returning from an excursion, would commence with his departure, and mark the subsequent intervals of time. Animals may also, to an extent, be personated in pantomime. In this shape the language of action has been cultivated as a fine art, and used for popular amusement, and is universally and readily intelligible.* The deaf mute not only makes abundant use of such pantomimic action, which is pantomime, properly so called, but he imitates the motions of inanimate things, and pictures objects by other means.

The sign-language of deaf mutes exhibits, however, a wide departure from pure pantomime or mere pictorial representation. In addition to their direct

* The art of pantomime, it is well known, was carried to great perfection by the ancients. We have it on the authority of Lucian, that a king from the borders of the Euxine, seeing a pantomime perform at Rome, begged him of Nero, to be used as an interpreter with the nations in his neighborhood at home. As every schoolboy knows, it was a matter of strife between Roscius and Cicero, which could best express an idea, the one by gestures or the other in words.

The language of signs has been much used by many tribes of American Indians. Parties from some of these tribes have found themselves quite at home, when visiting a school of deaf mutes. Not mere pantomime, but even symbolical signs, strikingly similar, and in some instances the same with those employed by deaf mutes, have been found in use among the Indians.

use, it establishes from these as elements, distinct signs appropriated to particular objects, qualities and phenomena, and thus becomes a language of terms combined in propositions—is not merely capable of representing a succession of scenes to the imagination, but becomes an instrument adequate to the expression of ideas in various forms, as in the artificial languages of speech. Such it is, in different degrees of perfection, even as originated and used by the uneducated deaf mute. We shall describe it as it exists in institutions in this country.

Of sensible qualities and attributes, form, size and position are either marked or pointed out in the air; or the arms, hands and fingers, one or all, are so adjusted, as themselves to represent the form, position, and sometimes also the size of the objects described. Motions of various kinds are represented through the same means. In a similar manner are denoted the relations of objects, in respect to situation, if at rest, or relative motion, if in motion; thus, by the two hands, or a finger or a thumb of each, are expressed the ideas denoted by such words as *on*, *in*, *with*, *near*, *between*, *around*, *under*, *together*, *meet*, *separate*, *follow*, *approach*. Number, definite or indefinite, is represented by the fingers; and with one hand alone, by a simple method of distinguishing units, tens, hundreds, &c., sums to any amount may be expressed with ease and rapidity. Colors are denoted by referring to some object, (as the lip for *red*,) or by signs somewhat arbitrary. Weight, hardness and softness, fineness and coarseness of particles or of fabric, roughness and smoothness, degrees of consistency, viscosity, &c., are expressed by peculiarity of action in handling a body having any of these qualities; fluidity by the action of pouring, or by representing the flowing or waving motion of fluids.

An individual of a species or class is designated, either by a detailed enumeration of distinguishing traits, or by one or two prominent characteristics simply. The latter is the method natural even to the uninstructed deaf mute, and as the language becomes improved and fixed, is adopted for all common objects; detail being still admissible as occasion or fancy may demand, and much used in the early stages of instruction. The various sorts of external objects, animate or inanimate, the productions of nature or art, are described, not only by peculiarities of form, motion, and other sensible properties, but

by the most common actions connected with their production or use, or otherwise related to, and implying them. Animals are in most cases personated; the individual who makes the sign, representing their peculiarities of form or appendage—as horns, ears, neck, whiskers, beard, wings, bill, mane, claws, tusk trunk &c.—upon the corresponding part of his own person; he also generally imitating, to a greater or less extent, the peculiar actions of the animal. The sign for a *dog*, however, is made by patting the thigh and snapping the fingers as if calling one; the act of catching a *fly* denotes this species. *Bread* is indicated by the action of cutting a loaf, and *butter* by that of spreading upon the bread; *milk* by that of milking, and *hay* of mowing; an *egg* by showing how one is opened, and a *watch* by seeming to apply one to the ear. The manner in which a cluster of *currants* is taken into the mouth, that of projecting the stone of a *cherry*, and that of snapping a *watermelon*, denote these fruits. The fingers are so moved as to imitate the flickering of *flame*; or again, they picture falling drops of *rain*, or flakes of *snow*. The two hands are united in the shape of a *boat*, and moved in imitation of its motion; or they are applied to each other and opened and shut like a *book*. If there is occasion to guard against a mistake of the object intended, for the quality, act or appendage, by which it is mainly denoted, or to distinguish it from other objects equally implied by the action made use of—this is easily done by some rude representation of its form or size, or the addition of some other distinctive sign.

In passing from the external world to the world of consciousness, we find the language of action equally, and to some extent peculiarly, natural, rich and expressive.

The most expressive language of emotion is visible in action, attitude, and play of feature, in the agitation of the frame and the changing hue of the countenance. What volumes does the eye speak? The lips, though mute, may be eloquent. The minutest shade of emotion may be pictured forth to the eye, beyond the power of words, and even tones of voice, to express. The capabilities of the language of action here, will be questioned by none. Rightly to appreciate the indirect service rendered by this element, in every part of the sign-language, requires not only a familiar knowledge, but a careful study of the language itself. Emotions

and passions are, however, indicated, not only by their natural expressions and actions characteristic, but also by other signs, descriptive of their physical concomitants—as the quick beating of the heart in joy, the stirring up of the blood in anger, the suffusion of the face from shame. Conventional signs are established by selecting some striking point of one or the other kind.

