

JOURNAL OF *Endodontia*

VOLUME II

NUMBER 2

TABLE OF CONTENTS

Program of Meeting at Boston	Page 2
An Improved Pulpotomy Technic	3
Endodontic Abstracts	5
Book Review	6
Obituary — Dr. John Henry Hospers	7
Constitution and By-Laws	8
Suggested Changes in Constitution and By-Laws	11

JUNE, 1947

PUBLISHED BY
AMERICAN ASSOCIATION OF ENDODONTISTS

JOURNAL OF *Endodontia*

VOLUME 2

JUNE, 1947

NUMBER 2

EDITOR

J. HENRY KAISER
21 East State Street
Columbus 15, Ohio

CONTRIBUTING EDITORS

PROF. DR. WALTER HESS
Zurich, Switzerland
DR. F. PUCCI
Montevideo, Uruguay

OFFICERS OF THE

AMERICAN ASSOCIATION OF ENDODONTISTS

President—M. K. HINE.....Indianapolis, Ind.
President-Elect—L. I. GROSSMAN.....Philadelphia, Pa.
Vice-President—E. A. JASPER.....St. Louis, Mo.
Secretary—N. W. BURKMAN.....Birmingham, Mich.
Treasurer—S. D. GREEN.....Chicago, Ill.

Executive Committee

1950
E. C. WACH
S. L. BARRON
A. T. WHITE

1949
M. D. WOLFSOHN
JOHN R. PEER
E. FRANK INSKEEP

1948
R. R. DE KRUIF
C. W. WHITE
R. L. GIRARDOT

Published Quarterly—March, June, September, December—by the
American Association of Endodontists
21 East State Street, Room 418, Columbus, Ohio

Yearly Subscription \$3.00

Single Copy 75 cents

Entry as second class matter May 7, 1946, at the Post Office at Chicago, Illinois, under the act of March 3, 1879. Re-entered at Columbus, Ohio, July, 1947. Publication of an article or abstract does not imply endorsement by the Journal or the American Association of Endodontists.

Program

AMERICAN ASSOCIATION OF ENDODONTISTS

Boston, Mass., Hotel Sheraton

AUGUST 2 - 3, 1947

AUGUST 2

6:30 P. M. Dinner and Meeting of Executive Committee.

AUGUST 3

9:00-10:30 A. M. The Teaching of Endodontic Technic.
Undergraduate Technic F. D. Ostrander
Graduate Technic G. R. Brooks

10:30-12:00 Noon. What Should a Lecture Course in Endodontia Include?
L. I. Grossman
Discussion—Opened by G. C. Hare and R. L. Hayes.

2:00- 3:00 P. M. Trends in Modern Endodontic Teaching . . . J. R. Blayney
General Discussion.

3:00- 5:00 P. M. **Films for Endodontia Teaching.**
Root Canal Therapy plus Surgery Bleaching Technic,
Louis J. Fenech
Windsor, Ont.

Immediate Root Canal Technic Daniel M. Kollen
New York, N. Y.

Endodontic Technic as Taught at the University of
Illincis Robert G. Kesel
Chicago, Ill.

Immediate Root Resection Louis Grossman
Philadelphia, Pa.

Silver Point Filling Technic J. Henry Kaiser
Columbus, Ohio

An Improved Pulpotomy Technic

By LOUIS I. GROSSMAN, D.D.S. Dr. med. dent.

(From the Oral Medicine Department, School of Dentistry, University of Pennsylvania)

Pulpotomy is the removal of an exposed or nearly exposed vital pulp in the pulp chamber of a tooth in order to save the healthy pulp tissue in the root canals. The operation is simply performed since instrumentation is confined within the crown of the tooth and the root canals are not entered. Great care must be exercised, however, that the operation be carried out aseptically if it is to be successful. Pulpotomy must not be confused with pulp mummification which, by whatever name it be called, implies the presence of an intentionally devitalized pulp in the root canals. Pulpotomy aims to preserve the vitality of the pulp in the root canals.

