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JOURNAL OF THE AMERICAN COLLEGE OF DENTISTS

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AMERICAN COLLEGE OF DENTISTS

Sections and dates of meetings in 1934–35.—(1) Kentucky: July 27, Dec. 3 and 17, '34; June 11, '35. (2) Northern California: June 21, '35. (3) Maryland: June 3, '35. (4) New York City: Dec. 13, '34; May 3 and 28, '35. (5) Minnesota: July 24, '35. (6) New England: June 3, '35. (7) Wisconsin: Apr. 15, '35. (8) Colorado: June 24, '35. (9) Pittsburgh, Oct. 23, '35.

Objects (quotation from the booklet containing the list of members, as of Jan., 1931): "The American College of Dentists . . . [aims] to exemplify the highest conception of professional and social responsibility of dentists as servants of the public health; to honor those who make notable contributions to the science and literature of dentistry; to stimulate the younger members of the profession to strive earnestly for such excellence as may admit them to fellowship with their most distinguished colleagues."

Classes of members (each member receives the title of Fellow—"F.A.C.D."): (1) "The active members shall consist of dentists and others who have made notable contributions to dentistry, or who have done graduate or educational work of a character approved by the College." (2) "Any person who, through eminent service, has promoted the advancement of dentistry, or furthered its public appreciation, may be elected to honorary membership."—*Constitution, Article III.*

Nomination and election of members. "Any member of the College may nominate candidates for membership."—*By-laws, Sec. A.* "After a nominee for membership has received the approval of a four-fifths vote of the Board of Censors, he may be elected by a majority vote of the Board of Regents."—*Constitution*, Art. III.

Forfeiture of membership. Membership in the College shall be "automatically forfeited" by members who "(a) give courses of instruction in dentistry under any auspices other than those of a dental society, dental school, or other recognized professional or educational agency; or (b) give courses of instruction in dentistry in a privately owned undergraduate or postgraduate dental school, or in a school that is associated with an independent hospital or dispensary but not an organic part of it; or (c) exact exorbitant fees for courses of instruction in dentistry under any auspices." . . .—*Constitution, Art. III.*

Standing Committees (1935–1936)

By-Laws.—A. L. Midgley, *Chairman;* W. J. Gies, J. B. Robinson.

Centennial Celebration (establishment of dentistry as a separately organized profession—1939–40).—H. S. Smith, *Chairman;* E. C. Mills, Howard C. Miller, J. H. Ferguson, Jr., Harry Bear.

Certification of Specialists in Dentistry.—C. O. Flagstad, *Chairman;* L. M. S. Miner, E. W. Swinehart, H. C. Fixott, G. R. Lundquist.

Dental Prosthetic Service.—W. H. Wright, *Chairman;* P. C. Lowery, A. H. Paterson, C. H. Schuyler, W. H. Grant.

Editorial Medal Awards.—W. C. Graham, *Chairman;* R. S. Vinsant, F. T. West, C. W. Stuart, J. A. McClung.

Education and Research.—A. W. Bryan, *Chairman;* J. B. Robinson, A. D. Black, L. M. Waugh, L. M. S. Miner.

Endowments.—J. V. Conzett, *Chairman;* A. H. Merritt, Herbert C. Miller, Abram Hoffman, D. U. Cameron.

Finance and Budget.—A. L. Midgley, *Chairman;* O. W. Brandhorst, H. S. Smith.

Hospital Dental Service.—Howard C. Miller, *Chairman;* Leo Stern, J. E. Gurley, E. A. Charbonnel, C. T. Messner.

Journalism.—H. O. Lineberger, *Chairman;* U. G. Rickert, B. B. Palmer, J. T. O'Rourke, G. M. Anderson, Leland Barrett, J. C. Black, E. A. Johnson, E. G. Meisel.

Legislation.—W. A. McCready, *Chairman;* M. L. Ward, G. S. Vann, W. O. Talbot, B. L. Brun.

Necrology.—J. B. Robinson, *Chairman;* R. H. Volland, U. G. Rickert, J. E. Gurley, B. B. Palmer.

Oral Surgery.—M. W. Carr, *Chairman;* J. R. Cameron, C. W. Freeman, J. O. Goodsell, Harry Bear.

Relations.—T. J. Hill, *Chairman;* R. L. Sprau, A. R. McDowell, T. A. Hardgrove, H. G. Fisher.

Socio-economics.—B. B. Palmer, *Chairman;* E. H. Bruening, C. E. Rudolph, M. W. Prince, W. R. Davis, G. W. Wilson, Maurice William.

AMERICAN COLLEGE OF DENTISTS

Presidential Address[1]

J. BEN ROBINSON, D.D.S.

Baltimore, Maryland

It is with a feeling of satisfaction that the Officers and Regents of the College present the program that has been announced for this its fifteenth Convocation. These contributions represent the work of the officers and various standing committees in their endeavor to attain the purposes of the College. The reports to which you listened this morning, the addresses planned for this afternoon, and the special program on an important project of the College arranged for the evening, will, I believe, measurably promote the work for which our organization was designed and add strength to the profession which we desire to serve. We trust that the effect of this year's work and the influence of this meeting will push forward the great movement of scientific and professional advancement toward the goal of a long cherished ideal—a learned profession fully qualified to meet the complete oral health needs of society, with dignity and effectiveness.

The College, from its modest beginning fifteen years ago, has rapidly and substantially grown to occupy an important place in the profession. As its duty has become clearer, and its responsibilities better understood, additional problems have been accepted and assigned to committees for investigation, study and report. The ensuing results have contributed materially to the advancement of the profession, by clarifying thought, establishing sound trends of endeavor, and strengthening the position of dentistry in many of its most important relations. The American College of Dentists exists for the prime purpose of fostering professionalism as an ideal, and of promoting education, literature, and organization along lines that will ensure high standards in all relations. It properly regards the detail of dental practice as adequately cared for by popular dental organizations,

[1] Convocation: New Orleans, La., Nov. 3, 1935. See item 49; abstract of minutes: *J. Am. Col. Den.*, 1935, *2*, 272; Dec.

and recognizes that these shall assume their proper responsibilities of leadership without embarrassment. The objects of the College testify to this purpose. These were set forth in its first constitution as follows:

"The object of this College is to bring together in a group the men of outstanding prominence in the profession, and by their united efforts, in a field that is not now covered by any dental agency, to endeavor to aid in the advancement of the standards and efficiency of American dentistry. Some of the aims of the College are to cultivate and encourage the development of a higher type of professional spirit and a keener sense of social responsibility throughout the profession; by precept and example to inculcate higher ideals among the younger element of the profession, and hold forth its Fellowship as a reward to those who faithfully follow such ideals; to stimulate advanced work in dental art, science, and literature; and to honor men who have made notable contributions to the advancement of our profession.

"The enormously increased responsibilities of the dental profession to humanity on the one hand—the unprecedented opportunities for exploitation, which have resulted in a wave of mercenary practices that threatens to become a public scandal to the everlasting disgrace of American dentistry, on the other hand—demand that those elements of the profession whose character, reputation, and professional attainments point them out as leaders, should be brought together for the purpose of checking the tide of destructive agencies and of encouraging by every laudable means the cultivation of that high spirit of professional and social responsibility, the wholesome influence of which is so greatly needed."

Professionalism is not an ethereal something understood only by philosophers and advocated only by idealists. It is the intangible, yet very practical, cloak of integrity, altruism, and culture that shrouds and protects a body of men whose conscious purpose in life is to serve humanity, and who are willing to give spiritual values an even chance with the material things of life. Indeed the term "profession" implies something infinitely higher than a mere band of mercenary workers. To quote from a definition used some years ago by Dr. Gurley on an occasion such as this:

"The term 'profession' may be regarded as an honorary title awarded informally by society to occupations conforming to certain standards. . . (1) the occupation must require high skill and intellectual effort, and an extended educational preparation, both intensive and comprehensive in nature. (2) The occupation must involve primarily the exchange of serv-

ice or advice for a fee or salary rather than the sale of material products for profit. (3) The occupation must have achieved in public opinion traditions of group dignity, intellectual superiority, self-control and resistance to unscrupulous commercialism."

Dentistry has diligently sought to measure up to these specifications; it has resisted stoutly the tendencies to break down this idealism; it is to strengthen and support them that the American College of Dentists exists.

It is neither the purpose nor the intent of the College to assume an arbitrary attitude toward any questions affecting the integrity of the profession, unless it be to challenge destructive policies or tendencies which require prompt, vigorous, and determined action. It does not desire to usurp the prerogatives of others; but, because of its active interest and sustained study of many vital problems, it is anxious to assist in promoting the profession's good. It wishes to act at all times to strengthen and uphold recognized dental leadership, and to contribute as much as possible to professional advancement through such coöperation. It will not promulgate nor support policies, regardless of their sources, which have not been carefully studied and which do not contemplate the greatest good to the public, or which may be baneful to the high professional standards which dentistry has achieved. In all its transactions the motive of the College has been to achieve the objects alluded to above.

The problems which the College has studied, is now studying, and in which it is taking active interest, do not cover completely the field of professional endeavor and interest. It has reached a degree of completeness in only a few of its projects. Other studies are in progress. It is expected that, as these are completed, much of value will accrue to the profession. I shall refer to a few of these, which seem at the present time to be quite important, in the hope that we may stimulate thought and enlist the active interest of all the fellows in their solution.

MEDICO-DENTAL RELATIONS

For a number of years the College has devoted its attention to the achievement of an improved medico-dental relation. This subject is important as it relates to plans of dental education, effectiveness in

dental service, and the coördination of dental and medical practice. In the course of its study, the College has sought to clarify misunderstandings, to emphasize the true values of dental education and practice; and, by such adjustments, to articulate the services of medicine and dentistry in the interest of a more complete and effective general health-service. There are present indications that this desirable purpose will be achieved. The difficulties involved have been to secure the acceptance by medicine of standards in dental education that are adequate for the training of those who engage in the oral division of health service; for the two professions to agree on the extent of service to be included in the scope of such a division; and to establish effective coördination of the two in practice, in which their independence and interdependence may be mutually observed. There are some who contend that oral surgery as practised by dentists for the past century can not be performed adequately under present standards in dental education and training; and that oral surgery, now included in dental practice, should be regarded as a specialty of medicine requiring the full medical base as essential to the most effective service to the public. On the other hand dentistry maintains that its present standards in dental training and practice are adequate to a competent and effective service in oral surgery, as traditionally practised by dentists.

It must be admitted that the arguments against the complete acceptance of dentistry have not been altogether rational. In some instances the position of medicine has been dogmatic, partisan, and obviously selfish. Its proposals for the treatment of the field of oral surgery do not appear to contemplate the greatest good to society so much as to maintain an arbitrary advantage. The College, in its desire to arrive at an unprejudiced solution of this vexing question, has attempted, through its committees, to present evidence that will support dentistry's claim of competency to deal with the problem. The evidence indicates that dentistry should be recognized by medicine as an independent division of health service; that dentistry's standards in education are sufficient for an adequate oral health-service; that the scope of service is defined by the traditional practice of dentistry; and that the most effective coördination of these two groups, in the interest of the public, is through mutual respect and mutual under-

standing expressed through independence with interdependence. We are pleased to present, this evening, a discussion of the medico-dental relation by competent members of the two professions, and confidently expect this event to bring about a better understanding and a more effective coördinated service.[2]

CERTIFICATION OF SPECIALISTS IN DENTISTRY

For some time both medicine and dentistry have viewed with concern the tendency toward specialization by many who do not possess the essential qualifications that could, by any stretch of the imagination, mark them as experts. In view of this trend and consequent abuses, the College has seen fit to study this problem in the hope that some plan could be evolved to protect both the specialists known to be qualified and the public to which the profession is morally obligated. A committee from the College has been appointed to study the status of the specialties in dentistry, and to report on the advisability and practicability of efforts to require certification of specialists. While there are obvious difficulties in any possible plan to require such certification, there are also obvious needs to regulate the tendency of professional men to hold themselves out to serve the public in a superior manner. A specialist is one who, in fact, is superior in a well defined department of work, and whose superior status is established by study, training, and experience. The extent and scope of these essential qualifications can be defined. When a conclusion is reached, standards for qualification should be established and enforced by stringent regulation. This important problem has long been neglected, and it is hoped the report of the Committee on Certification of Specialists will be a step toward the correction of this abuse.

DENTAL PROSTHETIC SERVICE

In addition to promoting the standards of dentistry, it is necessary that the advances already made shall be protected. It has been observed that effort is frequently made by adjuncts of the profession

[2] Miller: *J. Am. Col. Den.*, 1936, *3*, 11; this issue. See items 56–58; abstract of minutes: *Ibid.*, 1935, *2*, 272; Dec.

to assume responsibilities legally reserved to the dentist. Dental prosthetic service has been, for some time, an object of desire by certain well-known interests. During the past few years this field has suffered encroachment by unqualified aspirants known as dental prosthetic technicians. Certain commercial interests, lacking both the scientific training and unselfish appreciation of the value of this service, have undertaken to gain control of it, basing their claim upon the mechanical sufficiency of their craftmanship.

The work done this year by the Committee on Dental Prosthetic Service is outstanding in its quality and possibilities of usefulness. I take pleasure in pointing to the ad-interim report of that Committee in the latest number of the *Journal* of the College.[3] Its historical review of the evolution of the commercial laboratory is interesting, while its portrayal of the attitude of the National Dental Laboratories Association toward dental prosthetic service is both instructive and significant. It reveals clearly that the Laboratories Association has become a potential menace to the integrity of dentistry. Its leaders have by their own consent and insistence denominated themselves an industry, professing to sell finished appliances to the profession, instead of serving it only when called upon to assist in processing cases already begun. They have rated themselves as industrialists or manufacturers, whereas as a matter of fact they are dependent on dentistry and not independent of it; thus becoming, in effect, professional assistants who aid in facilitating dental prosthetic service by performing certain specific extra-oral operations delegated to them by the dentist, and without whom they cannot work. In 1933 the Committee on Legislation of the American Dental Association vigorously challenged the code committee of the National Dental Laboratories Association on its statement of industrial independence, clearly pointing out that the technician *delivers appliances* on prescription rather than manufacturing in bulk; and that, because of this intimate dependence upon the dentist, the laboratory should not be regarded as an *industry* but as a *professional adjunct.* The determined persistence of the laboratories, in establishing through codal regulation their independence of dentistry, has caused the profession to look upon them with distrust, which cannot be effaced until this important adjunct is

[3] Wright: *J. Am. Col. Den.*, 1935, *2*, 153.

subordinated to professional control. I commend the Committee for its fine work and recommend its report be given careful study.

SOCIAL RESPONSIBILITIES

The year just passed has been important as it relates to efforts to adjust social problems. We have seen plans completed by the Federal Government for the security of old age and employment. No official recommendations were made pertaining to health security, nor were any steps taken to provide a more adequate quantity of health service to the whole population. A study was made of problems involved in health insurance by a technical staff representing the Committee on Social Security. The technical staff appointed to make the study submitted a report to the President, but no official recommendations came from it. That the thought has not been abandoned is indicated by the President's message delivered to Congress under date of January 17, 1935. He said: "I am not at this time recommending the adoption of so-called Health Insurance, although groups representing the medical profession are coöperating with the Federal Government in their further study of this subject, and definite progress has been made."

Unfortunately a petty controversy over the merits and demerits of health insurance has beclouded the real issue before the profession. It is not whether voluntary or compulsory health insurance is the answer to the social situation confronting us, or whether "state medicine" will evolve from the social chaos in which we are engulfed, or whether regional installment-plan service will be adequate to the complete needs of society, or whether the personal-service plan will persist. All these proposals, as I see it, are guesses at the answer, or unconscious efforts to forge the answer. It is a simple rule of mathematics that until the conditions of a proposition, or a problem, are thoroughly understood, efforts to arrive at an accurate answer are futile. The question before us is not: What shall be the future mode of oral health-service delivery in the United States? Instead, it is this: Are the American people receiving an adequate quantity of health service? If they are not adequately cared for, does the deficiency deserve consideration? If it is deserving of thought and

planning, what is the profession's responsibility? Shall we undertake to plan for adequate health service for all economic levels, or shall we abandon to their unnatural fate deserving unfortunates on the lower-income levels? The American College of Dentists has not exceeded its authority, nor strayed beyond the bounds of its responsibility, either to the public or to the profession, in urging an honest study of the problems as a safeguard to all concerned.