The capacity of this language for representing the operations of the intellect, in great variety and with great distinctness and expressiveness, will not be so obvious. It may best be shown, by describing, however inadequately, a few signs for ideas of this class. *To learn* is, in the sign language, to gather up something and put it into the *forehead*; *to remember*, is to hold something there; *to forget*, is to let something fall out of the same receptacle of thought; *to invent*, or originate mentally, is expressed by pushing the finger upward upon the forehead, signifying that the thought springs up there; *to understand*, by striking or pressing the point of the finger upon the forehead, with a lighting up of the countenance; *to know*, by gently touching and pressing the forehead with a confident air; *to intend*, to aim at, to refer to, embracing also the idea of the word *for*, by projecting the point of the finger from the forehead, as if toward an object; for *fixed thought*, the finger is held upon the forehead with an appropriate air and attitude; It is moved about the forehead to denote *thinking about* something, or thinking somewhat discursively. The general sign for *judge*, is made by representing the scales of a balance, by circles formed with the thumb and forefinger of each hand; and is of extensive use in expressing modifications of this general idea, as *compare*, *deliberate*, *determine*, *criticise*, &c.—in deliberation, there is a hesitating air and a wavering of the scale; in judgment positive, the scales are fixed and the air confident; in determination, the judging is finished, (cut off,) and there is an air of will and decision.

Hope, embracing both thought and emotion, is represented by reaching forward with an air of pleased expectation; *trust*, by grasping one hand and resting on it with the other; *trouble* of every sort, objective or subjective, by a sign descriptive of confusion and entanglement before one, or in the mind.

As thought and feeling cannot be directly depicted to the eye; they are of

necessity designated, either by their accompanying outward expression, or bodily affection of some sort; the actions connected with them; the occasions which awaken them; or their resemblance, real or imagined, to something external and sensible. The application of words to ideas of this class, is founded on these principles, traceable in their etymology, or apparent in their obviously figurative use. Signs, by attaching themselves more to the outward expression, and by always introducing this as one element, come nearer to an exhibition of the internal state itself, and present it with far more vividness, and often with more definiteness and accuracy; and thus furnish a vehicle for eloquent expression, and an effective instrument for acting, by sympathetic communication, upon the intellectual and moral faculties.

Extensive use is made of figurative or symbolical modes of expression for other ideas. Indeed, the signs for sensible objects bear a close relation to those figures of speech, in which the whole is represented by a part, or an object by something connected with it—as when *sail* stands for ship, or *whip* means coachman. It is chiefly by the use of figures founded on resemblance or analogy, that our languages of words are enriched, and acquire copiousness, and at the same time precision. The sign-language also employs symbols of this description, naturally and abundantly; but to a somewhat less extent, in consequence of its power of more direct expression; it also wants the occasions and facilities for the use of metaphor, which result from the artificial structure of language, the employment of the abstract noun especially.

The following are a few of the signs of frequent use in a metaphorical sense. The sign for *fall*, (made by letting the hands tumble downward over each other,) expresses disappointment, discomfiture, and failure of every kind. The sign for *silence*, (made by pressing the forefinger or the thumb upon the lips,) expresses, as differently modified and combined, stillness and quiet of every kind, peace, humility, meekness, patience, passivity in general, secrecy, &c. Physical *cleanliness* represents moral purity, as it does also neatness, grace, elegance, refinement, and ideal perfection. *Air* or breath denotes spirit, literal *straightness*, moral rectitude. Just and unjust are figured by the even and the uneven *scales*. To pardon is literally to *wipe off*. The sign for *show*, (made by holding up the palm of one

hand, and pointing to it,) has many figurative applications. That for being *bound*, (made by placing the wrists across, as if tied with a cord,) denotes slavery, confinement of every kind, habit, engagement, business, necessity, obligation of every sort; the opposite ideas of freedom, escape, release, &c., are expressed by separating the wrists, as if breaking loose.

In signs, as in words, metaphorical terms become proper by usage. Their figurative origin is, however, not so often lost sight of as in words; yet there is seldom danger of confounding the figurative with the literal meaning. Not only the connection gives the clue, as in words, but there is the aid of a suitable accompanying expression, of combination with other signs, and of variations in the form of the same radical sign; and many signs founded in analogy, differ so widely from any used in a literal sense, that they can hardly in strictness be called metaphorical. Instances of the latter are those for mental operations, which are based upon analogies of motion. The sign for *event*, or *happen*, expresses, as nearly as anything, a sudden upturning, but has a form peculiar to itself. *Truth*, and the opposite, are represented by carrying the finger, with a straight-forward, or a sideways or crooked motion, from the mouth; whereas material straightness and crookedness are expressed by carrying one hand, in a straight or a crooked line, along the open palm of the other. A sign for being *interested*, or pleased with, is made by a single motion, signifying a drawing or leading of the heart. This flexibility of signs—the facility with which they are varied in form, as differently applied, and often in combination blended into one—is a beautiful feature of the language, and is a resource for variety of expression and speciality and definiteness of signification to an unlimited extent.

