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# EDUCATION OF THE DEAF

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## PERCIVAL HALL

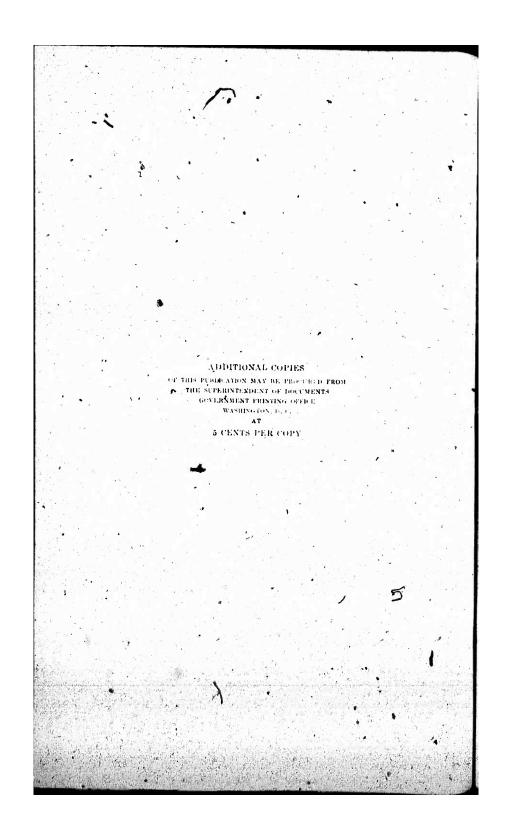
PRESIDENT OF GALLAUDET COLLEGE WASHINGTON, D. C.

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#### EDUCATION OF THE DEAF

By PERCIVAL HALL,

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CONTENTS. Number of schools and their formeof organization—Status of the schools for the deaf. Compulsory education. School agree—Size of classes—Oral teaching and the combined system—Auricular instruction—Industrial training—Salaries—Pensions—Preparation of teachers. New school plants—Dual schools—Methods of support—Lip reading for the adult deaf. Education of deaf soldiers and sallors—Matters of special interest—Methods of educational organizations—Higher education of the deaf—Mental and educational tests.

#### NUMBER OF SCHOOLS AND THEIR FORMS OF ORGANIZATION.

Since the publication of Dr. E. A. Fay's article on the Progress of Education of the Deaf in the Report of the Commissioner of Education for 1913 the number of public residential schools has not increased, remaining at 64. The number of pupils, however, has risen in this time from 10.837 to 11,103, the former number being 82 per cent of the pupils in 1912 and the latter number representing 80 per cent of all the deaf pupils under instruction in the United States in October, 1919.

The States of Delaware, New Hampshire, Wyoming, and Nevada have not yet established special schools for deaf children, but continue to provide for the education of their deaf children at public expense in other near-by States.

The public residential schools continue to offer excellent care and supervision over the pupils both in and out of school. As a rule, they provide free tuition, laundry, and necessary medical attention to all the children throughout the school term of about nine months. They also provide industrial training of high grade in many cases and continue to offer from officers of the institution moral and religious instruction to all the pupils whose parents do not arrange for their children to have special sectarian religious instruction.

The number of day schools for the deaf has now risen to 78, an increase of 8 since Dr. Fay's report. The number of pupils taught in these schools has increased from 1.773 (13 per cent) to 2,010, or nearly 15 per cent of the total number under instruction.

In October, 1919, there were 21 private and denominational schools in the United States, or one more than reported by Dr. Fay in 1912, The number of pupils in these schools has risen from 553 (4 per cent)

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to 666, or 5 per cent of the total number under instruction. The relative proportion, therefore, of children instructed in the various types of schools has varied only slightly in the past seven years.

The same advantages which existed in the residential schools seven years ago may still be cited. They are as follows: Better industrial training, more careful physical attention, regular hours of study, exercise and work, simple diet, supervision of athletics and play by competent instructors, etc. Such schools also in general, because of the large number of children instructed, offer better graded classes than the smaller day schools are able to provide. A more homelike atmosphere has now been furnished in many of the large residential schools by the erection of cottages for small groups of children.