Statistics indicate that only about 20 percent of our population receive adequate dental care, and it must be admitted that the cause of this deplorable situation is, in the main, economic. If these unfortunates are victims of social injustices, and are deserving of the physical blessings which health service groups can offer, then some means to provide such service should be devised. It is a betrayal of our trust to neglect to acquaint ourselves with the principles involved in the problem. Having equipped ourselves to treat the problem understandingly, it is an indictment of our integrity to fail to solve the problem in the interest of a society which dentistry is designed to serve. It is both futile and silly to argue that no such problem confronts us. Despite the urgent insistence to the contrary by some—whom we are willing to grant a sincerity equal to ours—if our profession does not intelligently and acceptably meet this problem (and by so doing retain control of health-delivery trends that will restrict any health-service plan to professional leadership), we predict there will come a time when state management of health service will be inaugurated as a means of reducing the costs of health service to the masses; and that with it will come all the viciousness of political and commercial domination that has damned practically every plan of state-aided health-service so far inaugurated. A solution of the problem can be achieved only through well organized studies of the indigents and low-level income groups, and the nature of all plans now in effect to meet the situation. The College is committed to no hypothetical mode of adequate health-service distribution. It is conscious of its responsibilities and will meet them in the same rational manner that has characterized its studies of all other important questions. It seeks only to know the truth; and, if there is conflict between truth and tradition, there will be no question as to its decision.

EDUCATION

The Report of the Curriculum Survey Committee of the American Association of Dental Schools has been presented to the profession within the year. The general nature of this Report has been touched upon by the Committee on Education of the College. While complimenting the Commission on the fine contribution it has made in reducing the problem of dental education to a common level of acceptance, and by so doing finally putting an end to the diversity of plans in dental education that have for so long constituted a handicap to the greatest good from this source, we frankly disagree with some of its recommendations. We refer specifically to the recommended two year pre-professional requirements as lacking in strength and adequacy to the problem of dental education. Substantial strength was added to the recommendation by the precipitate action of the American Association of Dental Schools in approving officially the conclusions of the Commission: "That this Association express its disapproval of rigid specifications of required subjects in the two years work in the College of Arts and Sciences by any regulatory body other than the universities and the schools themselves."

The statements and conclusions leading up to this recommendation indicate an element of doubt in the minds of the Commission as to its validity. It recognized current opinion among dental educators that basic sciences are essential to the successful completion of the dental curriculum; that a reorganization of the curricula requires that such basic sciences can not be included in the dental curriculum; and that for effective use they should be included in the pre-professional schedule. The Commission tacitly acknowledged the need for the basic-science requirements as prerequisites to the dental curriculum in suggesting the possibility of organizing five-year courses in dentistry to be superimposed upon the two-year liberal college base, or to sandwich a one-year *pre-professional* year between the two-year liberal arts course and the four-year dental course. Since present conditions will not justify the added time requirement involved in these suggestions, a compromise was adopted which proposes two years of liberal arts work, without prescription, thus inferentially excluding the basic sciences from these courses. This plan requires that the basic-science courses be substandard in quality and crowded

into the four-year dental schedule. It seems that the Commission lost sight of the desirable sequence of science subjects from the predental to the professional courses. It chose to adopt a plan that is expected to develop a greater social consciousness and appreciation among those who begin the study of dentistry which, the Commission believes, can be achieved by requiring courses in history, economics, sociology, etc.

It is obvious that, in considering this problem, the age-old theories of the cultural versus the utilitarian purposes in education conflicted and that, owing to the influence of the liberal-arts group in the Commission, the so-called cultural viewpont obtained. It is hoped by its sponsors that the social sciences will develop a greater culture than can be expected of the physical sciences, and that, as a consequence, the future dentist will be better equipped to take his proper place in society, even though he may be lacking in the fundamentals essential to a scientific profession. On the other hand, some believe that the price paid by the sacrifice of essential basic sciences is not only too great but that too much emphasis is placed on the comparative values of social sciences against the physical sciences as culture-producing experiences. These argue that a social being *may* result from an intimate acquaintanceship with the physical sciences, while there can be no guarantee that a superior social individual *will* be produced by mere emphasis on the social sciences. Thomas Huxley, in speaking to the point of classical against scientific training said: "For I hold very strongly to two convictions. The first is that neither the discipline nor the subject-matter of classical education is of such direct value to the student of physical sciences as to justify the expenditure of valuable time on either; and the second is, that for the purpose of attaining real culture, an exclusively scientific education is at least as effectual as an exclusive literary education."

Dental education is interested in a sound scientific base for adequate preparation of those who are to become a part of a true scientific body. Because of this our first attention must be to the values fundamental to the achievement of a scientific background. This does not mean that we are opposed to the so-called cultural values which are so desirable; but, when a choice must be made between the two, we, as guardians of the scientific standards of the profession,

should choose the *essential* elements of a scientific training as against the *desirable* so-called cultural training. It is to be hoped that our leaders in education will come to realize the greater importance of a firm scientific foundation for dental students preliminary to their admission to the dental school, and that this will be safeguarded by prescribing science courses for the pre-dental novices.

In closing may I express my thanks to the Officers of the College, to its Committees, and to the many Fellows who have so loyally supported its purposes and faithfully served its objectives throughout the year. The support, from many sources, has been useful and I can only regret that time will not permit me to refer to it in more detail. You have heard the many splendid committee reports, the text of which will be made available through future issues of the *Journal* of the College. I commend them to you for earnest study and careful thought.[4]

[4] Abstracts are published on pages 57–77 of this issue.—[*Ed.*]

SOME PROBLEMS OF MUTUAL INTEREST TO DENTISTS AND PHYSICIANS[1]

SYDNEY R. MILLER, M.D., F.A.C.P.

Baltimore, Maryland

This paper is presented with mingled feelings of appreciation, pleasure, regret and timidity. *Appreciation* because you have so graciously honored me with the invitation to attend this meeting of the American College of Dentists, now in its fifteenth year of activity, and to suggest to you some of the many problems which are, or should be, of keen mutual interest. *Pleasure* because it affords an opportunity openly to acknowledge the tremendous debt which the medical profession owes to yours. Not many decades ago dentistry was regarded, not as an integral branch of the healing art, but rather an almost purely technological trade. Today, it is clearly recognized that your profession and mine are in many respects on a parity, faced

[1] Read at the New Orleans convocation of the American College of Dentists, Nov. 3, 1935. The author was introduced as Associate in Clinical Medicine, Johns Hopkins University; Associate Professor of Medicine, University of Maryland; and a Past-president of the American College of Physicians.—[*Ed.*]

as they are with diagnostic, therapeutic, educational and research problems that are of special interest to both. *Regret* because I shall be unable to offer anything particularly new, or impart information with which you are not quite as familiar as I; and certainly nothing which can be claimed as original. Associated with this feeling of regret, there are kindred feelings of doubt, produced by the many difficulties which confront both medicine and dentistry in their interpretation and application of an ever-growing mass of knowledge coming to us from many different sources. Practically, however, doubts and difficulties *should* arouse the normal emotion of wonder and its associated instinct of curiosity; together, they stimulate the impulse to examine more closely the object or difficulty which excites them. The curious mind is ever alert; it remains sensitive to all that is doubtful or unsettled. Demand for the solution of a perplexity is the steadying and guiding factor in the entire process of reflection, and it is from some such point of view that I shall attempt to treat the allotted subject. *Timidity* is aroused by the fact that hitherto physicians have been sadly lacking in dental knowledge; in dental interest; and in ability to recognize some of the tell-tale evidences revealed by careful oral inspection, which should prompt both appropriate dental surveys, as well as medical investigations and treatment. This feeling of timidity is offset somewhat by the consoling, though sad, fact that far too many dentists are equally deficient either in their knowledge or their utilization of sound medical practice in their daily work.

Lack of time prevents discussion of the evolution and progress of dentistry and medicine, with particular reference to the relationships that have existed between them. An excellent historical resumé by Haggard, which appeared in one of your recent dental publications, is most illuminating on this subject. It is of more than passing interest to recall that in 1839 Harris and Hayden, dentists with a medical background, laid the foundation of both organized dentistry and dental education; conceiving their art as a specialty of medicine, they endeavored to elevate it to that status in character, usefulness and appreciation. Their plea to the Medical Faculty of the University of Maryland, that dentistry be taught under medical auspices, was rejected with the statement "that the subject of dentistry was

of too little consequence, and thus justified their unfavorable action." Undaunted, these pioneers, together with four other doctors of medicine, founded the first dental school in this country, in Baltimore; called it the Baltimore College of Dental Surgery; and based its curriculum on the so-called medical sciences. It is singularly significant that your eminent President is also the Dean of the Baltimore College of Dentistry of today; and that I, also a Baltimorean, am privileged to appear before you and individually apologize for the short-sightedness that has blinded the medical profession to the usefulness of yours for so many years. Meanwhile, dentistry has steadily advanced into extensive fields of both knowledge and skill, of research, and of educational perfection, to a point where it now justifiably claims the right of self-determination and future autonomy. No longer can there be intelligent doubt that "public interest will not be best served unless there is inter-dependence and mutual respect between the medical and dental professions. Both groups need to understand each other better and learn how they can be of mutual assistance in dealing with the problems of disease." Probably nowhere has there been a better exposition of this subject than in an article entitled, "The status of dentistry," which recently appeared in the *Journal of Dental Research*, penned by so eminent an authority as Dr. William J. Gies. Obviously dentistry is only one of the special divisions of medicine, and the relation of dentists to medical practitioners or internists ought to be precisely the same as that of any other specialist in a circumscribed domain. Fortunately for all of us, and particularly the public, the practices of dentistry and of medicine have been growing steadily closer as experience has demonstrated the unavoidable inter-relationship of their problems.

These facts and many others warrant earnest consideration of what seems to be the most pressing primary problem of common interest to dentists and physicians: namely, a better unification of existing knowledge; the institution of better team-work in the solution of problems as yet not accurately answered; and a consistent, perennial remembrance of the fact that both the prevention and treatment of disease involve a much more comprehensive therapeutic perspective than either profession is able to grasp, unaided by the other. Naturally enough, the question arises: How can such a desirable state be

effected and perfected? The answers to this question are many; some of them would seem to be these (1–7):

(1) It is not the purpose at this time for one admittedly unqualified from a pedagogical point of view to suggest in detail along what lines dental and medical education should be either improved or altered. The plain, outstanding fact is that students in training for medical practice receive, to the best of my knowledge, little, if any, useful instruction in the dental aspects of medical practice. It is questionable if they are given much more than the most superficial teaching in the recognition of significant dental lesions. In the Carnegie Foundation's *Bulletin on Dental Education in the United States and Canada*, in 1926, this statement occurs: "Organized medicine has been traditionally inattentive to the prevention and treatment of abnormalities of the teeth and adjacent structures. Most medical faculties have been strangely unwilling to teach medical students even the medical part of dentistry." The medical course at the University of Maryland does not include any specific instruction by dentists on what might be called the medical relationship of dentistry. There is no instruction by dentists on the care of the teeth, the recognition of oral sepsis or the relationship of diet to the health of the teeth, etc. The same, I believe, is true at the Johns Hopkins Medical School. The Professor of Medicine at one of these institutions admits without reservation that more concerning the teeth should be given to the average medical student, and that some of it, at least, should come from the dentist; but adds that the only reason why more definite inter-play does not occur between the schools of medicine and dentistry is that the curriculum is so crowded in each. It is likewise debatable whether enough time is devoted during the dental curriculum to the presentation to dental students, by physicians, of certain basic and practical facts which would enable them to approach many of their problems with a much more comprehensive attitude. It is encouraging to know that at the Medical School of the University of Pennsylvania they have started their third year in the teaching of medicine to dental students, through lectures, clinics and group diagnostic methods. As stated by one of those most interested in this problem: "We are endeavoring to provide them, we hope, with a speaking knowledge of the major problems met in the daily practice

of internal medicine." Too few physicians and medical-school educators are aware of the efforts as well as the successes which have resulted, largely through the activities of the Dental Educational Council of America, in the steady progress which has been made along educational lines within your own profession. "The Council's work of a decade has left no doubt that dentistry should be closely allied with medicine, both in education for the study of the basic sciences, and in clinical experience and practice to promote a complete and adequate health service." It would be of inestimable value if the recent report of the Curriculum Survey Committee of the American Association of Dental Schools were in the hands of all medical leaders and deans of medical colleges in this country. Its perusal by them might well lead to some much-needed inclusions in medical curricula, and point the way toward appropriate medical courses in the several dental colleges throughout the country.

(2) More aggressive efforts should be made to demonstrate, both to our professions as well as to the laity, that the medical and dental problems of prevention, diagnosis, cure, education and research possess much in common. Since neither profession is capable of the entire job, it logically follows that intelligent cooperative work is incumbent upon both professions, beginning, so far as patients are concerned, from the earliest period of childhood, and indeed prenatally.

(3) A distinct improvement in the present situation would follow the institution of an active dental-medical service in the wards of all large and, particularly, teaching hospitals. Fortunately, steps along this line have already been made, and some of the hospitals in Baltimore and elsewhere, though far too few, include a dental resident or intern on the staff. They lead, I am told, an existence far too isolated from their medical confrères. Though it has long been an established procedure to have a dental department and dental consultants associated with large hospitals, there does not seem to be, as yet, that set-up which makes for an intelligent discussion of dental advice sought for by the average and all-too-casual physician or surgeon. The criticism in this respect would seem to fall more on the shoulders of the medical than of the dental profession.

(4) By appropriate measures, there is need for the spread of the gospel that progressive physicians and dentists are much more in-

terested in patients as a whole than they are merely in the presenting symptoms or conditions for which the patient seeks help. Some of the difficulties in this respect, so far as dentists are concerned, are due to the fact that dentistry in its development was formerly dwarfed in its broader biological aspects by a disproportionate growth of its mechanical and esthetic procedures. Today this is no longer true.

(5) Benefits undoubtedly would accrue from more frequent joint meetings between the medical and dental professions. It is a singular fact that the component city and state medical and dental societies rarely, if ever, meet together. Granted that such meetings might not be feasible or necessary frequently, their occasional consummation certainly could not fail to promote a more alert and utilitarian interest. Dentists have many messages of both scientific and practical value that are never given to the medical profession. The reverse is equally true. The first meeting of this sort, so far as memory serves me, will be held in Baltimore during the coming winter. It is gratifying, also, to know that at the next meeting of the American College of Physicians this subject of medico-dental relationships will be presented, in one of the programs of the General Sessions, by a leading member of your profession.

(6) Co-ordinated scientific research along biochemical, bacteriological, nutritional and other lines, will ultimately solve some of the present problems. Again, it is heartening to note that such co-operation is already well established in a number of different centers throughout the country. It is altogether likely that the joint researches of these various groups will clarify many of the perplexities which now exist.

(7) In these times of extraordinary change, with the development of new, bizarre and dangerous economic trends, in a period when more and more pressure is being brought unmercifully and unjustly upon your profession and mine, it is highly important that all possible efforts be made to the end that the practice of medicine and dentistry shall remain within, and be under the control of, our professional groups, and not be turned over to the hands of people—politicians or otherwise—utterly incompetent to decide many of the questions that for years we have been interested in, as they affect the public at large, rich and poor alike. In any discussion that might arise, bearing on

the general problem of the socialization of medical care, it is most important that my profession be more intelligently aware of some of the basic differences that exist between medical and dental services. When one remembers, as Walker points out, that dental disease, in some form or other, affects almost everyone, that it is predictable, that it does not correct itself, that uncorrected it tends to grow worse, that correction demands dental service, that dental disease constantly recurs and hence demands recurrent therapy, that the problem is totally different in children, adolescents and adults—then and then only will there be a proper degree of medical recognition of the problems of dentistry as they concern us all in the solution of some of our economic difficulties.

It is assumed that most of these recommendations are axiomatic; doubtless they have been voiced many times, in various ways and places. Some of them may be idealistic, but not practical. Others may be questionably desirable. But when all is said and done, none of them appear to be unattainable, nor do any seem to possess the dangers of professional intrusion on either side, and none carry with them the risks which their neglect clearly portends. Apparently one difficulty in the institution and maintenance of appropriate medical-dental relations, according to one of your own observant members, is that discussion "usually ends in gum-shoe palaver, with each side patting the other on its back and then going back to their respective offices, where nothing that has been preached is ever put into practice." If such a frank criticism as that represents the true attitude of both professions, the moral is obvious, and the demand for action becomes that much more urgent.