In the principles already stated lie the methods for denoting the occupations, offices, and relations of mankind, and acts of a general or complex description, which cannot be directly or fully imitated; but for these and other classes of signs our limits forbid detail.

All the usual divisions of *time*, with its different modes and relations, have distinct and established signs; the divisions and the time of day being indicated chiefly by signs having reference to a clock or to the course of the sun; days being counted as so many sleeps, or apparent revolutions of the sun, and weeks, months, and years having other appropriate signs. *Future*

time is indicated by a forward motion of the hand; time *past*, by throwing the hand backward; and *present*, by presenting both hands horizontally in front. The signs for sleep, for one, two, or more, and for past or future time, are so combined as by a single brief motion to express the idea of yesterday, or to-morrow, or of two or more days past or hence. *Before* and *after*, *while*, *since*, *till*, *late*, *quick*, *slow*, *soon*, &c., have signs founded on the idea of motion along the track of time, from behind forward. Repeated circles represent *always*, and with the negation of beginning or end, *eternity*.

Grammatical distinctions cannot be said to have an existence in the natural language of action. There are indeed signs for the different parts of speech and their modifications, which are of use in the explanation of words; they form, as has been stated, an essential part of "methodical signs." Signs may be divided, according to signification simply, into those for objects, qualities, relations, and acts or events; actions into those necessarily transitive and those not so. There are also signs which correspond in their use to conjunctions and adverbs; but there are no peculiarities of form or inflection to mark these classes, or to distinguish the agent from the act, an action or event from a habit, quality or condition, the subjective from the objective, the abstract from the concrete, &c. Explanatory signs are added, however, for this purpose, when needed, and also to indicate time, mode, and agency or passivity; and present indeed something approaching to auxiliaries and inflections in speech.

The syntax of the sign-language—the principles by which signs are connected in discourse—is wholly unartificial. The general principles which regulate the order are, that those most nearly related be in the closest proximity, and that the subject be followed by the signs which qualify it, and then by those which predicate something of it. The predicate may be accompanied with an air or a sign of affirmation, or of negation, or of uncertainty, which will answer to the copula of a logical proposition. Little use is made of the affirmative expression, however, in continued narration or description; the several particulars being merely represented as if pictured. The sign-language may be considered as nearly in the condition of certain spoken languages, which have no verb *to be*.

When there is an object on which the subject acts, or to which it bears a rela-

tion, the construction varies according to the exigency. Most frequently, the nature or circumstances of the case show which is the subject, and which the object. It is, of course, the cat that devours the mouse; it is the wounded and disabled man who is carried. When the natural relation is reversed, or no clue is found in the nature of the case, it is not difficult to indicate the meaning correctly, by methods which vary according as the scene can be most successfully pictured. One is, to have a strict regard to the relative position and location of subject and object. Or, both the agent and the recipient of an action may be personated in turn. Having represented the stripling in the act of hurling the stone from the sling, we may immediately act the part of the giant receiving the blow on his forehead, and falling to the ground. So, a horse may be shown in the act of kicking, and a man as receiving and feeling the effect of the blow. Another method, like this, but more artificial, yet altogether common, is to use the sign for *give* in the figurative sense of agency or causation, or that for *first*, or both at once; and on the other hand, the sign for *receive*, or some other denoting passivity. These auxiliary signs answer the end of an active and a passive voice. The signs for some actions, however, mark this distinction by a change in their form, the motion being, for the active sense, from the person, and reversed for the passive.

There is nothing in the language of signs corresponding to the tenses of verbs. The time of an action or event is generally indicated at the outset, definitely or indefinitely; it being once fixed, the narration may proceed, events in succession being simply represented, and time reckoned from the starting point. We are not, however, confined to the direct order, but may at any point refer to other events, at any distance of time previous. As the relation of events gives them an actual presence to the imagination, each one of a series narrated becomes in turn present; and the interval between this and the one next succeeding, is hence represented by the sign of futurity. Thus this sign becomes a connective between successive events, when separated by any appreciable interval; the relation between two successive events past, being in fact the same as that between the present and the future. There is here a remarkable cor-

respondence with a peculiar usage of the Hebrew tongue. The commencement of Genesis, literally translated, reads thus: "In beginning created God as to the heavens and the earth. And the earth was formless and waste, and darkness upon face of abyss, and spirit of God moving upon face of the waters. And *will* say God, be light, and *will* be light. And *will* see God as to the light, that good," &c.* This usage prevails in all the narrative parts of the Hebrew Scriptures. It still forms a *quæstio vexata* for grammarians; one theory that has been advanced for its explanation, is confirmed by the comparison now made. This is only one instance among many, in which this language of nature may throw light upon the studies of the philologist. It is well known to those acquainted with the Hebrew, that it has but two forms of tense, and that the past (so called) is extensively used for future time, as well as the future for past. This also may be explained, by considering the tense called the past as really an aorist, representing the action simply, and without relation to time at all—just as it is pictured by an imitative sign—the relation of time intended being determined by the connection, or by circumstances. Thus the first of Genesis would read: In the beginning *create*, instead of *created*.

