Abstracts

Speech

*SIGMATISMUS NASALIS. HELEN HULICK BEEBE, J. Speech Disorders 11:35, 1946.

The term "sigmatismus nasalis" does not distinguish between the "s" uttered through the nose with a "snoring" component and the "s" uttered through the nose without the "snoring" component. On the basis of a study of 3 cases and other information, it is suggested that sigmatism with the "snoring" component is due to a psychologic factor introduced by the fact that "s" uttered through the nose is hardly audible. It is recommended that speech pathologists adopt appropriate terminology to note this distinction.

PALMER, Wichita, Kan.

* Presented by courtesy of "American Journal of Diseases of Children."

*DEFECTIVE SPEECH IN CHILDREN. P. HENDERSON, Practitioner 156:119 (Feb.) 1946.

The author discusses the development of speech, the incidence of speech defects and the relation of intelligence to speech defects. The statutory provisions for children handicapped by defective speech in England and Wales are briefly listed and discussed. Speech defects of childhood are classified as follows:

1. Stammering. Several current theories of the cause of stammering are listed in this interesting discussion.
2. Defects of articulation.
   - A. Dyslalia: Defective pronunciation of consonants.
   - B. Rhinolalia: Nasal speech.
     - (*a*) Rhinolalia aperta, in which the nasopharynx is not closed by the soft palate, as in the cleft palate and all speech sounds except *m*, *n* and *ng* are incorrectly produced.
     - (*b*) Rhinololia clausa, in which there is nasal obstruction due to deflected nasal septum, nasal polypi, enlarged turbinates, bones, enlarged adenoids or neoplasm.
   - C. Cluttered, hurried and jumbled speech.
   - D. Idioglossia: Articulation so defective that the patient appears to have a language of his own; this type of speech is characteristic of persons with low-grade mentality and of children with congenital auditory imperception.
   - E. Dysarthria, due to imperfect coordination of the muscles of the lips, tongue, larynx or palate; the seventh, tenth or twelfth cranial nerves or their nuclei may be involved.
3. Defects of voice: Alphonia and dysphonia. Complete and intermittent loss of voice may be organic, as after a tracheotomy, or functional, as in hysteria or severe chorea.
4. Aphasia: Congenital word deafness occurs, but is rare in children. Neurologic and psychologic classifications are included under this heading.
5. Defects due to amentia.
6. Defects due to deafness.
7. Retarded speech. In children late in talking an investigation should be made of the hearing, the mental development and the emotional status. The author makes suggestions on therapy and the ages at which therapy should be institute and gives the qualifications and status of speech therapeutists in Britain.

FERDINAND, Peoria, Ill.

* Presented by courtesy of "American Journal of Diseases of Children."

Technic & Metallurgy

A DISCUSSION OF TREATMENT BASED PRIMARILY ON LABIOLINGUAL THERAPY. RUSSELL E. IRISH. Am. J. of Orthodont. and Oral Surg. 32:134, Mar., 1946. (See Treatment and Retention).

CONTRACTION COIL SPRING; ITS USES AND HOW TO MAKE IT. GEORGE NAGAMOTO. Am. J. of Orthodont. and Oral Surg. 33:392, June, 1947.

A technique is outlined for use and manufacture of simple and double contracted coiled springs.

COORDINATING THE PREDETERMINED PATTERN AND TOOTH POSITIONER WITH CONVENTIONAL TREATMENT. H. D. KESLING. Am. J. of Orthodont. and Oral Surg. 32:285, May, 1946. (See Treatment and Retention)

INDIRECT-DIRECT BAND AND APPLIANCE TECHNIQUE. LOWRIE J. PORTER. Am. J of Orthodont. and Oral Surg. 32:294, May, 1946. (See Technic and Metallurgy).

THE EASE WITH WHICH ACRYLIC RETAINERS MAY BE PROCESSED IN YOUR OWN OFFICE. D. P. COMEGYS. Am. J. of Orthodont. and Oral Surgery. 32:276, May, 1946. (See Treatment and Retention).