# STATUS OF SCHOOLS FOR THE DEAF.

Progress is slowly being made in the classification of schools for the deaf as strictly educational institutions. During the past few years the State school at Council Bluffs, Iowa, has been placed under the board of education, and the school for the deaf in Florida is now classed distinctly with the State university and other educational institutions in all general legislation. Of course, the private schools have never been classed as charitable institutions, as Dr. Fay has pointed out, and the public day schools have always been a part of the common-school system of towns and cities in which they are located. No schools have been changed from an educational to a charitable status in recent years.

In late years very few of the public residential schools have been controlled in any way by politics. There are still a few in the United States in which the office of superintendent is made a political appointment, but as a rule all such positions and all of those on the teaching and domestic force have been filled by the appointment of people qualified to do the work required, without reference to politics.

The States of Illinois and New Jersey have placed many of the positions in their schools under the State civil service.

## COMPULSORY EDUCATION.

The uneducated deaf man or woman may easily become a burden to society. The educated deaf person is a distinct asset. It is, therefore especially necessary that there should be adequate compulsory school laws for the education of all deaf children. Only a small percentage of the States have satisfactory compulsory school-attendance laws for deaf children. One of the mistakes in existing laws in a number of States is the low age (from 16 to 18) at which deaf children may leave school. As the average deaf child has been shown by test to be some three or four years behind his hearing brother or



sister in progress in school, it is easy to see that compulsory school laws should require the attendance of deaf children up to 19 or 20 years of age.

The ages for compulsory schooling might well be between 6 and 19, or 7 and 20, and the term of school nine months.

The following model compulsory educational law was prepared at the instance of the conference of superintendents and principals of American schools for the deaf and submitted at a special meeting held at Staunton. Va., in 1914.

## COMPULSORY EDUCATIONAL LAW.

Ecquiring the attendance upon school of deaf children of the State.

Re it enorted by the Legislature of the State of

Every parent, guardian, or other person having control of any normal child between \_\_\_\_\_ and \_\_\_\_ years of age, too deaf or defective of speech to be materially benefited by the methods of instruction in vogue in the public schools, shall be required to send such child or youth to the school for the deaf at the city of \_\_\_\_\_\_, during the scholastic year of that year. Such child or youth shall attend such school, year after year, until discharged by the superintendent upon approval of the board in control of such institution.

# EXCUSING ATTENDANCE.

Such Board may excuse attendance when satisfied: \

- 1. That the child is in such bodily or mental condition as, to prevent his attendance at school or application to study for the period required.
- 2. That he is afflicted with such contagions or offensive disease or possesses such habits as to render his presence a menace to the health or morals of other pupils, or for any reason deemed good and sufficient by the superintendent with approval of the board in control of such school.
- 3. That the child is efficiently taught for the scholastic year in a private or other school, or by a private tutor, the branches taught in the public schools so far as possible.

### PENALTY.

Any such parent, guardian, or other person falling to comply with the foregoing section shall, upon conviction thereof before the justice of the peace or other court, be deemed guilty of a misdemeanor, and shall be fined in a sum not less than \$5 nor more than \$20 for the first offense, nor less than \$10 nor more than \$50 for the second and every subsequent offense, with costs in each case.

Any person who induces or attempts to induce any deaf or partially deaf child to absent himself or herself unlawfully from school, or employs or harbors any such child unlawfully from school while said school is in session, shall be deemed guilty of a misdementar, and shall, upon conviction thereof before the justice of the peace or other court, be deemed guilty of a misdementar, and shall be fined in a sum not less than \$5 nor more than \$20 for the first offense, nor less than \$10 nor more than \$50 for the second and every subsequent offense, with costs in each case.

That said fines as provided, when collected, shall be paid to the public-school fund of the county in which the child lives.



BEPORT NAMES OF DEAF CHILDREN.