Modifications corresponding to the potential, subjunctive, and imperative moods, are indicated, sometimes or partly by an accompanying expression of feeling, and further by auxiliaries consisting of distinctive signs for the modifying ideas. By both these means also, are expressed the relations between the members of conditional, disjunctive and causal propositions. A causal proposition is sometimes put in the form of the question *why?* and the answer *because*. There are also signs for the ideas expressed by the other conjunctions. Indication upon the fingers serves instead of *and*.

Little use is made of anything corresponding to personal pronouns of the third person, or relatives. Yet their end can be answered, by fixing and referring to the location of objects, or by indicating them respectively on the fingers, which may be employed to represent them. The several pronominal adjectives have in general corresponding signs.

A very marked and important differ-

* It is not uncommon for deaf mutes in their first attempts at composition, to be misled by the idiom of the sign-language into a use of words precisely like the Hebrew, as it reads thus translated, and to write a story throughout in this same style.

ence between signs and a refined language of words, is the want of anything in the former corresponding to the abstract noun. Yet such propositions as these: God gives health and happiness; Idleness leads to poverty; Wisdom is better than strength; Murder is worse than theft; Revenge is wicked; and others may be, and often are of choice, expressed in the abstract form in the colloquial usage of deaf mutes. But *strength* is not distinguished in the form of the sign, from *strong*, or *theft* from *steal*, and so universally. Hence, and from the want of an artificial syntax, but limited use is made of the abstract mode of expression, and with a less variety of metaphorical dress. The tropical use of the prepositions, in connection with this form of speech—without which we rarely move a step in words—has nothing similar in signs.

The advantages of the abstract noun in discourse, are by no means indispensable. They are simply, variety of expression; elevation and grace of style, from the figurative drapery it naturally wears; and especially brevity and neatness, and this partly in consequence of the convenience with which it fits into the framework of artificial language. There are no ideas for the expression of which abstract terms are indispensable. There is nothing existent in nature, or conceivable in thought, but individual objects, and their qualities, phenomena and relations. Every possible proposition in abstract terms, by however many steps their meaning may seem removed from the world of individual things, really expresses something of which individuals are the subject; and so far as the nature of things or the nature of language is concerned, can be expressed in terms descriptive of the individuals. A concrete form of statement may be no less general than the abstract, and will require no less of the mental faculty of generalization or abstraction to comprehend it. The term *man* requires this as much as *manhood*; *good*, as much as *goodness*. The abstract noun is not a product of the reasoning faculty, but rather of the poetical—aside from its mere convenience. It is the result of a tendency to individualize, rather than to analyze; though some analysis necessarily precedes the individualizing of an attribute. "Every language," says Cousin, "is at once an analyst and a poet; it makes abstractions and it realizes them." The abstract noun has its ground in a

figure of thought, which, if not always personification, is yet closely allied to it. Though this form has, through its conciseness, advantages for scientific purposes, yet it often betrays into error. A proposition in the abstract form, can be apprehended at all, only by going back in thought to the concrete reality. A man who neglects this process, may be a poet, or may be a logician, at least a sophist; but can be no philosopher, or sound thinker, or safe reasoner. In the sign-language, general propositions can be expressed in the concrete form as perfectly as particular ones, and sometimes also in the abstract. Also the comparison involved in a metaphor, may in signs be drawn out in detail, as a simile, when it cannot be conveyed in the concise metaphorical form.

We see that this language is by no means confined to the sensible or the special. The difficulty which words present to the deaf mute, results not so frequently from their wide generality of meaning, as from that complexity and speciality by which the general sense is limited. That ideas may be expressed in languages employed and cultivated for ages, by mature and gifted minds, for scientific, imaginative, and a great variety of practical purposes, which cannot be rendered into the sign-language of the deaf and dumb, in its present state, without much circumlocution, and a tedious process of exemplification and analysis, is most true. But it is also true, that if we take any two languages, particularly of nations differing essentially—one, for instance, a commercial, and the other a philosophic people—we shall find a difference and a difficulty of the same general nature. No two languages correspond in all respects. The language of signs has its peculiar advantages. Not only is it picturesque and expressive, but it can indicate shades and niceties of meaning, beyond the power of words. The classical scholar may boast his two particles of negation in Greek; but not only have we signs, distinct in form, corresponding to *οὐ* and *μη*, but many more varieties, to an extent to which no language of words can make an approach.

Written language, supposing the deaf mute to have learned to use and understand it, is of course an available means of communication with all who know how to write legibly and spell correctly. The deaf mute is sorely puzzled by the incorrect orthography he often meets with, as he wants the clue fur-

nished by pronunciation. In written language he has the key to mental treasures, inexhaustible and always accessible, in books; and may find in them an invaluable compensation for those social enjoyments and advantages, of which he is necessarily in a measure deprived. That course of instruction which will put the deaf mute most completely in possession of this instrument, may, without hesitation, be pronounced the best.