THE EXPANSION BAR APPLIANCE. ALEXANDER SVED. Am. J. of Orthodont. and Oral Surg. 32:22, Jan., 1946. (See Treatment and Rentention.)

Tempora-Mandibular Joint

THE TEMPOROMANDIBULAR JOINT: THEORY OF REFLEX CONTROLLED NONLEVER ACTION OF THE MANDIBLE. MARSH ROBINSON. J. A. D. A., 33:1260, Oct. 1, 1946.

A number of the present day thoughts regarding the mechanics of the mandible are the results of accepting the teachings of outmoded texts. Gross anatomical description of the mandible is not sufficient to completely explain the movements within the temporomandibular joint.

Two methods were employed in the study of the temporomandibular joint of fifty-nine cadavers: (1) detailed dissection of the masticatory organ with special reference to bone, ligaments, cartilage and direction of muscle fibers and (2) saw-cut sections made in different planes with special reference to the sagittal plane. The temporomandibular disks were studied microscopically, hematoxylin-eosin stain was employed.

The anatomy and histology of the temporomandibular joint definitely indicate that they are not stress bearing areas. The mandible is a reflex controlled non-lever action and is not a class III lever as was formerly believed. Heavy stress is developed in the denture only during isometric muscular contraction. The disk is not fibrocartilage but a specialized connective tissue which is capable of repair.

Glen W. Foor,
Richmond California

Treatment and Retention

A DISCUSSION OF TREATMENT BASED PRIMARILY ON LABIOLINGUAL THERAPY. RUSSEL E. IRISH. Am. J. of Orthodont. and Oral Surg. 32:134, Mar., 1946. (See Technic and Metallurgy.)

A FURTHER STUDY OF TWEED'S BASIC PRINCIPLES AND THE REDUCTION OF BIMAXILLARY PROTRUSION WITHOUT EXTRACTION. ALEXANDER SVED. Am. J. of Orthodont. and Oral Surg. 33:363, June, 1947. (See Case Analysis and Diagnosis.)

CASE ANALYSIS AND TREATMENT PLANNING BASED UPON THE RELATIONSHIP OF THE TOOTH MATERIAL TO ITS SUPPORTING BONE. ASHLEY E. HOWES. Am. J. of Orthodont. and Oral Surg. 33:499, Aug. 1947. (See Case Analysis and Diagnosis)

COORDINATING THE PREDETERMINED PATTERN AND TOOTH POSITIONER WITH CONVENTIONAL TREATMENT. H. D. KESLING. Am. J. of Orthodont. and Oral Surgery 32:285, May 1946. (See Technic and Metallurgy)

PRINCIPLES AND MECHANICS OF TREATMENT WITH THE SLIDING TWIN SECTION MECHANISM. C. W. CAREY. Am. J. of Orthodont. and Oral Surg. 33:1, Jan. 1947.

Carey introduces a technique designed to utilize and control the forces which are applied in the mechanics of treatment to the fullest extent. His procedure is described step by step for the treatment of a Class II, Div. I case.

In order to reduce treatment time he believes cases should not be started until complete eruption of canines and premolars. Mandibular teeth are routinely moved distally in nearly all cases.

THE EASE WITH WHICH ACRYLIC RETAINERS MAY BE PROCESSED IN YOUR OWN OFFICE. D. P. COMEGYS. Am. J. of Orthodont. and Oral Surg. 32:276, May 1946.

The author describes a technique for processing acrylic retainers which are more pleasant and easier to handle than vulcanite.

COORDINATING THE PREDETERMINED PATTERN AND TOOTH POSITIONER WITH CONVENTIONAL TREATMENT. H. D. KESLING. Am. J. of Orthodont. and Oral Surg. 32:285, May 1946.

Treatment should be instituted when the premolars and permanent canines have erupted. Then it is possible to develop a predetermined pattern of the case which will serve as a guide through treatment and as a form over which the tooth positioning appliance can be constructed. It is possible that in the future most cases can be treated with twelve to fifteen basic treatment appointments.

