# CONTENTS.

Mechanic Art Schools	177
Function Symbols	
Punctuation Edmund Booth, M. A.	204
Why Not "Deaf and Dumb?"	
Barnabas Maynard Fay	
Hannah Louisa Melville	221
Preliminary Home Training A. L. E. Crouter, M. A.	
Notices of Publications	229
School Items	233-
Miscellaneous	237
ADVERTISEMENTS: Training School for Oral Teachers; Situations Wanted; Publications	240

The American Annals of the Deaf and Dumb is a quarterly publication, appearing in the months of January, April, July, and October. Each number contains at least sixty-four pages of matter, principally original. The subscription price is \$2.00 a year, payable in advance. For foreign subscribers the price, postage included, is 9 shillings or marken, (11 francs or lire,) which may be sent through the postal money-order office. Subscriptions and all other communications relating to the Annals should be addressed to the Editor,

E. A. FAY,

National Deaf-Mute College,

Kendall Green,

Washington, D. C.

LANGUAGE LESSONS, - by Isaac Lewis Peet, LL. D. Script Type. Pp. 232. Price \$1.25, (including postage.)

Designed to introduce young learners, deaf-mutes, and foreigners to a

correct understanding and use of the English language.

It is believed that this book will meet a want long felt, as the directions for use are so minute that any one, even without previous familiarity with the instruction of deaf-mutes, may with its aid satisfactorily carry forward their education. It is therefore adapted for home instruction as well as for use in the class-room. In the latter it is admirably fitted to serve as a standard of attainment and a means of securing uniformity of method, thus rendering classification easier, and obviating the injury which often arises from transferring a pupil from one teacher to another. By its means the education of a deaf-mute can be successfully commenced at a very early age. In order to employ it to advantage it is not necessary to forego the use of other text-books, but it will, it is thought, supply many deficiencies, and moreover form in the pupil the habit of thinking in language.

With this view it need not be confined to elementary classes, as all the pupils in an institution would derive a benefit from going through the

exercises.

#### COMPLETE SETS

OF THE

## AMERICAN ANNALS OF THE DEAF AND DUMB

May be obtained as follows:

Volumes I and II of the present editor, whose address is given below;

Volumes III-XII, inclusive, and the first two numbers of Volume XIII, of ISAAC LEWIS PEET, LL. D., Principal of the New York Institution for the Education of the Deaf and Dumb, Station M, NEW YORK CITY.

The second and third numbers of Volume XIII, and all subsequent volumes, of the present editor.

The first and second volumes will be sold separately.

Of the volumes for sale at the New York Institution, the third and fourth, the fifth and sixth, the seventh and eighth, the ninth and tenth, and the eleventh and twelfth have been bound together, two volumes in one, the first two numbers of the thirteenth volume being included with the eleventh and twelfth volumes; these will be sold only as bound.

Of all the subsequent volumes single numbers will be sold separately.

The price of the *Annals* is \$2.00 a volume, or 50 cents a number. For further information address the editor,

B. A. FAY,

Kendall Green,

WASHINGTON, D. C.

Papers have been promised from Messrs. Ackers, Arnold, Barber, Bessant, Buxton, Chidley, Elliott, Howard, Kinsey, Payne, Schöntheil, Stainer, Thomson, and Van Praagh, and Miss Hull. Mr. Woodhull, M. P., will preside. The proceedings will begin on Wednesday, July 1st, at 11 A. M.

### ADVERTISEMENTS.

Miss EMMA GARRETT will continue to give a portion of her time to the training of persons for articulation work, as the demand for articulation teachers is increasing, three more of her students having obtained positions since her communication to the October Annals.

Applicants must possess a correct ear and furnish reference as to their

English education.

Miss Garrett's students are working for the deaf in schools, families, and institutions as follows: One as principal of a private school at 1301 Arch st., Philadelphia; two as private teachers in Philadelphia; one in the Pennsylvania Oral School for Deaf-Mutes; one as private teacher in Wilmington, Del.; two in the Le Couteulx St. Mary's Institution, Buffalo, N. Y.; two in the Virginia Institution, and nine in the Pennsylvania Institution for the Deaf and Dumb—one of these as "special articulation teacher."

Two other students have taught; one—who had been a teacher of articulation nine years previous to studying with Miss Garrett—subsequently married; the other one retired from the work while under Miss Garrett.

Address Miss Emma Garrett, Principal, Pennsylvania Oral School for Deaf-Mutes, Scranton, Pa.

THEODORE GRADY, a graduate of the California Institution, Bachelor of Letters, Class of '83, State University of California, and lately Deputy City and County Tax Collector of San Francisco, desires a situation as teacher, if possible, at a convenient distance from the Johns Hopkins University. Address Theodore Grady, 12 Moss st., San Francisco, Cal.

An experienced articulation teacher desires an engagement for the coming year. Address Miss Farrant, 1512 Lucas Place, St. Louis, Mo.

JUST published, price 6d., a Funeral Sermon, Preached on the Death of the late Mrs. Melville, Hon. Matron of the Llandaff Deaf and Dumb Institution. S. W. Partridge & Co., 9 Paternoster Row, London, and may be had of any bookseller.

COMPLETE SETS of the *Annals*, or any back volumes or numbers desired, can now be obtained. For further particulars see the advertisement on the third page of the cover.

English Conference on State Aid.—A conference to consider the subject of State aid in the education of the deaf was held at Manchester under the auspices of the Manchester schools on the 8th of January last, Lord Egerton, of Dalton, presiding. Delegates were present from sixteen schools; some others expressed sympathy with the movement, while several declined to co-operate in it, on the ground that State aid would involve State inspection and State interference, and perhaps endanger the religious instruction of the pupils. The following resolutions, after much discussion, were adopted:

- 1. That State aid is absolutely necessary to secure the efficient education of all the deaf and dumb children in the United Kingdom.
- 2. That it is desirable that such aid should take the form of an annual capitation grant on the average attendance of each child in the schools.
- 3. That all the internal affairs, domestic and educational, of each institution receiving the said grant be left, as heretofore, with the governing bodies of such institutions, subject to Government inspection.
- 4. That the authorities of public elementary schools be empowered to contribute to the existing schools and institutions for the deaf and dumb, or to establish and maintain such schools and institutions after the manner sanctioned by Parliament for the establishment and maintenance of certified industrial schools.
- 5. That the infirmity under which the deaf and dumb suffer shall not be considered a reasonable excuse to exempt such children from attendance at school, and that it be made compulsory upon all parents and guardians having deaf and dumb children to send them to a school for the deaf and dumb for a term not less than that provided in the Education act, unless they are educated elsewhere.

A memorial was drawn up and subsequently presented to Lord Carlingford and Mr. Mundella, of the Committee of Council on Education, urging the need of State aid, and recommending the measures proposed in the above resolutions. Both those gentlemen promised that the matter should receive careful attention from the Council, but said that further legislation by Parliament would be necessary. As Mr. Ackers, who was active in the Conference, is now a member of Parliament, there seems to be more than ever before reason to hope that the subject of deaf-mute education will receive from the Government the attention it deserves.

Conference of English Head-Masters.—A "Conference of Head-Masters of Institutions and of Other Workers for the Education of the Deaf and Dumb" is to be held in London on Wednesday, Thursday, and Friday, the 1st, 2d, and 3d of July this year in the Council of the City and Guilds' Institute.

the organization of the "College of Teachers of the Deaf and Dumb." The first examination was announced to take place on the 29th and 30th of June of this year. The scheme proposed has been modified somewhat, and has finally taken the following form, the modifications being printed in Italics:

- 1. That an Examining Board, consisting of head-masters, be elected annually; in the first instance by the whole body of head-masters of institutions for the deaf and dumb in the United Kingdom, and in subsequent years by the duly accredited members. The Board to meet yearly for the purpose of examining candidates in the theory and practice of educating the deaf and dumb.
  - 2. That such Board consist of not less than three members.
- 3. That the title of the whole body of members shall be "College of Teachers of the Deaf and Dumb." That after application, and only at the first meeting of the Board, all teachers who produce evidence such as shall satisfy the elected body of examiners that they have taught the deaf and dumb successfully for a period of not less than ten years shall receive the diploma of the College.
- 4. That candidates who satisfy the examiners in the subjects chosen for examination shall receive the diploma or certificate of qualification, and be enrolled as members of the College.
  - 5. That such certificate be the recognized qualification of a teacher.
- 6. That there be a fee for such examination of one guinea, and a further sum of one guinea for the diploma when granted.
- 7. That the expenses be defrayed by subscriptions from institutions, head-masters, and examination fees.
- 8. That the time when the several subjects will be taken, together with the books for examination, be indicated by the Examining Board at least six months previous to the 'date of examination, except at the first examination, when it is probable that a number of candidates will present themselves who already possess the required knowledge and qualifications.
- 9. That no certificate be granted to any candidate who fails to give satisfactory evidence of knowledge and ability in regard to the following subjects marked a, b, c, d, e, f, g:
  - a. The History and Education of the Deaf and Dumb.
  - b. The Principles of Education.
  - c. The Intuitive Method of teaching Elementary Language.
  - d. The Method of teaching Advanced Language.
  - e. The practical Instruction of a class, with black-board illustrations.
- f. The Mechanism of Speech, with the Anatomy and Physiology of the 'Organs.
  - g. The Method of teaching Articulation.
- 10. That examination in the following be optional on the part of the candidate:
  - h. The making and understanding of Natural Signs.
  - i. The ability to read Finger Spelling.
- 11. That the College certificate shall specify the subjects in which the candidate has passed.

#### MISCELLANEOUS.

A Contested Legacy.—The late Mr. William Nicholson, the noted London silversmith, by his will dated August 13, 1867, gave amongst other bequests a bequest of £200 to "the Deaf and Dumb Society." There is no society in existence called "the Deaf and Dumb Society," but "the Deaf and Dumb Asylum," in the Old Kent Road, and the "Royal Association in Aid of the Deaf and Dumb," of 419 Oxford street, London, severally claimed the legacy. The trustees of Mr. Nicholson's will not desiring to take upon themselves the responsibility of deciding which of these charities the testator intended to benefit, paid the legacy into court under the powers of the Act 10th and 11th Vic., cap. 96, entitled "An act for better securing trust funds and for the relief of trustees." As the fund in dispute was so small, and as it would become smaller if the ordinary legal steps were taken in contesting the claims of these charities, the solicitors for the testator's estate before paying the legacy into court and the solicitors for the Royal Association used their efforts to persuade the Committee of the Asylum to divide the legacy. This they declined to do, but applied to the court for payment of the legacy to them. Both charities were then officially directed to prepare evidence in support of their respective claims. On the 13th of February, such evidence being then completed, the matter came before Mr. Justice Kay in chambers, when, after considering such evidence and hearing the arguments, he expressed an opinion that as there was no direct evidence on either side associating Mr. Nicholson with either of these charities, it would be but fair and proper to divide the legacy between them; but the solicitors representing the Deaf and Dumb Asylum declined to adopt the suggestion, and his Lordship being then bound to decide between the rival claimants, considered that the evidence filed on behalf of the Asylum showed a very slight link between the testator and the Asylum, the testator having been a bondsman for a collector of the Asylum. He therefore decided in their favor, but directed, under the circumstances, that the costs of the Royal Association should be paid by the Asylum out of the legacy.

English College of Teachers.—The plan for the examination of candidates who aspire to become teachers in English schools, mentioned in the last number of the Annals, has resulted in

Their floral offerings—an anchor and cross, a harp, and an arch with gates ajar, bearing the monogram 1882—were very beautiful and appropriate. The sermon was preached by Rev. Mr. Bushnell, the pastor, whose subject—the gospel idea of the sphere of woman—was an excellent discourse, well worthy of publication.

He was followed by some remarks by Dr. Gillett, when all that was left of Miss Getty was borne to Sharon Cemetery and deposited among the graves of her father, grand-parents, brothers, sisters, and other relatives.

Missisippi Institution.—In the month of May a large number of the pupils had the opportunity of visiting the New Orleans Exposition. Mr. Dobyns was present at the Exhibition on "Educational Day," May 12, and spoke in behalf of deaf-mute education.

National College.—On Presentation Day, the 6th of May last, Messrs. Philip Joseph Hasenstab of Indiana, Samuel Gaston Davidson of New Jersey, Nathaniel Field Morrow of Indiana, and Charles Kerney of Indiana were presented as candidates for the degree of Bachelor of Arts, and Mr. William Brookmire of Pennsylvania for that of Bachelor of Science. The degree of Master of Science in course was conferred upon Mr. George T. Dougherty, who has pursued advanced studies in chemistry since his graduation from the College, is now at the head of large assaying works in Chicago, and has made valuable contributions to scientific publications, some of which have been translated and published in European journals; and the honorary degree of Master of Arts upon Mr. A. L. E. Crouter, principal of the Pennsylvania Institution. Addresses were made by the Hon. Thomas F. Bayard, Secretary of State, and Professor Simon Newcomb.

Virginia Institution.—Mr. Wm. D. Cooke, the first principal of the North Carolina, Georgia, and Maryland schools, afterwards a teacher in the North Carolina Institution, and more recently in the Virginia Institution, died at his home in Staunton, Va., on the 20th of May last, in the 74th year of his age. He was engaged in the work of deaf-mute instruction for forty years, performed much difficult and trying labor in the establishment of the three schools of which he was principal, and was an efficient and faithful teacher.

Miss Getty was a native of Geneseo, Illinois, where her infancy and girlhood were spent. In 1882 she graduated at Wellesley College, Massachusetts, and though urged by friends to remain at her home, yet impelled by a desire to utilize her talents and acquirements to a good end, and, if possible, promote the happiness and welfare of others, she at once began to seek a field of labor. Devotion to a deaf sister drew her to this work, and she was gladly secured as a valuable addition to our corps of instruction. Few young persons have shown a quicker aptnesss in acquiring an appreciation of and skill in this work than Miss Getty did, and very few so young have possessed so just a discrimination and judgment in it as she. Her prospects of success and happiness in it were most promising, and her love for her work was one of her ruling passions.

Miss Getty was a lady of excellent natural endowments, liberal education, refined manners, elegant sense of propriety, and an earnest, devoted Christian. Beside her work at the institution she was teacher of a class of boys in the Congregational Sunday-School, who had for her the same esteem and love that her deaf pupils always manifested.

Miss Getty's parentage on both her father's and mother's side was of the most respectable, her father's family relatives having founded the town of Gettysburg, Pennsylvania, and her mother's family (the Meades, her maiden name being Meade) being related to the family of General Meade, the successful commander of the Union army at the battle of Gettysburg.

Miss Getty's life, though short here, has not been in vain, for of her, through the pupils whom she has been teaching to speak, it may now and for a long time be said, "She, being dead, yet speaketh."

Her illness continued three weeks, during very nearly all of which she was attended by her mother and two sisters.

Her death was most peaceful and becoming. As quietly and gracefully as day glides into night she passed from us, filling the hours of the night with beautiful selections of scripture recited from memory, audibly responding to the prayer at her side, leaving mementos and messages to friends, saying: "I am tired now; I think I must go to sleep." "Darling sisters." "Poor mamma," "All is well," "Good-bye."

The funeral was at the place of her residence, at half-past four in the afternoon, April 24th, 1885. Rev. H. E. Butler, pastor of the Congregational Church, conducted the services, making a beautiful and touching address, which was followed by a few remarks by Dr. Gillett.