The manual alphabet is available to the deaf mute, for communication with all who know how to spell correctly, and who will devote an hour or two to the acquisition of the character. It may, by means of practice, be used with great rapidity—greater than that of writing, and exceeding any but the rarest attainments in articulation and reading on the lips. It may, especially the one-handed alphabet, be used in a great variety of circumstances, where writing is impossible or inconvenient. It admits of emphasis and accompanying expression; and is of constant use, intermixed with natural signs. It is perfectly distinct, and may be read at a distance and by a whole company at once; which is not the case with the labial alphabet. It may also be felt in the dark.

We are now to consider these several instruments, as to their use in imparting the knowledge of a language of words; and for the purpose of general mental and moral cultivation, in the hands of the teacher; as instruments of thought and of mental improvement on the part of the deaf mute; and as furnishing him a medium of intercourse with society at large; and then to indicate that combination and use of them, which in our judgment is to be preferred in the education of deaf mutes. The matter is more or less complicated, in reference even to any one of these ends, and becomes still more so when we bring them all into view.

We may lay down three distinct methods, or rather theories of method, for the education of deaf mutes, which will cover the whole ground. One relies upon the language of action, to give a knowledge both of words and of other things, and for general cultivation. Another—rejecting signs of action, or restricting them to the narrowest possible limits—depends upon the constant use of words by writing or the manual alphabet, as the true way to acquire language—as in accordance with the manner in which nature teaches hearing children to learn it in the spoken form—employing, of

course, the aid of definition and of explanation by means of words already acquired, as far as practicable and desirable. A third resorts to articulation and reading on the lips, as still more in accordance with nature; depending, like the preceding, mainly upon use to instill the meaning of language; and aiming to furnish a readier means of communication with the mass of mankind, and a form of language more manageable for the mind of the deaf mute himself. These methods, thus distinct in theory, are, however, in practice nowhere distinct; but exist in every variety of combination, and also with important subordinate modifications in each.

In reference to the acquisition of language, it will aid our inquiry, if we consider the manner in which hearing children learn their mother tongue. They are introduced to it, always through natural signs. Objects are designated by pointing to them. The qualities and acts, which the child first learns to call and to recognize by name, are indicated in great part by gesture and expression of countenance, together with tones of voice. The most important means of all, is however, the observed connection between actions, facts and occurrences, and the language used to express them. After a sufficient foundation has been laid, the meaning of words may be inferred from their connection with others, or be taught by direct explanation. Practice in the use of language must be added, to give the learner a command of it himself.

The method which would rely mainly upon the actual use of words, in the forms of writing and the manual alphabet, depends on principles virtually the same, but employed at great disadvantage. To the success, or even the trial, of this method, it is absolutely essential, that language in these forms should be made the ordinary medium of colloquial intercourse for the pupils of an institution—that words may be caught by new comers from their more advanced companions, so as to be available for the explanations of the school room. But the inferiority would be immense, not only to the living voice, but to signs of action, in rapidity, ease of apprehension, convenience, and expressiveness; and again, and as a consequence, there would be adopted an elliptical and irregular use of language, which would form a peculiar dialect.

It is indeed most true, that nothing but putting language into actual service, will lead to a firm grasp and an effective

wielding of the instrument, and skill in its management. There is nothing like being forced by stern necessity to the constant use of a particular mode of communication, to give it a firm adhesion to the mind. But with instruments slow and cumbrous like these, if command of them is to be acquired by use alone, there must be constant use, and a necessity admitting no alternative. That it is possible to acquire language in this manner, has been demonstrated in the remarkable instance of Laura Bridgman—the deaf, dumb and blind girl at the Perkins Institution for the Blind, at Boston; who has literally felt her way to the new world of ideas, into which she has been introduced through the medium of finger language alone—the manual alphabet of the deaf and dumb, and the raised letters used by the blind. With the increased disabilities consequent on the loss of sight—the necessity which has shut her up to alphabetic language as the only available means of communication, must, on the other hand, be reckoned an important advantage for its acquisition in the mode now in question. Although her attainments reflect deserved credit upon Dr. Howe, under whose direction they have been made, yet it is manifest that, by the favor of a rare mental and physical constitution, she is enabled to fly where others would creep, and she has had for a long course of years, the almost exclusive attention of a competent individual devoted to her instruction. Her case is far from proving that the deaf and dumb, supposing signs of action abandoned, would acquire alphabetic language as rapidly or perfectly as by the methods now in use; while to force them, in a community by themselves, to do without signs, may be safely reckoned an absolute impossibility.

The work of learning a language involves two processes, distinct, though conjoined—the acquisition of the external forms and of their meaning. For a child acquainted with language as spoken, to learn the same in another form, as spelled and written, is usually a work of considerable labor; but it would be a hundred-fold greater, were not the sound of the words a guide to the spelling, and the spelling to the sound. A person who should attempt to learn a foreign language in a strange character—as Hebrew or Arabic—by the eye and the pen alone, giving no sound to the letters or words, would be in a condition to estimate the difficulty presented to the deaf mute in

the mere external form of language; but still without experience of the consequent disadvantage for acquiring its meaning in the mode now in question. Yet, while signs should be subsidized to make amends for this disadvantage, this method should have the fullest scope consistent with realizing their benefits.