An analysis of replies to a simple questionnaire, sent to a number of physicians and dentists, has made it manifest that in both groups there exist a number of problems of common interest which seem to be more or less universal. One of these relates to the discussion of various types of disease, to each one of which an entire paper or session might be usefully devoted. One can but briefly allude to a variety of conditions, which, for the sake of simplicity, may be grouped as follows: (*a*) Constitutional diseases with oral manifestations, which may occur early or late, and can frequently be remedied by the cure of the disease in question, with but little dental therapy. (*b*)

Oral infections, particularly of the gums and periapical areas, which are presumed to be the cause of many pathological alterations in remote situations of the body. (*c*) Oral diseases or infections which are self-limited.

(*a*) Included within the first group are a number of conditions which, clinically, are accompanied by oral manifestations involving the teeth, the buccal mucosa or the gingival structures. Among the most important are those associated with disturbances in the function of the hemopoietic system—diseases such as the acute or chronic leukemias, pernicious anaemia, aplastic anaemia, and others. The condition referred to as purpura, which may be either symptomatic or primary, should not be omitted from the list. You, of course, are familiar with the fact that pyorrhoea, spongy, swollen and bleeding gums, particularly in the interproximal areas, with associated periodontal infection and loosening of the teeth, are common in these conditions, and also in the course of an improperly treated or uncontrolled diabetes. The mouth manifestations encountered in association with chronic poisoning from the heavy metals, lead and mercury in particular, are easily recognized if looked for. Nephritis, particularly when accompanied with varying degrees of nitrogen retention, is frequently associated with oral disturbances which may first lead a patient to consult his dentist. Obviously it is impossible to discuss the differential diagnostic points between these conditions —so frequently associated with bleeding gums, sore tongue, aphthous spots, petechial areas—and the host of others which are thought to be purely local in their origin, and likewise associated with bleeding and other types of dental and gingival disturbance. However, if we are to adhere to the concept that only by better dental and medical team-work will proper therapy be instituted, it follows that there must be many instances in which local manifestations are treated locally, at least for some time, before their systemic significance is appreciated. One can easily recall instances in which dangerous loss of time was incurred by well-intended dental efforts, carried on to the exclusion of appropriate medical investigation which would have given a precise diagnostic answer. One wonders how often this actually happens. Over a period of twenty years I have been impressed by the extreme infrequency with which patients are referred by dentists to

physicians for investigative surveys; whereas, the reverse is certainly not true. This fact merits thought, and also prompts the suggestion that whenever a dentist is not absolutely positive as to the significance of certain abnormalities, he should regard it as an impelling duty to seek such information, and in such ways as may be clearly indicated and quickly done by a competent physician. Oral examinations alone cannot possibly disclose what a painstaking physical examination may reveal.

(*b*) To the subject of oral infections presumed or believed to cause disease in remote structures of the body, but little time can be given. MacNevin and Vaughn include among the mouth lesions which have been shown to be sources of focal infection: caries; vital degenerating pulps; periapical infection about pulpless teeth or teeth with non-vital pulps; infected dental cysts; residual infection after extractions; infected impacted and unerupted teeth; infections arising from irritations of the gums, due to tartar, food debris, operative and prosthetic restorations; gingivitis and stomatitis, or any inflammatory condition of the mucous membranes of the mouth and pyorrhoeal pockets. You are all familiar with the theory of focal infection, originally, though not in an historical sense, advanced by Billings, Gilmer and Black, and subsequently magnified to proportions which bar description. During the twenty-odd years that have elapsed since the initial pronouncement of the focal-infection theory, it has been unbelievably abused, both by physicians and dentists; in fact, the tendency has been to pounce upon any oral infection as the possible cause for the perpetration of any insult or disease occurring anywhere else in the body, often at the utter disregard of common sense and critical analysis of the problem in question. Gradually it has become clear that both acute and chronic infections of the mouth, or of any other part of the body, constitute only one of a number of conditions which determine the persistence or progress of various pathological conditions. Dentists, in their eagerness to cooperate and often probably against their better judgment, have shown too great a willingness to follow in the credulous footsteps of the referring physician, and sound teeth, which were so unfortunate as to have developed insensitive pulps, have had their masticatory service terminated. Insofar as there may have been bad leadership in this respect, much of the blame

must be laid on the shoulders of my profession. It is presumptuous for any physician arbitrarily to demand or order the removal of teeth, be they non-vital or otherwise, without consultation with a dentist well qualified and courageous enough either to agree or disagree. Certainly focal infection, in its relation to disease elsewhere, has never been conclusively proven, at least in terms of the four bacteriological postulates of Koch. For this and other reasons, voiced as far back as 1921 by the author, in *Dental Cosmos*, the focal-infection theory has given rise to much doubt, much speculation and many experiments, some well conceived, some poorly planned, and others illogically interpreted. Even at the present time there is apparent discord within your own ranks as to just what are the criteria and justifications for the removal of a tooth. There is still an unfortunate lack of unanimity of opinion on some matters, such as what to do with the pulpless tooth which shows no clinical or roentgenological evidence of infection; what criteria conservatively demand operative intervention, when there are only slight evidences of periapical infection; and, finally, what relation is there between such conditions as dental caries on the one hand and periodontitis on the other, in relation to disease elsewhere? Obviously these are problems which the dental profession cannot conclusively solve without such help as can be derived from all other sources whatsoever. There are many gaps to be bridged before the focal-infection theory, as applied to all of the oral infections previously enumerated, can be reduced to a proper working basis. So long as uncertainties exist, probably the safest course is to assume that all mouth infections *are* potentially capable of damaging the general health of the individual in one of many ways; but in the present state of affairs, "those of us who practise medicine are obliged to depend upon you who practise dentistry, for competent decisions as to whether or not the patient can with safety retain a tooth that is under suspicion."

(*c*) An adequate discussion of oral diseases or infections which are apparently self-limited is impossible, partly for the reason that there are so many factors which inevitably prompt the query: Are *any* local manifestations of disease unassociated with alterations or lowering of general bodily resistance? For example, it is well known that fusiform bacilli and the Spirillum, which are believed to cause trench

mouth or Vincent's gingivitis, are normally present in the mouths of a great many who are not suffering from that disease. Many normal people harbor in their throats or mouths the pneumococcus, streptococci of various types, the Klebs-Löffler bacillus, and some types of mycotic organisms, such as the ray fungus; yet, under ordinary conditions, these microörganisms apparently lead a perfectly benign saprophytic existence. Just what the factors are which permit any of these to blossom out into full pathogenicity, we simply do not know. Since this is true, it is debatable whether there are any infections which primarily arise in, and are strictly confined to the oral cavity and its associated structures. Here, again, there are gaps to be bridged which demand medical, dental and laboratory collocation.

To understand just what is meant by disease, it is necessary that we know what is meant by health. In the broadest sense of the word, probably very few people are consistently healthy, though they may claim to be so because they ignore minor disturbances. Most of us accept the ordinary head cold, the periodic crop of pimples, a headache, dental decay, or various types of transient gastrointestinal upsets, as inconsequential; at least, we are not inclined to consider ourselves as ill. As one of your profession points out, the consideration of any disease almost inevitably leads to the same conclusion; namely, that we may be able to determine the specific and inciting cause or agent, though this need not produce the same disease in every person. The syndrome that we call the disease is a response of the body tissues to and against the inciting agent and some kind of a changed cellular environment. The body must cure itself; all that we can hope to do is to help. We do not know just how cure is accomplished. How many common problems of mutual interest loom up in the consideration of such a statement! In any or all of the conditions briefly alluded to, it is obviously our duty to initiate all accredited therapeutic measures which will effect a cure in the shortest possible time and with the minimum of functional and financial loss. When all is said and done, the patient's interests, of course, are the primary consideration. Though the therapeutic attack may judiciously pass from the dentist to the physician, or vice versa, or proceed concomitantly—it should not matter. Rugged honesty in our dealings with patients, as well as with each other, should preclude

any professional acrimony or pique. Many therapeutic problems of common interest to our professions, and of vital importance to our patients, yet await satisfactory solution.

Mark Twain once said: "Men are usually competent thinkers along the lines of their specialized training, only; within these limits alone are their opinions and judgments valuable; outside of these limits, they grope and are lost, usually without knowing it." These words might be applied with salutary effect upon those who seem to imply that any or all of the diseases or anomalies to which mankind is heir, are directly or indirectly attributable to disturbances in endocrine physiology. As one peruses much of current literature, it would appear as though all of medicine demands little else save a comprehensive knowledge and application of endocrinology. That the study of the glands of internal secretion has become a recognized, important, fruitful and significant phase of medicine, is unquestionable; that it has a very practical importance in the practice of dentistry, is certain; gaps in our knowledge still demand rigid adherence to known and proved criteria of glandular imbalance.

Growth is an extraordinarily complex process, the resultant of many influences. Granted that the factors of necessary food, minerals, vitamins, and a healthy condition of body tissues, exist, growth *appears* to be largely under the control of the endocrine system. It is known that a growth hormone is elaborated in the anterior lobe of the pituitary gland. It has a stimulating effect upon the osseous system, as well as on all of the body tissues; absence of it results in stunted growth, or dwarfism; excess of it in childhood causes gigantism, and in adults, acromegaly. This same pituitary hormone also has a stimulating effect upon the thyroid, and on the maturation of the sex glands. Inadequate pituitary stimulation of the thyroid in growing children is known to be associated with late eruption and exfoliation of teeth, and resultant malformation of the second denture. The deciduous teeth make their appearance late; often they are incompletely formed, may be poorly calcified, and hence subject to early caries or actual loss. If lost prematurely, particularly the first molars, there immediately result certain mechanical deficiencies in jaw development, with consequent orthodontic disturbances. When the permanent teeth appear, and these also

are delayed, they may be irregular in both size and development. Conversely, if there be over-activity of the anterior-pituitary growth-hormone, premature appearance of abnormally large, widely spaced teeth occurs. When and if the sex glands fail to mature at the proper time, the pituitary hormone apparently can continue to exert its effects beyond the normal period, as evidenced by growth of the long bones beyond their usual length. In other words, the proper maturing of the sex glands has a decided influence upon the closure of epiphyseal junctions. Dwarfism, cretinism, eunuchoidism, gigantism, and precocious puberty are all associated with skeletal and oral anomalies, in which the teeth, the tooth germs and ossification centers are all involved. The parathyroids are known to exert a regulatory influence over the metabolism and transport of calcium and phosphorus. Functional insufficiency is associated with calcium deficiency; clinically, with tetany; and, if the parathyroids are completely inactive, death ensues. Hyperparathyroidism is associated with absorption of bone calcium, with resultant hypercalcemia. Unquestionably these glands play a part in the calcification of dentine and enamel in the formative period of dentition. In this period hypoparathyroidism appears to be associated with enamel hypoplasia; but apparently after dentine and enamel have both reached their final state of development, the teeth themselves are not seriously influenced by parathyroid inadequacy. To what extent other glands of internal secretion, such as the suprarenals, pancreas, ovaries, the pineal gland and thymus, have any definite effect upon the teeth and gums is as yet an unsettled problem of mutual interest. The endocrine enthusiast would have us believe that dental caries, pyorrhoea, and a host of other dental conditions, particularly of the so-called paradentosis group, are or may be primarily induced by endocrine disturbances of various types and combinations. Proof is as yet not forthcoming.

Endocrinology is a relatively new domain in internal medicine; a great deal more physiological and clinical work must be rigidly analyzed before glandular therapeutics can be reduced from its present somewhat empirical state to a precise level. At present it is impossible to prove or disprove just what the value of glandular administration is in a variety of dental conditions. Certainly, as Reynolds

well points out, the tried and true mechanical principles employed in orthodontic treatment cannot be discarded. Present accepted methods of treating pyorrhoea cannot logically be thrown overboard in favor of glandular therapy; the factors of infection and diet as a cause of dental abnormalities must be considered quite as seriously as ever. Our present cognizance of the endocrine glands and their pathological physiology offers an explanation *only* of some of the dental abnormalities which you are called upon to treat and correct. It is sound advice to suggest that in cases of delayed eruption, very early tooth decay, root-end resorption, dystrophic paradentosis, enamel hypoplasia, malposition of teeth, and asymmetry of jaws, dentists would be farsighted in instituting intelligent study from an endocrine viewpoint. Upon such a study should be based the decision as to the amount and type of glandular therapy to be instituted, as an accessory to the dental problems involved, and probably this decision should be made by the internist and not the dentist.

Two other problems of great common interest must be dealt with rather tersely. The *first* concerns the general subject of an adequate diet, with particular reference to oral conditions, and most of all to dental caries. "Of all the people in the world, Americans are most cursed with faddists, and of all the faddists that occupy our attention, the food faddists are most eccentric and comical. We have those who believe that the eating of more white bread, more fruit or raisins, is necessary for healthful living. We have those who oppose acids, and those who oppose alkalies. Vegetarians attach undue evil to the eating of meat and base their conclusion on the fact that apes live on nuts and fruits. Vegetarians say that animals living on a vegetable diet are strong and tractable, while meat-eating animals are ferocious. There is not the slightest scientific evidence to support the view that the eating of wholesome quantities of any single article of diet, such as meat, bread, or any of the other fundamental foods, is dangerous." Information is readily available, to him who will read, as to what are the criteria of a balanced diet, as applied to the various ages of life. Any diet, to be adequate and protective for maintaining health, must meet these four requirements: Enough protein, sufficient calories for energy requirements, and an ample supply of minerals and vitamins. It is assumed that all well informed members of your

profession are familiar with these well established physiological nutritional requirements, as well as with the tremendous importance of vitamins and their relation to deficiency diseases. For those who are not, one might refer to an excellent article published in the issue of *Dental Cosmos* for March, 1935, in which all of these matters are excellently summarized. Despite their admitted importance, vitamins today occupy the talking point in the promotion of cure-alls and panaceas for health. One is almost forced to conclude that health salvation is to be acquired only through the purchase of this or that proprietary vitamin concentrate. In the light of present information, it is timely to remind our professions, as well as the public, that one can get more than enough, and with ease, of vitamin A in butter; of B in whole cereals; of C in orange or tomato juice and green vegetables; and of D in milk, eggs, and especially sunshine. Furthermore, it would seem entirely safe to tell adults in reasonable circumstances to forget vitamins entirely, if they are living in the temperate zone, and if they are economically able to partake of an average diet, dictated by hunger and by the innate sense of taste. Vitamins are vividly over-done and over-emotionalized, and it is almost impossible for an individual who is not a "dietetic nut" to miss enough of needful vitamins each day. The case for babies and younger children is, of course, quite different.

As to the rôle which diet plays in the problem of dental caries, no one short of a nutritional expert could impartially weigh the mass of evidence which has been adduced for and against various dietetic theories. Apparently there are two main schools of thought on this subject of dental caries, often spoken of as "the most prevalent disease of mankind." One maintains that local, environmental factors are chiefly responsible for caries; the other, that deficient diet and defective nutrition are primarily responsible for the disease. So far as the latter is concerned, a recent critical analysis of the studies of such eminent dental-research workers as Mellanby, Howe, Bunting, Boyd and Drain, McBeath, Hanke and others, seems to prove that a diet supplying a liberal amount of milk, meat, eggs, leafy and tuber vegetables, whatever its content of sugar and cereal products, markedly reduces, in most children, susceptibility to dental caries, whatever their history may be as regards tooth development, but it is most

effective when the teeth primarily are of excellent structure. Hence the implication, that by diet alone caries can be prevented, is not intended. Preventive dentistry and medicine, therefore, are faced with the mutual problem of adequacy of diet and endocrine function, particularly during the developmental period of life, to insure, as far as possible, perfection of tooth structure.

The *second* problem that comes up frequently concerns the utilization of diagnostic laboratory tests, and particularly those which the alert dentist should apply or be familiar with. It is questionable how pertinent these various diagnostic procedures are in the routine practice of dentistry, and to what extent dental education teaches the clinical application and interpretation of so-called clinical laboratory methods. My impression is that most dentists probably are as competent in such matters as I would be in the use of a drill or the choice between various synthetic compounds for the filling of cavities. Diagnostic laboratory procedures may be grouped briefly, as follows: (*1*) Those of pure research. (*2*) Those of presumed but unproved value. (3) Those of established value, but of a complexity which puts their application beyond the range of the average individual. Fortunately, the intelligent utilization of tests in this group is necessary in but a relatively limited number of cases. (*4*) Those tests of long-tried and proven worth—simple, requiring the minimum amount of laboratory apparatus and a relatively small expenditure of time, each capable of yielding diagnostic information which every physician and probably most dentists should be able to interpret correctly. In this group are included the simpler studies of the blood, urine, feces, gastric contents, spinal fluid and sputum. "In spite of the great contributions which the laboratory has made to clinical medicine, there has been surprisingly little change in the character or number of the technical methods that are essential to good practice."