Saturday morning her mother and sisters, with Dr. Gillett, took her remains to Geneseo, Ill. Friends of the family at Joliet, where a transfer was made from the Alton to the Rock Island train, met the party at the train, and passed an hour with them in sympathy and fellowship.

Friends of her family, among whom she had grown up, could not consent to her burial without an opportunity of expressing their sorrow at her loss and of sympathy with them. Before the arrival at Geneseo they had of their own accord arranged for a memorial service on Sunday morning at the Congregational Church. The house was filled with an appreciative and sympathizing audience, who felt this affliction as their own. Six of her Wellesley classmates were present, having been notified of her death by telegraph, and being able to reach Geneseo by Sunday morning.

Bombay Institution.—Mr. Walsh, principal of this new school, gives us the following information concerning it, in addition to what has already been published in the Annals:

India has among its teeming millions at least 200,000 deaf-mutes, and for that immense number of our fellow-creatures no provision educationally has hitherto existed. According to the Census Report of 1881, there were in the Presidency of Bombay, inclusive of the Feudatory States, no fewer than 16,494 deaf-mutes, or an average of about 1 in 12,000; the same proportion, I should say, obtains in other Presidencies and States of the Indian Empire.

The Institution which has just been started here owes its foundation to the charitable zeal of his lordship, Dr. Meurin, the Roman Catholic Bishop of Bombay, who was urged to undertake it by an ecclesiastic who merits the title of the modern apostle of deaf-mute education—Monsignor de Haerne, of Brussels. At present we number eight pupils, and already we have had quite as many more applications for admission. Our school is non-sectarian. Amongst the children under instruction and those seeking to be received we have Christians, Hindus, and Parsees. As soon as the establishment is fairly before the public, when it becomes fully known and its object understood, I am sure we shall lack neither pupils nor support.

The method of instruction is the "pure oral." Impressed with the results which I had seen in several of the continental institutions, more especially in the Italian schools, and encouraged by the advice and assistance of the excellent Abbe Tarra, of Milan, and the zealous Chanoine Balestra, of Como, I started here on the oral lines. The progress already attained affords a guarantee for future and increasing success.

Colorado Institute.—Miss Isabel Palmer, formerly of the Illinois Institution, has been added to the corps of teachers.

Edinburgh Institution.—Mr. Bensted has been obliged to resign his position of head-master of this Institution, owing, as we are informed, to his over zeal in maintaining discipline.

Horace Mann School.—The State of Massachusetts has given to the city of Boston a lot of land upon which to erect a building for this school. The land is upon Newbury street, next to the lot occupied by the Hollis Street Church Society. The plans for the erection of a building have not yet been considered.

Illinois Institution.—Miss Kate A. Getty, for three years a teacher in the articulation department, died on the 24th of April last. The following sketch is from an article published in the Deaf-Mute Advance of May 2:

THE TWELFTH ANNUAL REPORT of the Church Mission to Deaf-Mutes. With an Appendix containing Reports from Other Departments. New York: Charles H. Clayton & Co. 1885. 8vo, pp. 72.

This report shows gratifying progress in the benevolent work of this Mission carried on under the general direction of the Rev. Dr. Thomas Gallaudet. The building fund now amounts to over \$13,000; when the sum of \$30,000 is reached a farm is to be purchased to provide a Home for Aged and Infirm Deaf-Mutes, an Industrial Department for the unfortunate and the erring, and a chapel for religious services. In the meantime a family of the aged and infirm are supported by the Mission in New York city.

The active working force of the Mission has been increased during the past year by the addition of the Rev. Anson T. Colt as missionary. The field of its religious work is continually enlarging; the journal of the General Manager and the reports from other departments in the Appendix give some idea of the extent and importance to which it has already attained.

REPORTS OF SCHOOLS, 1885. Cambrian, (Swansea, Wales,) Keller's, (Copenhagen, Denmark,) New York, Rhode Island, Fru Rosing's, (Christiania, Norway,) St. Joseph's, (Fordham, N. Y.,) Western Pennsylvania

E. A. F.

#### SCHOOL ITEMS.

Mr. Bell's School.—During three weeks in May and June Dr. Bell delivered an interesting and instructive daily course of lectures on the Mechanism of Speech. It was attended by a number of the students of the Normal School and teachers in the public schools of Washington, the members of his "parents' class," the teachers of his own school, and several of the teachers in the Columbia Institution and National College. Aside from the benefit directly conferred upon the hearers, it is hoped that the general cause of articulation teaching will be promoted by the lectures, through the attraction to the work of several of the Normal School students who attended them.

Professor Gordon, of the National College, delivered a valuable lecture before the "parents' class" on the 31st of May upon the Preliminary Home Training of Deaf Children. We hope it will be written out, and published in a future number of the *Annals*.

ing, as that the deaf child without education "is a born liar and thief;" that after coming to school he "invariably forgets his mother within three days," and that "deaf-mutes never address each other by their proper names, but say 'The boy with the large eyes,' 'The man minus a thumb,'" etc. The practice last named prevails in many schools; but we are happy to say that there are some schools for the deaf in this country—and we trust their number will increase—where this semi-barbarous custom of giving the pupils sign-names based upon scars, physical defects, and other individual peculiarities is not in vogue.

VAN PRAAGH, WILLIAM. Lessons for the Instruction of Deaf and Dumb Children in Speaking, Lip-Reading, Reading, and Writing. Part I, illustrated, and Part II. 2 volumes. London: Trübner & Co. 1884. 16mo, pp. 51'and 61.

These little books, which follow in part the method pursued by Mr. Hirsch, of Rotterdam, under whom Mr. Van Praagh received his training as an instructor of the deaf, have been used for many years in manuscript in the author's school, and have produced satisfactory results.

The first volume, instead of being printed in Roman type, is lithographed in script characters, in order that writing may be acquired at the same time with reading. The instruction in speaking, speech-reading, reading, and writing is all carried on simultaneously by Mr. Van Praagh's method. The course begins with gymnastic exercises; then come lessons in breathing; then simple sounds; then the combination of vowels and consonants in monosyllables. Significant words are introduced as early as possible after the combination of sounds has been begun, in order that the pupil may have some idea of the use of the powers he is acquiring. Diacritical marks are used in the lithographed part to distinguish the different sounds of the same letter and to indicate silent letters.

The second part is printed in Roman type, which the pupil is not taught until the completion of the first part. It introduces the pupil first to words of more than one syllable, then to words combining two and three consonants, and finally gives a selection of short sentences for practical use in every-day life.

Mr. Van Praagh intends to publish a series of Readers, which have also had the test of use with good results in his own school.

the vowels by giving the pupils pure water for a, sweetened water for o, wormwood for e, vinegar for i, and olive oil for u, because "under this appearance of mystification is concealed an excellent fundamental principle—the principle of the fixation of the vowels." But why not fix the consonants also? The Abbe Stork, who sought to learn Heinicke's secret, might justly have felt defrauded if, having paid the \$7,000 which the German teacher modestly demanded for his wonderful "arcanum," no beverages, agreeable or otherwise, had been prescribed for the consonants.

PETTINGELL, J. H., A. M. The Unspeakable Gift. The Gift of Eternal Life through Jesus Christ Our Lord. Yarmouth, Me.: I. C. Wellcome. 1884. 12mo, pp. 347.

Mr. Pettingell adds another volume to the several able treatises he has previously published on the subject of Eternal Life, and we mention it, not because its theme comes within the scope of the Annals, but because we and our readers are interested in the author as a teacher of the deaf. We also take this opportunity to explain a reference to Mr. Pettingell's views in our notice of his last work which may have given a wrong impression to our readers. Not wishing to take up space with a subject that does not belong to the Annals, we did not state what his views were, but said they were not those of any church creed. This may have been understood to imply a greater heresy In fact, Mr. Pettingell does not regard himthan was intended. self as a heretic at all; from his point of view he is more conservative and orthodox than his brethren. His doctrine is not something of his own device, but is wholly based on the teachings of the Bible as he understands them. It is briefly this: Immortality is not the natural inheritance of the human race, but is the gift of God through Jesus Christ to those who are saved, and to them only. Readers who desire to know more of Mr. Pettingell's views are referred to his works, in which they are clearly set forth, together with the reasons upon which they are founded.

TILDEN, DOUGLAS. Deaf-Mutes and their Education. An Article in the Overland Monthly for May, 1885, pp. 504-510.

Mr Tilden is a graduate of the California Institution, where he is now a teacher, and gives a lively and interesting description of the condition of the uneducated deaf-mute and the manner of his education. Some of his statements are perhaps too sweeplivered several lectures at the National Institution, Paris, on the history of deaf-mute instruction in Germany. The substance of these lectures is reproduced by Mr. Dupont, and published with the author's consent and revision. They give a brilliant and interesting, but fragmentary and incomplete sketch of the subject, not to be compared in fulness and accuracy with Walther's able History reviewed in the *Annals* two years ago.

A considerable proportion of the book is devoted to Heinicke, of whose methods of teaching Mr. Kilian seems to know more than other investigators have been able to ascertain. He represents the founder of the German method as much less of a "pure oralist" than he has always been regarded.

Like the Abbé de l'Épée, (he says,) Heinicke had recourse at once to the sign-language, the manual alphabet, writing, and speech. To this first period of confusion succeeded the period of elimination. And first he proscribed dactylology, of which the French origin incessantly aroused his antipathy for the Abbé de l'Épée. He reduced his quadrilateral to a triangle, of which the three sides were the sign-language, writing, and speech. Still, his triangle was far from being equilateral. It was an isosceles triangle, of which speech represented the shortest side. During Heinicke's life, and long after his death, until the year 1840, the sign-language played an essential or preponderant part in the instruction of deaf-mutes. It remained the first, almost the only basis of instruction. La Parole was relegated to the second place; she was only the interpreter, the cicerone of Lady Minique, the mistress of the house.

We should like to know Mr. Kilian's authority for the above statements concerning Heinicke's use of the sign-language. They are directly contradicted by Heinicke's own assertions in his third letter to the Abbé de l'Épée: "Your notions and mine concerning the best method of instructing deaf-mutes are wholly at variance, and can never be reconciled. \* \* \* In my method articulation is the fundamental point, the hinge upon which everything turns. \* \* \* I use the manual alphabet, but only for the combination of ideas; the signs which serve for the expression of thought among my pupils are articulation and writing."

Mr. Kilian's explanation of the remarkable results obtained by Heinicke, Amman, and other early teachers in an incredibly short space of time is that their pupils were not congenital deafmutes, but semi-mute, semi-deaf, and backward hearing children, who, not speaking or speaking badly, were at that time wrongly supposed to be true deaf-mutes.

Mr. Kilian approves of Heinicke's curious method of teaching

In conclusion, remember if the child can speak at all, to make him speak always. Let him make known all his wants by speech. Do not let him depend upon signs when he can make himself understood otherwise. Always speak to him if he can understand you, and only make signs for what he cannot otherwise understand. If the child cannot speak and cannot read the lips of others, write to him and have him write to you whenever possible, rather than make signs, for by writing and reading he will be gaining a knowledge of the English language, which must always be the most important of the deaf child's studies.

A. L. E. CROUTER, M. A.,

Principal of the Pennsylvania Institution, Philadelphia.

#### NOTICES OF PUBLICATIONS.

DUPONT, MARIUS. L'Institution Nationale au Congrès de Paris, Septembre, 1884. Paris: G. Pelluard. 1885. 8vo, pp. 40.

Communications faites au Congrès de Paris. Genève: Taponnier et Studer. 12mo, pp. 33.

A Convention of French teachers of the deaf was held in Paris from the 15th to the 21st of September of last year under the auspices of the recently established "National Society for the Study of Questions Relating to Deaf-Mutes." The principal subjects discussed were the conditions essential to a model school, the comparative value of day and boarding schools, the best methods of teaching articulation, the suppression of the signlanguage among the pupils, reading-books, and industrial education. The teachers present were unanimous in their support of the oral method of instruction; but the proceedings were not entirely harmonious, owing to differences of a personal nature.

In the pamphlet first named Mr. Dupont gives a synopsis of the proceedings of the Convention, especially of the part taken in them by the director and teachers of the National Institution at Paris; in the other he gives in full all his own communications to the Convention.

KILIAN. Historique de l'enseignement des sourds-muets en Allemagne. Conférences faites à l'Institution Nationale des Sourds-Muets de Paris, et recueillies par Marius Dupont. [History of deaf-mute instruction in Germany. Lectures delivered at the National Institution, Paris, and reported by Marius Dupont.]
Paris: G. Pelluard. 1885. 8vo, pp. 28.

Last year, Mr. Kilian, founder and formerly director of the oral schools at Saint Hippolyte-du-Fort and at Strasburg, de-

a great help to the child on entering school and will make his progress much more rapid. Have him imitate the form of the letters for one word, as hat, and repeat it many times, until he can write it as readily as spell it on his fingers. Do the same with other words. Point to each letter and require the child to make a sign for the letter on his fingers. By doing this very often the child will learn to write the names of many things, and to form all the letters of the alphabet. It is best to have him make the letters as round as possible and not to take off the pencil until the word is completed. After the child has learned to write many single words, begin to put them together in easy sentences. But be sure that he fully understands the meaning of each word as he writes it. Let him write his name with a verb, as John sees. Explain carefully the meaning of the word sees, and let him write after the verb the name of an object which he does see, as John sees a table, John sees a chair, and let him cover his slate with similar sentences, bringing in the names of the different objects in sight. Help him to objects out of the house as well as in. Encourage him to write as many as he can. All this may be the work of months, and the child's improvement may seem to you very slow, but persevere and do not be discouraged. The advantage to the child cannot be over-estimated. A little attention thus given, each day, will greatly help his mental development and make his progress more rapid upon entering the institution.

What has been said concerning the instruction of your child in language, whether spoken or written, applies with equal force to the study of numbers. Teach him simple numbers as soon as he is able to write. In doing so, you will find it greatly to your advantage to make use of objects. Marbles are very convenient. With these teach him to count orally, in signs, or in writing, up to twenty. Treat each number by itself, counting Then let your child count out the number of marbles each time. them out, or let him pick out a number for you to count. may next teach him to add, being careful to use only the smallest numbers at first, as, one and one, two and two, three and one. three and two, etc. Use the marbles till he understands the process, and then let him add mentally. After he has been made thoroughly familiar with small combinations, it will be safe to try larger ones. Do not force the child under any circumstances; rather than do so, make no attempt in this direction at all, for it will only end in his conceiving a distaste for numbers which it will be very hard to overcome.

gins to talk, its mother and sisters and brothers talk to it all the time and try to make it imitate the words spoken, repeating the same word again and again. Do the same with the deaf child, only do not talk baby-talk. Speak every word and every syllable slowly and distinctly, at the same time showing the object or performing the action of which you speak. Some of the best talkers and lip-readers among the deaf have been taught in this way at home. Even in the case of those deaf children who have never spoken, try to teach them to recognize words by the motion of your lips. Always be careful to place yourself so that the child can have a good view of your mouth, and be sure that he knows what you are saying. For example, show him an object, such as a ball, a top, or a cup, and repeat the word many times, giving him to understand that such a movement of your lips means that thing. Although he may never be able to speak, yet the ability to understand those who speak to him will be an immense advantage to him. Do not be discouraged if you don't succeed at once, but keep on trying. Patience is the thing most needed.