FACTORS OF INFLUENCE IN PRODUCING A STABLE RESULT IN THE TTEATMENT OF MALOCCLUSIONS. ROBERT H. W. STRANG. Am. J. of Orthodont. and Oral Surg. 32:313, June 1946.

Strang believes the time has arrived for the specialty to face the fact that too many cases collapse when retention is removed. To Tweed is given credit for evolving a technique which has made possible the large number of permanently satisfactorily treated cases.

Presented is a new concept of requirements for successful treatment if permanent stability is to be reached; first, treatment must preserve those conditions in the deformed denture that simulate the normal, i.e. balance and harmony of abnormal environmental structures and essential support of undergrown osseous bases; second, elimination of abnormal conditions such as incorrect inclined plane adjustment, faulty axial positioning of teeth, rotations, and excessive overbites. The first objective is of far greater importance than the second.

The author has developed new forms of ideal archwires which are in harmony with the objectives of his new concept of treatment. A comparison is made of old and new forms and reasons for the changes are discussed.

Lewis, Dayton.

PSYCHOTHERAPY IN ORTHODONTICS. CLIFFORD G. GLASER. Am. J. of Orthodont. and Oral Surg. 32:340, June 1946.

Psychic control of the lower face may be the factor to determine the success or failure of treatment. For every ideal occlusion and every malocclusion there are definite positive factors. Unless environmental conditions about the teeth are changed during treatment failure will result. One important factor is sense of occlusion and articulation; labial occlusion and articulation are just as important as dental occlusion and articulation of the incisal area.

Illustrations are shown depicting the use of wooden blades for developing a sense of incisal articulation.

THE TREATMENT OF MALOCCLUSIONS. J. E. LASKIN. Am. J. of Orthodont. and Oral Surg. 32:384, July 1946.

The aim of this article is to discuss the treatment of malocclusions employing the adjustable bracket, and to introduce a clamp for rectangular arch wire therapy, and a bracket bow-spring for the rotation of teeth.

The clamp can become a stop or a spur and can be placed on the archwire at any point without removing the archwire from the mouth. Intermaxillary hooks, auxiliary springs, and vertical spring loops are made by soldering gold wire to the clamps and being inserted on the archwire in the mouth. The bracket bow-spring is a spring designed to fit snugly around the wings of the bracket and extends to the mesial and distal labial extremities. It can also be placed on a tooth without removal of the archwire from the mouth. Use of the new auxiliaries in treatment is described in detail by the author.

Lewis, Dayton.

THE TREATMENT OF MALOCCLUSION WITH AND WITHOUT THE REMOVAL OF DENTAL UNITS. SAMUEL J. LEWIS. Am. J. of Orthodont. and Oral Surg. 32:518, Sept. 1946.

This paper deals with various diagnostic signs and symptoms which the author uses in determining whether or not to remove dental units in treatment of malocclusion. A series of six cases is presented with complete diagnostic outline for each case.

THE VALUE OF MODEL EXPERIMENTS ON TOOTH MOVEMENT. PETER ADLER. Am. J. of Orthodont. and Oral Surg. 32:583, Oct. 1946. (See Treatment and Retention)

MANAGEMENT OF CLASS *II*, DIV. *II* MALOCCLUSIONS. FREDERICK T. BARICH. Am. J. of Orthodont. and Oral Surg. 32:611, Nov. 1946.

In this article Barich reviews the features of Class II, Div. II, outlines his treatment objectives and plan of treatment, and presents a case report on this type of malocclusion.

A DISCUSSION OF TREATMENT BASED PRIMARILY ON LABIOLINGUAL THERAPY. RUSSEL E. IRISH. Am. J. of Orthodont. and Oral Surg. 32:134, Mar. 1946.

That the labiolingual technique is second to none, and more closely approaches the ideal than any other appliance is the opinion of Irish. An outline of his concept of orthodontics is given.

Technique and Metallurgy (Tech.)