As to the value of routine blood-chemistry determinations of various sorts in dental practice, the author has already attempted to cover this problem in a paper read at a meeting of the American Academy of Periodontology, in 1929. There should be no such thing as "routine," to the exclusion of "discerning choice;" and herein lies another very subtle problem of mutual interest for our professions to work out. In the excessive reliance upon, or in the unsound non-discrim-

inating use, or incompetent interpretation, of laboratory tests, one can find a tremendous menace to modern medical and dental practice, as well as their economic efficiency. Just so long as dogmatic reliance upon laboratory methods keeps reflective thinking and systematic observation subservient, poor clinical practice will persist.

Summary. It is hoped that this meager discussion of some of the many problems of mutual interest to the medical and dental professions has been as disappointing, disillusioning and stimulating to you as it has been to its author. *Disappointing*, mainly because of the obvious arrant gaps yet to be filled in both medical and dental knowledge; in the utilization of proper inter-relational activities; and in our present measures of therapeutic attack, progressively excellent as they are. If such be the case, we shall be *disillusioned*; that is, we shall be aroused to stern and pressing realities, and hence be *stimulated* by the enthusiastic belief that both as individuals and professions we shall inevitably keep on going forward.

One way to do this, and one not commonly thought of, is to wage daily warfare against the innate human tendency to be credulous. Credulity is a weak or ignorant disregard of the nature or strength of the evidence upon which a belief is founded; hence, a disposition to believe too readily. To be credulous is to believe without good evidence; to jump at conclusions; to run away with an idea; to take for granted. The credulous individual is gullible, easily cheated, infatuous, over-confident, yet simple oftentimes in the way in which he trusts, despite lack of knowledge.

Credulity, as it operates in the diagnosis and treatment of many conditions, has been responsible for some of the distrust in the medical and dental professions among the rank and file of laymen; for frankly admitted dissatisfaction within the ranks of our professions themselves; and it has at least a significantly important bearing upon the problem of the so-called cost of medical care, which confronts both professions.

I have recently read with both interest and profit the Lowell Lectures, delivered by Doctor LeRoy M. S. Miner, Dean of the Harvard Dental School, on the subject, "The New Dentistry: A Phase of Preventive Medicine." He concludes his lectures by quoting the closing sentences of Pasteur in his farewell address, which was in a

sense his confession of faith, as well it might be ours also: "Do not (he said to the friends and students who had assembled in his honor) let yourselves be tainted by a deprecating and barren skepticism; do not let yourselves be discouraged by the sadness of certain hours which pass over nations. Live in the serene peace of laboratories and libraries. Say to yourselves first: 'What have I done for my instruction?' and, as you gradually advance, 'What have I done for my country?' until the time comes when you may have the immense happiness of thinking that you have contributed in some way to the progress and good of humanity."

DISCUSSION

James T. Nix, M.D., Professor of Surgery, School of Dentistry, Loyola University, New Orleans. The privilege of addressing the American College of Dentists is an honor deeply appreciated. Dentistry is a profession whose achievements and records date back to the year 3600 B.C., when formulas for relief of the pain of toothache were written on Egyptian papyri. From that time, as one, doctors and dentists have worked under the same yoke and for the same purpose—relieving pain, offering hope in the cause of suffering humanity, curing ills, restoring health, lengthening life. How often have been repeated the famous proverbs, "We dig our graves with our teeth," and the French—"La mort entre par la bouche"—"Death enters through the mouth," implying, in each instance, "the platter kills more than the sword." Cervantes was not the first to think that "a diamond is not so precious as a tooth," although in his Don Quixote he was the first to say it. Translating these maxims into the language and achievements of the modern dentist, "care of the teeth and the oral cavity" takes a leading place in the maintenance and preservation of health. In diseases of the oral cavity there is no dividing line between medicine and dentistry. The modern dentist should include in his periodical examination a careful survey of the gums, cheeks, tongue and palate as well as the teeth. If this were done, cancer of the oral cavity could be eliminated and many other systemic diseases prevented. Fractures of the lower jaw have long since passed from the hands of the general surgeon, and properly have been assigned to the dental surgeon. Correction of cleft palate and harelip is now performed by both professions. In the successful treatment of oral cancer, the service of a capable dentist is indispensable. A medical-group examination without a dental report is incomplete and often valueless. Charles Mayo remarked only a few years ago: "The next great step of medical progress in preventive

medicine rests with the dentists." Not having received a copy of Dr. Miller's paper, a fitting discussion of his excellent contribution would be a most difficult task. Therefore it was concluded that greater respect for and appreciation of Dr. Miller's address would be shown by adding our humble experiences in medico-dental relations.

No man in history more closely symbolizes the inseparable relationship of medicine and dentistry than Dr. Truman Brophy, who as a dentist studied medicine and obtained the M.D. degree in order that, in his chosen calling of dentistry, he could enter a larger field for his dreams and endeavors. Although a physician, he was predominantly a dentist, by calling and by activities—the father of the cleft palate and harelip operations that are still the standards. (Slide showed portrait of Doctor Brophy.) As a tribute to Dr. Brophy, a few slides will show the success secured by following his technic in detail. Many dentists are now successfully performing these operations. (Six slides showed patients before and after operation for harelip and cleft palate—good results in all instances.) The Master Surgeon, J. B. Murphy, said of Truman Brophy: "He had thoughts sublime that pierce the night like stars and in their mild persistence led men on to vaster issues."

In our own personal experience the services of a dentist have been so vital a part of the practice of group medicine that, when our clinic was founded eighteen years ago, a dentist was included on the staff; during the past eight years another has been added. The following statistical data illustrate our findings: *Review of last 100 dental examinations in 100 complete examinations* (number of cases indicated by numerals in parenthesis).—No evidence of pathology (35); artificial teeth (13); suggest prophylaxis (4); caries, one or more teeth (21); pyorrhea: pockets (4), advanced (1); caries, requiring extraction and prophylaxis (7); caries, with pyorrhea, requiring extraction and prophylaxis (5); periapical abscesses: teeth to be extracted, one or more (9); shadow, under treatment (1). Certain conditions should be recognized by all dentists. (Seven slides showed miscellaneous buccal lesions, such as aphthous ulcers, leukoplakia and fibroma of gum.) These conditions are brought before the senior class at the Dental School of Loyola University with all emphasis, as part of our teaching.

In September, 1935, a tumor clinic was organized at the Charity Hospital of Louisiana, with the speaker as director. It was soon realized that the services of a dentist having knowledge of oral surgery and diseases of the mouth was necessary, and one was added to our staff. Such an affiliation is essential. When the patients are returned to the wards for treatment, it is often administered by or with the assistance of the Fellow in Dentistry.

(Tumor Clinic cases with buccal malignancies exhibited: two cancers of lip; three carcinomas of tongue; one carcinoma of palate; all (*a*) squamous-cell malignancies of different grades treated by surgery or radiation with good therapeutic results, and (*b*) associated with pyorrheic gums, carious teeth, or leukoplakia; in some, radium applied by Fellow in Dentistry; all treated with assistance of dentists. Slides also showed rare and unusual conditions outside of domain of dentistry, of interest to dentists as indicating possibilities to be considered in diagnosis—including two of massive tumor of nose—basal-cell carcinoma, cured by excision; two of destructive basal-cell carcinoma invading orbit, cured by excision; one of recurring melanoma of orbit, without metastases in three years; two of massive ocular growth, mycosis fungoides; one of liposarcoma of neck.)

Nearly a hundred years ago an enlightened concept of the dental profession was expressed by Oliver Wendell Holmes in these words: "The dental profession has established and prolonged the reign of beauty. It has lent perfection to the strains of eloquence and has taken from old age its most unwelcome feature." Today the dentist deals, in addition, with more vital issues. He has become the master of surgical diseases of the mouth. He not only deals with sound teeth but with sound health. He contributes not only to the beauty but also to the happiness of man. He mitigates, he corrects, and he cures the afflictions of our race, hand in hand with the physician.

William J. Gies, Ph.D., F.A.C.D., Professor of Biological Chemistry, Columbia University, New York City. [Summary]. The fact that medico-dental relationships are not what they should be in the public interest, and also conditions that interfere with closer cooperation, were discussed. Much that appears in recent published comment by the author, on this general subject, was reiterated (*J. Am. Col. Den.*, 1935, *2*, pp. 248 and 275; Dec.). There were numerous direct allusions to consequences of the serious lack of generous fairness of many physicians in medico-dental relationships, and to the ensuing public disservice. The hope was expressed that the spirit of cooperation and helpfulness, as exemplified by Drs. Miller and Nix, will soon completely displace all the ungracious deterrents to full working accord. To illustrate the foundations of the constructive criticism thus spoken in New Orleans, the author cited the example of Tulane University, giving special attention to the import of the following quotation from comment by the Dean of the Medical School in that University: "*Tulane University Medical School:* 'The dental instruction that is available and the dental service to patients through the dental profession are entirely too inferior to warrant more time in the [medical] curriculum [now admittedly

inadequate as to dentistry], nor more effort to utilize dental teaching at the present time.'" This partisan statement was included in a response to a questionnaire, issued by "the Joint Committee of the Organized Medical and Dental Professions of the City of New York," to "medical and dental colleges in the U. S. and Canada, to determine the extent [and improvement] of undergraduate and postgraduate medico-dental teaching" (*N. Y. State J. Med.*, 1935, *35*, 138; Feb.). Many dentists now in service in New Orleans are graduates of one of the two local dental schools: Tulane (1899–1928; discontinued in 1928) and Loyola (1914; now in twenty-third year).

MEDICO-DENTAL RELATIONSHIPS

A Symposium[1]

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I. Journalism

JOHN E. GURLEY, D.D.S., F.A.C.D.

San Francisco, Cal.

"People who give the world what it wants survive best, but they themselves survive because of people who gave the world what it ought to have." Three ideas in this anonymous quotation may be emphasized—they all point toward the question of leadership. A long time ago Jehovah selected two men, brothers, to become leaders of the ancient Israelites. One was a worker and knew what he wanted to do; the other was a good speech-maker. The latter became the mouthpiece for the former, and the two together worked along very well. But presently the former, who was none other than the law-

[1] Papers read at the convocation of the American College of Dentists, New Orleans, La., Nov. 3, 1935. See items 50–53; abstract of minutes; *J. Am. Col. Den.*. 1935, *2*, 272; Dec.

[2] Died May 28, 1936. This contribution has been published as read from the manuscript presented for the record by Dr. Messner.—[*Ed.*]

giver, Moses, went back upon the Mount, leaving Aaron. Immediately the people clamored for something more real that they might worship, so Aaron helped them make the false god, Baal. In other words, he prospered well, because he gave them what they wanted. Here we have the man who "survives best." In due time, Moses returned; the false god was destroyed; and the old order was restored. Moses still lives, and will live as long, at least, as law is required, for the old laws set forth by him are the very foundation of our present legal system. Here was a man who gave the world what it needed. The result is, he still lives; but so do those who would give the world what it wants, together with those who make up the mass of people in the world. But how differently! The third idea is the fact that the masses either do not know what they want or ought to have; or they deliberately want what, in reality, they should not have.

This leads me to think in terms of leadership. Hence the question: What is leadership? We hear much talk about education as preparation for leadership—so much, in fact, that it would seem as though we might all be leaders with none to lead. But I have long since dismissed that fear, knowing that man always has the leadership of himself as a part of his responsibility, even the first. I know of no better statement or definition of "leadership" than the following, which is a sort of composite of many: leadership is an art, consisting of principles and personality. There are many qualities, both general and specific, required of a leader, but this is not the place for their consideration. Neither shall we spend time in discussing either the principles of which a leader must be possessed, or the personality requisite to his success. Suffice it to emphasize only the fact that he must have a worth-while principle—he must have some place to go, some place to lead those whom he would lead. This is the task imposed upon our journals and, of course, their editors. One cannot be without the other, so in the last analysis, the editor is the real factor among the leaders. I am addressing the American College of Dentists—a body of men carefully selected from all parts of the country, even the world; and this body of men must be representative of dental professional leadership. Who should have more interest in our journals? Or who should be more concerned about professional journalism?

Dentistry has progressed far in the past quarter of a century. Thirty years ago dentistry was little more than a mechanical trade. It has now become a fine art, upon a scientific foundation. Dentistry is essentially creative, therefore those who practise its art must be creators. That many of our members are creators can easily be demonstrated. Witness many splendid clinics. But this creative ability among us lies in one field—the clinical. How about the scientific? If we create that which lies within the domain of our mechanics and our art, are we not creative scientifically first? Enough has already been said to indicate that before man can do a thing, he must be able to think that thing. This fact in the life of a man is the most important, for as he thinks he is likely to do. Therefore, his thought must be developed by, or come from, that source which has no interest other than the truth or the best development. The only logical source is the profession itself, or a kindred scientific body.

Professor Compton, Nobel Prize winner in physics, speaking recently at Yale University, said: "The evolutionary process is working toward the development of conscious persons, rather than toward the development of the physical organism." I like this expression, and especially the idea of "conscious persons." I wonder if we as a group are not becoming more conscious—conscious of our power; conscious of our ability; conscious of our responsibility; conscious of our need for independence, or perhaps the need for dependence upon ourselves; conscious of our intellectual growth; conscious of the development of dentistry as a profession; conscious of our social development; conscious of our ethical relationships; and, finally, conscious of that thing which man must have in himself and then in others, confidence. Without confidence, what can I do? With confidence, what can I not do? So it seems, as I think along these lines, that the development of professionally owned literature is a logical, definite end toward which our evolutionary process points. We are "conscious persons," and being such we see not only the need, but also the opportunity for further professional growth through professionally owned and professionally directed literature.

If we reflect on the meaning of the word "profession," we cannot allow direction by, or the acceptance of subsidies from, any outside self-interested agency. Business and profession are two different

enterprises. True, both are means of earning a living, but in the one we have a commodity over which we may barter; in the other, we have only service to render. In the first instance, cost is the primary element; in the second, cost becomes secondary. Business is established for gain; so are professions. But if a man cannot pay $20.00 for shoes, he doesn't get them for $5.00 or for nothing; yet how many are served professionally at little or no expense to themselves. Business is competitive, profession is coöperative. Advertising and salesmanship are the dominating forces in business; profession has no use for either. Our literature must be free from this, and dominated by the spirit of true professionalism, for the good of young and old within our ranks. Professor Hubert Phillips, in a recent article entitled, "The adult goes to school"—commenting on recent graduates of our universities—said: "Excellently equipped for fitting into a society dominated by Advertising and Salesmanship, those twins of the present social order, such men and women are hardly equipped to function very satisfactorily as citizens." (*U. Calif. Chron.*, 1931, p. 75; Jan.) If our young men and women will have difficulty in functioning as citizens under this influence, what about our young professional men and women, and perhaps some of us who are older? The report of the Commission on Journalism was presented three years ago. Let's take it from our shelves, dust it, read it, study it; then determine to 'lay to' and see that dentistry develops a journalism of which the profession is worthy—which will train us scientifically and technically, professionally and ethically. We are interested in journalism and are awake to the changes now being made in management and publication. "The handwriting is on the wall," and the job *is now* in the hands of organized dentistry.

For many years, the American Dental Association has been publishing a journal—now a definitely recognized institution among us. We wouldn't have it stopped at any price. But now we are confronted by other journals, many of our state and local societies issuing either journals or bulletins. Two questions, however, are involved. It seems to me that we should look at them from the national standpoint, and attempt a solution, or offer aid in that attempt:

(1) Much literature is being developed in this country as a whole. It should have a very wide reading public. In every state, valuable

and authoritative papers, either scientific or technical, or both, are read, which, when published in a local publication, have only a small reading public. This is not only a failure in the proper dissemination of knowledge, but extravagant from the economic standpoint. As I view the situation, we need publications somewhat as follows:

(a) *Journal of the American Dental Association*, to publish our very best literature.

(b) *Journal of the American College of Dentists*, to publish material pertaining to the work of the College, of interest to the members and to the profession as a whole; also other matters relating to professional advancement, education and research and teaching, in a general way.

(c) *Journal of the American Association of Dental Schools*, to publish matters of interest to schools, teachers, and others interested in educational problems.

(d) *Journal of Dental Research*, to publish researches.

(e) State and sectional journals, to publish papers read at state meetings. The best ought to be sent to the *J. Am. Den. Assoc.*, while those of lesser importance read at A.D.A. meetings might be distributed among these journals. Could we so organize as to achieve effectively along this line? Could we encourage two or more states to publish journals jointly?

(f) A journal for free distribution among all ethical dentists.