In the case of a child who cannot speak, encourage him to use signs at as early an age as possible. When he is pleased with anything, invent a sign for the thing, and repeat the sign many times afterward. \* Learn to form the letters of the manual alphabet, and teach them to the child. Hold the hand before you with the palm from you, and form each letter clearly without turning the hand or throwing it about much. Any intelligent person can take an object, as a hat, pick out the letters h, a, t, from the deaf-mute alphabet, and learn to place the fingers in the true position for each letter. No matter how slowly it is done. Have the child imitate until he can make the letters of the word in order without assistance, and at the same time show him the object. Do this very often, until the child has learned to spell the word when the hat is presented to him, or to go and bring the hat when the word is spelled to him. Then take another object, as a pin, and go through the same process, until by frequent repetition it is thoroughly learned. Do the same with other familiar objects, such as dog, cat, chair, table, etc., etc. The following ten short words, the names of common objects, contain every letter of the alphabet, viz., adz, fan, map, cow, box, jar, sky, hat, quill, and glove.

In a similar way the child may be taught quite early to write the names of things on a slate. To know how to write will be brilliant ability, and by how great an excess that reader best can tell who yearns the most to be steady in the Christian path.

JOHN CLYNE.

Late Head-Master of the Bristol Institution, Bristol, England.

## PRELIMINARY HOME TRAINING.\*

This circular is issued to urge upon those who have charge of deaf children their great need of careful and patient teaching at home before they are old enough to go to school, and to tell how such teaching may easily be given.

When a deaf child arrives at school age, it can be sent to a State institution for the deaf, where it can get a good commonschool education, no matter how poor its parents may be; for, if they cannot afford to pay for its education, the State will provide it free of cost. But it is very important that they should have some instruction at home, before they are sent to the institution. Usually one or two years of their school term are taken up in teaching them what they might very well learn at home, if parents would give the necessary time and take a little trouble. There is no mystery, nor is there any great difficulty, in beginning the education of deaf children, either by articulation or by signs. The steps to be taken are simple, and can be easily understood and put into practice by almost any one who will make the attempt.

Where children have learned to speak before losing their hearing, do not on any account allow them to give up their habit of talking. Oftentimes, after they have become deaf, as it is more trouble to make them understand, those around them fall into the habit of holding less and less intercourse with them, and day by day the children talk less, until finally they lose their speech altogether. Although this may be done without any intention of unkindness on the part of the deaf child's relatives, they could not, if they tried, do it a greater or more lasting injury. Talk to the child constantly and make it talk to you. Speak every word clearly and distinctly, so clearly that the child may be able to see the words from the motion of your lips, and, although it cannot hear you, it will gradually learn to know a great many words as you speak them. And its habit of talking to you will keep up its own speech. When a hearing child be-

<sup>\*</sup> Extracted from a circular issued by the Pennsylvania Institution, 1885.

She was never of robust constitution, and Time must unquestionably have touched her with his insidious tooth. In the summer of last year her husband saw with concern symptoms of failing strength, the increase of which seriously alarmed him. He proposed a change, and a short visit to attached friends at Swansea was made in the autumn; not, however, with the benefit hoped for. On the contrary, there were warnings to hasten home which could not be neglected. She so far rallied after once more reaching Llandaff that in the course of September she shared in an outing which her beloved pupils would have less enjoyed had she not been with them. From that date she was confined to the house, and very soon could only alternate between her bedroom and the adjoining parlor. In November she took to her bed, no more by her own efforts to rise from it. suffered a great deal. From nearly the beginning of her illness she felt persuaded she was not to recover. Worldly concerns ceased to occupy her mind, fixed now on things above. Vainly her heartbroken husband, the witness of her hours of severe suffering, prayed for her recovery and longer stay in this land of the living. The decree had gone forth; when death came, it was in the guise of a deliverer. With most literal truth, as well as in the highest sense, her end was peace.

She died with her hand clasped in that of her husband; here, as in another case where two had been together, one was taken and the other left.

Her kindhearted medical adviser, whose care was unceasing, said, when all was over, he considered it a privilege to attend her. "She must have been a good woman," these were his words, "who met the last enemy so calmly."

She was nursed and tended, with a motherly kindness and devotion not to be exceeded, by the workmistress of the Institution, Miss Cuzner, whose true repayment is in the consciousness that what she did for the stricken sufferer was done for that sufferer's Lord, and her own, in Heaven.

The pall was borne as she would have wished, by old pupils; all the children of the school being present, mourning with no simulated grief. Her remains rest in Llandaff Cathedral churchyard, above those of a beloved pupil, Harriet Thomas, who died in 1873, similarly rejoicing in a risen Saviour.

A life like that here roughly outlined teaches much: eminently the lesson that humble, Christian usefulness outshines

America, are names that now, alas, would be strange even to some able and well-read teachers of the passing generation. Mr. Melville agreeably remembers the intercourse he then enjoyed with such men as Dr. Peet, of New York, and his son; Mr. Gamage, Mr. Saegert, of Berlin, and others.

A few years after Mr. Melville had been called to a sphere of usefulness away from London, the Red Lion Square Institution underwent remodelling; but Sunday services for the deaf continued to be held in some more or less suitable place, and Miss Chappell remained conspicuous as one of the worshippers whom neither distance nor weather could daunt. Her friendship for the Rev. Samuel Smith, who was pastor of the Fitzroy Square Congregation at the time of her marriage, in 1865, and who had long been on terms of intimacy with her husband, was unabated to the end of his too short life. This valued mutual friend performed the marriage ceremony in Holy Trinity Church, Islington, on Sept. 21st, of the year named, after which it is as Mrs. Melville, matron of the Llandaff Institution, that her history must be chronicled.

Did space permit—but indeed it would be difficult to compress the testimony of those who had been her pupils, and of the Institution supporters, so as to show how she devoted herself throughout the twenty years of her honorable and honorary services to all the miscellaneous duties that fell upon her in the capacity of matron. When the last enemy came, (not an enemy to her, for his coming was longed for,) and the sphere that knew her was to know her no more, letters to her afflicted husband crowded in, from pupils who had left school, from friends of the Institution and personal friends, lay and clerical; from present and past masters and matrons of institutions in various parts, and from numbers of sympathizing correspondents not easy to group together, all seeming to vie in expressing heartfelt grief and bearing tribute to the worth of the departed. These attest in no hesitating fashion how she sought to develop the school and further its best interests; how she thought nothing beneath her that promised to be of benefit to her charge; how, for instance, she mended their clothes, nursed them in sickness, and so on; how she was with them in the school-room, work-room, garden, playfield—now as their companion, now as their instructor, pointing out the beauties of nature, fostering in them a love for animals-being, in short, the true guide, comforter, and friend their privation so much needed.

knowledge was unduly circumscribed, though "a veneration for divine things," as one who knew her well has remarked, "appears to have been early implanted in her mind." Under subsequent circumstances, it is true, that knowledge made wide expansion; and it is as a candle lit to shed Christian light that her character shone—in contradistinction, be it observed, to the mere intellectual shining which has attracted admiration, and not unworthily, for some gifted instances of deaf-mute genius.

On becoming once more a resident in the paternal home, she assisted her mother in domestic matters generally, but more especially devoted herself to needle-work, in which she excelled. and by means of which she sought to be of use towards her own support. She warmly aided meritorious efforts to benefit the adult deaf and dumb of London when brought to her knowledge, and it was mainly through her father's exertions, in conjunction with those of the late highly esteemed Matthew Robert Burns and other friends, that a refuge for the necessitous poor of that class was established in 1841, in Holborn. One result was the institution of regular Sunday services for the deaf, first in Fetter Lane, and then in Red Lion Square; at these Miss Chappell was a regular and devout attendant. Interest must attach to the fact that here her future husband became acquainted with her, being still more impressed when he perceived that the distance of her home, with bad weather superadded, did not prevent her appearance along with her father.

This habit of unfaltering punctuality at worship was her characteristic to the last, and drew attention in Llandaff under circumstances of impaired health, as it had done in her youthful prime in London. The services in Fetter Lane and Red Lion Square were often interpreted to the deaf by Mr. Melville; and obviously, when he accepted, in 1850, the office of superintendent and assistant secretary to the Red Lion Square Institution, his connection with and means of usefulness to the adult deafmute population of the metropolis were much increased. It is worthy of mention that he had the pleasure of receiving in Red Lion Square the first congress (truly international) of teachers of the deaf ever held. This was in 1851, the memorable year of the Great Exhibition in Hyde Park, when "the Crystal Palace, almost like a meteor, arose and flashed on the horizon." Amongst the eminent men of the profession who were then brought together from the various countries of Europe and

quenching of a light that shone for more than the humble inmates of the Institution. Whether as the mute shepherdess of a mute flock, walking out with them from time to time, or in her strictly business character of provider for the wants of the household, and thus having considerable dealings with tradespeople throughout the district—in either capacity she was a familiar figure, the absence of which drew remark, and if from any cause the absence were prolonged occasioned inquiry. While perhaps no one actually used the veritable words "Many daughters have done virtuously, etc.," precisely that sentiment was in the minds of many in the locality when the sad news went round, at the dark close of last February, that they should see her matronly, gentle, kindly face no more.

Hannah Louisa, the eldest daughter of Edmund and Elizabeth Chappell, was born in the year 1817, at Islington, London, where her parents resided. Beyond the fact that she was deaf from infancy, there is little to record of her early history. goes without saving, that her infirmity was a great blow to her affectionate parents, who very soon became sensible that human means could do little towards removing it. Naturally their thoughts turned to the Old Kent Road Asylum, into which they deemed themselves fortunate in at length procuring her admission when of proper age. The late Dr. Watson was then the superintendent, and of him and his work Miss Chappell always spoke with high respect. Just at that period the Kent Road establishment was attracting more than usual notice, in consequence of the lamented death of the Rev. John Townsend, its founder, who was widely known as the mainstay of other prominent religious societies of the day. In after years it afforded Miss Chappell great delight to tell how her father used to carry her to and from the Asylum at holiday times, on his back, over Old London bridge, cabs and omnibuses not being then the conveniences which they are now.

Out of school she was under the care of Mrs. Salmon, who appears to have been a very worthy person, and sincerely desirous to do her duty by the deaf and dumb girls committed to her charge. There is reason, however, to think that at the period in question the school-work proper of the Asylum must be spoken of in guarded terms of eulogy. Whether Miss Chappell had the benefit of the full five years' course is, strangely enough, a little uncertain; but there is no uncertainty on this point, viz., that when she finally left school, in 1831, her religious

to choose his own way. The faith in a Heavenly Father's guidance, which had upheld him in many a time of trial and perplexity, sustained him to the last, and he reached the height where he could give thanks even for his pain.

After his death his children, grandchildren, and neighbors assembled in the room where his last months were passed, and a simple service of remembrance and farewell was conducted by his old and valued friend, the Rev. Dr. J. W. Chickering.

His remains were taken by his sons to Dover, N. J., where, after a prayer at the grave by his son Walcott, they were laid beside those of his beloved wife.

MARY B. FAY, Kendall Green, Washington, D. C.

#### HANNAH LOUISA MELVILLE.

Sunday morning, March 8th, 1885, was a memorable occasion to all connected with the Llandaff Institution for the Deaf and Dumb, and to the district in which it carries on its unostentatious, beneficent work. On that morning was preached in St. John's Church, Canton, by the Rev. Vincent Saulez, the rector, a sermon "in memory of a greatly esteemed friend and sister in Christ, Mrs. Alexander Melville, the loved wife of the Superintendent of the Deaf and Dumb Institution, herself deaf and The congregation included the present and many former pupils, to whom the preacher's eloquent words were interpreted by the Rev. Charles Rhind, chaplain to the Royal Association in aid of the Deaf and Dumb, St. Saviour's, Oxford street, London. The Lord Bishop of the Diocese was present, taking part in the service, and at the close expressed his deep interest in what he then heard and witnessed, and his delight "to have had the privilege of observing the successful accomplishment of the wondrous teaching of our afflicted brethren and the enjoyment they unmistakably manifested in the knowledge of the sign-language." The local journals next day, in reporting what took place, dwelt upon the eager eyes of the poor deaf-mutes on the signs of the interpreter as he rendered into their idiom the spoken words of the preacher; the impressive effect is also noticed which was produced on the general congregation, as well by the pathetic discourse as by the occasion of it. No wonder! For years Mrs. Melville was well known over Llandaff and the neighborhood, and her removal was the

and learned that he had had a sudden and violent attack of inflammatory rheumatism and had gone to the hospital in this city for the care and treatment which could not be obtained at his hotel, and for which he was not able to be removed to the home of his children in Washington. There he lay confined to his room, and for most of the time to his bed, for a year and a half, suffering severely and often intensely, especially when his complaint passed into the disease of which he died; but in all the time no one, it is believed, ever heard him utter an impatient word. I tried to visit him as often as once a week, as did also our class-mate, Gen. William H. Russell, and we always found him cheerful and serene, trusting in the Lord he loved. Finally he so far failed that his physician pronounced his end at hand. Your father so regarded it, and expressed an entire willingness and even a wish to depart. But it was not then to be. To the surprise of all he began to rally, then to sit by the window, after a while to ride out, and later was able to go to Saratoga, and finally to return to his children in Washington. It seemed like life from the dead. His history from this time you know better than I; but in those months of suffering in our hospital he certainly taught a lesson of Christian courage and patience to those who tenderly nursed him which they will never forget. Let me join with you in thanks to Him who enabled him, and who sustained his servant to the end."

With the exception of summer visits to Saratoga and returning twice to the New Haven Hospital for surgical treatment, Mr. Fay spent his remaining years with his oldest son at Kendall Green. He took a lively interest in national affairs, and was a frequent visitor to the Capitol, until his increasing infirmities narrowed the circle of his activity, though not of his interests. His mental faculties remained unimpaired to the end. He never spoke of his health except in reply to questions, nor allowed his pain to cast a shadow on the household. His unvarying patience and fortitude in long continued and extreme suffering awakened the admiration of all about him. He gently rebuked a friend who praised him on this account. "It is no credit to me," he said, "if God gives me the grace to bear it." A few months before his death, on parting with a friend, he expressed the hope that he might not live for another meeting, but he soon took occasion to apologize for having spoken thus, fearing he might leave the impression of having, in an unfilial spirit, seemed

For several years following he was engaged as a banker in East Saginaw, Mich. The enterprise, at first successful, afterwards met with reverses, and finally resulted in the loss of nearly all his savings of previous years. As soon as he saw what the issue was likely to be, he took measures to withdraw from the business before failure should come to involve others as well as himself in ruin, and while his own fortune was sacrificed he had the consolation of knowing that of all who had entrusted money to his care no one lost a penny. He afterwards removed to Saratoga Springs, N. Y., for the health of his family, and remained there, active in all works of faith and charity, until his home was broken up by the death of his wife, in February, 1880, when he came to Kendall Green.

Notwithstanding her feeble health, Mrs. Fay was a woman of unusual strength of will; she was thus enabled to aid her husband under circumstances where most people would have claimed the exemption of an invalid. Beside the care of her own family, she always had her household affairs planned so well, and her slender income managed with such economy, that she had the pleasure of cheering with her presence those who were sick or in trouble, and of relieving the wants of the poor among her neighbors.

Of their three sons, the oldest took up his father's work of instructing the deaf; the second died in early childhood; the third, William Walcott, entered the Christian ministry and is now paster of the Congregational Church, Hampton, N. H.

We may return to Professor Day's letter for an account of the next year or two. He writes, in continuation of the passage above quoted:

"It was no small pleasure to me, therefore, to have the opportunity of renewing our acquaintance on his coming to New Haven to reside, in the autumn of 1880, in order to be near his son, who was prosecuting his theological studies here. It was a pleasure to him also to have the opportunity of regularly attending, as he did, several of the courses of lectures in the Divinity School, and marking the scope and bearing of the teachings to which he listened. I often met him in the Reference Library engaged in reading the latest books in theology, and in conversation with him always found that, while he firmly clung to the evangelical faith, his views were in the best sense catholic and liberal.