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(Or)

The provision of this act shall apply to children entitled, under existing statutes, to attend school at the school for the deaf, so far as the same are properly enforceable. Truant officer shall, within 60 days after the passage of this act, and annually between the first day of \_\_\_\_\_\_ and the first day of \_\_\_\_\_\_ and annually between the first day of ----- and the first day of -report to the probate judges of their respective counties the names, ages, and residence of all such children between the ages of --- and --- years, with the names and post-office address of their parents, guardians, or the persons in charge of them; also a statement whether the parents, guardian, or person in charge of each child is able to educate and is educating the child, or whether the interests of the child will be promoted by sending it to the State institution mentioned. Upon information thus or otherwise obtained-the probate judge may fix a time when he will hear the question whether any such child shall be required to be sent for instruction to the State institution, mentiofied, and he shall thereupon issue a warrant to the proper trunnt officer or some other suitable person to bring the child before such judge at his office at the time fixed for the hearing, and shall also issue an order on the parents, guardian, or person in charge of the child to appear before him at such a hearing. a copy of which order, in writing, shall be served personally on the proper person by the fraunt officer or other person ordered to bring the child before the Judge. If, on the hearing, the probate judge is satisfied the child is not being properly educated at home, and will be benefited by attendance at the State Institution mentioned, and is a suitable person to receive instruction therein. he may send of commit such child to such institution. The cost of such hearing and the transportation of the child to such institution shall be paid by the



county after the manner provided where a child is committed to a State reformatory; Provided, Nothing in this section contained shall be construed to require the trustees of the State institution mentioned to receive any child not a suitable subject to be received and instructed therein under the laws, rules, and regulations governing such institution.

Respectfully submitted

J. N. TATE, AUGUSTUS ROGERS, A. H. WALKER,

Committee.

#### SCHOOL AGE.

The tendency to open the residential schools to very young children has grown to a considerable extent and has been one of the reasons for the construction in Morganton, N. C., Austin, Tex., Colorado Springs, Colo., Ogden, Utah, and in other residential schools of separate primary buildings where the younger children have their own special diet, their own playgrounds, classrooms, and general school life.

In a great many cases there seems little advantage in beginning school life so early, as children of this age can receive very little formal education of value. There is no doubt an advantage to those children, however, whose home surroundings are poor, in attending school at 5 or 6 years of age. It is probable also that considerable progress in lip reading may be made even at this early age, which may be of advantage later in the pupils habitual use of speech in communicating with hearing people.

Well-graded beginners' classes of children from 7 to 8 years old, as a rule, seem to make as good final progress and obtain as good general accomplishment as classes of children entering a school at an earlier age.

#### SIZES OF CLASSES.

The number of pupils in a class in schools for the deaf has been reduced since 1912 from 10 to 9 in oral classes and from 12 to 11 in the manual classes. This is encouraging and necessary for the best instruction of deaf children. The methods of education demand a great deal of individual instruction. There is no reason, however, why manual classes should not be as small as oral classes, and it is most desirable that additional manual teachers be employed in many of the schools.

## ORAL TEACHING AND THE COMBINED SYSTEM.

Of 13,779 pupils under instruction in October, 1019, in the United States, 11,238, or 81½ per cent, were taught speech. Of these, 10,376, or 74½ per cent, were taught wholly or chiefly by the oral method; 287, or 2 per cent, were taught wholly or chiefly by the auricular



method. The percentage taught wholly or chiefly by the oral method. has increased steadily for many years until it is a question now whether the percentage who can profit best by oral methods has not been considerably passed. Interesting tests of manually taught pupils made by Dr. Pintner, of the Ohio State University; recently would seem to show that many manually taught children are making better progress than could be expected from their mentality, while practically no orally taught pupils are accomplishing the unusual.

It is to be regretted that in a number of schools the manual classes are made up almost entirely of mentally backward children and children entered late in school, and that they are so classified that several grades must be taught by one teacher in the same classroom. This hinders the progress of the children and leads to poorer results than would be obtained were manual classes better graded.

Most of the oral teaching done in the United States is carried on in the combined system schools. Of the children taught speech in October, 1919, eighty per cent were pupils of such schools.

In the combined system schools the method of instruction is supposed to be chosen to fit the individual child. In practice, all young children who enter these schools are placed in oral classes and kept there as long as their mental progress is good. There is no doubt that in some cases the desire of parents for the accomplishment of speech on the part of their children leads to the retention of children in oral classes in combined schools after they have ceased to make the progress which they should attain with their natural mental equipment.

As has been mentioned before, a number of the combined system schools have erected, or expect to erect, separate primary departments in which the younger children may be taught entirely orally and confirmed in the habit of the use of speech and lip-reading to a large extent. They are then transferred to the intermediate department and later to the advanced department, in each of which is maintained one or more manual classes. The manual alphabet and the language of signs is used in chapel exercises, on the playgrounds, and on social occasions with a large majority of these older children.