The technic finds its greatest application in the treatment of deciduous and young permanent teeth. The operation is not likely to be successful once secondary changes incident to age or infection have occurred in the pulp. The prognosis is more favorable where the pulp cavity is still large and the apical foramen is still wide, i.e., conditions favoring good circulation within the pulp tissue. Pulpotomy is not likely to be successful if infection has set in the coronal portion of the pulp, since during mechanical instrumentation, the infection may be spread to the pulp tissue in the root canals.

The operation may be found useful where caries has exposed the pulp or where the removal of the last layer of carious dentin would expose the pulp; where the pulp has been recently exposed by trauma, e.g., fracture of a corner of the incisor tooth; where the pulp has been accidentally exposed by an instrument and the size of the exposure or contamination by saliva would contraindicate pulp capping. Pulpotomy may be tried in mild cases of serous, ulcerative or hypertrophic pulpitis although the prognosis in such cases is doubtful. This method is particularly valuable in cases of young permanent teeth where the root apices are

not completely developed as the operation does not interfere with root-end development and calcification.

A number of reports on the successful termination of the procedure when observed over a number of years have been published. All are agreed that careful selection of cases to be operated upon is necessary if one is not to encounter failure. The percentage of successful cases varies from about 60% to 80%, depending upon the period of observation, manner of checking the end result, etc.

The technic and the materials used have varied with the different authors describing the procedure, but basically the object has been to remove the coronal pulp tissue aseptically and replace it with a non-irritating substance. The technic to be described here differs primarily in one respect, namely, the application of a hemostatic agent—topical thrombin powder—for controlling hemorrhage. This step in the technic, however, is important enough to warrant bringing it to the attention of those who practice the operation, since it may make the difference between success and failure. The *bête noir* of the pulpotomy technic has always been the placing of the cement, or paste, against the radicular pulp tissue following removal of the coronal pulp tissue. In many cases, a slight ooze of blood continues, making it difficult to place the cement properly, or else the blood seeps in along the margin between the pulp chamber wall and cement. A two-stage technic, in which the cement is inserted at a later sitting, has been recommended in order to obviate this difficulty. The entire operation may be carried out in one sitting, however, with less likelihood of contaminating the pulp and with the assurance of placing the cement securely when topical thrombin is used.

Following removal of the pulp from the pulp chamber, the material used for filling

the chamber is generally a mild, antiseptic, non-irritating cement. A paste of calcium hydroxide (lime) and sterile water has also been recommended and favorable results have been obtained following its use. There are two objections to its use, however, namely: (1) difficulty of placing the paste in the pulp chamber, particularly of upper teeth, and (2) difficulty of identifying the paste in a roentgenogram since it is not radiopaque. A non-irritating cement is more commonly used than the calcium hydroxide paste. Several pulpotomy cements have been recommended. The one used by the author for a number of years is as follows:

<i>Powder</i>	<i>Liquid</i>
Zinc oxide.....60	Oil of clove.....50
Staybelite resin...15	Eugenol.....50
Dentin powder...24	
Benzoic acid.....1	

The purpose of the dentin powder is to stimulate odontoblastic activity with the laying down of a calcific barrier against the surface of the amputated pulp. It is prepared by grinding dentin powder from an extracted tooth with a fissure bur and collecting the dentin dust in a lathe pan. The dentin powder is then autoclaved and added to the other ingredients.

A simpler formula, without dentin powder, may be prepared as follows:

<i>Powder</i>	<i>Liquid</i>
Zinc oxide.....70	Oil of clove.....50
Staybelite.....20	Eugenol.....50
Zinc stearate....8.5	
Benzoic acid....1.5	

The technic may be described as follows: The tooth is pulp-tested and a record is made of the numerical index or voltage at which the tooth responds. A roentgenogram is taken and the area of exposure, the depth of the pulp chamber, contour of floor of the pulp chamber, etc., are observed. The pulp is anesthetized by infiltration or conduction anesthesia, depending upon whether an upper or lower tooth is to be operated upon. The rubber dam is then applied and an aseptic technic is followed throughout as for root canal therapy. The cavity is swabbed with

a dentin antiseptic, such as beechwood creosote, and the roof of the pulp chamber is removed. The exposed pulp tissue is then removed with a sterile excavator (re-sterilized by dipping in alcohol and flaming twice) until the floor of the pulp chamber is clear of tissue except for the exposed pulp in the root canal (or canals).