"After a few months—in February, I think—I missed him,

wick, Worcester county, Mass., near the home of his childhood. In September, 1842, he married Miss Louise Mills, of Morristown, N. J., a sister of his college friend, the Rev. Chas. L. Mills, late of Andover, Mass. She was a woman of culture, sensibility, and piety, and the union was a happy one. The following autumn he gave up his church and taught school in Durham, Conn., for two years. From 1845 to 1850 he was settled over the Congregational Church in Wilmington, Mass. It would seem that he had not the preacher's gift, for after a fair trial of his powers he decided to give up the work of pastor for that of teacher. He had, however, such success in both his parishes as was sure to attend a man of his kindly disposition, 'who was working to the best of his ability.

In 1850 Mr. Fay removed with his family to Indianapolis, Ind., and was for several years a teacher in the Institution for the Blind in that city. Three years later the "Trustees of the Michigan Asylums," who were visiting other States in search of information, came to Indianapolis, and finding that Mr. Fay had experience in teaching both the deaf and the blind, they invited him to become principal of the school to be established in Michigan for the education of both classes. The city—then village—of Flint was selected as the site of the Institution. A suitable building was rented, and the school was opened for the reception of pupils in February, 1854. There were twelve pupils during the first session.

In spite of the many difficulties and discouragements incident to the establishment of a new institution in a new country, Mr. Fay's earnest and devoted labors in its behalf were crowned with success. The number of pupils increased steadily, able and efficient teachers were chosen, and liberal appropriations were obtained from the State Legislature, by means of which land was purchased, and the present ample buildings, now devoted exclusively to the use of the deaf, were erected. He remained in charge of the Institution until 1863, when he resigned on account of Mrs. Fay's ill-health.

In the autumn of the same year he received the appointment of chaplain to the 23d regiment of Michigan Infantry, then in active service in Tennessee. Owing to severe exposure and fatigue on the way to join his regiment, he was taken ill with dysentery; he also contracted rheumatism, from which he suffered more or less all his after-life, and in consequence of these disabilities he was soon obliged to resign his commission.

went to Amherst Academy to fit himself for college. While there he became conscious of his deepening interest in religion, and wrote of it to his father, who at once desired that he should prepare for the Christian ministry. He accordingly continued his studies with this object in view, and entered Yale College, from which he was graduated in 1833. He defrayed his college expenses by teaching, so that he was able to return to his father the money that had been advanced for his education. Professor George E. Day, D. D., of the Yale Divinity School, his college class-mate, his associate in the New York Institution, and the friend of his later years, speaks of his college and institution life as follows, in a letter addressed to his son:

"Your father and I were not in the same division of the class, so that I was not brought into very close connection with him in our college days, but I remember him as carrying himself with Christian steadiness and manliness, and, so far as I know, without an enemy. He commenced his course of study rather late and probably did not have the best means of preparation, but his stand as a scholar was good and secured for him an appointment to speak, if he wished, at commencement.

"After graduation we spent two years together in the New York Institution for the Deaf and Dumb, and here I had the opportunity of seeing more perfectly his solid qualities, especially his diligence, fidelity, and good sense, with which were combined a dry wit, which showed him to be a keen observer, although it was never exercised to the injury of others. the association of able and earnest teachers with whom he was brought into connection, comprising Dr. H. P. Peet, Léon Vaïsse, David E. Bartlett, F. A. P. Barnard, Samuel R. Brown, J. Addison Cary, and John R. Keep,\* he was regarded as a faithful and successful instructor and as uniformly courteous and considerate in his intercourse with others. On my leaving the Institution to engage in theological study, our paths diverged, and I only saw him occasionally, and after long years of separation, although hearing of his usefulness in several other spheres of labor."

From 1833 to 1838 Mr. Fay was a teacher in the New York Institution; in the course of this time he studied theology at the Union Theological Seminary in New York, and in May, 1840, he was ordained pastor of the Congregational Church in Hard-

<sup>\*</sup> Of this remarkable and illustrious group of instructors Professor Day and President Barnard are now the only survivors.—E. A. F.

and dumb," and thus rid ourselves from ever hearing the bar-barous pronunciation "me-yutes."

An affliction is not mitigated by hiding it under a name. It may be very considerate to call a thief a kleptomaniac; a grogshop a saloon or sample-room; and to call insanity alienation; but there is no surer way to foster sham and deception. To say that "Deity is my pastor; I shall not be indigent," may argue much learning, but plain, honest folk will stick to the old text.

What teachers of the "deaf and dumb" need to do is not to fry to suppress a word that runs through the warp and woof of our best literature, a word that Shakespeare, Milton, Addison, Dryden, and a host of others have used, but to spend their efforts in raising the class which that word represents into the sphere of moral and religious manhood and womanhood; to discipline them to habits of thrift and economy; to make them feel that their usefulness and happiness in life depend upon taking up some useful occupation, and persevering therein to the end.

W. G. JENKINS, M. A., Teacher in the Pennsylvania Institution, Philadelphia.

## BARNABAS MAYNARD FAY.

Barnabas Maynard Fay was born in Berlin, Worcester county, Mass., July 27, 1806. He departed from this life at Kendall Green, Washington, D. C., on Sunday morning, March 8, 1885, in the seventy-ninth year of his age.

Mr. Fay was of Puritan stock, being a descendant in the sixth generation of John Fay, who came from England to New England in the Speedwell in 1656, and settled in Worcester county, Mass. The religious element he inherited from this pilgrim ancestor was strengthened by the influence of his early surroundings, and was through life the dominant one in his character. His parents were Dea. Dexter and Zilpah Maynard Fay, of Berlin, Worcester county, Mass. He was the second in a family of nine children, four sons and five daughters, all but one of whom lived to have families of their own.

His father was a farmer, and the boy grew up with the blessings of sound health, simple tastes, Christian training, a habit of self-dependence, and that common-sense which is perhaps the most valuable crop of the New England farm. He

the 1st chapter of Luke, the angel, addressing Zacharias, should be made to say, "Behold, thou shalt be dumb," for the original is "thou shalt be silent," and this is the word used in the Revised Version. Yet when the original justifies it the revisers do not hesitate to use the word "dumb." It has always been a problem to me why the penalty of silence inflicted upon Zacharias should be accompanied with deafness. There is nothing said by the angel to justify this added infliction. That Zacharias was deaf and dumb there can be no question, for they made signs to him, a proceeding wholly unnecessary if he could hear.

In this discussion I raise no question as to the propriety of dropping the conjunction from the phrase "deaf and dumb." That is a question independent of the proper meaning of the word "dumb," though it would, I think, be difficult to show why "deaf and therefore dumb" is not as lucid, as philosophical, and as logical, as the explanation "mute because deaf."

The general opinion of mankind in regard to these accompanying afflictions is found in the words used in all languages and in all ages to express them. It is not by mere chance that the order "deaf and dumb" is so universally observed. If this sequence means anything, it means that the relation between them is that of cause and effect. There is no possible danger that this order will ever be changed to dumb and deaf.

There is no other word in our language that so precisely expresses the idea of speechlessness. The word "mute" does not begin to do it. The children we teach are speechless, not silent; they are anything but that. A person "hard of hearing" may be mute, (as all good people should be sometimes,) but they are not deaf-mutes. In the Seraglio at Constantinople there are mute attendants, but it is well to remember that they can hear and speak. A prisoner, again, is a mute when, being arraigned for treason or felony, he either makes no answer, or answers foreign to the purpose. By statute 12, George III, judgment is awarded against mutes, as if they were convicted or con-It is not unusual throughout the East to find servants who have had their tongues cut out, and they too are called mutes. We have known a reader of Dickens who could not un? derstand the use of the word "mute" when applied to the persons employed at London funerals. Since, then, there are mutes and mutes, (a careless boy neglecting to cross his t's makes it still worse,) let us have the plain, unambiguous English of "deaf

no possible pertinency in the phrase unless it means the lack of speech.

Just what relation there may be, if any, between the Hebrew "dum" and the English "dumb" is a question for the philologists to settle. If it is nothing but a coincidence, it is certainly an interesting one, that in two of the three families of speech two words should be found so similar in sound and in signification. In the derivation of the English "dumb" by Worcester, Johnson, Perry, and the Imperial Dictionary I find the Hebrew form given.

It is plainly the opinion of these lexicographers that the Hebrew root "dum" is the origin and source of all the later forms of the word in European languages. Webster, in his etymology, makes no allusion to the Hebrew root, but gives the old Germanic form with the meaning "dull and stupid." He is careful, however, to exclude the idea of mental incapacity from his definition, for the plain reason that the word would not justify such a meaning. But was this idea of dullness the primary meaning of the word? Richardson, in his Dictionary, says not. rives "dumb" from the Anglo-Saxon "dæman," "dammun," to obstruct, to dam up; so, also, Tooke; and Wedgewood, in his Philological Dictionary, follows the word up to its Gothic source and finds it "afdobnan," meaning, to have the mouth stopped. But, after all, the question is not what meaning our very remote ancestors attached to the word under discussion, but what it has always and invariably meant in English speech, and its Anglo-Saxon progenitor; to this question all English lexicographers give but one answer, viz., "destitute of speech." We certainly need not trace the word back any farther than the German "stumm," which Adler tells us is "sprachlos," speechless, and this word is the Germanic "dumm" with a sibilant prefix. (See Gesenius.) All that has been said against the word "dumb" can be applied with equal point to the word "deaf," for are not "deaf" and the Scotch "daft" one in origin?

There is another verb in Hebrew, "harash," which is commonly translated "deaf," but like the Greek " $z\omega\varphi\delta\varsigma$ " it is used in a double sense, for "deaf" and "dumb." It is found in the following passages: Ex. iv, 11; 1 Sam. x, 27; Lev. xix, 14, and Psalm xxxviii, 13. In the New Testament, besides the word  $z\omega\varphi\delta\varsigma$ , we have  $d\lambda\alpha\lambda \delta\varsigma$ , Mark vii, 37; Mark ix, 17; and  $d\varphi\omega\nu\delta\varsigma$ , Acts viii, 32; 1 Cor. xii, 2, and 2 Peter ii, 16. It is difficult on any theory of interpretation to understand why, in

applying it to animals as to man. Our boasted superiority over the brutes is not as great, perhaps, as we imagine it to be.

> A dog may many a lesson give To his superior, man.

As far back as we go in the history of English literature, we find this word "dumb." It is found in the satire of Piers Ploughman, and in Chaucer.

For trewely comfort ne mirth is non, To riden by the way dombe as a stone.

In Wiclif's translation we have "The doumbe man spak." The translators of King James' version use it freely, but in every instance the word has but one meaning, and that meaning is speechlessness. Perhaps these semi-civilized Saxons needed the light of the nineteenth century to teach them the meaning of the word "dumb." It can hardly be claimed that they had no alternative, for the word "mute" is as old as Rome; as old even as Athens.

It may be a matter of some interest to examine the original words in the Bible translated "dumb;" we may thus get some idea of what the word was intended to express.

The Hebrew verb "alam" means to have the tongue bound. It is found in Psalm xxxix, 2, 9; Isaiah liii, 7; Ezekiel xxxiii, 22. In three of these passages it is translated "dumb," and once "silence." There is nowhere, in the original meaning of the word, the glimmer of a suggestion of mental dullness or stupidity. The only possible meaning to be gathered from the original is the negation of speech—"only that and nothing more."

The adjective "illem," from the above verb, is also translated "dumb" in Isaiah xxxv, 6; Psalm xxxviii, 13; Isaiah lvi, 10; Exodus iv, 11; and Proverbs xxxi, 8. In one of these passages we meet with the expression "dumb dogs," but the prophet, as if foreseeing a possible perversion of the phrase, is careful to add "they cannot bark."

The whole series of words in Hebrew, "baham," (from which we get the word behemoth—the speechless,) "balam," "damam," "daham," "dumah," and "shamam," all convey the idea of speechlessness. In common with the Greek "μύω" and the Germanic "dumm," they represent the sound uttered with the lips closed. The most interesting of these words is the root "dum" and its substantive "dumah." It is translated "dumb" in Hab. ii, 19, "the dumb stone." There can be

unfitness. Whatever word may be used to express the affliction resulting from deafness will always carry pain and sorrow to the parents and friends of those whom the world calls "deaf and dumb." Beyond the narrow circle of those directly interested in this unfortunate class, the correctness of the designation is hardly questioned. To ascribe our inadequate census returns to the use of the word "dumb" is a claim that both astonishes and puzzles us. Unquestionably, many parents hesitate to speak of their deaf and dumb children, but it is the painful fact of their misfortune that restrains them, and not the mere verbal appellation. Parents are sensitive concerning their children's misfortunes, and if we are going to expunge from our daily speech all the words that express intellectual, moral, and physical defects, where shall we end?

It is to be observed that objections to the word "dumb" come mainly from those who are advocating the "pure oral method."\* It is the practice of most articulation teachers in speaking of this silent class to designate them only as "deaf," so that people unacquainted with this particular usage never know whether the persons spoken of are "deaf and dumb," or simply "hard of hearing." Readers of the New York Independent will recall, a few months ago, an article entitled "Wrongs of the Deaf," wherein the writer is under the necessity of explaining that by "the deaf" she means the partially deaf—an explanation wholly unnecessary were it not for the ambiguity now creeping into the word. It ought to be the pride and glory of articulation schools that they make the "dumb" to speak. The exalted work in which they are engaged will lose none of its grandeur by admitting the fact that the children that come to them are speechless; they are schools for the "deaf and dumb," whether the fact be admitted or not.

Nothing is easier than to inject into a word a meaning it never had; and when we find the word "dumb" defined to mean "stupid, brutish, mentally imbecile," we cannot refrain from calling upon those who are so strenuously trying to relegate this word to the brute creation, to give one standard English authority in justification of this definition. If the word "dumb" has this low, base meaning there is just as much reason against

<sup>\*</sup>Is not this too hasty a generalization? Among those who have expressed themselves publicly as objecting to the term "deaf and dumb" are President Gallaudet and Dr. I. L. Peet, neither of whom advocates the "pure oral method."—E. A. F.

Of course, illustrations, complicated like the above, are intended for, not the earlier, but the later period of a pupil's education. The idea once made clear to their minds, they will, if of ordinary intellect, do a deal of thinking both in and after leaving school, and thus better understand and have a greater relish for reading.

The semicolon has uses in other ways, but this article is much too long. Go into the Government Printing Office at Washington, where rough and badly written speeches of congressmen, and with no punctuation at all, are set in type, unread save by the compositor; or go into any printing office in any city; ask editors, printers and proof-readers how or in what school or by what master they were taught punctuation, and they, one and all, would laugh at the question. They each penetrated the mystery for themselves by being compelled to give daily and practical attention to the subject. The idea underlying all once grasped and understood, the mystery vanishes and the whole becomes as clear as a sunbeam.

EDMUND BOOTH, M. A.,

Anamosa, Iowa.

## WHY NOT "DEAF AND DUMB?"

A society in Paris, with the motto "Dieu, voilà l'ennemi," proposes to exscind the name of God from all human language. Just how this is to be accomplished we may charitably suppose the members themselves to be ignorant. But Paris is not the only place where plans for the suppression of some popular word originate. We find efforts similar to this in our own country. The latest declaration is that the word "dumb" must go. It is claimed that to speak of those born deaf as "deaf and dumb" is to put them into the category of brutes; that the word dumb is "fraught with debasing and disparaging associations;" that "it has a depressing effect upon the deaf," and much more in the same strain.