(2) How could these coördinations be accomplished: (g) From the literary standpoint? (h) From the economic standpoint? The A.D.A. recently developed the so-called "Beneficial Circle" plan; probably that has helped a little. But must we depend on advertising, dues and subscriptions to provide the money? The Committee on Advertisements, of the American Association of Dental Editors, is working on the question, and made an interesting report at our annual meeting yesterday. We have yet to see what may develop. I will be deeply appreciative of any interest you may take, and with you hope to see the new day in dental literature advance rapidly.

The American Medical Association went through the same pains with the birth and growth of their literature. In fact, they are not full-grown yet for, after 28 or 30 years, there were, at last report, two state societies not yet in compliance with requirements. Our state societies are already in almost complete compliance. All member

journals of the American Association of Dental Editors may advertise only such therapeutic products as have been accepted by the Council on Dental Therapeutics of the American Dental Association. A series of five pertinent principles has been adopted. The Regents of the College have endorsed a lengthy series of regulations governing advertisements, as proposed by our Committee (*J. Am. Col. Den.*, 1935, *2*, 173–75; July). This alone augurs well for our professional attitude. In addition, there is a definite tendency to coördinate similarly with the Research Commission, and the Bureau of Standards. Editorial comment on advertising will appear in the next issue of our *Journal*, which, as you read, will strike you as a definite professional and ethical advancement (*J. Am. Col. Den.*, 1935, *2*; adv. sec.; Dec.).

In early infancy, when first steps are taken, the child leans on a chair, but later stands on his own feet and goes ahead. So with us in our literature: we leaned on the manufacturer and the supply houses for guarantee funds. Now that we have reached our full manhood it is time to walk unaided. We have only gratitude to those in the past who honestly and honorably promoted our start. The best way now that we can show our gratitude is to relieve all others of this responsibility, and proceed with the job that is ours. This is proper economically, but professionally as well. We create technically and scientifically; we should create in literature. Dentistry is creative in character; let's make it so in all respects.

II. Opportunities for Dental Health Activities Under the Provisions of the Social Security Act

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The protection and promotion of the public health have long been recognized as a responsibility of government. In the United States, however, this responsibility has not generally been discharged in a systematic and adequate manner as have other functions of govern-

[3] See footnote 2, page 31.

ment, such as the protection of property, the provision of means of communication, or the administration of justice and education. Furthermore, there is a marked inequality in the health service now being rendered to different communities, which results in great difference of opportunity for citizens to acquire and maintain health. It is the aim of the Social Security Act, among other purposes, to stimulate a comprehensive, nation-wide program of public health, financially and technically aided by the Federal government, but supported so far as possible, and administered, by states and local communities. When the Social Security Act was enacted by Congress and signed by the President, it was confidently expected that the necessary appropriation would be made promptly. However, owing to an unfortunate chain of circumstances this was not done. Consequently, the contemplated work must for a time be postponed. Meanwhile there will be ample time and opportunity to formulate plans for carrying out the various provisions of the Act.

Section 601, of Article VI of the Social Security Act, authorizes an annual appropriation of $8,000,000 "for the purpose of assisting states, counties, health districts and other political subdivisions of the states in establishing and maintaining adequate health services, including the training of personnel for state and local health work." The Act specifies that the allotments made to the states by the Public Health Service shall be determined on the basis of population, special health problems, and the financial needs of the respective states. It is further required that the allotments be made to the 51 states and territories in accordance with the rules and regulations prescribed by the Surgeon General after consultation with the health authorities. Prior to promulgation, the regulations must receive the approval of the Secretary of the Treasury. The $8,000,000, which it is expected will be appropriated annually for aid to the states, will be available for the following purposes: (*1*) Aid to state and territorial health departments, to strengthen the service divisions and to provide adequate facilities for the promotion and administrative guidance of full-time city, county, and district health services. (*2*) Aid through state and territorial health departments for the development of city, county, and district health departments. (*3*) Training of public health personnel.

Any agency or profession which has as its object the improvement of the physical well-being or the general welfare of the population, en masse, should have a well established place in public health administration. Public health work aims at the promotion of individual and community health as well as the prevention of disease, and is based on the fundamental needs of human welfare. Although it may deal with the individual, its greatest aim is to raise the standard of health of the community—the sum total of individual healths. The fact that the dentist deals almost entirely with abnormalities and diseases which are not communicable has, in my estimation, placed him in the background of public health administration; and yet every abnormality which he corrects in the oral cavity is but an evidence of the outraged human mechanism reflecting distress signals. It is estimated that more than 90 percent of all outside infections enter the body through the respiratory tract. This fact alone should place the dentist in the front rank in the field of prevention. The relation of infection in and around the teeth to systemic conditions has been definitely established. Such infection is one of the main etiologic factors in many of the chronic diseases to which man is heir. Its elimination is recognized as an important factor in recovery from chronic diseases. Oral health should be the first step in the prevention of communicable diseases in the young. By the maintenance of oral health throughout life, the degenerative diseases resulting from oral infection in later years will be proportionately reduced.

Unfortunately no direct provision has been made in the Social Security Act for dentistry. This is probably due to the meager dental representation in the various state health departments. The survey of these departments, recently conducted by the Public Health Service, revealed that only 14 states had specific provisions for the appointment of dentists on state boards of health. However, of the 48 states, only 5 were employing full-time dentists in the state health departments. One other state employs a part-time dentist; 3 states employ dental hygienists; 2 states employ teachers in charge of the state dental health programs. A few of the larger cities have full-time or part-time dentists with the city health department, but the majority of these are engaged in clinical work for school children. Only a very few are engaged in the broader aspects of public health

administration. There is no association in dentistry comparable to the Association of State and Territorial Health Authorities, which is comprised of active heads of state health departments. Therefore, it can easily be seen that the dental profession at large does not have trained representatives, familiar with health activities, to take an active part in public health administration.

Dentistry has long been recognized as an integral part of health service. Dental diseases among children and adults are more prevalent than all the other diseases combined; yet dentistry has not taken its proper place in the field of public health. This is due to various reasons, the foremost of which are lack of facilities for training dentists in public health work, and the fact that no well-developed program of dental activities has as yet been promulgated. If the dental profession can be properly stimulated, it has an opportunity, through the medium of the Social Security Act, to take a prominent place in health administration and education. This can be accomplished only by concerted and definite action.

Allotments to states under Title VI of the Social Security Act. The $8,000,000, which it is expected will become available for allotments to the states after Congress reconvenes, will be made to the various state health departments on the basis of financial needs, population, and special health problems. A certain percentage of the total will be allotted to each state as a flat grant which need not be matched. An allotment will also be made to be matched by an existing state appropriation. Another allotment must be matched by a new appropriation for public health purposes. The sum to be appropriated by the Public Health Service for the training of personnel is tentatively 12.5 percent of the total, or $1,000,000.

All programs or projects must originate in the various states and shall be submitted to the Public Health Service for review and approval. It must be definitely understood that nominations of public health trainees and other personnel are to be made by the state department of health and not by the Public Health Service. State dental societies interested in developing a dental division in the state department of health should make contacts with their respective state health officer and, with his assistance, work out a program to be submitted by him to the Public Health Service for approval. Natur-

ally every state health officer has many projects in actual operation, or awaiting necessary funds before starting, and with which he is entirely familiar. The medical profession is busy with its own problems. Although many health officials have indicated their interest in oral health educational programs, they will naturally leave it to the dental profession to make specific recommendations as to the scope and extent of activities that should be included in this field.

Dental program to be coördinated with other state health activities. No definite program has as yet been developed that is entirely satisfactory to health officials or to the dental profession. Until such a program is created and tried out in certain states, it is only natural to assume that the state health officer will hesitate to make definite recommendations for any large scope of dental activities. Such a program can be created only after intensive study by individuals having a background of training in public health. The organized dental profession should take early and definite leadership in developing such a program, outlining its scope of activities not only for children but for adults as well, and for communities both large and small. Such a program should be flexible, one that may be used in parts or in its entirety, and that would coördinate with existing state health activities and the present administrative policies. It should provide for a full-time Dental Director properly trained in public health administration. It should outline his qualifications, the number of assistants and other personnel required. It should provide for a division of dental health in the state health department, and show definitely why a dental section or unit under some other division will eventually tend to prevent the administration of dental health activities as they should be administered for all the public. Such a program should have the indorsement of the various state dental societies. A committee of each state society should work in close harmony with the state health department, giving encouragement, advice and also constructive criticism wherever it is needed.

It is only by a successful approach to the state health officer, by the local or state dental societies—convincing him of the urgent necessity for a dental health program in the state health department—that there is any chance for dentistry to obtain a part of this huge appropriation by the government in the interests of public health.

It is only through the state health officer's recommendation to the Public Health Service, of a project for a dental educational program in his state, that such an allocation can be made from this fund.

Facilities for training personnel in public health work. At present there is no school for the training of dental personnel in public health administration. There are several outstanding schools for the training of physicians in this field, but so far none of them has incorporated in its curriculum specific courses which are definitely applicable to dentistry or dental health programs. Under the provisions of the Social Security Act it will be possible for state health officers to recommend qualified personnel, including dentists, for training in public health administration. If the Public Health Service approves this recommendation it can, under the provisions of the Act, make an allotment to the state to cover the transportation of the individual from his home to the training school, pay him a reasonable stipend while he is undergoing training, pay the tuition and laboratory fees, and return him to his field of activity. The stipends will be comparable to those paid, during training, by the Rockefeller Foundation, approximately $150 to $200 a month.

At a conference of the State and Territorial Health Authorities, June 17 to 19, 1935, a committee appointed to draw up qualifications for health officers and health personnel made recommendations covering health officers, public health nursing positions, sanitation personnel, public health engineers, sanitariums, and sanitary officers. However, in their lengthy report they made no mention of qualifications or training for dental personnel. This was perhaps an oversight. The conference recommended that $1,000,000, or 12.5 percent of the $8,000,000 appropriation, be set aside for the prompt development of qualified personnel designed to strengthen and enlarge the staffs of state and local health departments. In furthering these objectives it was recommended that the Public Health Service proceed to develop suitable training centers at existing institutions, conveniently located to serve certain groups of states. In formulating these standards of training, the committee of the conference followed closely the report of the Committee on Professional Education of the American Public Health Association. This report, adopted May 4, 1935, recognized that most successful health officers are those who "entered the field

of public health when comparatively young; who have displayed the necessary qualities of personality and temperament; who either before appointment or since have received some education in the elementary sciences or preventive medicine; and who have learned, by practical experience in the various grades of service, the real technic of public health administration. Therefore, there is no reason to believe that schools of public health will ever be able, by intramural education, however intensive or prolonged, to furnish individuals capable of stepping at once into important administrative positions." Regarding the "facilities for the training of personnel," the Committee of the State and Territorial Health Authorities recommended as follows:

"1. That the regular courses now given by the university schools of public health be regarded as their paramount duty, and that the giving of short courses by such schools be so limited as not to interfere with the conduct of these fundamental courses.

"2. That it seems necessary to organize a limited number of special short courses designed to serve groups of states. These courses should be established in connection with university schools of medicine, selecting these schools on the basis of the character of the teaching personnel locally available. It will probably be necessary in most cases to supplement existing personnel by the detail of Service officers or the employment of supplementary teachers.

"3. The course given in any such training center will be based necessarily on the available teaching force and laboratory facilities. It should include courses in public health bacteriology and immunology, biostatistics, epidemiology, sanitary engineering and health administration, including field teaching. In schools serving southern states, medical zoology should be emphasized in the course.

"4. In general, two months of systematic instruction should be regarded as the minimum. An additional month of apprenticeship under a well-trained and experienced health officer, preferably in the state in which the trainee expects to work, should be required. Supervision of the trainee during this field apprenticeship should be provided by the training center.

"5. That the responsibility for selecting training centers, outlining the general course of instruction, and arranging the financial details of the work be assumed by the Public Health Service.

"6. The cost of establishing and operating any such centers shall be prorated among the states served by it, and paid for from the funds allotted to these states for this purpose.

"7. Similar principles shall be followed in setting up training centers for public health nurses.

"8. Courses for sanitarians of the different grades should be organized along the same general lines, the courses to be worked out on the basis of experience.

"9. All trainees of whatever grade should be given systematic teaching in the general principles of public health administration."

At the same conference a committee report was adopted on "qualifications for health officers and health personnel." The recommendations for training health officers were these:

"I. Basic educational requirements shall be: (*A*) The degree of Doctor of Medicine from a reputable school and eligibility to examination for medical licensure in the state where service is to be rendered. (*B*) Not less than one year of clinical experience gained preferably in a hospital of acceptable standards. Preference shall be given to candidates whose clinical experience includes three months' hospital work in pediatrics and a similar period in infectious diseases.

"II. Special qualifications: (*A*) Pending the development of a reserve of personnel having graduate training in public health work the following minimum qualifications shall apply as a standard in the selection of medical officers of health for jurisdictions of less than 50,000: (*1*) Candidates for appointment shall be not more than 35 years of age when first specializing in public health work. Preference shall be given to candidates having had one or more years' experience in the general practice of medicine. (*2*) Personnel selected shall already have had or shall agree to take before assuming duty not less than three months of special training in public health, of which not less than two months shall be organized instruction in an approved academic institution and one month in field apprenticeship in an approved local health organization. (*B*) For health officers of jurisdictions having populations of more than 50,000, for staff positions with state health departments, and for positions having the responsibility of supervisory and consultant service, the following standard of qualifications shall apply: (*1*) Not less than one year in residence at a recognized university school of public health and the satisfactory completion of a course of study in the fundamental subjects in preventive medicine:

"(a) Such knowledge of biostatistics as will give the individual a sound conception of the mass phenomena of disease, familiarity with the methods of collecting, recording and studying statistics on vital phenomena, and ability to interpret the results of the analysis of such material.

"(b) Some knowledge of general or theoretical epidemiology and training in the collection, recording, analysis and interpretation of epidemiological information regarding the commoner diseases, including occupational diseases and industrial hazards.

"(c) Familiarity with the general historical background of health administration, a general knowledge of the forms and methods of operation of health departments of the National Government, and of the states and local units, and acquaintance with the standard procedures of health administration.

"(d) Sufficient knowledge of public health bacteriology and immunology to permit the performance personally of the simple diagnostic procedures, the interpretation of laboratory reports and familiarity with the general methods of administration and operation of public health laboratories.

"(e) General knowledge of the usual methods of water purification and sewage disposal, sufficient to enable the individual intelligently to advise the local authorities in securing engineering advice and in undertaking new procedures.

"(f) Familiarity with the dangers from, and the general methods of securing protection against, diseases transmitted by foods.

"(g) Sufficient familiarity with the clinical aspects of the commoner communicable diseases to serve as a basis for developing skill in differential diagnosis and advising as to treatment; complete and accurate knowledge of the possibilities, limitations and practical methods of immunization against communicable diseases.

"(h) Sufficient knowledge of the epidemiology and clinical aspects of tuberculosis to enable the individual to plan and administer methods of prevention.

"(i) Sufficient knowledge of the epidemiologic, clinical, and social aspects of venereal disease to enable the individual intelligently to plan and administer preventive procedures.

"(j) Familiarity with the principles of nutrition. He should possess a knowledge of basic food requirements. Not only those that are necessary to life, but those which represent optimum conditions for production of the greater vigor and stamina. He should have sufficient knowledge to recognize the actual clinical entities that may be produced by a faulty dietary.

"(k) Sufficient familiarity with the clinical aspects of the common occupational diseases to serve as a basis for developing skill in differential diagnosis and advising as to treatment, and accurate knowledge of the possibilities, limitations, and practical methods of control of occupational diseases.

"(2) Not less than six weeks of field experience under proper supervision in a suitable health organization."

In studying this circular (report), I find only three subjects which would not be necesary in training dental personnel for public health activities. Those subjects relate to the general knowledge of water and sewage disposal, knowledge regarding clinical aspects of tuberculosis, and clinical and social aspects of venereal diseases. In place of these subjects there should be substituted the necessary instruction pertaining to dental or oral education, as outlined in a proposed program of oral health administration.

The Federal legislation gives the dental profession an opportunity definitely to place dentistry in its proper place in existing public health organizations and activities. If it does not assume this leadership at this time, it will be doubly difficult in the future to dove-tail dental programs with other health activities that will be enlarged and stimulated by this Federal assistance. Mental hygiene, industrial hygiene, and various other branches of health work are awakening to the fact that here is an opportunity never before offered to those engaged in public health activities to coördinate the various branches of health administration into one public health program, which may include all the intricate ramifications in preventing disease and promoting the public health. Naturally, with no definite plan for the scope or extent of dental health activities, it is impossible for organized state associations, or those individuals or groups interested in promoting dental health programs, to make definite recommendations to their various state health departments. However, with the definite assurance of organized dentistry that this matter will be definitely worked out in the near future, and that the national and state dental organizations will coöperate and lend their every aid and assistance to the health departments, it should not be difficult to secure the coöperation of the state health officer, to the end that he nominate for training purposes, a dentist selected or recommended by the representatives of the state dental society. The state health officer should include with his recommended program, which he will soon forward to the Public Health Service, a provision for a dental division in his department, at the completion of training of the dentist whom he has previously nominated for that purpose.