The adult deaf people of the United States have been, with few exceptions, educated in special schools for the deaf, some under the purely oral method and others under the combined system. These educated deaf people are organized in various ways, the largest body being the National Association of the Deaf, which meets every three years.

A large majority of these adult deaf people are strong in their blief that the use of the manual alphabet and the language of signs is to the general advantage of the deaf child's mental and moral growth. At a meeting of the National Association of the



Deaf, held thiring the summer of 1920 in Detroit, and attended by nearly 2,500 deaf people, the following resolutions in connection with the education of the deaf were passed:

Whereas much harm is done to the cause of the deaf, especially in their education, by mislending statements constantly made by enthusiasts of one method and another, arousing false hopes in the minds of deaf children, and

Whereas we believe our practical experience in life, after leaving a school, in actual contact with the affairs of the world as breadwinners, qualifica us to speak with authority and confidence as to which method, or methods, best fits the deaf to overcome their handicap, and as representing the 60,000 deaf men and women of this country, we ask the carnest attention of all nubiased people to the following declaration of principles;

We believe that every deaf child is entitled to the best education be can

We believe that the oral method alone does not give every child this chance and that the method best adapted to the purpose of his education should be employed.

We believe that there is notch good in the oral method, but that it is misused to the detriment of nearly children and that the manual method is not given a fair chance.

We believe that the moral, social, and religious welfare of the deaf is best promoted by the system of instruction which recognizes and makes judicious use of the cultural value of the language of conventional signs. That to fully enjoy the benefits of social, intellectual, and communal gatherings the sign language is essential.

We heleve, therefor that these ends can all be secured through the combined system of instruction which includes all methods and adupts each to the child.

We believe in compulsory education of the deaf. .

We believe that method by law is wrong in principle, injust in its execution, is un-American and deprives the deaf child of his birthright.

We believe that all schools should be classed with educational institutions

We believe that schools for the deaf should place their industrial departments on the same plane as their literary departments and maintain a higher standard in this department of the school than has department of the

# AURICULAR INSTRUCTION.

Auricular instruction is given in the combined system schools as well as in the oral schools. It is thought by a number of educators of the deaf that much more attention should be given to auricular training. Added impetus to this kind of work has been given by the development of training in vibration and rhythm mentioned by Tr. Fay in his article. Aural and oral teachers in many of the schools are employing the piano and other musical instruments to increase the pupil's knowledge of pitch, rhythm, and vibration, and to acquire a more natural use of the voice. The increase in auricular instruction as a principal method has been from 1.36 per cent to 2



per cent since 1942. This percentage should probably be considerably larger. But auricular instruction has always been very largely individual. During the past 30 years various devices have been invented, including tubes and electrical apparatus, with several branches to accommodate up to six or seven pupils. But these have hardly met the varying needs of the partially deaf, so that a whole class can be easily handled together, and growth in this line of instruction has been slow.

# INDUSTRIAL TRAINING.

Industrial training in schools for the deaf has undergone a considerable improvement in the past seven years. The younger deaf children are almost without exception now given simple training in handwork, such as weaving, and are given free-hand drawing and color work of various kinds. Later the boys are taught to use simple tools in woodworking. The younger girls and often the boys are given instruction in simple sewing. At about the age of 12 regular industrial work is introduced for both boys and girls. For the boys some 60 trades are taught among the various institutions in the United States. For the girls sewing, cooking, millinery, housework, printing, photography, nursing, poultry raising, tailoring, dressmaking, laundry work, etc., are among the principal lines in which instruction is given.

The tendency in recent years has been to study the industries of the State and to provide first-class instruction in a few trades in each school rather than to branch out into a very large number. Printing, agriculture, tailoring, and carpentry work still remain some of the best trades for the boys, while dressmaking, millinery, sewing, and cooking seem to be most in demand for the girls.

The field of photography and photo-engraving is good, but has not been used by many of the schools as an opening for its pupils.

Equipment for industrial training naturally becomes out of date in the schools, but in almost all of the large residential schools good shops of considerable magnitude are maintained, and many of them are provided with modern machinery of the best kind for the trades taught.