It is sufficient to say in answer to all objections of this kind that they are simply and altogether sentimental. An argument in favor of the exclusion of the word "dumb" from the technical use to which it has been devoted for centuries ought to be rigidly free from anything that might appeal to our feeling of commiseration. If the word is to be banished from the good society it has hitherto kept let it be on account of some inherent

which, in many cases, is indispensable. Take the following from Campbell's Pleasures of Hope:

Eternal Nature! when thy giant hand Had heaved the floods and fixed the trembling land; [Eternal Nature!] when life sprang startling at thy plastic call, Endless her forms, and man the lord of all!

At the end of the second line the semicolon saves repetition of the words "Eternal Nature." It will be observed, too, that following the supposed personage addressed is an exclamation point where would otherwise be a comma.

The following from Percival's "Genius Waking" is so manifestly a single sentence in eight lines that I quote it by way of giving further illustration of the use of the semicolon:

Where the pillared props of Heaven Glitter with eternal snows; Where no darkling shreds are driven, Where no fountain flows; Far above the rolling thunder, When the surging storm Rent its sulphury folds asunder, We beheld thy form.

The reader may take the two first lines, omit the semicolon, and then read the last lines. It will form a complete sentence. Or take the three first lines and the last, or take the four first lines and the last, or take all except the sixth and seventh—which constitute an intercalation—and the last.

Here is another single sentence taken from Bryant's well-known poem, "Thanatopsis." It fitly illustrates the use of punctuation in simplifying what appears a very complicated passage:

"The hills."

Rock-ribbed and ancient as the sun; the vales
Stretching in quiet pensiveness between;
The venerable woods; rivers that move
In majesty, and the complaining brooks
That make the meadows green; and, poured round all,
Old ocean's gray and melancholy waste,—
Are but the solemn decorations all
Of the great tomb of man."

In the above extract from Bryant are six nominatives, printed in *Italics*, and the verb, without which the sentence would be incomplete, is in SMALL CAPITALS. It will be observed that the nominatives are abundantly and yet judiciously qualified, or perhaps more properly, decorated, with intercalations.

That was a defensive fight from begining to end, if there ever was one.

If there ever was, from beginning to end, a defensive fight, that was one.

Envy, hatred, malice are all nouns, all one class of words, therefore the commas following the two first.

I clip again from a newspaper:

Dom Pedro, Emperor of Brazil, has reigned fifty-three years, longer than any other living monarch. He succeeded to the throne in 1831, when he was only six years old, but he was not crowned until 1841.

Dom Pedro, in the above, is the nominative; then comes an intercalation, between commas, which may be omitted or something else substituted if you please; next we have the verb-has reigned fifty-three years. A period might be placed at the end of years, but a comma is dropped there instead, and the sentence is lengthened by adding [that he has reigned] "longer than any other living monarch." Next follows another sen-"He succeeded to the throne in 1831," and here a period would be in proper place, but we have another comma and another lengthening of the sentence, "when he was only six years old." Again we might place a period and stop; but, no, it goes on with a but and a whole sentence by itself—he was not crowned until 1841. Such are the terrible complications of language, simplified by bestowing attention on the punctuation. The pupil might analyze it thus: Dom Pedro is Emperor of Brazil. He has reigned fifty-three years. ceeded to the throne in 1831. He was only six years old [at the time. But he was not crowned until 1841.

By putting pupils through processes like the above or something of the kind, language will, in large degree, cease to be the frightful bugbear that it is, and many, being thus accustomed to analyze language by its punctuation points, will read more intelligently and with greater pleasure in subsequent life.

Thus far I have dwelt specially on the comma, because it is in most frequent use; and the remaining points, together with the idea underlying all, being once understood, they can more readily be comprehended as regards their practical application, the teacher and the more advanced pupils of a class having only to give attention to the various points in the lessons or in the course of reading. I will further touch on only the semicolon, a point often omitted and a period substituted, but

ness in other States, but organized in this State, and the exemption proviso was changed to read so as to exempt "manufacturing companies, and mining companies carrying on business in this State." The amendment appears with a distinct comma after the words "manufacturing companies," but in engrossing the reference committee's amendments into the bill the Assembly clerk left out the comma, and the bill as signed by the Governor and filed in the office of the Secretary of State reads so as to exempt "manufacturing companies and mining companies carrying on business in this State." Those manufacturing companies, therefore, which have organized in this State to carry on business elsewhere, are liable under the law to a tax of \$100 on every \$100,000 capital. In the case of one company alone, a glucose manufacturing concern, this tax will be \$15,000 a year.

So much for the wisdom that imagines punctuation "old woman's" rubbish. The omission of a comma by an ignorant or careless clerk causes certain New Jersey companies to lose many thousands of dollars, and they must wait a year or two till another legislature assembles and corrects the blunder. The trouble with teachers of to-day in these matters is simply in the fact that they were never taught in their own school-days, their teachers, and college professors, too, being, for all practical purposes, equally ignorant. They depended on sound and its modulations, and deemed this sufficient. But for the deaf there is no sound. Punctuation must be the substitute

Again I clip from a newspaper. It is part of a political article. The portions I underscore—in *Italics*—are intercalations:

The circular of the Independent Republican Conference Committee is, on the whole, a sensible document. But it contains one proposition that cannot be successfully maintained. That proposition is that "the Republican party cannot afford to burden itself with a defensive campaign." It can afford to do just that. Have the gentlemen who prepared the circular so soon forgotten the Garfield fight of 1880? That was a defensive fight, if there ever was one, from beginning to end. Envy, hatred, malice and all uncharitableness opened their batteries upon the General just as soon as he was nominated. They never ceased firing until election night. Nevertheless he was triumphantly elected.

By attention to the commas it is seen how easy it is to make clear to a class of three years, or less, what appears to them a complicated sentence.

"The circular . . . is a sensible document, on the whole."
On the whole the circular is a sensible document.

The circular is, on the whole, a sensible document.

Further down we read:

That was a defensive fight, if there ever was one [fight], from beginning to end.

To illustrate the use of the comma in another way:

We shall go to Chicago to-morrow.

To-morrow we shall go to Chicago.

Both the above two lines are complete sentences and need no comma or any point save at the end.

The verb *shall go*—first future—is in some languages a single word and may be here considered as so used.

As a help towards making clear the idea underlying punctuation, I will divide it.

We shall . . . go to Chicago to-morrow.

A space is thus left in which a word, several words, or the fragment of another sentence can be inserted, but be sure and use the commas as showing that the complete and perfect sentence has been cut into by another word or part of another sentence.

We shall, to-morrow, go to Chicago.

We shall, Providence permitting, go to Chicago to morrow.

We shall, if the weather is pleasant, etc.

Adjectives qualify nouns, and adverbs qualify verbs, so the intercalation frequently qualifies the whole sentence or that part of the sentence which it immediately precedes or follows. But what we here term an intercalation may be used at the beginning or close of a sentence, thus:

Providence permitting, we shall go to Chicago to-morrow. We shall go to Chicago to-morrow, Providence permitting. Should the weather be pleasant, we shall go to Chicago to-morrow.

We shall go to Chicago to-morrow, should the weather be pleasant.

In each of the last four sentences there is one complete sentence and a part of another, and as the hearing reader pauses for an instant where they divide, in order to convey the correct sense, so there should be a punctuation point for the deaf—and for the hearing also, as the following will show. I cut it from the telegraph columns of the New York Tribune of May 9th, which reached me this morning:\*

TRENTON, N. J., May 8.—When the general corporation tax act was under consideration in the Senate an amendment was inserted which exempted from taxation under it "all manufacturing and mining corporations." Afterward, while the bill was in the hands of a conference committee it was decided to except from this exemption mining companies doing busi-

<sup>\*</sup> This article was written a year ago.—E. A. F.

idea of the use of punctuation than a blind oyster has of astronomy. We have seen how the language has changed, from continuous, unseparated, and unpunctuated words, down to its present clearness and ever-growing richness. Why not show persons, deprived of the sense and many uses of sound, a way to supply the deficiency during the process of reading? It is not so important that they should punctuate always correctly—not over one in a hundred hearing persons ever do that at all—as that they should understand what they read, and to this end the points used in punctuation are, as a rule, a sure guide. A college graduate may read and understand foreign and dead languages without being able to write correctly other than his mother tongue.

What I have said above, and may yet say, may seem presumptuous. I am very far from wishing that, and the fear of being so considered has kept me silent many months. The English language has not reached the higher perfection it will yet attain, and I may plead this as an excuse.

Some time ago I was in a school for the deaf. The teacher of one of the classes, an excellent lady by the way, was exercising her pupils in what some one called "the puts," using Latham's lessons. She wrote on her large slate, in the imperative mood:

James put a book on the table. George bring a cup of water.

And so on. By her gesture each line was a command, but because of the lack of a comma after James and George the first line was in the past tense, and the second line was in the present, the verb bring wanting only the letter s. If teachers and pupils will take notice in their readings they will observe that, in every case where a person is addressed, a comma follows the name of that person, as in speech a slight pause is invariable at that point. And so when a person or object is addressed in the course of a sentence. As examples:

Even so, Father, for so it seemed good in thy sight. Father, even so, for so it seemed good in thy sight. Even so, for so it seemed good in thy sight, Father. Roll on, thou deep and dark blue ocean, roll. Thou deep and dark blue ocean, roll on.

Take out the commas in the above and the grammar is lost—to the deaf at least.

following goes the round of the press every fifteen years or so, as a quiet sarcasm or as an incentive to thought on the part of teachers and pupils of hearing schools. I clip it for insertion, and suggest that some teacher read it to others in monotone and as though he had never heard sounds in his life. He will then read as does a deaf person who knows nothing of punctuation or the variations of sound:

He is an old and experienced man in vice and wickedness he is never found in opposing works of iniquity he takes delight in the downfall of his neighbors he never rejoices in the prosperity of any of his fellow creatures he is always ready to assist in destroying the peace of society he takes no pleasure in serving the Lord he is uncommonly diligent in sowing discord among his friends and acquaintances he takes no pride in laboring to promote the cause of Christianity he has not been negligent in endeavoring to stigmatize all public teachers he makes no efforts to subdue his evil passions he strives hard to build up Satan's kingdom he lends no aid to the support of the Gospel among the heathen he contributes to the evil adversary he pays great heed to the devil he will never go to heaven he must go where he will receive the just recompense of the reward.

The above describes two different persons, according to the position of the comma or semicolon. It might be a good plan to let the pupils copy and study it out. It will convey something of an idea, will not be wholly labor lost, and need not take more than an hour.

I suggest that the article "Punctuation" in any good encyclopædia be examined. It will be found that in the earlier days of the language words were written and printed continuously, sometimes all in capitals, sometimes in common Roman, or what printers call lower-case: ourfatherwhichartinheaven. are yet extant so printed. Later the words were separated as It was not until near the close of the fifteenth century that one Aldus Manutius, a printer and publisher of note, became impressed with the necessity of facilitating the more ready understanding of written language, and therefore devised and applied punctuation according to the sense intended to be conveyed. And this was for hearing persons. How much more important for the deaf! And yet I have known a teacher of the deaf, when the matter was suggested to him, to say in reply, "It is of no importance." He simply did not understand at the time; he does now, and uses the points in his teachings.

When my article, referred to above, appeared in the *Annals*, the editor of an institution paper mentioned it as an "old woman's" yarn. He was perfectly excusable, for he had no more

## PUNCTUATION.

#### SECOND ARTICLE.

Over half a century ago, in the course of one of my vacations, an old friend whom I met asked me to send him a book containing all the signs used by the deaf. He was satisfied with the explanation that signs were pictured on the air, not in books.

When a young man, knowing nothing of signs, is selected as a teacher, his ideas of how to teach are apt to be as crude and erroneous as were those of the person above referred to. He begins, often in a ridiculously awkward way, and goes on for a year or two before the spirit or real idea of the language has permeated his brain. After that the thing becomes clear and he uses the, to him, new way of communication with tolerable facility, if not with ease. Thus it is with punctuation.

A few years ago I wrote an article on this subject, which was published in the *Annals*. A few months later I had the satisfaction of knowing the article was not without its effect; a few teachers, seeing the value of punctuation, taught it from that time henceforward. Still, as I am informed and as I have seen, to the great majority of teachers and pupils the matter is as obscure as was the idea of signs to the person mentioned in the first paragraph of this paper. The one difficulty is to get hold of the underlying idea. That accomplished, punctuation is easy and natural.

Mere reading of the rules is not enough. Daily or frequent practice is necessary. Not the memory merely is to be improved, but the understanding needs to be enlightened; for it may be set down as an axiom that punctuation depends on the sense, and the sense depends on the punctuation. The writer, to convey his meaning, must punctuate in a way to convey that meaning; and the reader, to understand correctly, must pay attention to the punctuation. Thus writer and reader are mutually dependent. A point of law sometimes turns on a comma. semicolon, or colon; but, as a rule, hearing persons, having the variations of sound, the pitch, pauses, emphasis, or want thereof, all rolling off their tongues, or running in their heads, give little or no attention to the punctuation as they read or write. With the deaf there is no such advantage. To them, unless they learned to speak before losing their hearing, reading is all monotone, if I may use that word by way of illustration.

exercises. Exercises of this kind are fascinating to both teacher and pupil; in their injudicious use there is danger that the pupils will learn to build sentences mechanically rather than instructively and habitually, which latter is the end we must keep in view.

Language is not hand-organ music to be ground out with a grammatical crank. Using a grammatical method to an extreme is as injurious as using no method at all. A grammatical method can be profitably used only as a guide and a check. Language, like music, must be learned by practice in the expression of thought and feeling, not by thumping notes, although such thumping may be an indispensable preliminary.

Finally, a most importance piece of advice: Don't try to do too much at once; "go slow."

While this method is designed for primary work, it is well adapted to the analysis of intricate constructions. Its function symbols lack the fulness and detail of etymological symbols and the scientific exactness of diagrams, but as a preparation for the study of Grammar we have found it to be of great value. The Storrs and Peet systems of grammatical symbols are symbolic parsing, while this system is analysis in its simplest form. Our symbols can be used in connection with any diagram system. We have found, however, that simply factoring complex sentences by clauses, and indicating the relations of the parts by symbols, fully serve the purpose of giving a comprehensive view of construction. For the rest the definitions and rules of the text-book serve a better purpose than microscopic symbol modifications or elaborate diagrams that twist sentences out of all recognition.

GEORGE WING,

Teacher in the Minnesota School, Faribault, Minn.

## 2. Factitive Construction.

When the verb is made passive, the complement follows the same rule as the object in the Dative construction, and remains unchanged.

When the complement is an infinitive or participle, as in "He made me work," "I saw him running," the above remarks as to the Dative will apply to this construction.

In the Dative construction the two objects refer to different persons or things; in the Factitive they refer to the same person or thing, one object being attributive to the other, just as the complement of an intransitive verb is attributive to the subject. To this rule there are no exceptions; but the two forms approach each other so closely, and the shades of meaning are so elusive, that we are not always certain whether we are on one side of the dividing line or the other. Typical constructions can be made clear enough, and it is seldom necessary for us to go further. For example:

"The soldiers found the general a horse" (a horse for the general) indicates a commonplace matter; but "The soldiers of ound the general a horse" (to be a horse) indicates a startling transformation suggestive of the Arabian tales or the fate of Nebuchadnezzar.