The method which relies, for the acquisition of language, upon its use by articulation and labial reading, agrees in a most important respect, as has been observed, with the one just considered. As compared with this, it presents, however, essential disadvantages for which it has nothing to offer in compensation. The form of words, as represented by writing or the manual alphabet, is more easily learned, than as articulated and read on the lips. The latter requires a great expenditure of time in a mere mechanical exercise, to the hindrance of intellectual cultivation and of progress in learning the meaning of language. This mode of communication has, on the whole, no advantage in point of rapidity. Mr. Day says, he could generally spell with the manual alphabet, as rapidly as the most advanced deaf mutes in the German schools could read. It is less certainly and readily intelligible, especially in the intercourse of deaf mutes with each other. Instead of being fitted to aid in acquiring language by observation of its use, a previous knowledge of language is itself necessary to the successful guessing, by which chiefly speech is understood by the deaf mute. The advantage that can be urged with the most semblance of plausibility, is that of being a better means of communication with the speaking world; which, of course, cannot be realized to any great extent by the pupil within the walls of an institution; while the imperfection of the attainment is, in the majority of cases, such as to render the advantage altogether imaginary. Instruction in writing is, of course, combined with this method, and is an auxiliary indispensable, in order to give anything approaching a correct and thorough knowledge of language. Indeed, the fact, that both signs and writing are everywhere, and of necessity, employed, where deaf mutes are instructed in oral language, demonstrates the exceeding imperfection of the latter, as a medium of communication for them. It is to be remarked that the irregular orthography of the English presents peculiar difficulties in the way of acquiring language by this means; such as do

not exist in the German, Italian and some other tongues.

What is the fitness of signs of action, for the purpose of instruction in a language of words? From the simplicity of their form, and their lightness and rapidity of execution, they are easily employed and readily perceived, and remembered without labor; while they are, for the most part, so naturally representative, that their meaning is perceived without explanation at all, or, once understood, is never forgotten. So far as precision in their use is given by instruction, it is done with no loss of time, but in the very act of teaching words. By this medium, the meaning and force of words and the laws of their combination, can be explained at once; and in many cases, if skillfully done, the knowledge thus imparted will be nearly complete and accurate from the outset; whereas, by the mere process of observing the occasions of words and expressions, their meaning would generally not unfold itself, till after many repetitions; would be established correctly only through the repeated relinquishment of mistaken assumptions; sometimes after long groping in the dark, would still elude the grasp; and often would be only partially seized, and be but a dim and uncertain thing in the mind. Signs often shed immediate light upon what would otherwise either remain absolute darkness and chaos, or be long waiting the gradual dawning of day.

Signs are, however, merely a staff to assist along those steps, which the deaf and the hearing must alike take in the acquisition of language; to leap or to fly being as impossible in the case, as to pass from one point of space to another without traversing the interval, or to support the upper part of a structure without the lower. To have a correct translation of a passage in a foreign tongue even, is by no means to have a knowledge of so much of the language as the passage embodies; while the genius of the sign-language differs so essentially from that of a language of words, that the acquisition of the latter, by the help of the former, is altogether a different task from that of learning a foreign language by means of a mother tongue, constructed upon the same general laws. The process must indeed be essentially the same, as in the acquisition by the hearing child of his mother tongue itself. Signs, used as they should be by the instructor, supply the place of the actual presence

of things, by representing them to the imagination; and with two advantages: one, that by the multiplication of examples and illustrations, the experience which, in the use of language in real life, would be scattered over a long period, can be concentrated upon a point; the other, that this method admits of a regular and systematic procedure, in which one acquisition shall prepare the way for another. By proceeding thus, and engaging the pupil constantly in the alternate processes of translating words into signs and signs into words, language may be rapidly and thoroughly inwrought into his mind, in its twofold use, for communication actively, and reception passively. Again, signs are a means of rapidly enlarging the circle of the pupil's ideas, and the bounds of his knowledge; and as there is a sense in which ideas must go before their expression or apprehension in language, the advantage here is immense. They also awaken and give a spring to all the mental faculties; they give that kind of interest to the exercises of the school-room, which the mind of childhood especially needs, making what would otherwise be an intolerable drudgery, a pleasant occupation; by this means, the powers are more energetically and actively employed upon both the mechanical, and the more properly intellectual, labor of the acquisition of language. Cut off, as the deaf mute necessarily is, from the living voice, with the music and the eloquence of its tones, it would seem cruel to deprive him of that agreeable and expressive substitute which nature puts in his power, and to chain him down to a language literally dead to him.

It is true there is a tendency on the part of the pupil to be misled by the peculiar idiom of the sign-language—a point demanding skill and care in the teacher. Signs mislead by intervening between words and their meaning, and often imperfectly representing the latter. There is, again, a tendency for signs to be indulged, when words might be employed more to the advantage of the pupil. They are such a convenient staff, that the support must be judiciously and timely withdrawn, or the learner will never be able to go alone. The use of signs, on the other hand, in their improved condition, accustoms the pupil to the free and familiar use of a real language, embracing terms general and figurative; and thus, as far as it goes, forms an excellent preparation for the

ready apprehension of a language of words.