As the independence of the deaf of this country has come largely from successful industrial training, this part of the work of instructing the deaf is very important and is one in which heads of schools are anxious to obtain the best results through proper equipment and efficient teachers. The schools are realizing more and more that instructors in industrial subjects must be trained teachers as well as good mechanics, and the demand for highly trained teachers of this kind has increased greatly in the past seven years.



#### SALARIES.

The salaries of teachers of the deaf have risen some 25 per cent in the past two years, but in most cases are not yet adequate to meet the increased cost of living. One of the greatest needs in the education of the deaf at the present time is a further increase in salaries paid, not only to the teachers in the academic classes but also to the instructors in industrial lines.

#### PENSIONS.

Teachers in the schools for the deaf in New York and in the State school at Trenton, N. J., are now entitled to pensions under the State laws, after certain periods of service. Ohio and California will pension teachers of the deaf in the course of a year. Every State should in time include its teachers of the deaf in a general pension system so that the special profession of teaching deaf children may be more attractive.

# PREPARATION OF TEACHERS.

It has been impossible in the past few years to obtain enough candidates for training in the special work of instructing the deaf to meet the demands of the schools. The normal class at the State school for the deaf at Indianapolis has been disbanded, and a number of normal classes maintained at other schools have been musble to find enough candidates entirely to fill their capacity. The services of men have been especially hard to obtain and only a few have been trained for the work of instruction of the deaf in the past seven years. Practically all of them have been graduated from the training classes at the school for the deaf at Columbus, Ohio, or from the normal department of Gallaudet College, Washington, D. C. Higher salaries and pensions would no doubt attract both young men and young women to the profession.

An addition to the opportunities for normal training for special work with the deaf has been made by the establishment of a class in the New Jersey State Normal School at Trenton which will graduate candidates with teachers' diplomas after a two years' special course, including observation work in the State school for the deaf at Trenton and special study of the needs of deaf children.

## NEW SCHOOL PLANTS.

A number of the schools for the deaf have added greatly to their capacity in the past seven years, notably the schools at Colorado Springs, Colo., Sulphur, Okla., and Austin, Tex. Entirely new plants are being built or planned for at the American School at Hartford, Conn., and the New Jersey school at Trenton. Both of these schools have purchased new sites much larger than those available heretofore. The American School will be rebuilt upon the old institution plan, practically all dormitories, classrooms, etc.,



being in one building. It is planned to rebuild the New Jersey school on the cottage system with a number of small buildings, including separate cottages for young children, intermediate grades, and older children, and separate school and shop buildings.

It is generally accepted among heads of schools for the deaf that the cottage plan of buildings is theoretically better for the development of children in a number of ways. Such plants are expected to answer the objection of the lack of home life in the older institutional buildings and to give better opportunities for supervision of play and study.

#### DUAL SCHOOLS.

A number of States still educate their deaf and blind children in the same institution. It is agreed everywhere that this is a mistake, except possibly from the point of actual expense of money. A number of dual schools are planning to separate their deaf and blind children in the near future. The authorities of the Virginia school are endeavoring to accomplish this, but a law for this purpose has so far failed of passage at the hands of the legislature. In California the dual school at Berkeley has been separated by law, but money for the establishment of a new plant for either the deaf or the blind children has not yet been provided.

#### METHODS OF SUPPORT.

Methods of support of public schools have changed little during the past seven years. Appropriations have been made by State legislatures in some instances in lump sums and in other instances on the per capita basis. The State of Colorado seems to have the best provision for general support. By law, a certain percentage of the total taxes collected by the State is used for the support of the State school for deaf and blind children.

Where per capita rates have not been raised liberally, State schools have been much handicapped in the past few years by the increased cost of supplies and materials, and a flexible plan of some kind like that used in Colorado, whereby the amount of money provided for the support of the school for the deaf increases with the increasing wealth of the State and also with the tax rate, would seem desirable throughout the United States.

The tendency in a number of States to include estimates for schools for the deaf in State budgets prepared by a central committee, and to place entire financial control of appropriations and expenses in the hands of a State board of control has not met with entire success. Too little flexibility is usually allowed in any such plan.