I further recommend that the officers of the American Dental Association and the American College of Dentists communicate with the

Surgeon General of the Public Health Service, urging that he include facilities for training dentists for public health work in at least one of the training centers where he is setting up training centers for physicians, sanitary engineers, nurses, and others, and that he make provision for instructors in such courses of public health as are deemed advisable for dentists. If this is approved by the Surgeon General it will be possible for the Public Health Service to pay the tuition of the dentists, as well as the stipend while they are studying; and it may also be possible for the Service to pay for the travel and expense of instructors for any special instruction necessary for such a course. Unfortunately only a very few instructors are available at the present time.

The Social Security Act also provides $2,000,000 annually for research by the Public Health Service. I feel sure that, as these plans develop, oral diseases will be allotted their fair share of these funds. However, unless the organized dental profession takes definite leadership in developing a plan of dental health activities and urging that dentists be trained in public health training centers, I firmly believe it will lose the golden opportunity provided by this legislation.

III. Relationship of Dentistry and Medicine in Socio-Economic Problems

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Minneapolis, Minn.

A new day with new responsibilities and new opportunities is here. When I say responsibilities, I mean emphatically that. We, as professions, have never been faced so squarely into our task as public servants as at the present moment; and it is a comforting thought that groups such as this, and the American College of Surgeons and some others, are in the forefront trying to produce data, experiments, and experiences out of which good may come. The past year has taken each of us abruptly from the theoretical, ethereal discussions of socio-economics to the actual workings of definite phases of the phenomenon called "social medicine"—far beyond our former experiences. No doubt most of us have had the first personal contacts with civil author-

ities regarding the regulation of medical care for indigents and others. These contacts, frequently no doubt, provoked questions of methods and controls in services which, if not met and answered correctly, jeopardized the position of the professions throughout the country. Such experiences bring us not only to the question, "Is there danger of socializing medicine?," but to the more searching question, "How far is this country ready and willing to go in the socialization process?"

It is silly to ignore what is actually in process. It has been announced that the chief subject for debate for the coming winter in high schools throughout the country is "socialized medicine."[4] These debates are now in progress. The great need for medical and dental services, not only from the physical point of view but also from those of social and public health, is now being discussed by all classes. Seldom has a problem been thus attacked without attainment of definite results. Wide-spread public discussion is gradually molding public judgment. Among the last persons to give the trend credence are those most vitally interested—physicians and dentists. Obstinate opposition to a trend in social progress, by relatively small groups even though they be powerful, seldom changes the ultimate result. Frequently, the guidance of definite trends by individuals or interested groups changes the procedures of general progressive movements to the extent that the final results are tolerable and equitable.

It is to be regretted that such groups as the American College of Dentists cannot meet more often to renew the vigor and enthusiasm of their members in work being done in special fields. The attitude of many leaders on the socio-economic problem is pathetic. It is quite natural for one in comfortable circumstances to resent being disturbed about matters which seem so abstract. This is a selfish attitude, however, in the light of well-known facts regarding dental and medical incomes and lack of services rendered the general public. Fortunately, the wave of resentment of a year or so ago, against any mention of social change in medicine, is now gradually and surely changing to an attitude of deep concern. However, some leaders make it their business, even now, to nullify, if possible, all efforts to

[4] Selected, by the National Forensic League, for nation-wide discussion. Subject: "Resolved that the several states should enact legislation providing for a system of complete medical service available to all citizens at public expense."—[*Ed.*]

bring about an orderly education of the rank and file of physicians and dentists in this grave problem. Quite naturally there are differences of opinion regarding the correct approach to the problem. Vehement are some voices against any proposal which savors of European methods now in practice. There are those who say we must have an entirely new approach to the problem. This alternative is interesting and has possibilities, for where men have the will to accomplish things they usually find a way. To date, however, no new suggestions for wide-spread services have been brought forward. Since the problem is very acute in many places, it would seem only logical that something be forthcoming soon.

It has been extremely interesting to watch the trends in professional growth. Although my personal experience does not extend over a great span of time, nevertheless the happenings of the last three decades furnish the clue for rich and serious contemplations. During the last thirty years changes in medical education and dental education have been the points upon which most thought and energy have been focused. The educational problem has not yet been settled, and is probably in the most drastic phase of its evolution right now—as far as dentistry is concerned. Since 1928 another trend has become prominent, and is the one to which we are now obliged to give special attention. I cannot refrain from referring to the parting of the ways, many years ago, in medical and dental education. Definite professional entities were established when this occurred. Throughout a long period, thereafter, cruel bickerings rather than interprofessional coöperation resulted from the contacts. The history of medical, social and economic progress in this country, if studied carefully, indicates many reasons why the medical professions could not indefinitely remain isolated from each other. Scientifically their paths cross at every corner. Socially they have attained the same stratum. Economically the status of each group has been definitely set by society, one beside the other. Much of this equality in position was not accomplished by the professions alone, but aided greatly by the inexorable laws of general social and economic growth in this country. True, the scientific position of each profession is largely due to the energy and prophetic projection of their best minds. I sometimes think that we have been so absorbed in the scientific aspect of our

callings, however, that we have grown lopsided. We have been content to live, in all but the scientific phase of our life, at a tempo in our daily contacts with humanity that is comparable to low gear in automobile driving. With the gears in high in our scientific life, and in low in our social and economic contacts, we have the phenomenon which is so evident at the present time—circular track performances.

It is not my intention to bring out the faded and not too immaculate linen—used while dentistry was making its laborious beginnings as a separate profession—to be laundered again, but simply to call attention to the fact that human progress in general finally regulates the position of its several social strata. This may seem a bit fatalistic, but upon analysis is not. Everyone has some influence on the general scheme of things. Time, human desires, and human necessities, along with human ambitions, finally mold the pattern of the social order in which we live, in spite of agitator, demagogue, dictator, or any other single good or bad influence. The complexity of our particular problem is typical of all phases of progressive trends. Because we as individuals cannot see eye to eye at all times does not mean the world is going to pot, or that definite trends will not progress to fruition. We, as medical professions, may wiggle and struggle, fume and fret, and even fight and kill within our own stratum. Still that constant, unyielding and (to date) friendly pressure, from without, finally points the way for our progress, for we cannot separate our progress from that of the rest of the population. Never has there been a time in the development of society when our position in its fabric needed more careful coöperative endeavor within the professions. It is very probable that lackadaisical methods of dealing with our phase of the social and economic problem will mean general lowering of standards of practice and social position, should so-called socialized practice obtain abruptly.

The individual, personal attitude toward social and economic crises under our very noses may not matter, but our collective attitude is important. It will be a sorry day when medicine and dentistry cannot travel arm in arm through the maze of socio-economic intricacies of the tomorrows. Nothing would please a certain avaricious, highly active, and very powerful element in the social order, in this country, more than to create confusion within our own ranks. We have but

to look at the results of professional indifference and political connivance in neighboring nations to convince ourselves of the futility of family quarrels and desertions. Since we cannot as professions live comfortably with ourselves while going in low gear scientifically, why cannot we realize that our professional car will not go forward with the wheels on one side in high and those on the other in low. The destinies of the two professions point up the same thoroughfare. It will not be an easy road to follow. Contributions of one profession along socio-economic lines must complement those of the other. It is evident that the imminent social changes are so new, even yet, to the concepts of most individuals in medical and dental groups that the necessity for an absolutely fundamental background in general sociology and economics has never occurred to them. Multitudinous are the personal vocal eruptions all over this country regarding governmental control, despite the fact that more than one agency has pointed out the evolution taking place. However, patience is in order; the maxim, "Haste makes waste," is here applicable. But in saying this, it is not my intention to condone the inaction of the easy-going, sleepy-spirited individuals and groups who cannot understand the lopsided gait we have assumed. No one on earth will get and keep our house in order but ourselves.

It is altogether too evident that few in the two professions have taken the time and trouble to make an intensive study of medical social conditions. Few realize that the professions themselves have suggested and promoted practically every project for the care of the underprivileged that savors of so-called social medicine. Unconsciously, we see to it that given classes get proper care, regardless of its cost or the source of its payment. It is simply the logical and humanitarian thing to do. On the other hand, when our attention is called to the fact that the marginal group must have care and there is suggested a means for payment for such care—and this means may be the same, or very similar, to that used with indigents—we immediately set up the cry that this will surely bring the horrible spectre of "state medicine" too close for comfortable living. This cry may have very good foundation. But since we know the conditions of service to the people as a whole, and that there is a very sizable marginal group in every community, would it not be far more logical and humanitarian to offer something else than just a cry? Call the con-

tribution anything you like, if "state medicine" is repugnant. I think I am as unwilling as any practitioner to have the regulation of my daily routine, in practice, in the hands of a political nincompoop. In my judgment this will be very apt to happen, if the professions do not busy themselves mightily in the formation of plans, and laws if need be, for whatever the coming change might be.

Scarcely any community has at hand the necesssary information to aid in making an equitable law, if such law were demanded. It seems incredible that we cannot understand that to fashion regulatory legislation, or any form of rules for work in the line of medical dispensation, we must first know what the job is. The sensible preparation for change in this phase of our social set-up is imperative. It would seem that, since medicine and dentistry will be most concerned if radical changes take place, they should make it their business to know the most about the problem; and, in knowing, become indispensable in shaping the program in whatever change might take place. I repeat: to think that no change in the dispensing of medical-care is upon us, or will be in the very near future, is to my mind shortsightedness to say the least. Again I say: scarcely one of us during the last year has escaped the duty of regulating or helping to regulate the dispensation of governmental care for persons who before the depression were self-sustaining. This duty has, in many cases, been distasteful, but it had to be done. Of course, it is our hope that these unfortunates will get back again to a self-sustaining basis but, in the meantime, they have acquired new ideas regarding medical care. What effect will these ideas have upon the scheme of things?

To date, the tendency of the health-service professions is to pull apart rather than together when they get out into the field of action where equitable apportioning of medical care is demanded by civil authorities. It is all very well for us to "palaver" and agree with each other in formal meetings where these problems are being discussed, but the test comes in the actual doing of the job. The rank and file in the professions must understand and coöperate, or confusion will obtain to the detriment of all concerned. We cannot forget, however, that this is a large country in which varied conditions prevail. It would be absolutely impossible for this or any other group to specify a detailed plan for the use of all. It is not asking too much of this and other groups to have a definite policy—backed by social and

economic data and experiences from the world, analyzed by specialists who understand—fitted to our trends.

While you and I have been discussing, and often quarreling, about policies, many of our confrères throughout the country have kept their bodies and souls together with pay received from governmental monies for services they have rendered indigents. This comes close to state medicine to say the least. The self-respect of these dentists is no small item in this matter, and this we must preserve. I can say, from careful observation in my own community, that much worry in the professional groups has been avoided by careful guidance of all phases of the working program, especially the equitable distribution of indigent patients. It is surprising how readily most lay officials and groups look to professional men for guidance when once the understanding is established that the common problem of medical care must be met and solved. Deviation from a sympathetic coöperative understanding by either group immediately builds up a fence of suspicion, and few have the nerve to climb that fence and offer an equitable and conciliatory program.

When the thought occurs that the marginal-income group in our social order numbers many millions, in addition to the indigent millions, it is a sobering influence—one that stirs the imagination and stimulates resolution. In making these resolutions, the foundations of our true American democratic heritage must never be forgotten lest we be diverted into radicalism or communism, a threat which is on every hand. It is therefore my profound hope that many sound, sober, thinking, far-sighted men in both professions will coöperatively lend their influence to a sane forward-looking humanitarian policy in the problem.

IV. Relation of the Council on Dental Therapeutics to the Profession and the Public

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According to an old Latin adage, "repetition is the mother of studies." Because of my conviction of its truthfulness, my first impulse was to re-read to you an address already published and read by me on several occasions. I felt strongly inclined to do so because I

am firmly convinced that one must repeat to the student, to the dentist, and to the public any message that one feels is of worth. You all are, no doubt, familiar with the modern version of this old adage in the form of the answer given by an eminently successful lawyer to his friends and legal colleagues when he was asked about his technique in always influencing the jury to his turn of mind, even when the situation considered from any angle seemed distinctly unfavorable to him and his client. His answer, you recall, was as follows: "I first tell the jury what I am going to tell them; then, I tell it to them; and, then, I tell them what I told them."

The Council on Dental Therapeutics has been rather militantly active for some five years. In spite of hindrances and impediments of various kinds, and from sources not to be anticipated, it has doggedly held fast to its principles, and has come out of the various frays in a continuously better strategic position in the interest of the profession and of the public. Why not? Its membership works altruistically, with no axe to grind and without financial remuneration. Many of its members spend their spare (?) time at work on the "*Bulletin*" or at *research* in your interests and in the interest of the public, when many of you are at golf or engaged in other social activities. And, may I hasten to add: many of its members have as their principal duties such as are quite remote from the avowed interests of the dental profession. During the Council's brief history, it has made contact, naturally, with manufacturers of dental products of diverse sorts. There were those manufacturers who wished to distribute an honest product; there were others whose intentions seemed to be mere exploitation; others again, were "out" to sell under extravagant claims noxious products irrespective of the consequences. And, then, there were some who were willing to learn from the Council and were anxious to treat the profession and the public fairly.

It was inevitable that the Council should interest itself in the subject of trade journalism. It hoped that the membership of the profession would know intuitively that it should not publish in any trade journal. And, still, some of you, even in high places, have preferred such journals as a medium for publication when you might equally well have published in the official organ of the American Dental Association. As a result, you have contaminated your good scientific ware with the advertisements of many a self-seeking propagandist

and exploiter. Or are some of you convinced that the trade journals have a higher scientific standard, aside from subversive advertising, than your official organ, the *Journal of the American Dental Association*"? Personally, I think you are wrong in principle and practice. But even if you were right, why not attempt, on your own account, to make your *Journal* as good as the *Journal* of your sister profession? It seems utterly incongruous to me for you to convey truly scientific material to the profession via a periodical that permits blatant and scientifically unsound advertising on products declared unacceptable by a critical body such as the Council on Chemistry and Pharmacy or the Council on Dental Therapeutics. If you are adverse to the decisions of *your* Council, either abolish it or have one appointed that meets with your professional standards; and, *then*, abide by its decisions and act accordingly, as a matter of principle.

The same type of reasoning applies to the selection of exhibits for gatherings of the local, state, or national bodies. Certainly no exhibitor should be allowed space, *at any price*, whose products have been adjudged unacceptable by the Council. I repeat what I have already written and published on this subject: "Even in these hard times one is not justified in selling-out the profession and the public for a mess of pottage." The *Journal of the Arkansas State Dental Association* has proclaimed its position on this matter as follows: "The advertising pages of this Journal are reserved for firms of known reliability and for those products approved by the Council on Dental Therapeutics of the American Dental Association." A number of other journals have followed suit, but not all! However, better times seem to be ahead! This remark is prompted by my experiences with the rank and file of the profession, when, as an incognito observer, I tried to evaluate the reaction of the profession to the Council's work and its exhibit at the St. Paul meeting a year ago last August. Suffice it to say that the younger and some of the older members of the dental profession expect that the Council be allowed to act freely in the interest of what it was created for. And, after all, these men with whom I talked constitute in the aggregate not only the practitioners of dentistry, but the American Dental Association; and the same practitioners will eventually dispose of the professional and the politically minded obstructionists. The youthful and active profes-

sion has had its taste of what progress in dental therapeusis might amount to under the altruistic guidance of the Council. It *wants* this guidance in the future; and it wants no political influence to interfere with the attainment of high professional standards. *Professional* dentistry is on the march; and a handful of reactionaries will not be able to impede its progress. No one will, for long, be able to down the professional idealism of youngsters like a Kurth and a McBride, nor the research ardor of a Schour. And these men need only be ridiculed and feared by those whose interests are other than the true advancement of professional dentistry. These and many others of the profession will spend $1.00, yearly as every one of the organized profession of dentistry should, for a copy of *Accepted Dental Remedies*, in order to possess a synoptic evaluation of products as advertised to the profession and the public. If a highly vaunted product is not listed as "acceptable" in *Accepted Dental Remedies* ("*A.D.R.*")—"There Is A Reason!"