After what has been said, there can hardly be a question which of these methods is preferable as a means of general mental and moral cultivation. If a medium of communication, which is rapid and full of natural eloquence, is for this purpose preferable to one that is slow and unimpressive; if one which brings the mind of the teacher into close contact and intimate sympathy with that of the pupil, is better than one by which they can communicate only at arm's length, there can be no hesitation in our choice. The "winged words," which, when fully plumed and unimpeded, convey intelligence with such rapidity, can be for the deaf mute but lame and halting couriers; let him enjoy that substitute by which the living thought itself, in its simplicity and freshness, leaps forth from every limb and feature; let him enjoy this means, by which his knowledge can be extended, his mind opened, his heart touched, and his character moulded; by which he can be taught his duties and his destiny, his relations to his fellow-beings, to his God, and to another world; by which the teacher can reach the individual mind to such advantage, or, by well-timed and eloquent strokes, can sway numbers in a body, infuse into them one thought and one feeling, and in religious worship, lead their hearts, in a united, though speechless, offering of devotion to their Maker. These advantages can be realized long before a language of words can by any means be acquired; and also with that portion of the pupils, who from age, or want of the requisite capacity or application, fail of making respectable attainments in artificial language.

The spectator who may witness, while instruction is imparted, the attention, eager though not painful, the kindling eye, the light of intelligence overspreading the features, the answering nod or smile, the shake of the head, or the sudden burst of recognition; and during devotional exercises, the fixed and reverent attention; or in conversation, the rapid and animated interchange of thought, and the keen encounter of wit that may be seen to be going on, though its purport be undiscovered; cannot doubt, that a medium is here employed, by which an easy and unobstructed passage is opened from mind to mind.

In the German schools, which discard signs for instruction in language, and

even discourage their cultivation and their use as a means of communication, pantomimic exercises, having for their object the general development and awakening of the faculties, form, in the early part of the course, a regular branch of school instruction. The benefit is of course realized imperfectly, and at a disadvantage, and with expense of time, while in the French and American schools, it is gained incidentally and constantly, and much more completely.

The influence of language upon thought, has been a subject of much philosophical speculation; its importance can hardly be overrated; and in the present case it deserves careful attention.

The vernacular language of deaf mutes, which is in reality used by them everywhere, and generally more or less through life, cannot but have an important influence on their mode of thinking. The effect will remain, even supposing it superseded by another instrument of thought. Its use, together with their ignorance in early life of the ordinary means of communication, leads to the cultivation and tends to the continued ascendancy of the faculties dependent on ocular perception; promotes quickness and accuracy of observation, distinctness of conception, and strength of memory for particulars. These powers, cultivated as they should be in youth, lay the best foundation for the right use of the reasoning and reflective faculties, whose development in the natural order is subsequent. Again, in the sign-language of the deaf mute, ideas are not distorted from their natural shape by being arrayed in an artificial garb. Words have not the opportunity to mislead--themselves to take the place of ideas, and cheat the mind with a semblance of thought, or to be a vehicle for vague and obscure notions. The medium of exchange which he uses in the commerce of mind, has not its original stamp of thought worn off by use, so that its value is uncertain; nor does it consist of a sometimes worthless representative in place of the genuine metal.

The teacher who pursues such a course as to lead into exercise the reflective faculties, will, before even the merest rudiments of artificial language have been acquired, be often startled with proofs of thought, which will convince him that the cultivated language of signs is quite adequate to the development of these powers. An instructor was explaining to his class the limited extent of the atmosphere, when a young girl, not advanced

beyond a very imperfect knowledge of the simplest style of language, suddenly started the inquiry, how angels could in that case fly to the earth; showing no little reflection thus to understand and apply, and perhaps to have observed for herself, the fact of the agency of air in flying. To satisfy the inquiry, the teacher had not merely to remind her of a truth familiar to her, that angels are spiritual beings, but also to explain that this spiritual nature might, by the power of God, appear in a visible form. All this was readily apprehended; and further inquiries were put, as to the nature of such an assumed appearance, which showed a keen and reflecting mind, and might not be easy to answer even with the help of words. As signs will, at all events, be used to a great extent by deaf mutes, it seems important, as concerns their influence upon thought, that they should be improved and perfected to the fullest extent.

In giving instruction in language, the proper method of explaining the meaning of words and the laws of construction, by means of signs, leads directly to the exercise of generalization and analysis, and to the apprehension and the application of general principles, to the extent of the pupil's capacity; and is far more favorable to mental cultivation, than an irregular or even a somewhat systematic manner of learning language by use alone. The deaf mute is not floated along at ease, upon a stream of audible words, through the regions of thought, but has to trudge on foot; and in following the track of words, such as they are to him, has to go through many turnings and windings, which make him well acquainted with the domain.

Though the deaf mute rarely advances so far as not to associate some sign with nearly or quite every word he uses or reads, yet he may do this, without depending on the sign for the meaning of the word. It is highly desirable, indeed, that his thoughts should be associated as much as possible with words, and run in that channel by which books are accessible, and communication opened with the world.

Words articulated, consisting, for the deaf mute, only of characters seen or felt, have none of the advantages which may belong to a language of sound, for gliding in easily, and adhering firmly in memory, and intertwining itself with processes of thought, and forming a pliant and manageable instrument for the mind. But written language presents some advantages

even over audible speech, for easy, rapid, and correct apprehension. The visible form of words represented to the mind of the deaf mute, may be for him an available instrument of thought.