It is also difficult for a board controlling a great many State in stitutions to take the same personal interest in any one school as a special board controlling a single institution.



# LIP READING FOR THE ADULT DEAF.

Beside the 11,103 deaf pupils reported as in regular schools for the deaf, there are of course thousands of adults with more or less imperfect hearing. Many of these have great difficulty in carrying on conversation with hearing people. They have already received their general education in schools or colleges for normal persons. A great number of them have felt the necessity of the study of lip reading in order to improve their ability to understand speech.

These adult deaf people naturally do not need the instruction of the special schools for deaf children, but need individual or class instruction in the special art of reading the lips. Miss Bruhn, following the Mueller-Walle method, has instructed a considerable number of special teachers of lip reading, who have established classes in nearly all of the large cities of the United States for adults wishing to learn lip reading. Mr. Edward Nitchie, recently deceased, some years ago evolved a system of instruction in lip reading and established classes in New York City which lave been carried on since his death by Mrs. Nitchie. Teachers using this system are also to be found in other large cities.

A number of other more or less experienced teachers of the deaf have taken up this line of work which has resulted in great benefit to many adults with impaired hearing. It is now possible through the Volta Bureau at Washington. D. C., for those in need of such special instruction to get in touch with successful teachers of lip reading for adults in almost any part of the country and receive the benefit of their instruction.

# EDUCATION OF DEAF SOLDIERS AND SAILORS.

An interesting phase of the education of the deaf during the past few years has been the provision for teaching sailors and soldiers who became deaf during the recent war. These cases consisted partly of temporary deafness caused by concussion and partly of permanent deafness caused by concussion, disease, accidents, or wounds. Dr. Charles W. Richardson, of Washington, D. C., commissioned major in the Medical Corps of the Army and later lieutenant colonel, was placed in charge of the whole plan for handling these soldiers prior to their discharge from the Army.

An able corps of experienced educators of the deaf under the charge of Capt. A. C. Manning, formerly of the Mount Airy School, was provided at Cape May, in base hospital No. 11. General educational facilities were provided here for all patients, deaf or otherwise, together with a considerable amount of shop or trades instruction.

The special teachers of the deaf confined their work almost entirely to the teaching of lip reading to the deaf soldiers received at the hospital, and the results accomplished were most satisfactory.



Intensive lessons in speech reading were given for from 45 minutes to an hour three times daily by two or three different instructors to each pupil individually. The general plan followed was largely based on the Mueller-Walle method of instruction.

After an average of eight weeks of such teaching, a large majority of the pupils were able to read the lips with a considerable degree of success. A number of them became quite expert lip readers.

A few State schools for the deaf were called upon to aid in the general education of deaf young men discharged from the Army or Navy. One young man was entered at Gallaudet College and a few were admitted to the Ohio school. In general, the State schools for the deaf, whose courses are limited to grade work and part of the high-school subjects, were not the proper places for the admission of deafened adults; and the arrangement made at Cape May, with the provision for the vocational training of all in need of such education in higher institutions for the hearing, seems to have met the situation most satisfactorily.

## MATTERS OF SPECIAL INTEREST.

In the States of Indiana and Illinois, traveling agents are now employed by the residential schools. It is the business of these agents to look up deaf children in need of education, to follow up those children who have dropped out of school, to keep in touch with the graduates who are at work, and to assist those who are out of employment to obtain positions.

This is no doubt one of the most helpful and interesting developments in the education of the deaf in recent years, and such a plan might well be adopted by practically every State in the United States.

It is interesting to note the change in recent years in the attitude of industry toward deaf workers, brought about probably by war conditions. While this is not strictly a matter of education of the deaf, it is a matter of education in regard to the deaf on the part of the public. During the scarcity of labor in war time, it was found by more and more manufacturers that deaf people gave intelligent service, were not liable to accident, and in every way satisfied requirements in factory and office in many lines of work. The result has been the employment of many hundreds of deaf people in the rubber industry in Akron, in the automobile industry in Detroit and Flint, and in a number of manufacturing plants in New England.

In the Goodyear Rubber Co.'s plant at Akron, Ohio, an educational department especially for the deaf has been established with regular teachers, offering courses in English, arithmetic, drawing, and other subjects tending to make the employees more valuable citizens genefally and to fit them for higher positions in their work with the company.