FABRICATING APPLIANCES WITH ELECTRIC SPOT WELDER. T. M. ROBINSON. Am J. of Orthodont. and Oral Surg. 32:281, May 1946.

This article gives the advantage in fabricating an orthodontic appliance and retaining the original temper, color, and polish of spring bar, bands, and attachments. The materials and pliers used are illustrated.

INDIRECT-DIRECT BAND AND APPLIANCE TECHNIQUE. LOWRIE J. PORTER. Am. J. of Orthodont. and Oral Surg. 32:294, May 1946.

Appliances are placed in two appointments with this technique Colloid impressions are taken and separators inserted at the first appointment. On the stone models Johnson loop bands are placed but not pinched tightly; lingual tubes are soldered and the appliance constructed. At the second visit the appliance is placed on the teeth, bands pushed to place and the loops pinched tightly; appliance is removed, bands soldered, and then cemented.

SIMPLIFIED TECHNIQUE FOR SOLDERING INTERMAXILLARY HOOKS OR STOPS ON SMALL CHROME ALLOY ARCHES WITHOUT REDUCING TEMPER OF THE ARCH. ERNEST T. KLEIN. Am. J. of Orthodont. and Oral Surg. 32:591, Oct. 1946.

A technique is given for soldering brass to chrome alloy arches for use as a hook.

THE EFFICIENCY OF THE RUSSEL ATTACHMENT. JACOB STOLZENBERG. Am. J. of Orthodont. and Oral Surg. 32:572, Oct. 1946.

A complete report is given on the uses and advantages of the Russell attachment for use with the ribbon and edgewise arch.

THE EXPANSION BAR APPLIANCE. ALEXANDER SVED. Am. J. of Orthodont. and Oral Surg. 32:22, Jan. 1946.

Sved presents a full account of his "Expansion Bar Appliance." Principles, technique of construction, and applications are discussed. With this appliance unilateral expansion and mass distal movement of teeth are possible. The appliance is better adapted for upper teeth than lower.

A METHOD FOR RECORDING THE KEY RIDGE. SAUL *M.* BIEN. Am. J. of Orthodont. and Oral Surg. 32:619, Nov. 1946.

Stick compound is used for an impression of the upper buccal teeth. A wire is imbedded at the height of contour of the mesial buccal cusp of the first molar and aligned with the anterior border of the key ridge. This impression is transferred to the plaster model and the model marked with the wire for locating the key ridge on the model.

Temporo-Mandibular Joint (T. M.)

GROWTH OF THE MANDIBULAR JOINT IN NORMAL MICE. BARNETT M. LEVY. J.A.D.A., 36:2, Feb. 1948. (See Growth and Development)

ORTHODONTIC PROCEDURES IN GROSS DENTOFACIAL MALFORMATIONS. JACOB C. LIFTON. Am. J. of Orthodont. and Oral Surg. 33:325 June 1947. (See Treatment and Retention)

SCLEROSING TREATMENT FOR SUBLUXATION OF THE TEMPOROMANDIBULAR JOINT. WILLIAM ROSENBAUM. Am. J. of Orthodont. and Oral Surg. 32:551, Oct. 1946.

Rosenbaum reviews the structure and physiologic action of the normal temporomandibular joint, and discusses abnormal conditions of the joint with the etiology and symptomatology of subluxated joints.

Diagnosis and treatment of subluxated joints are considered and the author's tecchnique with the use of Sylnasol given.

THE CORRECTION OF MANDIBULAR SUBLUXATION. FREDERIC T. MURLLESS, JR. Am. J. of Orthodont. and Oral Surg. 33:224, Apr. 1947. (See Treatment and Rentention).

AN ARGUMENT FOR EARLY TREATMENT. EVERETT A. TISDALE. Am. J. of Orthodont and Oral Surg. 33:59, Feb. 1947.

By "early treatment" is meant primary, preliminary, or just the first stage of treatment. Early treatment between the ages of three and one half and seven in some cases will be all that is required, but most cases will benefit by further treatment at a later period. Further treatment does not mean retreatment, but additional treatment.