For the purpose of intercourse with society at large, the attainments of the deaf mute in oral language are not only imperfect at first, but are often lost after leaving school. On this point Mr. Day was at great pains to examine for himself, and gives the particulars at length, (pp. 199-205,) which fully sustain his conclusion, that the deaf mute, as he goes away from the institution, and mixes with the world, "gradually speaks less, and attempts less frequently to understand what others say, becomes more and more discouraged, and after a few years, for want of sufficient practice and corrections, his artificial speaking becomes only the relic of his former acquisition." He gives (pp. 205, 206,) the testimony of Germans of the highest character, including that of eminent teachers of deaf mutes, to the exceeding imperfection and the trifling value of these attainments in most cases, and says, (p. 167,) "While I have met some who maintained the contrary, the more common testimony given by professors, clergymen, and gentlemen in other professions is, 'We cannot understand them.'"

Reading on the lips is possible only within a short distance, generally from *two to five feet*, and with a front view, of course with a good light; and the speaking must be slower and more distinct and open to sight than usual. To understand conversation in a mixed company, or addressed to a third person is for the most part out of the question. The unnatural articulation of deaf mutes is generally so painful, as to be not only an objection to it, but an actual bar to its use.

The deaf mute taught on a different plan will find signs available to a greater or less extent with those with whom he has constant intercourse; while the manual alphabet can be easily acquired, and writing he can use with most persons in this country.

As these different methods of instruction offer advantages in a greater or less degree incompatible, it becomes difficult to decide precisely what combination of them will secure the greatest advantage on the whole. That it is not expedient to instruct the great majority of deaf mutes in articulation and reading on the lips, is beyond question; the advantage to be realized being slight, and the disadvantage

immense in the time consumed, and attention diverted from other things, by a mere mechanical exercise. The considerations we have presented, point to a judicious combination of the two other methods, as best for all the ends of instruction. An improved system of natural signs should be brought into full play, as more serviceable and consuming less time than one more imperfect. To this should be joined constant practice in the use of words. As fast as acquired, words should, to a great extent, supersede signs for almost every purpose. This, with pains on the part of the teacher, may be accomplished; as, notwithstanding the seductions offered by signs, the pupil will feel a pride and a gratification in the ability to use and understand words. Such is the general plan pursued in the French and American Institutions; the defects of the German and English schools being the want of an improved system and proper use of signs, and in all of the former, the waste of much precious time in fruitless attempts to teach oral language. Other objections to the German method are, the greater number of teachers, and the greater length of time required in a course of education, and the necessity of beginning at too early an age to learn a mechanical employment for maintenance in after life, and too early as respects intellectual instruction. The contrast between the German and American schools, in moral and religious training, is most striking, and the deficiency in the former is one for which no other advantage can compensate. The conducting of devotional and religious exercises in the natural language of the deaf mute—introduced by Mr. Gallaudet; whose name, as the father of deaf-mute instruction in this country, should ever be held in grateful remembrance—has been followed by the most happy results. The results in respect to language and general attainments, with the exception of arithmetic, are altogether in our favor.

The method of instruction by signs, has in this country, and also in France, become more practical and direct, and less metaphysical and circuitous, than as employed by the Abbé Sicard. If our instructors have perhaps still depended too much upon signs, and have not sufficiently insisted on putting words into frequent use on real occasions, and for explaining the unknown by the known, yet, in the consequent development of the sign-lan-

guage, a point has been gained which can never be lost. They have never doubted, that there were a few among their pupils, who might be instructed in oral language with benefit; in the institutions at Hartford and New York, the experiment is now making, to ascertain how much can be accomplished in this way, in connection with the ordinary course of instruction, which even for these pupils should by no means be given up. The friends of the deaf mute have the evidence, not only that our system is on the whole the best, but that our instructors will spare no pains to give it every improvement of which it shall appear susceptible, and which the liberality of their patrons shall put within their power. The course of instruction has, heretofore, been in general too much limited as to time. Printed books adapted for the use of deaf mutes under instruction, have been greatly wanted. The work of supplying this deficiency has been ably and successfully commenced by the President of the New York Institution, and its completion will, we trust, not long remain to be desired.

The union of schools for deaf mutes with those for the blind, has been advocated by some in this country. We learn from these Reports, that the experiment has been fully tried in Europe, and with results decidedly unfavorable to the plan.

There are many points of interest in relation to this subject, and embraced in these documents, which we have been obliged to pass by. The reader who desires can easily obtain the pamphlets. The Twenty-Seventh Report of the New York Institution is also just issued, containing some excellent directions upon a matter of great importance,—the training of deaf-mute children at home, before their entrance into an institution.

The friends of the deaf mute, and the public at large, are much indebted to the authors of these Reports and to those who commissioned them. The existence of institutions of benevolence like these, is justly esteemed one of the brightest features of our times. Let no efforts be spared to perfect and extend them. Though the sphere of the instructor of deaf-mutes is limited, the benefits conferred are, to the subjects of them, immeasurable and priceless. His work is arduous; so far as faithful and well-directed, his efforts should be encouraged by the interest and approbation of the public.