In single-rooted teeth there is no demarcation between the root canal and the pulp chamber so that the cervix of the tooth is used as a guide, the pulp being amputated at this level or slightly beyond. If access to this depth is difficult with an excavator, a large round bur may be revolved in reverse to sever the pulp tissue at this level.

The coronal pulp tissue having been removed, the pulp chamber is irrigated with sterile water or with procain solution, the latter being ejected from the syringe with pressure directly into the pulp chamber without the needle coming into contact with the amputated pulp. A sterile pledget of cotton is used to control gross hemorrhage and to cleanse the walls of the pulp chamber and cavity. Topical thrombin is now applied to the amputated pulp surface to effect an almost immediate blood clot so as to permit placing of the pulpotomy cement against a relatively dry surface. The topical thrombin may be blown into the pulp chamber by means of a powder blower, but is more economically applied by dipping a small, dry, sterile cotton pellet into the powder and carrying it into the pulp chamber, dusting the amputated surface of the pulp with the topical thrombin powder. The cotton pellet is discarded and the procedure of dusting the surface of the pulp may be repeated.

Pulpotomy cement is now mixed on a sterile slab with a sterile spatula to a thick plastic consistency and is applied to the floor of the pulp chamber with a sterile flat-faced plastic instrument. A pledget of cotton dipped into the pulpotomy cement powder until its surface is liberally coated with powder is now pressed against the cement to insure intimate contact between the cement and the resected surface of the pulp.

After three to five minutes, excess cement is removed and a base of oxyphosphate of zinc cement is placed to provide a solid floor for the permanent restoration. The balance of the cavity may be filled with a temporary cement.

After a period of about one month, in the absence of symptoms, the pulp should be re-checked with a pulp tester. At this time

the tooth electrode should be placed nearer the neck of the tooth during the pulp testing operation since cement acts as an insulator. A difference in response of 2 or 3 units on the scale (or of 10-15 volts) may be considered to lie within the normal range. After the permanent restoration the tooth should be re-checked every six months for a period of at least two or three years.

4001 Spruce Street.

Endodontic Abstracts

Treatment of Dental Pulp in Operative Department of Eastman Clinic. By Irene Sundvall-Hagland, Stockholm. (From Finska Tandläkars-ällskapet Forhandlingar, 83: 1, Dec., 1946.)

Surgical treatment of the pulp of a tooth (capping, amputation, extirpation) is decided upon after examining the occlusion and estimating the value of the tooth from the point of view of its function and the bite, taking into consideration the patient's general condition.

Pulp treatment is avoided, when possible, especially in the case of deciduous teeth. Every tooth under consideration is x-rayed.

Treatment of deep caries with ammoniated silver nitrate solution has proved of great value. In some cases, pulp capping was done with good results.

In the vast majority of cases the dental pulp is treated by so-called amputation. This method seems most suitable for deciduous teeth and for permanent teeth with open apices. Various types of amputation have been employed. The best results were obtained in deciduous teeth by the use of vital amputation, using a paste composed of xeroform (bismuth tribromophenate) 1 part, and zinc oxide mixed with triolein (glyceryl trioleate) 2 parts. Devitalization of the pulp with paraform and some material similar to that used for vital amputation also gave good results. Vital amputation with

Calxyl (calcium hydroxide) as a capping material yielded discouraging results.

Extirpation of the pulp has been performed aseptically under anesthesia, and root filling has been done with chloroform-gutta percha.

Periodic x-ray check-ups are made for a period of from 3-6 years. Pulp treatment of deciduous teeth offers particular difficulties, probably associated with the demolishing process of physiologic root absorption.—(W. Hess, Zurich.)