# MEETINGS OF EDUCATIONAL ORGANIZATIONS.

Since Dr. Fay's report there have been held three meetings of the Convention of American Instructors of the Deaf, one in Staunton, Va., in 1914, one in Hartford, Conn., in 1917, and one at Mount Airy, Philadelphia, in 1920. The last was a joint meeting of the Convention of American Instructors of the Deaf, the American Association to Promote the Teaching of Speech to the Deaf, and the Society of Progressive Oral Advocates.

There have also been held special meetings of the conference of superintendents and principals at Staunton, Va., in 1914, and at Columbus, Ohio, in 1919. Reports of the proceedings of the meetings of the convention have been issued as Senate documents—No. 986. Sixty-third Congress, third session, and No. 172, Sixty-fifth Congress, second session. The proceedings of the meetings of the conference have been issued in the American Annals of the Deaf, the official organ of the conference.

# HIGHER EDUCATION OF THE DEAF.

The higher education of the deaf is still provided for at the Columbia Institution for the Deaf in Washington, D. C., in the advanced department known as Gallaudet College. The number of free scholarships provided for worthy students has been increased from 100 to 125. Courses in agriculture, printing, library work, typewriting, domestic science, and drawing have been added to the curriculum since Dr. Fay's report in 1913.

While a few deaf young men and women of ability have been able to carry on courses of study at regular institutions for higher education in various parts of the country, a very large majority of the deaf seeking higher education have entered Gallaudet College. The degrees of bachelor of arts and bachelor of science, master of arts, and master of science, in course, are offered to successful students.

The graduates of the college are successfully engaged in the ministry for the deaf, business, agriculture, architecture, teaching, publishing, printing, chemistry, and many other fields.

# MENTAL AND EDUCATIONAL TESTS.

During the past few years Dr. Donald Patterson, formerly of the Ohio State University, and Dr. Rudolph Pintner, connected with the department of psychology of the Ohio State University, have worked out both mental and educational tests to be used in studying deaf children.

These mental tests have been developed until they are believed to give much information as to the native mental ability of deaf children, without depending upon the amount of language they have acquired. The educational tests have also been carefully worked



out. Both can be applied to hearing children as well as to the deaf. Over 2,000 pupils in our schools for the deaf have been tested by Dr. Patterson and Dr. Pintner and their assistants, and some

very interesting results have been obtained in this way.

It has been the hope of those most interested in this work that by using the tests with large numbers of children comparisons can be made between the congenitally deaf and those who have become deaf later in life, between those taught orally and those taught manually, and between hearing children and deaf children of the same age. It has also been hoped that by testing whole schools and classes, both the especially bright and especially dull children, they can be graded better in their work; also that in a general way the quality of the work of the teachers of the school can be determined by comparison of material at hand and results obtained.

From the number of tests made already those in charge do not feel that it safe to draw too definite conclusions. It appears, however, that deaf children on the whole are mentally about three years behind hearing children of the same age, but that once in

school their progress is about as rapid.

It is hoped that a great many more tests of this kind will be made. If they can be relied upon to compare the value of the various methods of instructing the deaf, a great deal will be accomplished for

the advancement of the education of deaf children.

A committee consisting of Mr. R. O. Johnson, formerly of the Indiana school; Dr. Augustus Rogers, of the Kentucky school; Dr. A. L. E. Crouter, of the Mount Airy school, and Mr. J. W. Jones, of the Ohio school, was appointed at the meeting of the conference of superintendents and principals at Staunton in 1914 to study the question of the efficiency of our schools for the deaf and to prepare a general scheme for the measurement of such efficiency. This committee has just published its report, which was submitted in brief at the meeting of the conference held at Columbus in December, 1919.<sup>2</sup>

From the work of the committee and the investigations of psychologists of proper standing and experience and with the cooperation of heads of schools for the deaf it seems possible that in the near future surveys of these schools will be made, including mental and educational tests, investigation as to equipment, industrial training, etc., which will lead to many helpful suggestions and improvements in the organization of all institutions devoted to the education of deaf children.

<sup>\*</sup> Standardization—Efficiency—Heredity—Schools for the Deaf, Hichard O. Johnson, A. M., Indianapolis.



