

do it for himself.

Mothers of deaf children, I told you before that your duty is not an easy one; but when through your untiring efforts and work and patience those children talk and their eyes take the place of their ears, you will be repaid a thousand-fold. The Americans with our Allies are fighting to "make the world safe for democracy." We oral advocates are fighting to make the deaf a potent power and factor in this democracy, and our work will go sounding and bounding down the ages with a reverberation that will never end, because the deaf will have come into their own and have what God intended they should have—speech.

The Chair: We will have a discussion of all the papers at the conclusion of all reading. The next paper is by Mrs. Mabel C. Gifford on Speech Defects, which I will ask Miss Rackham to read.

SPEECH DEFECTS

BY MABEL C. GIFFORD

Organization in San Francisco

The Department of Speech Correction in the San Francisco public schools was organized September, 1916, with a total enrollment of 1,486 pupils. Five schools were chosen as centers. The defective-speech classes from the schools in each district assembled in their respective centers one-half day each week. The other days of the week these classes received thirty minutes' drill from the teacher assigned to accompany the pupils to the center. A complete record is kept of each pupil, consisting of conditions before and during correction.

The classes were divided into two divisions—Class One and Class Two. Class One consisted of stammerers, stutterers, and clutterers. Class Two consisted of cases of lisping, infantile speech, faulty articulation, and enunciation. Model lessons were given Class One in the physiological and psychological training for stammerers and stutterers, with exercises for the development and control of the outer speech mechanism. Methods were employed for the training of the central mechanism by intensifying the visual and auditory images and for the establishment of confidence and emotional control by the formation of new mental associations. Mimeograph instructions were given each teacher for the purpose of accurately following up the instruction given by the supervisor.

For Class Two, tongue, mouth, and vocal gymnastics and special drills in phonetics and voice development were clearly outlined and the schedule arranged for home practise.

These drills are all arranged in steps of progression from the simple elementary sounds of language to the difficult consonant combinations. The scope of the speech department is to be generally broadened in the curriculum for the coming year.

First. A thorough survey of speech conditions in our public schools is to be made.

Second. Kindergarten teachers are to be instructed in the formation of elementary sounds, introducing the correct auditory elements preparatory to the primary work, and the introduction of reading.

Third. General speech improvement is to be furthered in the schools by

establishing in the regular class-room carefully graded drills to promote clear enunciation, articulation, breath control, and proper voice production.

Fourth. For the twenty-one nationalities represented in our schools, methods will be employed for the elimination of foreign accent.

The success of this corrective work is almost entirely dependent upon the *understanding and co-operation of principals, teachers, and parents*. Speech is essentially an unconscious habit, and the establishment of perfect unconscious speech is only acquired by the constant, diligent supervision of every teacher with whom the child comes in contact. Hence the necessity for an understanding of at least the fundamentals of speech correction on the part of every teacher in the public schools.

Speech Correction in the Public Schools

Speech defects in the public schools have received but little attention from educators until recent years. The lighter forms of imperfect speech passed unnoticed by the teachers, and the severe cases were considered by some to be incurable and by others to be outgrown.

Upon the inauguration of the Department of Speech Correction in the public schools of San Francisco, the enrollment showed that of the initial sifting of defective speech cases reported, 1,486 pupils with some form of speech defect were gathered. Of this number, 39 per cent were stammerers or stutterers; the remainder included cases of lisping, cluttering, infantile speech, nasality, defective articulation, and nasality resulting from cleft palate. This means that a great percentage of these 1,486 cases will be handicapped for life and that the careers of the majority will be ruined if the defect is not corrected.

Of the many forms of speech defects, stammering is the least understood generally and the most difficult of correction. The prevailing conception is that the difficulty is due to nervousness and that it will eventually be outgrown." There is a small percentage of transitory stuttering that is outgrown under favorable conditions, but true stammering and stuttering are *never outgrown*. The most recent and best substantiated theory of the primary cause of stammering is that advanced by Dr. C. S. Bluemel, as a result of his studies of aphasia, that the true cause of stammering is transient auditory amnesia due to a disturbance in the auditory speech center. This disturbance may be brought about by many different causes, as illness, emotional shock, falls or other violent physical shock, or inheritance of a weak auditory speech brain center.

When a weak auditory verbal center is inherited, the young child with his speech habits yet unformed is in grave danger of acquiring the habit of stammering by association with older children who have formed the habit of stammering. It is this phenomenon which gave rise to the theory formerly intensively held, that stammering was contagious. It is so *only* when a *marked predisposition exists* and can never be the true cause of stammering. The history of nearly two thousand cases of stammering recorded by the writer in the past two years has shown that most of them were confirmed stammerers before the school age, and the majority of them never heard a stammering child previous to the formation of their speech habits. Cases are frequently found of well-developed stammering at an age of two and a half and three years, who have never associated with older children. But on account of the cases of children with an inherited predisposition for a weak auditory center, who may be hastened into the stammering condition by hearing the struggles of another, stammering or stuttering children should never be permitted to recite in the school-room.

While the disturbance first occurs in the auditory brain center, due to an amnesia for the exact sound of the first vowel of a word, the mental struggle is quickly conveyed to the kinæsthetic and motor centers, setting up a disturbance here also, and from these it is communicated to the peripheral speech mechanism. Repeated experiences of this nature soon result in the stammering habit. Chil-

dren of two and a half and three years of age have been permanently cured in two months merely by training the auditory speech center to function in the perception of speech, and the center properly and unconsciously functions in persons of normal speech. But without this training of the brain centers no correction can ever be expected. Occasionally this correction occurs automatically and the habit is "outgrown," but these cases are rare.