Penicillin for Treatment of Inflamed Dental Pulp. By Mauri Pohls. (Acta odontologica Scandinavica, Vol. 7, Feb., 1947.)

Local penicillin treatment has been found suitable for the purpose of healing the inflamed dental pulp. In examining 10 cases of inflamed pulps treated by this method the process of healing was found to be as follows: the exudate, the character of which cannot be established with certainty from the picture, is replaced by scar tissue; in chronic ulcerative pulpitis and in acute partial pulpitis the process is limited to the area of the coronal pulp and thus may be termed *fibrosis pulpae partialis*; in total pulpitis, the reticular connective tissue of the pulp is completely replaced by scar tissue, and the result is *fibrosis pulpae totalis*; and in the healed pulp, nerve fibers are visible.

New odontoblasts do not develop in place of those which have been destroyed. If the odontoblasts are lacking in the region of the roof of the pulp, protective dentin does not form when a new infection is threatening. The value of introducing penicillin into the inflamed pulp cannot yet be fully estimated as the experiments in this field have not been extensive enough.—(W. Hess, Zurich.)

Investigation of the Bactericidal Action of Some New Medicaments Used in Iontophoresis. By L. Castaguola. (From Schweiz. Monatschr. f. Zahnheilk., Vol. 56: No. 5, 1946.)

The treatment of infected root canals and periapical lesions by medicaments transported by iontophoresis (ionization) was until recently based upon empiric data.

Clinical and radiologic examination of teeth treated by iontophoresis gave good

results, and the histo-pathologic examination gave similar results. The author examined the following medicaments for bactericidal action: Potassium iodid—iodin solution, sulfonamides, merfen and Desogen. The medicaments were tested against the following bacteria: Staph. aureus, Staph. albus, Strept. hemolyticus, Strept. non-hemolyticus, Enterococcus, Bact. necrodentalis.

The investigation showed that the topical treatment of infected root canals did not produce disinfection, and that a bactericidal effect was attained only by iontophoresis, varying from 70 to 90 minutes of application. The sulfonamides required 90 minutes of application and had no effect upon Enterococcus, but were effective against the streptococci. Potassium iodid-iodin and Desogen each were found to require 70 to 90 minutes of application and were bactericidal against all bacteria. Merfen was effective but could not be transported by iontophoresis.—(W. Hess, Zurich.)

Book Review

ROOT CANAL THERAPY, by LOUIS I. GROSSMAN, D.D.S., Dr. med. dent. 354 pages, 94 illustrations, second edition. Lea & Febiger, Philadelphia, Pa. Price \$5.00.

Dr. Grossman, teacher at the University of Pennsylvania School of Dentistry and president-elect of the American Association of Endodontists, has been an active proponent of Root Canal Therapy for years and his re-organized book entitled *Root Canal Therapy* reflects this enthusiasm. Dr. Grossman has taken time to make this book really a new edition and not just a reprint of his former book, for it has been expanded to include recent developments and concepts of practice, with 117 new pages and about 50% more text material.

The author offers a comprehensive discussion of the dental pulp and periapical tissues from clinical and histologic points of view, together with diagnosis of pulp and periapical pathology. A section on aero-

dontalgia is included and methods of pulp conservation as well as pulp extirpation are described. Many new illustrations have been added, and the application of sulfonamides, penicillin, tyrothricin, streptomycin and other antibiotic agents in endodontic treatment is discussed. A new chapter on the treatment of fractured and traumatized anterior teeth is now included and a discussion of the technics of post-resection filling and of immediate resection have been added to the chapter on root resection. A special chapter by Dr. Elsie Gerlach is devoted to the treatment of deciduous teeth.

Careful reading of this outstanding book on endodontia should convince everyone that this phase of dentistry should play an important part in every general practice. The book can be recommended as a text book for students, under-graduate and post-graduate, and is sufficiently complete to serve as a reference book.

MAYNARD K. HINE.