The teacher will find in this method a wide field for his ingenuity and tact. Exercises of almost infinite variety, pleasing and profitable to his pupils, can be devised. One that we have used for the purpose of showing the *functions* of words and phrases is as follows: The teacher selects words having several meanings, and gives them various constructions for his pupils to weave into sentences, thus:

fly, fly, fly, fly, fly, flying, flying, to fly, to fly, to fly, etc.

A good way to show the relations of words is to conjoin the symbol of one modifying form with several other symbols as a dictation exercise in sentence writing, thus:

Only familiar words should be used in connection with such

In such sentences as "Lend me your knife" the ellipsis of the subject may be shown, but nothing can be gained by considering me as the object of an omitted preposition rather than as one of two objects of the verb.

In teaching the construction of sentences with double objects we find several points of difficulty. In no other constructions do the functions of words and phrases overlap and shade off into each other in such a perplexing way. Grammarians disagree and contradict each other curiously in treating of "primary, secondary, and attributive objects;" the terminology they have invented and the nice discriminations they have made are of marvellous ingenuity and variety. We have no need to follow them through their mazes and contradictions; the problem with us is to make the meaning and usage clear to our pupils. I have divided these constructions into two typical forms as follows:

## 1. Dative Construction.

When the verb is made passive, one of the objects becomes the subject and the other remains unchanged.

> S — V — O A book was given Mabel. S — V O Mabel was given a book.

When one of the objects is an infinitive, few of our pupils are able to grasp the distinction between it and a limiting infinitive.

s  $\sqrt{\phantom{a}}$  -0 0 He told me a story, (told what to me?)

s  $\sqrt{\phantom{a}}$  -0 0 He told me to study, (told what to me?)

 $\overset{s}{\text{He}}$  sent  $\overset{o}{\text{me}}$  to study, (sent me—what for?)

It would be folly to make such nice distinctions with our younger pupils: what is so plain to us is incomprehensible to them. It is better to use the symbol "6" in all cases where the infinitive is not the subject, the complement of an intransitive verb, the sole object, or in apposition, as in the following:

s  $\checkmark$  c s  $\checkmark$  o s  $\checkmark$  C 1 To see is to believe; I want to go; It is wrong to steal. relative clauses. They are not interchangeable in *fact*, however, for the participle merely assumes a circumstance or condition, while the relative clause makes a predication.

SUNDRY REMARKS.

It will be observed that the letter "c" is used indifferently to indicate predicate nouns and predicate adjectives. The reason for not distinguishing them is practical rather than theoretical.

The letters "o" and "c" have dashes over them to prevent confounding the object and complement of the verb with those of the infinitive and participle.

The sign + is used to indicate auxiliary verbs in the potential mood and emphatic form. In other cases the verb may be considered as composed of two or more words, all but one of which may be disposed of by lines over them. There is no reason for this distinction other than the practical one of giving the teacher a lever to use in dealing with the obstacles in his way in teaching the proper use of auxiliaries. It is related that a Frenchman, who had fallen from a ferry-boat, cried out:

s + 
$$\sqrt{\phantom{a}}$$
 s -  $\sqrt{\phantom{a}}$  o I will drown; nobody shall save me! when he meant,

The use of the sign "\*" for ellipsis should be avoided as much as possible. We can supply ellipses before infinitives, participles, adverbial phrases, etc., but so doing only perplexes the pupils. Better ignore or dodge a grammatical principle than place a stumbling-block in the pupil's way. Thus, in the sentence "I studied an hour," instead of imagining a preposition governing the noun hour, and thereby burdening the pupils' minds and leading them to imagine ellipses where none exist, the phrase an hour should be considered simply as an adverb of time. The sign may be profitably used by the teacher in black-board work to show that connective sentences are not defective, but simply abbreviated to avoid useless repetition of words, e. g.,

A horse that is lame cannot trot fast.

Preposition Phrase, "4." The object of a preposition may be a clause:

That depends upon who told the story.

Adverb, "5." . We must make hay to-day.

We must make hay while the sun shines.

Infinitive, "6." .  $\overset{\$}{I} \overset{\circ}{am} \overset{\circ}{glad}$  to receive a present.

Here is a chance for criticism and grammatical hair-splitting. The analogy between the two examples consists in that the infinitive phrase and the clause are alike objects of omitted prepo-These examples illustrate the only point in this function system where it may seem to lack symmetry and strict conformity to grammatical rules. For our purposes, Analysis should be considered in the light of practical utility, rather than as a nice mathematical problem. In treating the modifying words and phrases of simple sentences the class to which a word or phrase belongs is indicated by a number, and the adjective or adverbial character is, for the time, ignored; but in treating clauses we have to consider them as adjective, adverbial or substantive. A "break" is purposely made at this point because, in order to get around the point without a "break," it would be necessary to dispense with sharp and practical classification of simple modifying forms, or to introduce complex symbols in teaching the construction of simple sentences. Peet's system of symbolic parsing goes to the opposite extreme. Upon the foundation of symbols for the parts of speech it erects a complex superstructure of symbols and embracing lines. ignore in this way the simple divisions of modifying forms and to seek after mathematical exactness in detail, is nothing less than to attempt to dig a well from the bottom. Children can readily grasp the simple forms and offices of words and phrases, but they cannot thread the intricacies of parsing until a familiarity with the forms and usages of languages is established, until their powers of discrimination are well developed.

Participle, "7." Participles are interchangeable in form with

## COMPLEX SENTENCES.

Passing from simple to complex sentences we find nothing new, except that when we cannot find a single word or phrase to represent an idea we are obliged to use a clause. The teacher should try to impress this fact upon his pupils' minds by every means at his command. This is a matter of the greatest im-To permit deaf-mute children to stumble about in the mazes of complex sentences, when they know nothing of the nature and office of a dependent clause, is simply ruinous. The teacher should be fully impressed with the fact that while hearing children catch the meaning of complex sentences from the variations in tone, the pauses, and the stress upon spoken words, all sentences are, to deaf-mute children, only successions of written words upon a dead level. To make them perceive the close analogy between simple and complex sentences calls for the greatest skill, patience, and energy on the part of the teacher. He should begin with exercises on parallel sentences showing the analogy in an unmistakable manner. Above all things he should avoid pushing the children beyond their depth. Every step should be cautiously taken and followed up by persistent drill and practice until the use of the construction in hand becomes habitual.

Examples of parallel sentences are here given, showing the substitution of a clause for each of the essentials (excepting, of course, the verb) and for each of the seven modifying forms (excepting the possessive.)

```
Subject, "s." . The statement is true.

S
That the earth moves is true.

S
That the earth moves is true.

Object, "o." . I believe the statement.

S
The statement is true [a fact.]

The statement is that the earth moves.

Appositive, "1." My friend John is a farmer.

S
The statement that the earth moves is true.

Adjective, "3." . A lame horse cannot trot fast.
```

The positions of the essentials in all the four forms are varied in a similar manner. These positions depend wholly upon usage, and must be fixed in the minds of the pupils by practice. The teacher may profitably prepare for his pupils a few pages of model sentences exhibiting the various constructions, avoiding, of course, rhetorical and poetical constructions. We are not teaching rhetoric or versification, but the simple forms of language.

POSITIONS OF THE MODIFIERS, ETC.

"1." The Appositive invariably follows the noun it limits. When an infinitive or clause is in apposition with "it" the predicate is placed between them.

s V c 1 It is wicked to steal.

- "2." The Possessive invariably precedes the name of the thing possessed.
- "3." The Adjective, as a rule, precedes the noun to which it belongs; when it follows the noun it is generally a contracted relative clause or participal phrase.\*

s  $\sqrt{\phantom{a}}$  3 o s  $\sqrt{\phantom{a}}$  c  $\sqrt{\phantom{a}}$  We saw a large tree \* \* white with snow.

- "4." The Preposition Phrase follows what it modifies, except in cases where it modifies a sentence as a whole, when it may either precede or follow the sentence.
- "5." The Adverb precedes adjectives and other adverbs. Whether it precedes or follows verbs seems to depend altogether upon usage. All the other modifiers have fixed positions: the adverb drops into the sentence wherever it can find a place without usurping that of another modifier.
  - "6." The Infinitive follows what it limits.
- "7." The Participle follows the nouns, etc., to which it belongs. The modifiers are often separated from the words to which they belong by other words and phrases, but their relative positions are maintained.

The ink in that bottle standing on the table, being full of dust, must be thrown away.

<sup>\*</sup>In point of fact, an adjective following a noun assumes the function of the participle just as the participle preceding a noun assumes the function of an adjective. A tree white with snow is not a white tree, nor is a horse trotting necessarily a trotting horse. To avoid confusion, the use of the participial symbol (7) should be limited to participles that retain their verbal nature.

"7." Participle:

s v o 7 We saw a rabbit running.

That boy standing in the corner is crying.

The child ran crying to her mother.

s  $\sim$  5  $\sim$  c  $\sim$  c The tree blown down by the wind was old and weak.

The pupils should be carefully and persistently drilled in the use of these forms in the expression of ideas. Mere mechanical drill should be avoided. The arbitrary division of the modifying forms into attributes and adverbials should not be attempted. It is sufficient that the pupils understand the purpose for which such forms are used, and learn properly to use them for that purpose. Let the preposition phrase be always a preposition phrase and nothing else, whether it modifies a noun, a verb, or an adjective. Marking the preposition phrase, the infinitive or the participle, now as an adjective and now as an adverb, simply introduces an element of perplexity and discouragement without serving any useful purpose.

## POSITIONS OF THE ESSENTIALS.

The natural positions of the essentials in declarative sentences are shown in the examples given. The order is different in different classes of sentences,  $e.\ g.$ :

Declarative, . . . That tree is large.

Interrogative, . . . Is that tree large?

5 c  $\checkmark$  3 s . . . How large is that tree?

Exclamatory, . . . How large that tree is!

The declarative sentence is often inverted:

Regular order, . . . A mouse is there.

Inverted, . . . . There is a mouse.

devil round grammatical stumps," but to place the forms of language before our pupils in such a way that they can comprehend the offices they fill. Therefore, the limiting infinitive is given a place among the distinct forms.

#### THE MODIFYING FORMS.

The next thing in order is to teach the modifying forms. These forms are distinguished by numbers instead of letters, so that the difference between essentials and non-essentials may be shown as clearly as possible.

There are seven clearly defined forms of modifying words and phrases. These seven forms should be taught at the same time,\* greater or less attention being directed to any of them as may seem expedient. The examples given below show the manner of using the numbers to indicate the several forms.

"1." Appositive:

s 1  $\checkmark$  My sister Mary plays.

"2." Possessive:

Mabel's book is old.

"3." Adjective, (including the Article:)

s  $\sqrt{\phantom{a}}$  3 3 0 Mary has a new book.

"4." Preposition Phrase:

The apples on that tree will be ripe in August. (Drill on the preposition phrase as a unit.)

"5." Adverb and Adverbial Phrase:

The boys walked three miles.

"6." Infinitive: †

John went to town to buy a new hat.

A book to read is a pleasant companion.

The lesson is very hard to learn.

<sup>\*</sup> Having reference to a class of two or three years' standing.

<sup>†</sup> The infinitive as a limiting phrase usually answers the question, "What for?" In reality the infinitive is always a noun. The limiting infinitive is a contracted preposition phrase: "What went ye out for to see?" Our business is not to make nice distinctions or "whip the

forms. Let them understand that a shoemaker cannot mend a shoe unless a shoe is brought to him, neither can a teacher correct a sentence unless a sentence is written. You should refuse to correct a sentence on a pupil's slate unless he can point out the essentials and give the meaning apart from the qualifying Encourage and assist your pupils all you please, but never erase or interline anything in a "sentence" that is wanting in its essential parts. When you find a verb with no subject, write the verb on another slate with a blank in the place of the subject. Then, if the pupil cannot supply a subject, strike out the whole string of words, giving the information that it is impossible to correct what has no meaning at all. Proceed in like manner in all cases where the verb, object, or complement is wanting. If it appears that the pupil has a clear idea which he wishes to express, you may draw out the idea and build a complete sentence for him, first writing the subject, then the verb, and afterwards filling in the qualifying words.

Do not try to make your pupils, understand grammatical principles by lecturing or theorizing; let your teaching be entirely by practice. Require them to follow the essential forms indicated, and to place the qualifying words in their proper positions, and trust them to grasp principles in due time. Until the children become familiar with the forms of simple sentences and use them habitually, argument and illustrative diagrams are thrown away.

"Fight it out on this line" without yielding or compromise. Pupils of two or three years' standing will "catch your drift" and fall into line with a rapidity and ease that will surprise you; but with pupils in the latter part of their course, who have long been accustomed to write in an aimless, hap hazard way, you will have a hard struggle; dragging them out of the ruts into which they have fallen will severely tax your energies and resources.

Confine your efforts to the essentials of sentences until your pupils are able to mark these essentials with the corresponding combinations of letters, and to distinguish the several forms with reasonable certainty. They should be required to mark the principal parts of all sentences they commit to memory, and to be prepared to mark the principal parts of every sentence they write if called upon to do so.

SUGGESTIONS TO A TEACHER USING THE MINNESOTA METHOD.

The aim of this method is—

 $\it First$ , to break up the habit of writing sentences with no guide but memory;

Second, to teach the essentials of the sentence—the subject and predicate—in such a manner that the pupils can comprehend them and intelligently use them;

Third, to teach the rational use of modifying forms, their offices and positions in the sentence, without burdening the pupils' minds with etymological distinctions before they are capable of appreciating them, and without confusing them with a multitude of symbols and diagram lines;

Fourth, to place in the hands of the teacher an instrument by means of which he can compel the attention of his pupils to his corrections and explanations.

It should be borne in mind that the forms, functions, and positions of the parts of sentences are all that we attempt to show; the etymology of words and the force and connection of words, phrases, and clauses are left to intelligent observation and persistent drill. The parts of speech and their various forms are taught by their names only; no symbols or manual signs are used to represent them. All grammatical symbols and arbitrary signs represent strictly the functions performed by words, phrases, and clauses in the construction of sentences.

THE ESSENTIALS.

There are four essential forms of declarative sentences. Examples are here given, with the combinations of letters used to distinguish them:

There are some elliptical constructions which may be considered as combinations of these forms,  $e.\ g.$ ,

s  $\sqrt{\phantom{a}}$  o c s  $\overline{\phantom{a}}$   $\sqrt{\phantom{a}}$  c He made the dog angry; He was made angry, etc.

You should "put your foot down" and insist that every sentence written by your pupils shall take one or another of these

LIST OF SYMBOLS USED IN THE MINNESOTA METHOD OF TEACHING LANGUAGE TO DEAF-MUTES.

Essentials, indicated by Letters:
Subject, s.
Verb, intransitive,
" transitive active,
" " passive, ¬
Object, o.
Complement,* c.
Modifying Forms, indicated by Numbers:
Appositive,
Possessive, 2.
Adjective, 3.
Preposition Phrase, 4.
Adverb and Adverbial Phrase, . 5.
Infinitive, 6.
Participle, 7.
Special Symbols:
<b>A</b> uxiliary, +
Conjunction,
Ellipsis, *

Modifications: The object and complement of the infinitive and participle are distinguished from those of the finite verb by lines over the symbols ( $\bar{o}.\bar{c}$ .) Intransitive, active, and passive infinitives and participles may be distinguished by forward and backward strokes over the symbols, imitating like modifications in the verb symbol.