In the interests of the profession and the public, may I suggest the following self-evident program:

(1) The editors, business managers, and those assigned to allocate space at dental conventions for advertising purposes should accept only such products as have been declared acceptable by the Council. Since most of the products declared *unacceptable* by the Council are also listed in A.D.R., any practitioner can determine with ease the scientific status of a given preparation.

(2) A repetitive editorialization of the Council's work is in order. *Every dentist privileged to speak to millions over the radio should urge the listening public to insist on "Council accepted products" from their dentists and druggists.* It should be made clear that the Council works for no special interest—only for the elevation of the standards of the prescribing profession that it *serves*. Its decisions are based on scientifically established facts coupled with cold logic, and not for any commercial or personal interest. It anathematizes all preparations which are therapeutically valueless, and calls attention to those that are exorbitantly priced. It condemns the noxious and deleterious medicaments in no uncertain terms. Its decisions may have appeared drastically worded at times, but, I believe, have always been scientifically fair. The Council may be accused perhaps for its

crusading ardor, its zeal, and its straight-from-the-shoulder pronouncements, *but* its prime interest is, and always will be, the scientific safety of the profession and the hygienic and monetary protection of the public. It will continue to add its mite in eliminating pretentious and fraudulent advertising by its *destructive* criticism; and will continue through succeeding editions of *Accepted Dental Remedies* to add *constructively* to a more intelligently prescribing profession.

As the least important of the standing committees of the American Dental Association, the Council is, like the others, certainly one which, without prejudice, fraternal or political partisanship, or personal interest, attempts to measure up to dental and public requirements, and functions to the best of its ability. It works solely for a better informed public and profession in matters of dental therapy. The Council appreciates, in its difficulties, the beneficent influence of the Wards, Meisels, and Bears. On the other hand, it is not unmindful of the ill founded and unscientific obstructionism of others. But historians are inexorable and impartial in their use of records—not only in the use of the official documents, but also in the use of the fugitive sheets and the privately recorded and typewritten memoranda of the period.

Several years ago, you saw fit to honor me, a medical man, with membership in this College. I have always considered this election to your organization as a distinction. As a medical man, I am enthused to think of the mutual benefits which will accrue because of the recent 'rapprochement' with the American Medical Association in connection with a consideration of the ways and means by which future dental students may be helped to acquire a sound dental education. Advice based on the experience of the giver should always be seriously considered by any individual or any organization that has an open mind. The contemplated loose affiliation with some of the officers of the American Medical Association does *not* imply shackling entanglements and professional subservience. A calm consideration of the experience of the American Medical Association in formulating a desirable program for a medical education will no doubt be useful to you in considering what *you*, the mainstay of professional dentistry, will eventually propose as the best steps towards a proper *dental* education from technical, therapeutic, and cultural standpoints.

I shall conclude as on a similar occasion, and to this effect: I am speaking solely for myself and not for the Council. Each and every remark is prompted by a sincere desire to do what I can to establish a new scientific deal in the interests of the profession and the uninformed public. I have enjoyed my work with the Council so much that I hope to be privileged to serve the profession for some years to come.

AMERICAN COLLEGE OF DENTISTS

REPORTS OF STANDING COMMITTEES

New Orleans Convocation, November 3, 1935[1]

I. CENTENNIAL CELEBRATION (ESTABLISHMENT OF DENTISTRY AS A SEPARATELY ORGANIZED PROFESSION, 1939–40)

On February 24, 1934, the Committee presented to the officers and trustees of the American Dental Association a statement in which the attention of the American Dental Association was invited to a suggested plan for the celebration, in 1939–40, of the centenary of the establishment of dentistry as a separately organized profession. In this statement the American College of Dentists expressed a desire to coöperate under the leadership of the American Dental Association in the early preparation of a dental centennial program. At a meeting of the officers and trustees of the American Dental Association in New Orleans, November 2, 1935, this matter was again presented by the Committee in a statement that included the following comment:

We respectfully again call attention to the very great importance of adequate celebration of the centennial anniversary (1939–40) of the establishment of dentistry as a profession, which was effected by the successive initiation of the first dental journal, the first national dental society, and the first dental school, during 1839–40. Emphasis should be given to the opportunity that dentistry would have in

[1] Abstracted by the Assistant Secretary. An abstract of the minutes of the New Orleans convocation, containing references to reports of committees, was published in the *J. Am. Col. Den.:* 1935, *2*, 269; Dec. For proceedings of the St. Paul convocation (1934), see *Ibid.*, 1934, *1*, 97; 1935, *2*, 1.

such a celebration, not only to invigorate the esprit de corps of the dental profession by emphasizing the constructive events of the intervening one hundred years, but also to impress upon the other professions, and upon the general public, the nature, scope, purposes, and status of modern dentistry. The proposed celebration could be made the agency for a general and conclusive recognition of dentistry as a separately organized profession, and as an autonomous unit in the professional family. Such a celebration should be notable for its dignity and effectiveness, both of which would depend upon *early preparation* for all its phases and wise selection of personnel to conduct each feature. It would be desirable to issue a notable volume, or group of volumes, relating to the history, attainments, and prospective responsibilities of dentistry. If matters such as this are to be done well, the *beginning* of preparations should no longer be delayed. Thus, an important historical volume to be issued in 1939 should now be well organized and on its way through the various phases of authorship. Such a volume would require much historical study, which cannot be done well by any one in a hurry.

The American College of Dentists has been giving this matter attention annually since 1930. The College first referred to it in a communication to the American Dental Association in 1932. The College has desired to go ahead with plans in this relation, but believes that all plans by all organizations and groups *should be correlated under the leadership of the American Dental Association.* For this reason the College has been delaying the plans it might otherwise have initiated, believing that other groups, such as the American Association of Dental Schools, the National Association of Dental Examiners, and the International Association for Dental Research have been, or will soon be, thinking along the same lines. Early initiation of leadership by the American Dental Association would have the effect of bringing into coördinated relationship all the factors of influence that might coöperate effectively to make the prospective centennial celebration an unprecedented success. Recently a matter has arisen which emphasizes the importance of an early decision by the American Dental Association on the matter of the proposed dental centenary celebration in 1939–40. At that time the entire nation will be giving special attention to the sesquicentennial of Washing-

ton's inauguration in connection with the world's fair to be held in New York City. The American College of Dentists again records its desire to coöperate with the American Dental Association in a dental centenary for 1939–40.—*H. S. Smith, chairman; Howard C. Miller, J. H. Ferguson, Jr., Harry Bear, E. C. Mills.*

II. CERTIFICATION OF SPECIALISTS IN DENTISTRY

The Committee studied the desirability of requiring those who wish to practise a specialty in dentistry to be certified. The Committee assumed that (a) "certification of specialists" means that an applicant must present himself before a board of examiners who would have power to license the candidate upon satisfactory proof of his fitness; and that (*b*) certification, to be effective, must be controlled by statutes setting forth the qualifications of specialists and governing their practice. The Committee endeavored to obtain a representative cross-section of opinions in response to the questions: (1) What are the "arguments" for, and (2) against, certification? (3) What should be the qualifications for certification, and who should certify them? (4) Are there any states in which there is certification, and what is the experience with it? (5) Should the American College of Dentists foster an effort to promote certification? The report includes a summary of the responses.

A special study in the field of orthodontia led the member (Swinehart) who conducted it for the Committee to express opinions including those that follow: The great majority of orthodontists are strongly in favor of state certification. The most influential are acquainted with the subject, and all can be counted upon to take a leading part in promoting such certification in their respective states. Successful certification in Tennessee, Oklahoma, and Illinois, in which there has been no opposition, indicates that the same results may be expected in other states—those in the southwest, west, and middle west will be most inclined to lead the way. The American Dental Association should take the initiative in endorsing the movement. The American College of Dentists should publicly coöperate, if that is the sentiment. The *general* practitioners must be assured that their full rights will be protected. They should be shown that if a man publicly proclaims superiority, he must be qualified; otherwise he is not

"square" with either his dental confreres or the public. The prospective advantages to the public and the profession are obvious; it would be a big step forward in professional conduct. The dental profession should not measure its steps solely by those of medicine. Being less cumbersome and less hampered by tradition, it is "in quicker step." The lack of ability of state boards as now constituted to examine post-graduate students in theory and practice in the dental specialties presents a problem. The lack of properly equipped post-graduate schools, conveniently located for those desiring to qualify, should be remedied. The educational problem should be given much study by joint committees of dental educators and dental specialists. Uniformity of prospective statutes should be sought. Alternative requirements, such as "its equivalent," would facilitate legislation, but would weaken the ensuing laws and render them ineffective under the present set-up of dental boards.

The main report included these recommendations: Study of "certification of specialists" should be continued. Surveys similar to the one conducted in orthodontia should be undertaken with the other groups of specialists. The reaction of state dental associations to certification should be ascertained. The American College of Dentists should endorse certification as a progressive move, but should not participate in efforts to obtain the enactment of statutes relating thereto; should be interested in the creation of high standards for certification, but should not attempt to specify them.—*C. O. Flagstad, chairman; E. W. Swinehart, H. C. Fixott, G. R. Lundquist, L. M. S. Miner.*

III. DENTAL PROSTHETIC SERVICE

The Committee considered, in detail, the practice of prosthetic dentistry in the light of oral-health needs; reviewed the history of dentistry in relation to the development of the commercial dental laboratory; and discussed the relation of dental assistants to the dental profession. A few direct quotations follow:

Despite the educational advantages of the dental profession, particularly the more recent graduates, there is a marked tendency among dentists to stress the mechanical aspect and to neglect the biologic requirements of dental prosthesis. It is a sad experience for

a dental teacher to witness a complete breakdown in the manner, methods of practice, and morale of certain graduates after entering private practice. This is especially disheartening since these very students were capable of, and rendered, a high-grade service to their patients during their clinical years in the dental school. This breakdown may be attributed, in the main, to the economic problems attending the entrance of graduates to the practice of dentistry. Some are influenced to adopt short-cuts and less exacting methods temporarily; but once adopted, they find themselves unwilling and frequently unable to discontinue such practices. There can be no doubt that the commercial dental-laboratory, directly or indirectly, has had much to do with the lassitude of some dentists toward this important phase of dental service. The following quotation from the Report of the Curriculum Survey Committee of the American Association of Dental Schools clearly states this situation:

"There is an erroneous idea among some members of the profession that the laboratory procedures of restorative work can be delegated, in their entirety, to a fairly-well trained dental mechanic in a commercial dental laboratory. Unfortunately this concept has led to the common practice of sending dental restorations out of the dental office into a commercial dental laboratory where, frequently, they are constructed by technicians with no knowledge of the part that restorations will ultimately play in maintaining the health of the patient. The situation is further complicated by the nature of such laboratories which, owing to their commercial character, regard profits as the criteria of success. This practice has misled the profession into a loss of interest and skill in the laboratory phases of the work, has played into the hands of commercial interests, and has done much to degrade the practice of dental prosthesis. Many practitioners have neither conceived dental prosthesis in its proper light nor lived up to the ideals of this service. They have lowered the quality of their professional services by accepting, against their training and better judgment, the standards of commercial organizations that are not inspired by the professional attitude. Moreover, the practice of restorative dentistry, particularly dental prosthesis, has been much exploited by commercial interests and at times grossly betrayed by selfish groups both within and outside the profession. This commercial degradation of dental prosthesis is of great concern to those members of the profession who conceive the promotion of the health, comfort, and happiness of the people as the most important

function of the dental profession. Owing to these influences dental prosthesis is at present in a somewhat uncertain position, and its very perpetuity on a professional basis is threatened" (p. 50).

There is a feeling among many members of our profession that conditions cannot be remedied so long as the commercial dental-laboratory retains its present status and continues its present relationship to the dental profession. Some dental laboratories have maintained a standard of quality; but, generally, the economic competition among most laboratories has lowered the quality of materials and workmanship, and degraded the professional standards of some dentists, so that the public has difficulty in understanding the relationship between the dentists and the commercial dental-laboratory. This fact is clearly shown in the direct patronage of certain dental laboratories by the public. So long as it is convenient, popular, and even profitable for some dentists to renounce their professional responsibilities by rendering a low-grade oral health-service, we may expect conditions to remain much as they are. There is, however, a serious danger that the public will get tired of, and dissatisfied with, paying the dental profession for a low-grade prosthetic service when, by licensing the laboratories to practice oral prosthesis, they, disregarding the inevitable reduction in quality, may be able further to reduce the cost of dental prosthesis.

At the present time, no educational prerequisite is required of those who enter the dental-laboratory industry. Most of the workers serve as messengers and apprentices, and grow up with the business. Through experience and practice the younger members acquire a degree of proficiency in the mechanical procedures involved in the laboratory phases of dental prosthesis, and thereby elevate their status and gain advancement. Most of this training does not exceed the bare necessities of daily routine. A few of the more forward-looking laboratories, especially those that employ or consult with dentists, have made an honest effort to provide an educational background designed to increase the quality of their work. Many laboratory operators, likewise, have availed themselves of the educational advantages of professional dental meetings, professional dental literature, and technicians trained by the dental profession.

The dental profession is flooded with high-pressure inducements

to patronize the commercial dental-laboratories; and so effective is this advertising that the profession pays millions of dollars annually for the support of thousands of laboratories when in reality most dentists could do their own laboratory work, and thus eliminate this financial overhead and the difficulties that frequently arise in commercial laboratory-service. The dentist who strives to render the highest grade of oral health-service does not, as a rule, patronize the commerical dental-laboratory. In fact, these dentists either do their own laboratory work, or entrust it to their own assistants in their own offices. Superficial study of the Code Hearing (1933)[2] impresses the fact that the great majority of commercial dental-laboratories, and likewise technicians, are not capable of supplying high-grade work in the laboratory phases of denture prosthesis. Generally speaking, the dentist prefers to do the important part of the work himself and to send only the purely technical part to a commerical dental-laboratory. However, the dentist who is not particularly interested in prosthesis prefers to send every possible step to a laboratory, and to devote his time to that part of dental practice which he most enjoys. Such practices invariably lead to a low grade of prosthetic service.

The importance of dental prosthesis in relation to the health of the public is such that there can be no division of the responsibility for denture service between the dentist and the dental technician. Only the dentist is legally responsible for every detail in rendering this service, and the transfer of any responsibility whatsoever is contrary to custom and professional ethics, and a violation of the law. It is evident, therefore, that the sharing of that responsibility with commercial interests would ultimately lead to dissatisfaction and bring reproach upon the dental profession. Looking forward to an increasingly better grade of dental health-service in the field of prosthesis, it seems highly improbable that the present relationship between dentist and commercial dental-laboratory can continue.

It is interesting, by way of comparison, to review the relationship that exists between the dentist and his assistants. There are in the United States, according to recent estimates, 12,000 socalled dental assistants. This number comprises, for the most part, women who are employed as chair-side aides, secretaries, office managers, tech-

[2] Wright: *J. Am. Col. Den.*, 1935, *2*, 158 (footnote).

nicians, and dental hygienists. None of these has any legal right to perform, without supervision, dental operations in the mouth, although they have had a varied training. Most of these have acquired a degree of proficiency through association with the dentist; some have received training as dental assistants through the educational programs of dental societies; some have gone to commercial schools that give such courses; and some have received training as dental hygienists in accredited schools of dentistry. All of these assistants, including about 3,000 dental hygienists, work with and under the direct supervision of the dentist. Exclusive of the dental hygienists, this group of approximately 10,000 assistants, is unorganized. Their relationship with the profession is most friendly and mutually helpful. At no time have these assistants attempted to violate the dental laws by the illegal practice of dentistry, nor have they by means of strikes interfered with the oral health-service which the dental profession must render to the public.

The ten conclusions at the end of the ad-interim report (1935) were reaffirmed (Wright: *J. Am. Col. Den.*, 1935, *2*, pp. 168–170).—*W. H. Wright, chairman; A. H. Paterson, C. H. Schuyler, W. H. Grant, C. F. Harper.*

IV. EDITORIAL MEDAL AWARDS

The Committee was unable to complete the work required for initial awards at this convocation. The Regents requested the Committee to present recommendations for awards for the years 1934 and 1935—after an examination of the editorials in all U. S. non-proprietary dental journals for these two years—"at least 60 days before the date of the convocation in 1936."—*W. C. Graham, chairman; F. F. West, C. W. Stuart, J. A. McClung, R. S. Vinsant.*

V. EDUCATION AND RESEARCH

The present Committee, in commending the work and report of the Curriculum Survey Committee of the American Association of Dental Schools, said in part: During recent years there has been much discussion regarding the place of dental education in the field of health service. A few in the profession have advocated the subordination of dental education to medical education. It is highly

gratifying to the majority in the profession to note that, after an intensive study of the whole problem of dental education and its relationship to health service, the Curriculum Committee concludes that dentistry should be continued as an autonomous unit in that field.