Obituary

JOHN HENRY HOSPERS, A.B., M.A., D.D.S.

October 11, 1879—June 12, 1947

Dr. John Henry Hospers, 67, died suddenly of a heart attack upon leaving his office on June 12, 1947.

Dr. Hospers was born in Kalamazoo, Michigan, October 11, 1879, and spent his childhood in Orange City, Iowa. He received his A.B. and M.A. degrees from Hope College, Holland, Michigan, and his D.D.S. from Northwestern University Den-

was a member of the American Dental Association, Delta Sigma Delta Fraternity, Boulevard Masonic Lodge, Dental Society Orchestra, in which he played the flute, Secretary and Treasurer of the Knickerbocker Society of Chicago, Deacon and Elder in the First Presbyterian Church, a member of the Men's Bible Class and a charter member of the Lincolnshire Country Club.

He is survived by his widow, Rena Cooper Hospers, two daughters, Helen Rose Yntima of Kalamazoo, Michigan, and Ruth Joan Bohart of Chicago, and seven grandchildren. His only son, Dr. Cornelius J. Hospers, Pathologist, died February 20, 1947. He leaves three brothers, Dr. Frank J. Hospers, of Chicago, Carl Hospers and Cornelius G. Hospers, of California, and two sisters, Mrs. Jake G. Gleysteen and Mrs. Garriet Slobe, of Iowa.

By his many services and accomplishments in his chosen profession, he has endeared himself to his colleagues who will feel his loss greatly.



DR. JOHN HENRY HOSPERS

tal School in 1904. During 1904 and 1905 he was on the faculty of Northwestern University Dental School as quiz-master in Materia Medica. He started the general practice of dentistry in 1904 at Englewood Avenue and Halsted Street, and about 1917 he moved to the Marshall Field Annex.

In 1934 he founded a study club with Vincent B. Milas, Lester E. Kalk, and T. Starshak for the study of root canal therapy. Since then the study club has appeared each year on the program of the Chicago Dental Society and other societies. He always believed in Endodontia and was one of the founders and the first secretary of the American Association of Endodontists. He

ADDRESS UNKNOWN

Mail has been returned from the following members by the postoffice. The Editor will greatly appreciate having the correct address.

DR. GEO. S. JACKS,
312 Chickamauga Ave.,
Roseville, Ga.

DR. J. H. MEINIG,
1000 Diamond St.,
Los Angeles 36, Cal.

DR. IRVIN L. TERRY,
405 Seminole,
Marietta, Ga.

Constitution of the American Association of Endodontists

ARTICLE I

Name

Section 1. The name of this association is American Association of Endodontists unless otherwise directed by a majority of the entire membership.

ARTICLE II

Objects

Section 1. This association has been organized with the following objects in view:

(a) to promote interchange of ideas on methods of pulp conservation and root canal treatment.

(b) to stimulate research studies, both clinical and laboratory, among its members.

(c) to assist in establishing local root canal study clubs.

(d) to help maintain a high standard of root canal practice within the dental profession by disseminating information through lectures, clinics, publications, etc.

It is not the object of the association to foster root canal therapy as a specialty of dentistry, although specialization in this field by any of its members will not be discouraged.

ARTICLE III

Membership

Section 1. The membership of this association shall be composed of active members, honorary members and life members.

Section 2. Any dentist who is a member of the American Dental Association or an accredited dental association in the country in which he is a resident and who is interested in the objects of this association is eligible for active membership.

Section 3. Honorary members shall be those elected to membership because of significant contributions which have furthered the advancement of root canal therapy or surgery. Honorary members shall be exempt from payment of dues.

Section 4. Life members shall be members in good standing continuously for 20 years. Life members shall be exempt from payment of dues.

ARTICLE IV

Officers

Section 1. The officers of the association shall consist of a President, President-elect, Vice-President, Secretary, Treasurer, and Editor. None shall hold more than one office during any one year excepting the

secretary, who may also be elected to the office of treasurer.

Section 2. The duties of the officers shall be those conventionally associated with the official titles, and such other duties as the executive committee or the membership may assign.