The above are all the symbols necessary to indicate the office of every word, phrase and clause in any English sentence. No additional symbols should be used until Grammar is taken up as a regular study. With advanced classes studying the rules of grammar a few further modifications may be introduced, e. g.,

Nominative Absolute, (8); Nominative Independent, (8).

Other convenient modifications may suggest themselves to the teacher; but he should remember that a multiplication of symbols is a multiplication of the pupil's difficulties in comprehending them.

<sup>\*</sup>I borrow this term from Dalgleish's Analysis. I can find no other term embracing nouns and adjectives in both the "predicate nominative" and "factitive objective" relations.

pute, that our pupils pay little attention to illustrations of principle, unless such illustrations are followed up by requiring them to illustrate their own work in the same way. For this purpose mechanically difficult diagrams are unsuitable.

The Minnesota method is based upon the synthesis of sentences, the etymology of words being considered only so far as is absolutely necessary. It blocks out language in the rough, so to speak—cuts it up into factors—and these factors are given to the pupils to aid them in the construction of sentences for The functions of the several parts of the sentence and the order in which the parts should be placed are taught simply as facts. Confusing minutiæ and the distortions and inversions of illustrative diagrams are strictly avoided. Our aim is to classify words and phrases in the pupil's mind according to the purpose for which they are used and the positions occupied in the sentence—to lead our pupils to frame their own sentences instead of blindly following patterns. For the rest, we rely upon natural methods in primary work. The system is designed to cover the bare framework of language. The symbols are limited to the smallest number consistent with clearness and the attainment of the end in view. Every symbol has a definite application and only one, and that one is the purpose for which a word or phrase is used. Ellipses, which are stumbling-blocks in our work, are not forced upon the pupils' attention when it is possible to avoid them. The reverse of this, by the way, is a prominent feature of the diagram system, ellipses being supplied before participles, converting them into relative clauses, before secondary objects, adverbial nouns of time, etc.

What we want is not a complicated machine in the hands of the teacher alone, but a simple tool in the hands of both the teacher and pupil. This has been kept in view in devising the method used in Minnesota. Every step in the method is backed by the best grammatical authority, but possibly it is open to criticism for want of scientific exactness—hair-splitting precision—in all its parts. In its general plan it follows closely that developed in Dr. John S. Hart's Language Lessons.\*

<sup>\*</sup>Hart's First Lessons in Composition, (page 39 et seq.) Eldredge & Bro., Phila. I have recently seen an English text-book based upon the same principle and covering substantially the same ground as our system. The title is "Grammatical Analysis with Progressive Exercises, by W. S. Dalgleish, A. M., of Dreghorn College, Edinburg," (pp. 66.) American reprint by Ivison, Blakeman, Taylor & Co., New York.

along. We are left to hope that the seed is planted and will germinate by and by.

The systems of grammatical symbols devised by Professor R. S. Storrs and Dr. I. L. Peet are convenient in teaching gram-Their usefulness is limited to the work of higher classes. These systems are based upon the etymological distinctions of words, the teaching of which should follow, not precede, the acquisition of simple language. The symbols represent the parts of speech, and the relations of words in the sentence are indicated by a multitude of modifications, representing genders, numbers, persons, cases, moods, tenses, etc. The use of etymological symbols in primary work with deaf-mute children differs little in principle from the use of algebraic symbols in teaching simple addition and subtraction. They invert the order in which all reasoning processes by immature minds must be conducted, seek to teach principles before the facts upon which principles depend, and require of the children a process of inductive reasoning of which they are wholly incapable. It must be taken as an axiom in our profession that our younger pupils are incapable of any reasoning process that is not based upon familiar facts.

The Storrs symbols alone were tried for years, and then, the fundamental error in principle being perceived, a combined system of diagrams and elementary symbols was substituted, by which to give "vivid visual impressions" of the relations of words in the sentence. These diagrams, while free from the fundamental defects of the complicated symbols, do not fully meet the requirements of our work in primary teaching, although they are of great value in the work of advanced classes. They present sentences in a different form and words in a different order from the form and order in which sentences and words appear in actual use 
Excellent results can be and have been obtained by the judicious use of diagrams in the hands of able teachers of long experience. In other hands they are of doubtful utility. Inexperienced teachers are very liable to use diagrams with the purpose of leading their pupils to discover facts and principles by reasoning from abstractions. The children being capable of little, if any, abstract reasoning, such use of diagrams results in nothing but a double burden upon their memory. Another objection to the Storrs diagrams is their cumbersome form; their use is practically confined to the teacher. It is a fact, which no experienced teacher will disfar as possible, to associate meaning with the sentences. They can have no idea of the relation of one word to another; the placing of words in their proper order is, to them, purely a matter of recollection, as you recall a series of numbers. In the beginning, when the sentences they have to remember are few, their apparent progress is rapid, but as such mere strings of words multiply and interfere with each other, the children become hopelessly confused. The habit of committing lessons to memory with but the vaguest notion of their meaning, or no notion at all, becomes fixed in the first two or three years, and plays the mischief with their subsequent course. Instead of constructing original sentences, they rake the memory for successions of words they have seen before. These successions of words become tangled together, and this, with the practice of writing exercises, not for the purpose of expressing thought, but merely to satisfy the teacher, is the origin of most of their difficulty in acquiring a correct use of simple language.

We have to contend with certain tendencies in the deaf-mute mind which must be recognized and met before we can hope for success in teaching. Grammatical methods are designed to meet and overcome (first) the tendency to blank memorizing with no thought whatever, and (second) the tendency to confine the attention to the meaning of words alone, and to make the meaning of sentences depend upon guess-work from the mere association of words in a sentence, regardless of their relation. It is this tendency of deaf-mutes to consider the meaning of words only, and to try to string them together as they have been told, that gives rise to the absurd and meaningless constructions that try the patience and balk the ingenuity of teachers.

If our pupils are allowed to go though five or six years of their course with no guide but memory in the construction of sentences, there is little chance of their ever gaining a ready and correct use of language. Some have natural gifts which enable them to extricate themselves, but a large majority, if left to pick up language from miscellaneous book lessons and exercises, become hopelessly stalled.

Various methods have been devised to meet the difficulties above indicated. Dr. Harvey Peet's series of text-books and Latham's Readers are arranged so as to take up grammatical principles in succession. The difficulties are but partly met by these books; the pupils do not grasp the principles as they go

## FUNCTION SYMBOLS.

MINNESOTA SCHOOL FOR THE DEAF, FARIBAULT, MINN., May 1, 1885.

To the Editor of the Annals:

SIR: Kindly allow me space for a few words to explain the origin and object of the accompanying paper by Professor George Wing.

Soon after he commenced teaching in the Minnesota School for the Deaf, I put into his hands a copy of Hart's First Lessons in Composition, requesting him to use certain parts of the book that were deemed well suited to the wants of his pupils. In the use of this book, grammatical analysis, and symbols of his own selection, he soon developed a system of teaching language that greatly aided his pupils, and made their progress more satisfactory than ever before. About a year ago a teacher in one of the Western institutions for the deaf desired a letter explaining our system of teaching language, and out of that letter has come the following paper.

The old system of diagrams and grammatical symbols had failed to bring the light and help the deaf pupils needed; and just here the experienced, discerning teacher found in Hart's work above referred to, especially on pages 39 to 69, the key that has unlocked many a difficulty in the study of language. Professor Wing made thorough work with parts of Hart's Lessons in Composition, and also was aided by Dalgleish's Analysis.

Having reduced the principles here taught to a system adapted to deafmutes, and having obtained such excellent results in his own classes, I urged him to put the outlines of the system into definite form for the *Annals*, or some-other publication, in the hope that others might be benefited by his study and experience.

Believing it will be more acceptable to the majority of your readers, the writer has preserved the easy, natural, and familiar language of an epistolary communication in preference to the higher and more involved style of an essay or a scientific treatise on language.

This, in brief, is the history of this article or letter, and Professor Wing offers it for publication at my request.

J. L. NOYES.

MINNESOTA SCHOOL FOR THE DEAF, FARIBAULT, October 20, 1884.

Dear Sir: In compliance with your request, I will give you, as fully and clearly as I can, a description of the method of teaching language that we have used in Minnesota for the past seven or eight years.

First, I will give reasons for the use of any method other than the so called "natural method."

From the necessity of the case, deaf-mute children must be taught at first to commit short sentences to memory, and, as

I. Organize the course of study in the intellectual department so as to give more attention to physics and the natural sciences.

II. Establish schools of mechanical art based upon the Russian system.

III. Establish constructive departments for the manufacture and sale of finished and first-class work.

IV. Pupils, until they are twelve years old, to attend school five hours a day, including recesses.

V. At twelve years of age, pupils, continuing the same class-room hours, to spend one and one-half hours per day in the mechanic art schools and to be taught the principles of handicrafts for three years.

VI. At sixteen they are to enter the manufacturing department and spend three hours a day for three years in learning the application of their arts to practical construction. During these three years to spend four hours a day in the class-rooms.

VII. Thorough and systematic instruction in drawing, free hand, linear, and perspective, to be made a part of the whole seven years' course.

VIII. Pupils who complete the course satisfactorily to be given a journeyman's certificate, testifying to their worth and competency.

I believe that some such method carried into execution as outlined above would be of vast benefit to the deaf, and in such belief it is earnestly commended to those in the profession who have larger means and better opportunities than I have for doing the work.\*

WARRING WILKINSON, M. A., Principal of the California Institution, Berkeley, Cal.

<sup>\*</sup>Those who wish valuable information on this subject are referred to the Forty-first and Forty-fifth Reports of the Massachusetts Board of Education, to Gen. Eaton's Report on "Industrial Education," and to "How to Use Wood-working Tools," a useful manual prepared by Mr. Channing Whitaker under the auspices of the Industrial School Association of Boston.

1 fore-plane,	1 $1\frac{1}{2}$ -inch long paring	1 try-square,
1 jack-plane,	chisel,	1 tie-bevel,
1 smooth-plane,	1 brace,	2 gauges,
1 block-plane,	1 set bits,	1 wing divider,
1 rip-saw,	1 hammer,	2 screw-drivers,
2 handsaws,	1 hatchet,	2 nail-sets,
1 buck-saw,	1 spoke-shave,	1 bradawl,
1 compass,	1 rule,	1 oil-stone.
1 set firmer chisels,	1 steel square, 5-inch,	

For general shop and special use:

```
1 set dado-planes—\frac{1}{8}", \frac{1}{4}", \frac{3}{8}", \frac{1}{2}", \frac{5}{8}", \frac{3}{4}", \frac{7}{8}", 1 set bead-planes—\frac{1}{8}", \frac{1}{4}", \frac{3}{8}", \frac{1}{2}", \frac{5}{8}", \frac{3}{4}",
```

1 fillister,

1 set Barton's framing chisels,

1 pair ½-inch match-planes,

2 iron rabbit-planes,

1 set turning-chisels,

1 set turning-gouges,

and a number of small and miscellaneous articles, some fixtures, a mortising machine, the cost of the whole being \$361.53.

Ten pupils were selected for instruction. They were made to understand that the shop was a school in which the same discipline would be exercised as in the class-room; nay, more, that admission to the shop was a privilege which inattention, laziness, or disrespect for the authority of the foreman would forfeit. The fundamental forms of carpentry, as described heretofore, were explained, and their construction taught. From the beginning the pupils were required to work from scaled diagrams.

The result has been most satisfactory. The morale of the shop has been excellent, the earnestness and enthusiasm of the pupils most commendable, and their progress rapid beyond all my experience. The shop was opened on the 1st of January, 1884, and on June 1st following an expert mechanic was invited to examine the ten sets of models, with a view to awarding a prize to the set of best construction. The expert expressed great admiration for the character of the work, and declared that not half of the journeymen of San Francisco could do better. A graduate of the Manual Training School of St. Louis told me recently that the work was much better than is done in that excellent institution.

In conclusion, what I have written and what I would do may be briefly stated as follows:

some direction, and the boy should, for the remaining three years, have an opportunity for practice and skilful manipulation in that particular handicraft. At nineteen, then, the young graduate would have an expert knowledge of one trade for which he had displayed taste and inclination, and a fundamental knowledge of nine trades to which he could turn and quickly adapt himself in after-life, according to the conditions of the labor market.

Such is a brief outline of my dreams. To realize them would cost in permanent plant about \$25,000 and \$5,000 or \$6,000 a year. It may come, but not in my day, nor under my direction.

The managers of the smaller institutions will be more interested in knowing what has been done with limited means, the use that can be made of this method of instruction in a small way, and how to begin. As a rule, I should advise bench-work in wood for a beginning. To know how to use wood-working tools is perhaps of more general application than any other trade. It comes in play for the farmer who is called upon to repair his implements or furniture and build fences, sheds, barns, and possibly houses. The skilled carpenter finds employment in city or country at remunerative wages. The specialties for which this knowledge is fundamental are many and varied. Mill-work, house and ship carpentry, wood-turning and carving, coopering, cabinet, box, and pattern making, are a few of the many industries which involve the use of hammer and saw, chisel and plane.

Two years ago the legislature appropriated \$2,500 to fit up shops for the California Institution. It was not a large sum, but, as we had a good building, it was deemed sufficient. For machinery we purchased a ten-horse power upright engine, a pony planing machine, a turning-lathe, a circular saw with adjustable table, a jig-saw, a grindstone, and three lines of shafting and belting complete. The steam was brought from the laundry boiler, 150 feet away, in a two-inch pipe wrapped in asbestos covering to prevent condensation. The total cost of the machinery, set in place and ready to start, was \$1,320. Ten sets of bench tools of the best quality were bought for as many boys. The benches were made by the foreman, assisted by the pupils. For those who may wish to know what our foreman considered necessary for each boy's outfit a list is given:

family; the docility of disposition, and the supple fingers of the deaf-mute, all combine to justify hopes of favorable results.

And here I beg leave to interject the belief that the deaf, as a class, must look to handicrafts for their support. A few may become teachers, and good ones, too; some succeed in obtaining clerical and literary positions. Assaying and chemistry are not beyond their reach. Lawyers are not unknown, and some very clever artists have established themselves in public favor by dint of hard work and exceptional talent; but after eliminating the small percentage of successful deaf-mutes in these varied lines of life, the great mass are left to take their places in the ranks of the industrial and productive classes who earn their bread by the sweat of the brow. And in this vast department of human activity there is no reason why the deafmute should not hold his own. He needs only to be pushed from the shore, after which he can paddle his own canoe with the most stalwart of his competitors. His eye is trained to quick and accurate observation, and his fingers, made supple by continual use of the manual alphabet, are dextrous in the handling of tools. With him the choice of a trade is simply a matter of individual aptitude or local conditions of supply and demand. He may be a type-setter or a blacksmith, a machinist or a shoemaker. With such capacity in its pupils, the selection of a trade or trades to be taught in an institution becomes a question of expediency.

If unlimited means and liberty were at my command, and such numbers as are gathered in the New York and the large western schools, I would establish on the Russian system mechanic art shops for-1st, carpentering and joining; 2d, woodturning; 3d, pattern-making; 4th, blacksmithing; 5th, foundry work: 6th machine tool-work. In addition, I would provide, after the manner of the Auchmuty School in New York city, instruction in bricklaying, plastering, plumbing, and frescopainting, making in all ten departments of varied industry. Allowing an average of 150 hours to each trade, it would require 1,500 hours to give a lad the fundamental principles of ten trades. Two hours a day would complete the course in 750 days. A well-developed boy ought to begin his mechanical instruction at twelve years of age, and at sixteen he would easily finish his preliminary training and be reasonably wellequipped for a start in life; but during his progress from shop to shop a special aptitude would probably be developed in

Russian system of teaching mechanic arts any longer doubtful. Being founded in common sense and proved by practical tests at the present school at Moscow and by its followers on the Continent and in America, it has passed the experimental stage and has taken its place as one of the recognized factors in public education in Russia, Germany, France, and in several States of the Union.