Tisdale feels the inherent pattern of the dental arches is acted upon by environment in the form of muscular action and function of the teeth. If abnormal influences are allowed to remain operating on the denture during its greatest growth those effects can never be overcome.

Class I cases with narrow arches, well defined Class II cases, all Class III cases and crossbites are reccommended for early treatment. The author believes if stress is placed upon the possibilities and advantages of early treatment that the teeth and faces of our patients would profit thereby.

Lewis, Dayton.

INDICATIONS FOR THE REMOVAL OF IMPACTED THIRD MOLARS AT AN EARLY AGE. GLENN R. HILLIN. Am. J. of Orthodont. and Oral Surg. 33:302, May 1947.

Hillin quotes directly and believes there can be no improvement upon the summary of C. Bowdler Henry's article on the same subject published in this journal in 1938.

THE LIMITATIONS OF ORTHODONTIC TREATMENT (1) MIXED DENTITION DIAGNOSIS AND TREATMENT. HAYS N. NANCE. Am. J. of Orthodont. and Oral Surg. 33:177, April 1947.

Nance measured a large number of casts and found that in the average case the relative mesiodistal widths of the deciduous mandibular canines and molars were 1.7mm larger than the mesiodistal widths of the mandibular canines and premolars. He concludes from his work that the length of the dental arch from mesial of one lower first molar to the other first molar is always shortened in the transition from mixed to permanent dentition. This arch length cannot be increased permanently in mixed dentition cases through orthodontic treatment.

It is possible, using the measurements described, to estimate accurately the prognosis of most mixed dentition cases and to determine whether or not extraction will be necessary in treatment of the permanent dentition.

Successfully and unsuccessfully treated mixed dentition cases, construction and use of a preventive lingual arch, preventive cases both successful and unsuccessful are all illustrated and discussed. Active treatment in the mixed dentition is recommended for Class III malocclusions, crossbites, and Class II, Div. I cases where facial appearance is markedly affected. In the treatment of these cases the arch length between the mandibular first molars must not be increased.

LEWIS, Dayton.

THE LIMITATION OF ORTHODONTIC TREATMENT (2) DIAGNOSIS AND TREATMENT IN THE PERMANENT DENTITION. HAYS N. NANCE. Am. J. of Orthodont. and Oral Surg. 33:253, May 1947.

Arch length and the various ways of increasing it are discussed in detail in conjunction with the author's "inside" and "outside" measurements. By "outside" measurement is meant the distance from the mesial of one lower first molar around the arch to the mesial of the other first molar; by "inside" is meant the distance between the mesiolingual of one first molar and the gingival crest between the lower central incisors. From observation and measurement of treated cases Nance is convinced that only in a very few cases is it possible permanently to increase arch length. Cases are shown illustrating permanent increase of arch length, and in others the failure to do so. In the majority of cases exhibiting loss of arch length it is necessary to remove tooth material.

A series of case reports is given with diagnosis and treatment planning in which teeth other than first premolars were extracted. Excessive lingual tipping of mandibular incisors is to be avoided.

LEWIS, Dayton.

THE ADVISABILITY OF EXTRACTION AS A THERAPEUTIC AID IN ORTHODONTICS—NEGATIVE. JOHN W. ROSS AND LEUMAN M. WAUGH. Am. J. of Orthodontics & Oral Surg. 33: 141, Mar. 1947.

Ross condemns extraction as an aid in the treatment of malocclusions. He does not extract because by adherence to physiologic principles and adaptation of treatment to these principles he has produced in ninety per cent of his cases an occlusal relationship and facial balance which has been maintained within physiologic limits fifteen and twenty years after treatment.

Waugh also assumes the negative side of the debate believing that extractions should not be done until after the eighteenth year so that there would be no doubt that the full natural growth of the jaws and the face has occurred. He extracts in about ten per cent of his cases, in half of which it is a lower incisor to align the lower anterior teeth after relapse.

LEWIS, Dayton.