Section 3. Each officer shall serve for only one year unless re-elected.

Section 4. During the periods between meetings of the association, the executive management of its affairs shall be conducted by the President, Vice-President, Secretary and Treasurer. Matters affecting the policy of the association shall be referred to the executive committee for its counsel and approval.

Section 5. Honorary officers may be elected by the executive committee, but these shall have no voice in the affairs of the association beyond the rights of active members, unless elected to regular office.

ARTICLE V

Executive Committee

Section 1. The general business and executive control of the association shall be vested in an executive committee.

Section 2. The executive committee shall consist of nine members elected by the association. These shall preferably be chosen from representative sections of the United States, i.e., 3 from the eastern states, 3 from the central states, and 3 from the western states.

Section 3. Members of the executive committee shall serve for a term of 3 years, excepting during the first 2 years of the association when 3 members shall be elected for only 1 year and 3 other members for only 2 years. The manner of election shall be such that one new member from each section of the United States (or a total of 3 members) shall be selected each year. The executive committee shall include the officers of the association who shall have no vote in committee.

Section 4. The President-elect shall be *ex-officio* chairman of the Executive Committee but shall vote only in the event of a tie vote.

Section 5. An ad-interim vacancy in any office or in the executive committee shall be filled promptly for the unexpired term by a majority vote of the executive committee.

Section 6. Any vacancy that might occur either at or during the progress of a ballot preceding an annual meeting of the association, shall be filled on recommendation of the executive committee by a majority of the members present and voting.

Section 7. Members of the executive committee shall not immediately succeed themselves.

Section 8. The executive committee shall render a report of its transactions at the annual meeting for action by the membership.

ARTICLE VI

Meetings

Section 1. The association shall have an annual meeting for the transaction of business of the association and for scientific sessions. This meeting shall coincide in time and place with the annual meeting of the American Dental Association. In the event that the American Dental Association holds no scientific meeting during any given year, the executive committee shall arrange for a scientific meeting of the association.

Section 2. A special business meeting of the association may be convened by a majority vote of the executive committee.

Section 3. Members shall be notified of special meetings of the association at least 2 months in advance of such meetings.

ARTICLE VII

Nomination and Election

Section 1. One or more nominations for each office and for vacancies on the executive committee shall be formally announced at least 3 months before the annual meeting.

Section 2. Nominations for each office shall be made by a nominating committee composed of 3 sectional members elected by the executive committee. The nominees selected by the nominating committee shall have the approval of the executive committee before being submitted to the membership. The form of the ballot shall be worded in such manner as to indicate that independent nominations by members of the association may be made.

Section 3. Two months before the annual meeting, the nominating committee's nominations for each office, and each independent nomination supported by 5 or more nominators, shall be mailed by the secretary to all members of the association on an official ballot-form for a vote at the meeting.

Section 4. The secretary shall keep a record of all ballots received and shall transfer the unopened ballots, during the annual meeting of the association, to tellers

duly appointed by the president. Only those whose dues are paid shall be eligible to vote.

Section 5. A plurality of the votes cast shall elect a nominee to his respective office.

ARTICLE VIII

Committees

Section 1. Standing committees shall consist of the following:

(a) *Program*. It shall be the function of this committee to arrange a suitable program for the scientific meetings of the association.

(b) *Study Clubs*. It shall be the function of this committee to assist in the establishment of root canal study clubs wherever a group of 5 or more members may request it.

(c) *Membership*. It shall be the function of this committee to pass upon eligibility to membership, and recommend to the executive committee those whose applications have been submitted to it.

(d) *Publication*. It shall be the function of this committee to keep the membership informed of recent advances in the science and practice of root therapy either by letter or publication, or both. The Editor shall be *ex officio* chairman of this committee.

Section 2. Special committees may be designated for particular functions.

Section 3. Appointments to standing committees shall be made by the President with the approval of a majority of the executive committee.

Section 4. Appointments to special committees shall be made by the President. A special committee shall not usurp the rights and functions of a standing committee.