A woman once asked a dentist, who was showing her some sets of false teeth, as evidence of his skill, if one could "eat with them things?" "Undoubtedly," said the dentist. "The process of mastication and deglutition is much facilitated thereby." "Yes, I know," answered the woman, "but can you eat with 'em?" After all this writing, some of my friends will perhaps ask, "What is the practical value of this system to deaf-mutes?" "Is this partial knowledge of many trades as useful to our pupils as a complete mastery of one?" "What have you done in California?" In short, "Can you eat with 'em?"

That the peculiar disabilities of the deaf call for certain modifications in the application of the Russian system to their needs is unquestionable. We cannot graduate a pupil at the age of nineteen or twenty years—the time when he leaves school—with simply a knowledge of the elements of construction. late for him to enter upon the practice and synthesis, so to speak, of his arts. He must be fitted to take his place at once at the bench and work from the scaled diagram. To this end there ought to be a manufacturing establishment connected with each institution for the deaf, where the graduate of the Mechanic Art School shall have opportunity to perfect himself in constructive art. And this has been done even at the great Moscow school. A series of manufacturing shops has been organized entirely distinct and separate, however, from the art school where this supplementary training is acquired. shops are conducted upon business principles; wages are paid and products sold, the yearly receipts from which are from one hundred and fifty thousand to two hundred thousand francs.

The relation of a school for the deaf to its pupils affords unusual facilities for the successful carrying out of such a plan. The tender age at which they are admitted; the long time they stay; the comparative isolation from outside influence; the constant inculcation, by precept and example, of industry; the union of class-room discipline and the moral force of the

Vise-work in iron, 10 weeks	100 hours.
Forging in iron and steel, 18 weeks	
Machine tool-work in iron, 20 weeks	

The course at Purdue University is modelled after the School of Mechanic Arts in Boston, which in turn obtained its inspiration and methods from the parent school at Moscow. Washington University, at St. Louis, has also an excellent Manual Training School organized upon the same principles.

By a little addition in the schedule given above, one will see that a student goes through the fundamental arts of six trades in 760 hours, or, presuming that he gives two hours a day to the shop, he finishes the whole course easily in two academic years, and without in the least interfering with the parallel intellectual development of the class-room. It will also be seen how broad and practical is the value of such a method of teaching mechanic arts. Instead of specializing the individual, and abnornmally developing his faculties and powers in one direction, he is fitted for any trade. He becomes a Briareus, hundred-handed, and ready for any occupation that his many hands find to do. If this sort of education were general, we should not see so many young men—the flotsam and jetsam of commercial life-stranded upon the shore of dull times and business depression. It also gives time and opportunity for the aptitudes of individuals to mature and declare themselves. Many a lawyer who should have been a blacksmith, and preacher who was cut out for a carpenter, would be lured by the fascination of tool practice into devoting his energies to mechanical pursuits, and be content with a pre-eminence there which he can never attain in professional life.

It must not be supposed that the details of this method of teaching trades are the brain offspring of college-bred theorists or doctrinaires, who are proverbially unskilled and deficient in the practical affairs of life. On the contrary, the analysis of typical forms, the tool practice, and the progressive order of manipulation, together with the supervision, the instruction, and the careful testing and credit of work, are entrusted to the most expert mechanics to be found; men who are not only capable of judging good work, but of doing it. There are thus brought together the broad generalization of the thinker, the practical skill and experience of the worker, and both acting upon a youthful mind made intelligent and receptive by contemporary study and culture. Nor is the success of the

and mending damaged furniture ever since, and all the time with a view not so much to the pupil's future efficiency as to the saving of a few dollars outgo in current expense. This view of trade-teaching is not confined to boards of management in our own profession. It is in line with, and is probably the result of, the popular belief that while intellectual training is a proper and legitimate charge upon the public purse, mechanical and applied scientific instruction is somehow going to pay for itself. This is the fundamental error that has proved fatal to the success of so many agricultural colleges and industrial schools. When it is understood that education and knowledge, whether of brain or hand, cost money or its equivalent, we shall be able to attack the labor problem intelligently.

The number of arts taught in the different schools organized in this country on the Russian system varies with the means at hand, or the faith of the managing board. When I visited Girard College in 1882, the trustees had just introduced, in a tentative way, vise-work in iron. A long bench fitted up with twenty vises and a drawer for each, supplied with hammers, cold-chisels, and files, occupied the middle of a room. twenty lads, ranging in age from twelve to fourteen years, were at work. Some were so small as to need a platform a foot high to bring them up to a proper level. Each had a rectangular bit of rough iron given him. The lesson was explained, the requirements made clear, and the proper tools to use. An experienced mechanic went from boy to boy correcting his errors of position or faulty handling of tools. The foreman took his position by the testing block, and from time to time the lads went to him to have their work criticised and tested. When finished, each block of iron was stamped with its proper credits. It was a novel sight, especially because of the tender years of the lads. Here were children using the hammer and cold-chisel and striking with the precision and correct method, though not the force, of journeymen. They were interested in their work and took pride in it. The lessons are limited in duration by the physical capacity of the pupils. With this class the time was one and a half hours.

At Purdue University, Indiana, the shop instruction is divided as follows:

Bench-work in wood, 12 weeks	<b>12</b> 0 J	hours.
Wood-turning, 4 weeks	40	"
Pattern-making, 12 weeks		66

As the typical instruments in carpentry are few, so are the fundamental forms to which their use is applied. Having learned how to handle saw and plane in working wood to given dimensions, the pupil is immediately put upon a series of elements in the following order: No. 1, a square joint; 2, a mitre joint; 3, a dovetail joint; 4, a blind dovetail; 5, a mitre dovetail; 6, a common tenon; 7, a key tenon; 8, a tusk tenon; 9, a brace tenon; 10, a pair of rafters with a collar beam; 11, a truss tenon; 12, a drawer; 13, a panel. If one will take the trouble to look about the wood-work of his house, he will find that these elementary forms embrace nearly, if not quite all, the essential principles of the carpenter's trade. The saving in time to the learner will be appreciated when it is known that this series of models is worked out in one hundred and twenty hours, or in twelve days of ten hours each. In the schools conducted upon this plan two hours a day for twelve weeks are devoted to the shop, and in this brief time a pupil masters the principles which underlie the carpenter's craft. It is not claimed that the young man is a finished and competent journeyman, but he knows how to go to work. Experience and skill come with practice, and practice is given in these manual art schools merely for the purpose of teaching the principle; when that is acquired the pupil passes on to the next art.

From this method and purpose of working, it follows as a necessary corollary that in the pure Russian system all commercial elements are rigorously excluded. As the construction is elementary and educational only, no finished or saleable articles are allowed. To expect an immediate money return from the lad learning the use of chisel and saw in constructing a mitre-joint is as unreasonable as to expect present compensation from the embryo engineer who is learning the use of logarithms or the strength of materials. Each is a part of the preparation for future efficiency. It is the seed-time and sowing; the harvest shall come by-and-by.

In some institutions this purely educational feature will be objected to on the score of expense. Fifty years ago the parent schools at Hartford and New York started a tailor-shop to make and repair the jackets and trousers of the boys; they also opened a shop to make and repair shoes. A carpenter was employed, who, with a few boys, mended the broken chairs and bedsteads and did the tinkering about the house, and we, following their lead, have been patching trousers, cobbling shoes,

like a revelation of the possibilities in that line of work. The school itself is not new, having been founded in 1830, but its novel methods date from the year 1868, when a reorganization was effected, and the present system of teaching handicrafts was begun. This system is based upon the theory that the various trades may be reduced to certain fundamental arts which underlie them; that these arts may be arranged in an orderly sequence, and taught to classes through a gradual series of examples or exercises by the same educational methods which are employed in teaching the sciences.

This plan of working naturally involves the study of the tool preliminary to the forms in which its use is to be illustrated. At the Moscow School referred to, the elements of instruments employed in the various arts have been studied and made the subject of class instruction, until by analysis, gradation, and system they have raised tool manipulation to the dignity of a science.

To illustrate something of the manner of carrying out this method of instruction let us select some wood-working tools which are of general use. The typical implements are four in number: the hammer, the chisel, the plane, and the saw. Nearly all others are only modifications or combinations of these. beetle and the mallet are modifications of the hammer; the axe, hatchet, and adz are combinations of hammer and chisel. pupil is shown that in the use of the hammer there are three movements: the wrist movement, suitable for light taps or tack driving, in which the wrist becomes a fixed centre of motion; the elbow movement, where the elbow becomes the fixed centre. and the shoulder movement, in which the shoulder is the centre. He is taught how to hold his hammer; how to strike square blows and with precision; how to drive a nail vertically and horizontally without splitting the block or mashing his thumbit is astonishing how few professional men can do it; how to draw a nail without marring the wood or bending the iron; then the different kinds of nailing, such as toe and blind nailing.

All this, and more, is taught and illustrated in the lesson and exercises under the head of "Striking." After the same manner, "Cutting," "Splitting," "Planing," with sharpening and adjusting the plane irons. "Scoring" and "Sawing" are reduced to elementary principles and taught in class exercise. Incidentally much information is given in regard to the qualities of woods, their management and eccentricities, and how to remedy them.

quill driving when there is such *manly* work as this to do?" And yet the so-called professions are overcrowded with men who ought to be tending the lathe or shoving the plane, while the handicrafts which nursed into greatness men like Franklin, Watt, Stephenson, and Faraday, and made the great fortunes of Cooper, Colt and Crossley, and Nasmyth and McCormick, are falling into disrepute.

One cause of this ill-favor with which mechanical industries are regarded is not far to seek. It is found in the unreasonable length of time required of a boy for learning a trade. The former almost parental relation between master and apprentice has disappeared, but the traditional five or seven years' term of service survives with exasperating persistence. The mystery attaching to the expert handling of tools vanishes before a lad has been three months in a shop, and still he is kept at carrying lumber, sweeping floors, tending fires, scouring castings, running of errands, and the thousand nameless drudgeries which are put upon the luckless apprentice. He knows there is no education in this sort of work; he longs to handle the tools he is forbidden to touch; he feels that he has been tricked of freedom; grows surly and impatient of restraint; quarrels with the foreman, and is soon discharged by his master as a worthless vagabond, when all the time there was in him the making of a good mechanic had the proper means been used and opportunity offered.

In view of this growing dislike to apprenticeship, and the consequent alarming outlook of mechanical industries in this and other countries, earnest men have been casting about for a remedy, and many think it has been found in the "Trade," or "Manual Training," or "Technical" school, as it is variously called, but each having the same objective purpose, viz: the teaching of the *principles* of handicraft by laboratory practice, pari passu with instruction in those studies which have a direct and immediate bearing upon industrial development and culture.

The credit of this device belongs to Russia. Those who visited the National Exposition at Philadelphia in 1876 will remember the surprise and admiration excited by the exhibit of the Russian Government, and especially the progress indicated thereby in the departments of art and mechanical industry. The display made by the Imperial Technical School of Moscow attracted great attention, and indeed was something

## AMERICAN ANNALS

OF THE

# Deaf and Dumb.

Vol. XXX, No. 3.

JULY, 1885.

## MECHANIC ART SCHOOLS.

In the Sixteenth Report of the California Institution reference was made to the "Russian system" of teaching handicrafts. Judging from numerous letters received since its publication, the paragraph has attracted some attention, and it has been thought that a few pages of the *Annals* might be used not unprofitably in setting forth something of the details of a method which has met the approval of many thoughtful men who are interested in the subject of industrial education and the serious problem, "What shall we do with our boys?"

This latter question has a broader bearing and significance than its special relation to the deaf-mute and his welfare. dominant thought of the average young man of to-day seems to be, how to get rid of work. As soon as he leaves school the boy casts about for a "light and easy" position—teaching, countertending, book-keeping, government employ, office work-anything that will save his hands from grime. And this in face of the fact that for bright, active young men the industrial pursuits offer the best opportunities for preferment, and for even that cheap "success in life" which is measured by the money There is also more of true dignity if one would one makes. A steel steamship was recently launched in the only see it. harbor of San Francisco, and a few moments afterwards the great engine, weighing fifty tons, was lifted like a toy from the deck, over the stancheons and into the hold. As we looked into the cavernous depths of the vessel and watched the bigmuscled grimy workmen who had built the engine, and now, armed with clamp and screw, were fastening it in position, a lady said to me, "How can young men take to tape cutting and

The following Works, published or for sale by

# BAKER & TAYLOR,

No. 9 Bond St., New York City,

Will be sent by mail, on receipt of price with 10 per cent. added for postage.

## PEET'S COURSE OF INSTRUCTION

FOR THE

## DEAF AND DUMB.

ELEMENTARY LESSONS, - - by Harvey P. Peet, LL. D. Pp. 308. Price 75 cents.

This work has been used in American and foreign institutions for the deaf and dumb for upwards of thirty years, and has won a reputation which cannot be lightly regarded.

SCRIPTURE LESSONS, - - by Harvey P. Peet, LL. D. Pp. 96. Price 30 cents.

Beautifully illustrated. Over 100,000 copies have been sold. This is the best compendium of Scripture history embraced in the same number of pages.

COURSE OF INSTRUCTION, Part III,

by Harvey P. Peet, LL. D.

Fully Illustrated. Pp. 252. Price \$1.00.

Containing a development of the verb; illustrations of idioms; lessons on the different periods of human life; natural history of animals, and a description of each month in the year.

This is one of the best reading books that has ever been prepared for deaf-mutes, and furnishes an excellent practical method of making them familiar with pure, simple, idiomatic English. It is well adapted, also, for the instruction of hearing children.

HISTORY OF THE UNITED STATES OF AMERICA,

by Harvey P. Peet, LL. D.

Pp. 423. Price \$1.50.

Extending from the discovery of the continent to the close of President Lincoln's administration. A work of great accuracy, written in a pure, idiomatic style, and pronounced by good judges to be the best and most instructive history of this country that has ever been condensed within the same compass.

MANUAL OF CHEMISTRY, - - - by Dudley Peet, M. D.

Pp. 125. Price 75 cents.

The principles of the science are unfolded in a manner peculiarly felicitous. The style is very simple and easily comprehended. A capital introduction to a course of lessons in physical science.

MANUAL OF VEGETABLE PHYSIOLOGY,

by Isaac Lewis Peet, LL. D.

Pp. 42. Price 25 cents.

A short, comprehensive, and lucid exposition of the subject, adapted to learners of all conditions.

[Continued on page 3 of cover.]

# AMERICAN ANNALS

OF THE

# Reaf and Jumb,

EDITED BY

# EDWARD ALLEN FAY,

UNDER THE DIRECTION OF

E. M. GALLAUDET, OF WASHINGTON, I. L. PEET, OF NEW YORK, T. MACINTIRE, OF PENNSYLVANIA, HARRIET B. ROGERS, OF MASSACHUSETTS, AND P. G. GILLETT, OF ILLINOIS,

Executive Committee of the Convention of American Instructors of the Deaf and Dumb.

Vol. XXX, No. 3.

JULY, 1885.

WASHINGTON, D. C.
PRINTED BY GIBSON BROTHERS.