THE ADVISABILITY OF EXTRACTION AS A THERAPEUTIC AID IN ORTHODONTICS—AFFIRMATIVE. ROBERT STRANG AND ARTHUR GREENSTEIN. Am. J. of Orthodont. and Oral Surg. 33:141, Mar. 1947.

Strang and Greenstein argue that extraction has a definite place in orthodontic therapy; that in the majority of cases it is the only way to obtain a denture that is functionally efficient, stable, without damage to teeth or supporting tissues and one that is located to give artistic balance and harmony to facial lines.

LEWIS, Dayton.

THE EXPANSION BAR APPLIANCE. ALEXANDER SVED. Am. J. of Orthodont. and Oral Surg. 32:22, Jan. 1946. (See Technic and Metallurgy)

THE USE OF THE TWIN WIRE MECHANISM IN THE TREATMENT OF CASES IN WHICH EXTRACTION IS INDICATED. JOSEPH E. JOHNSON. Am. J. of Orthodont. and Oral Surg. 33:582, Sept. 1947.

Four extraction cases are reported in detail as to technique and appliance therapy. The author has ordered extractions in thirteen per cent of his last five hundred cases.

THE TREATMENT OF VARIOUS TYPES OF CASES USING THE JOHNSON TWIN ARCH APPLIANCE. C. K. MADDEN. Am. J. of Orthodont. and Oral Surg. 33:442, July 1947.

A series of case reports is given in this article. Appliance therapy, timing of various steps in treatment, and retention are the points covered. The twin arch with upper and lower lingual arches were the appliances used.

THE PHILOSOPHY OF TREATMENT WITH THE JOHNSON TWIN ARCH APPLIANCE. C. K. MADDEN. Am. J. of Orthodont. and Oral Surg. 33:420, July 1947.

General rules for treatment and appliance technique are presented. Interest has been created in this appliance because it is so universal in its use. Madden urges the operator to correct the positions of the upper anteriors first and the molars later.

Lewis, Dayton.

THE EARLY REMOVAL OF UNERUPTED THIRD MOLARS. PHILLIP EARLE WILLIAMS. Am. J. of Orthodont. and Oral Surg. 33:388, June 1947.

Conclusions of the author are that the early removal of unerupted third molars offers a service that is safe, sane, and practical in every respect; that it can be regarded as a definite oral and systemic health measure and contributes to successful orthodontic treatment; and finally that the contraindications are apparently negligible.

LEWIS, Dayton.

ORTHODONTIC PROCEDURES IN GROSS DENTOFACIAL MALFORMATIONS. JACOB C. LIFTON. Am. J. of Orthodont. and Oral Surg. 33:325, June 1947.

The author describes orthodontic procedures in gross dentofacial deformities such as cleft lip and cleft palate, ankylosis of the temporomandibular articulation, and the surgical correction of prognathous mandibles. The orthodontic procedures utilized orthodontic appliances in combination with restorations to supply missing teeth or deficient or absent structures.

LEWIS, Dayton.

CONSERVATISM IN ORTHODONTIC PROCEDURES AND APPLIANCES. LOWRIE J. PORTER. Am. J. of Orthodont. and Oral Surg. 33:109, Mar. 1947.

Porter makes a plea for utmost conservatism regarding the extraction routine now so prevalent. He believes all orthodontists would agree on removal of teeth in some cases but it is the borderline case that draws his concern.

A series of illustrated case reports is given, all of which have been out of retention for at least three years. A multibanded appliance is not always needed, but is probably desirable. Sometimes good results can be attained with a minimum of bands.

LEWIS, Dayton.

THE CORRECTION OF MANDIBULAR SUBLUXATION. FREDERIC T. MURLLESS, JR. Am. J. of Orthodont. and Oral Surg. 33:224, April 1947.

A routine exercise plus the use of a vulcanite device which covers the palate partially and extends over the occlusal surfaces of the upper second molars has been successfully used by Murlless in reducing the irritation of mandibular subluxation.

LEWIS, Dayton.