Section 5. The foregoing section shall not interfere with the appointment of personnel to special committees created on a duly approved motion by members of the association.

ARTICLE IX

By-Laws

Section 1. By-Laws may be proposed at any business meeting of the association, and may be adopted at the same meeting by a majority vote of the members present and voting.

ARTICLE X

Amendments

Section 1. A proposed amendment of this constitution, formally endorsed by at least 5 members and accompanied by a statement of reasons of adoption, may be presented at a business meeting of the association and thereupon becomes a special order for a vote at the succeeding business meeting. An

interval of at least 3 months must elapse, however, between the introduction of the amendment and the vote thereon in order that the entire membership may be informed of the proposed amendment and may have an opportunity of giving it due consideration.

Section 2. A proposed amendment shall

become a part of this constitution when at least a majority of the entire association has voted for its adoption.

Section 3. Amendments of the by-laws may be proposed at any business meeting by a majority vote of the members present and voting.

By-Laws

ARTICLE I

Application for Membership

Section 1. An applicant may apply for membership to the secretary of the association, who shall furnish him with an application blank to be returned with the endorsement of 2 members, accompanied by annual dues. The membership committee shall determine the applicant's standing in the community in which he practices before presenting his credentials to the executive committee. Upon approval by the executive committee, the applicant will be informed of his election to membership in the association.

ARTICLE II

Termination of Membership

Section 1. Membership may be terminated by a formal notice of resignation.

Section 2. Membership may also be terminated by unanimous vote of the executive committee.

ARTICLE III

Installation of Officers

Section 1. An appropriate ceremony of installation, determined by the executive committee, shall inaugurate the term of service of each officer.

Section 2. Duly elected officers shall begin their term of service immediately upon conclusion of the annual meeting.

ARTICLE IV

Quorum

Section 1. Twenty members shall constitute a quorum of this association.

ARTICLE V

Dues

Section 1. The annual dues shall be determined by the executive committee.

Section 2. Dues are payable to the secretary on January first of each year. In the event, however, that a new member has paid dues upon being admitted to the association within a period of 3 months prior to the above mentioned date, then payment of dues for the then current year shall be waived.

Section 3. Delinquency in payment of dues for 2 successive years shall automatically suspend membership in the association.

ARTICLE VI

Reinstatement

Section 1. Reinstatement to membership after 2 successive years, but not after 3 or more successive years, may be effected by payment of past and current dues. When 3 or more successive years have elapsed, reinstatement may occur only upon recommendation of the membership committee with the approval of the executive committee.

Suggested Changes in Constitution

ARTICLE II

Section 1. (a) Change the words "root canal" to "endodontic."

Section 1. (c) Change the words "root canal" to "endodontic."

Section 1. (d) Change the words "root canal" to "endodontic."

Section 1. (d) Change the words "root canal therapy" to "endodontic treatment."

ARTICLE III

Section 3. Change the words "root canal therapy" to "endodontic treatment."

ARTICLE IV

Section 3. Change to read, "Each officer shall serve for a term of one year or until his successor has taken office, except the Editor, who shall be elected for a term of two years. An officer may be elected to succeed himself for a similar term of office."

ARTICLE V

Section 2. The Executive Committee shall consist of the officers and nine members preferably chosen from representative sections of the United States. Three members shall be elected each year for a term of three years, and shall serve until their successors are installed.

Section 3. Deleted.

Section 4 becomes Section 3 and changed as follows: "The President-elect shall be *ex officio* chairman of the Executive Committee but shall vote only in the event of a tie vote.

Section 5 becomes Section 4.

Section 6 is deleted.

Section 7 becomes Section 5.

Section 8 becomes Section 6.

ARTICLE VI

Section 1. The association shall have an annual meeting for the transaction of business of the association and for scientific sessions. The time and place of this meeting and any other meeting shall be determined by the executive committee.