In most cases, however, the age of self-consciousness arrives before the correction of the evil and brings with it the complication of the emotional factor. Associations are built up of the difficult words and situations; habits of substitution are formed, with their resulting confusion of thought. Fear comes to hinder a natural adjustment, so that later, when the first cause, the transitory amnesia, has been removed, the havoc wrought by fear results in a wrong and unfortunate attitude of mind toward speech. The child loses all confidence in himself and seeks to avoid every condition which may show his peculiarities. The inevitable result is a gradual warping of the whole character. During the first years of school life he is subject to ridicule on the part of companions and avoids recitations, develops abnormal self-consciousness, and withdraws, so far as possible, from active school life. His school progress is retarded and the majority leave school during the grammar grade period. Some few have sufficient courage to continue into the high school, but few indeed reach college.

There is no place in the professions nor in most lines of business for the individual with defective speech, so that most of these unfortunates finally settle into obscure positions and trades that do not require personal contact with the general public.

What is to be done? We must do more than tell him to go slowly and take his time or not to talk; associations are too strong. First, a reconstruction and development of conscious control of the outer speech mechanism must be gained before fear will depart and the individual have confidence in his ability to control his organs. To this end articulatory and breathing exercises must be practised. Obviously, a jumble of voice-training exercises will never correct the real difficulty; but a few well-selected ones, with a fundamental principle underlying them, designed to bring under conscious control the mechanism of breath and voice, must be the starting point for all corrective work. These exercises must be designed especially to bring about a feeling of conscious control of the entire peripheral speech mechanism, the abdominal muscles controlling the production of breath, the glottis, and especially the muscles of the jaw, lips, and tongue. This is the first step toward a feeling of self-confidence and security.

These are followed by exercises combining the various parts of the speech mechanism—the breath, voice and mouth, and the central speech mechanism—viz., the auditory verbal, kinæsthetic verbal, and visual verbal brain centers. This corrective course is followed by aid in gaining voice, confidence, and a normal healthy attitude toward speech.

Many things conspire to prevent the complete correction of all cases. First, there may be an inability to devote sufficient time to effect a cure; second, there may be a lack of earnestness, application, and sustained determination to maintain effort until complete correction is effected and the new physical and mental habits formed.

The correction of defective articulation is developed in graduated steps of progression also. First, the auditory imagery is performed in the exact vowel sounds; secondly, the kinæsthetic imagery for the memory of the exact position of the muscular mechanism. Single consonant positions with vowels, consonant combinations with vowels, words and sentences containing the defective elements, and exercises designed to establish an automatic auditory and kinæsthetic recall of perfect articulation are given as the general method of procedure.

At the conclusion of the reading of Mrs. Gifford's paper, Dr. Goldstein resumed the chair.

Dr. Goldstein: Miss Marian C. Johnson's paper on Legislative Measures will

be read by Miss Chapin. Miss Johnson is principal of the Day School for the Deaf Children, in Minneapolis.

LEGISLATIVE MEASURES

BY MARIAN C. JOHNSON

When I first began teaching the deaf, many years ago, I brought to my work a little knowledge, a whole lot of ignorance, an unbounded enthusiasm, and a number of Utopian dreams about the heavenly times I was going to have teaching darling little deaf children to talk and read the lips. I had visions of parents falling over each other in their eagerness to get their children into school. I pictured the parents counting the days until their deaf babies were old enough to begin their education. How the parents would rejoice and how glad and happy every one would be!

Then, too, I had dreams of helping the poor deaf adults who had been taught by the old fashioned method of signs. (I had a beautiful disposition in those far-off days.) I was sure they would be glad to see my little ones learning to talk and would wish to learn themselves, so I pictured myself as an angel of mercy spreading light and gladness all around!

It is needless to say that my lovely vision of joyous parents rushing their children into school, and the radiant adult deaf rejoicing over the banishment of the sign-language has never materialized.

My first shock came when I found that the adult deaf who had been educated by the manual method not only did not wish to learn anything else, but were bitterly opposed to any school that taught the pure oral system. I received my second rude awakening when I discovered that many parents did not understand that an education was the only salvation for their deaf children and didn't want to send them to school. It took some time to recover from this blow; but my naturally optimistic nature reasserted itself and I turned to the law, confidently expecting that all deaf children would at once be placed in school and kept there. But alas for my hopes; you all know how inadequate even the best of attendance school laws are. I then turned to the public and indignantly demanded better laws, only to be told by the cruel public that there was nothing wrong with the laws as they were, and this brought me to what is still our greatest need, enlightenment of the hearing public, and this can be accomplished only by a publicity campaign.

There are three powerful factors working against progressive methods of educating the deaf:

First. The adult deaf.

Second. Inefficient, badly enforced laws.

Third. Ignorant parents and an ignorant public.

The majority of the adult deaf are sincere in their opposition to the oral method, but this very sincerity makes their opposition all the more dangerous, and their efforts, combined with an uneducated public, is largely responsible for the continuance of the manual method. The adult deaf are well organized, and if we wish to do effective legislative work we have got to have good organization ourselves and work with a definite aim. The wonderful work the Volta Bureau is doing shows what organization and system can accomplish.

The adult deaf really wish to help in the education of young deaf children, but they are so prejudiced against the oral work that they often seriously injure schools. The day schools are especially likely to be harmed by their misdirected efforts. For instance, a day school has more children than one teacher can handle advantageously, and goes to the legislature for a larger appropriation per pupil; the adult deaf at once oppose this, and seem to think that defeating the bill will close the school. Of course, it doesn't; but it means that the needed teacher is not secured, and that the school will struggle on under the handicap of too many grades to a teacher because of this interference on the part of the adult deaf.