ARTICLE VII

Section 1. At least three months before the Annual Meeting, the President shall appoint a Nominating Committee of three

members whose chairman shall be a member of the Executive Committee. Its function will be to select nominees for each office and for vacancies on the Executive Committee.

Section 2. At least three months before the annual meeting each member of the Executive Committee shall furnish the Nominating Committee with a list of preferred nominees. Such recommendations, however, shall not be binding.

Section 3. At least one month before the annual meeting, the Nominating Committee's nominations for each office shall be published in the **Journal of Endodontia**, or mailed by the Secretary to all members of the association together with a notice that independent nominations may be made by mail when supported by five or more members, or from the floor at the time of the meeting. The time and place of the meeting shall also be duly announced.

Section 4. The Secretary shall keep a record of all nominations made before and during the annual meeting. Only those members whose current annual dues are paid shall be eligible to vote. Nominations and election shall be conducted separately for each vacancy.

Section 5. A plurality of votes cast shall elect a nominee to his respective office.

Section 7. In the event there are no independent nominations for an office, the nominee selected by the Nominating Committee shall be declared elected to office.

ARTICLE VIII

Section 1. (b) *Study Clubs*. Change the words "root canal" to "endodontic."

Section 1. (c) *Membership*—Add the following after the word membership, second line: "The Chairman of the Membership Committee shall be selected from the Executive Committee. He shall in turn be assisted by a member from each of the following sections—Pacific, Mid-Western, Central, Eastern, Southern, Canadian, and all others not encompassed by the above mentioned areas. The Chairman of the Membership Committee shall determine area lines for reasons of expediency at any time.

Section 1. (d) *Publication*—Change to, "It shall be the function of this Committee to advise the Editor regarding the policy and publication of a journal."

Section 1. (e) *Budget Committee*—It shall be the function of this Committee to recom-

mend allocation of monies to the Executive Committee for carrying on the functions of the Association.

ARTICLE X

Section 1, Line 4—Change to "may be presented to the Executive Committee and if

approved thereupon becomes a special order for a vote at the next business meeting," etc.

Section 3. Change to—"Amendments of the by-laws may be proposed at any business meeting and becomes part of the by-laws when adopted by a majority vote of the members present and voting."

Suggested Changes in By-Laws

ARTICLE I

Section 1. *Application for Membership.*

An applicant may apply for membership to the Secretary, or to the Chairman of the Membership Committee, who shall furnish him with an application blank. This is to be returned with the endorsement of two members to the Chairman of the Membership Committee accompanied by the annual dues and initiation fee. The Chairman and a Section member of the Membership Com-

mittee shall determine the applicant's qualifications. If the application is approved, the applicant is to be informed by the Secretary of his election to membership. If the application is not approved, the Chairman of the Membership Committee is to advise the applicant and refer the application card and all correspondence relative to it to the Secretary for a permanent record.

Section 2. Honorary members may be elected at the Annual Meeting upon recommendation of the Executive Committee.

Committees

Nomenclature—

R. G. KESEL, Chairman
C. O. DUMMETT
E. F. INSKIPP

Program—Boston Meeting—

E. G. VAN VALEY, Chairman
F. D. OSTRANDER
H. J. ROSS

Local Arrangements—Boston Meeting—

H. A. ZANDER
M. F. YATES

Study Club—

GEORGE STEIN, Chairman
B. ORBAN
H. H. PEARSON, Montreal

Student Awards—

J. T. HILL, Chairman
J. R. BLAYNEY
H. B. JOHNSON, SR.

Budget—

I. A. EPSTEIN, Chairman
GEORGE SHARP
V. B. MILAS

Library

HARRY HEALEY, Chairman
J. H. HOSPERS (Deceased)
C. W. SAWYER

Publication—

EDGAR COOLIDGE, Chairman
G. P. BANNISTER
E. G. VAN VALEY

Membership—

L. A. LUCAS, Chairman
R. G. ELLIS
SAUL LEVY
W. CLYDE DAVIS

Exhibits and Teaching Aids—

R. F. SOMMER, Chairman
G. T. HAYMAKER
J. L. BERNIER