The present Committee, disagreeing with the Curriculum Committee's recommendations that courses in some of the basic sciences, heretofore required in the predental period, be included in the professional curriculum, commented in part as follows: The desirability of interfering as little as possible with the freedom of predental students to pursue the cultural courses is apparent, but there are certain scientific courses that must be taken, as a sound basis upon which the science courses of the dental curriculum may be built. . . . With 60 semester hours of [predental, college] work, the student should have no difficulty in selecting enough courses in sociology, economics, and psychology to give a firm cultural foundation. Certain important [basic-science] courses have been recommended by the Curriculum Committee for the dental curriculum with far lower standards than when included in the preprofessional year or years. If it is desirable to standardize closely the professional work, it would also seem logical to approach uniformity for entrance.

The present Committee recognizes a responsibility of dental faculties to undergraduate dental students in their contacts with dental journalism. During the period of their dental education, professional concepts, opinions, and attitudes are being molded, and young students are very susceptible to the influences that surround them. The commercial interests have been very active in seizing every opportunity to contact the dental student, mainly through the medium of free publications of a purely commercial type. Many faculties have innocently and almost unconsciously abetted these interests in making these contacts, by aiding in the distribution of their publications. This Committee presented to the administrative session of the American Association of Dental Schools, at its meeting in March, 1935, the following resolution, which was adopted without a dissenting vote:

"*Whereas* one of the important functions of a dental educational institution is the development of a proper attitude of students toward professional literature and journalism; and

Whereas, the free distribution of commercial and proprietary dental publications to the students develops the wrong psychological attitude toward dental literature; and

Whereas, the articles published and advertisements carried are uncensored, and often present erroneous and distorted concepts of professional conduct; be it

Resolved, that it is the sense of the American Association of Dental Schools that distribution of the *Dental Students' Magazine*, and other similar publications to dental students, be discouraged by the administrative officers of the various schools, and that official lists of students be not furnished to the publishers of such magazines."

The American Dental Association deserves much commendation for the recent action by which a junior membership in the Association was created. This membership automatically places in the hands of the student the official journal of organized dentistry. This contact with professional literature will do much to counteract the baneful influences of the commercial publications.

The report included general discussions of ways and means for "encouragement of undergraduates in the development of the correct attitude toward organized dentistry," and on the need for promotion of research.—*A. W. Bryan, chairman; A. D. Black, L. M. Waugh, L. M. S. Miner, J. B. Robinson.*

VI. HOSPITAL DENTAL SERVICE

The Committee continued its studies on the general plan outlined in the report in 1934, which contained the statement that the recorded list of hospitals throughout the country having some form of dental service exceeded 700. The present report contains a list of 1,174 hospitals having some form of dental service, as transcribed from the list of registered hospitals at the home office of the American Medical Association. In this list is included the name and address of each hospital, the number of dentists connected with each, and the name of the hospital superintendent or director. The American Medical Association has recently (1935) listed a total of 6,334 hospitals in the U. S., not including 221 in Alaska, Hawaii, Puerto Rico, and elsewhere. The increase in the number of hospitals having dental service is encouraging, but the percentage recognizing the importance of dentistry as an integral part of modern hospital organization is still

far below the number it should be. Little is known regarding the extent of dental service in the listed hospitals. The Committee aims to increase this knowledge.

The Committee has been greatly assisted by copies of the manuscript of a comprehensive paper written by Dr. M. W. Carr, of New York City, entitled: "Oral surgical service as an integral part of modern hospital organization; systematic plan of management." This paper, representing a thorough and painstaking compilation of essential factors, tends to clarify the entire situation. On the Committee's recommendation, the paper has been published (*J. Am. Col. Den.*, 1935, *2*, 203–48; Dec.). The Committee recommended that a reprint of Dr. Carr's paper be sent to all registered hospitals, with a questionnaire, in an attempt to compile data relative to such service, and to secure information that may be used in an effort to promote systematic development of hospital dental service.—*Howard C. Miller, chairman; J. E. Gurley, E. A. Charbonnel, C. T. Messner, Leo Stern.*

VII. JOURNALISM

The Commission presented a monograph which, because of its length and comprehensiveness, cannot be abstracted without loss of instructive detail, but is a valuable addition to the works of reference in the records of the College. Under "summary of new proposals," the following recommendations were included: The American College of Dentists should lend its moral support to the efforts of the American Association of Dental Editors to establish a central advertising bureau. The plan suggested for an "A.D.A.-State Coöperation," for enlarged state publications, should be approved as a means to increase the outlet for dental literature and as an opportunity for conversion of one of the better proprietary publications to the non-proprietary status. Plans should be formulated for the publication of a journal for the education of the public, such as *Hygeia*. The Secretary should be instructed to inform our entire membership that the College notes with disfavor and regret that some of its members hold positions on the editorial staffs of proprietary dental journals.

The following quotation from the minutes of the New Orleans convocation (Midgley: *J. Am. Col. Den.*, 1935, *2*, 271; Dec.) applies directly to the last recommendation: "(40) All committee reports (33–39) accepted;

recommendations were referred to Regents, with following exception: (41) Recommendation by Commission on Journalism, because it suggested instruction to Secretary, was reread by President for any action Fellows might wish to take: '. . . . *The Secretary . . . [shall] be instructed to inform the entire membership that the College notes with disfavor and regret that some of its members hold positions on editorial staffs of proprietary dental journals.*' On motion duly made and seconded, recommendation adopted without dissenting vote." [See also page 291, *J. Am. Col. Den.*, 1935, *2*; Dec.—*Ed.*]

The scope and import of the report are indicated by the following quotations: We invite all those who have the interest of the profession and the public at heart to advise with us on methods and procedures that will eliminate the evils and seek out the good in the present journalistic problems. . . . The Commission is impressed by the fact that there has been marked improvement in the non-proprietary publications, so far as objectionable advertising is concerned. On the other hand, it is regrettable that many of the proprietary publications are still "running wild" in this respect.

The fact that many organizations have withdrawn their proceedings from proprietary publications, and that many individuals are now interesting themselves in the journalistic problems by refusing to contribute to certain publications, is encouraging. When essayists inquire where their contributions are to be published, before accepting invitations to appear on certain official programs, it is even more encouraging. On the other hand, there are still many men who have not heeded the warning and apparently do not see the handwriting. But the outlook is encouraging, for progress is being made—in fact, it is being made by leaps and bounds.

Nutrition and Dental Health is a typical proprietary journal, and we regret that there are still those who lend themselves to such projects.

Most of us recall when the dental schools cast off the proprietary yoke. Today, our teaching institutions boast of university connection and control. True, some trade-houses continue to feel it is necessary for them to educate the dentist; and there are those of the profession who offer to dispense, at so much per person, the knowledge they acquired chiefly through contact with others. Both are unbecoming and distasteful. Dental education advanced to a higher

plane when it shook off the mantle of profit and put on the robe of service. So, too, journalism raises its voice to demand freedom from commercial dominance, so that, with dental education, it may carry the profession to even greater heights. In doing so, the profession expresses its appreciation of the help given in the past by some of the trade-houses that saw the need for journalism in dentistry. As the profession had to set new standards in its code of ethics, and the schools rearranged the foundation upon which they were building, so journalism now steps forth to plead the cause of higher standards for the protection of the public and the profession. Not only must the profession be free to guide its own destiny in journalism, but the dental trades should realize that they must be subservient not dictatorial to the profession. It is for the profession to suggest the standards upon which their services are acceptable.

Shall we give encouragement to the dispensers of tooth pastes, mouth washes, etc., by supporting—through subscription, or contribution of articles, or by tolerance—publications that offer pages, and thereby lend support, to frauds? If we hope to meet our obligations to the public, we must not only serve it but also protect it. . . . We must as individuals give our every-day support to the principles for which we stand as an organization. Lip service at meetings and indifference at other times is not sufficient. . . . Forty-two states in the U. S. now have laws which declare that "advertising statements by dentists that tend to deceive or mislead" constitute unprofessional conduct. Since statutes, which give us the right to practice, say that advertising statements by dentists that tend to deceive or mislead are unprofessional, can we individually or collectively close our eyes to such statements in dental publications?

We plead, therefore, with those who have been lending their talents, unknowingly perhaps, in support of unethical procedures in dental journalism; with those who have the talent to write and whose literary efforts are appreciated; with the officers of the dental organizations who have been honored by the profession and are pledged by such honor to protect its best interests; with those who have been commissioned to transact the business of our professional organizations; with every member of the dental profession—*we plead* with all these to join in the efforts to uphold the ideals of the profession, so that

the public will not find us wanting and that dental health-service will rise to the high place it may justly aspire to attain.—*O. W. Brandhorst, chairman; B. B. Palmer, J. T. O'Rourke, G. M. Anderson, Leland Barrett, J. C. Black, E. A. Johnson, E. G. Meisel, H. O. Lineberger.*

VIII. LEGISLATION

The Committee presented an excellent "brief" on "the important and timely questions of corporate practice and advertising as applied to dentistry." It is regrettable that its length, owing to its broad scope, prevents its publication. Fortunately as a valuable unit in the records of the College, it is available for practical use. The "brief" was so comprehensive that only a few pages could be presented orally at the convocation. The Committee, calling special attention to the decision of the U. S. Supreme Court in the case of Harry Semler vs. Oregon State Board of Dental Examiners (No. 538, October term, 1934; April 1, 1935), expressed the view that "the said decision constitutes a ratification, by the highest tribunal in the land, of statutory attempts to regulate dental advertising, and furnishes a guide to be used by the legislative committees of the various states in the preparation of statutes." A portion of the Committee's quotation from respondent's brief, as submitted to the Supreme Court, follows:

"Reference has recently been made to the self-enforcing regulations developed by craft and professional groups who control the conduct of professional men to the end that the public may be protected against injurious practices by physicians, dentists, attorneys and other professional men who serve the people in matters intimately related to the public health and welfare. The beneficial results of this regulation, which have been supplanted in large part by statutory regulation, coupled with a developing public approval of such voluntary and statutory regulation, has resulted in recent times in the adoption and enforcement of similar self-enforcing codes of business practice by trade and commercial associations.

"The results of this trend are apparent in the Federal Statute creating the Federal Trade Commission which has been granted broad powers to determine and enforce regulations governing trade and business practices in the interests of the public welfare. The activities of this commission are largely directed at regulating advertising by preventing the use of unfair methods of obtaining business, the ultimate result of which is injury to the general public.

"The pernicious practices previously referred to are now generally recognized as socially injurious, when used in the business, (by) people who have been misled by the widespread and blatant advertising of the self-laudatory and 'come to me' species. These people have been lured by the 'bait' advertising consisting of exaggerated claims of professional superiority, superior quality, painlessness, and other misleading statements presented by a few dentists through the various advertising media, particularly the newspapers and the radio.

"The practice of employing so-called 'cappers,' 'steerers,' and 'runners,' by attorneys, physicians and dentists as a means of inducing the patronage of clients and patients has long been prohibited in almost all states by specific prohibitions in the professional practice acts under penalty of disbarment or revocation of license. These prohibitions, however, which relate to solicitation of practice through lay persons are not efficacious in preventing similar solicitation through impersonal instrumentalities, the use of which has largely replaced the old evil of the 'capper,' 'steerer,' and 'runner.' The more recent practice developed by imitation of certain types of predatory business has been largely through the use of impersonal agencies, including displays, signs and newspaper and radio advertising, coupled with the employment of advertising solicitors, and free publicity would have also seriously affected conditions in the practice of the learned professions. There has been a serious infiltration of these practices into the professions, particularly into the practice of law, medicine and dentistry. Under the pressure of this infiltration the practice of the learned professions has threatened to cease to rest upon a well-merited reputation for the ability and integrity with which the lawyer, the physician and the dentist render these intimate and personal services to the sick and perplexed. In short, the learned professions have threatened not only to degenerate into a business but a 'predatory' business.

"The increasing use by a small minority of professional men of the 'high-pressure' methods developed by certain types of predatory business has seriously concerned the state boards charged with the duty of protecting the public against unskilled and unscrupulous practitioners, particularly in the professions of law, medicine, and dentistry. State dental boards throughout the country have been shocked as a result of multitudinous complaints received from press agents. Along with the use of these instrumentalities a small number of dentists have also adopted other methods used by certain predatory classes of retail merchants in inducing patronage by means of exaggerated claims of 'professional superiority,' 'painless dentistry,' 'free' dental work, 'free' examinations, 'guaranteed' dental work, and similar

statements which are either half-truths or may result in the perpetuation of fraud.

"The deceptive character of certain types of advertising is well illustrated by a brief consideration of two common forms of 'bait' advertising used by a small number of dentists.

"It is well known to those who are familiar with the extraction and restoration of teeth that so-called 'painless' dentistry is a delusion and a snare. The advertising of 'painless' dental work is perhaps the most flagrant of the many falsities employed to entice the public. It is true that there are several generally accepted means of inducing anesthesia and thus reducing and minimizing pain accompanying the various procedures in dental surgery. However, the administration of all anesthetics in dentistry is accompanied by considerable discomfiture or pain and pain is almost invariably present after the anesthetizing agent has lost its numbing effects.

"It is well-established that no professional man can 'guarantee' his work or promise his client that the outcome of his case whether it be legal, medical or dental will terminate successfully for the client. It is certain that no patient of a physician or surgeon who has been treated for a bodily disease or lesion of the teeth or mouth can be restored to his original physical condition following a wrongful diagnosis or treatment."—*W. A. McCready, chairman; G. S. Vann, W. O. Talbot, B. L. Brun, W. F. Walz.*

IX. ORAL SURGERY

The Committee called attention to the following statement, by the Acting Dean of the Dental School of Columbia University in his annual report for 1933: "Oral surgery, of course, is already recognized as a specialty of medical practice." In a discussion of this assertion, the Committee presented the gist of dissent in the following references: (A) *Journal of the American College of Dentists*, 1934, *1*—(a) correspondence and comment, p. 43; (b) editorial, p. 93; (c) presidential address, p. 103; (d) reports of committees, pp. 125 and 132; (e) editorial, 155. (*B*) *New York Journal of Dentistry*, 1935, *5*; editorial, p. 239. (C) *Journal of the New York Academy of Dentistry* (now *Annals of Dentistry*), 1935, *2*; editorial, p. 33.

Referring to the status of oral surgery in hospitals, the Committee said, in part: The status of oral surgery is a complex problem when considered in relation to hospital organization. There is considerable variation in the manner in which oral surgery and the oral sur-

gical staff are included in the hospital unit. Some hospitals have a 'Division of Dentistry' that is independent of the Divisions of Medicine and Surgery, and oral surgery is a department in this division. In other hospitals, oral surgery is regarded as a specialized branch of surgery. The (medical) Advisory Council of the Department of Hospitals of the City of New York, recently adopted the following resolution: "*Resolved*, that dentistry is a highly specialized department of surgery and the ultimate supervision of all surgical work including dentistry should rest with the surgeon or director of surgery in Municipal Hospitals." This resolution indicates that the issue has become confused; and, like the pronouncement that "oral surgery is recognized as a specialty of medical practice," shows also the increasing tendency of medicine to attempt to dictate the policies and practice of dentistry. The attitude of medicine regarding the status of oral surgery, so far as relations in some hospitals are concerned, seems to have been influenced by two factors: (1) In many hospitals, general dentists who hold the appointment of 'attending dentist' or 'attending oral surgeon' are not qualified to assume responsibility for the major oral-surgical case; and (2) medicine, not well-informed on the advances that *dentistry* has made in oral surgery, now looks upon oral surgery as an attractive supplement to general surgery and wishes to annex it. It is important for the future development of oral surgery that a systematic plan of management of the oral-surgical service as an integral part of the hospital be standardized. [A very valuable contribution on this phase of the subject was subsequently published by the Chairman of the Committee—Carr: Oral surgical service as an integral part of modern hospital organization; systematic plan of management, *J. Am. Col. Den.*, 1935, *2*, 203–248; Dec.—*Ed.*]

A general discussion of the status of oral surgery led to the following "summary and conclusions:" The historical development of oral surgery and study of the educational, statutory and medico-legal conditions influencing its practice, indicate that oral surgery has been and is a specialty of dentistry. Oral surgery is the oldest specialty of dentistry. It is also one of the most important specialties of dental practice, because it occupies the pivotal position in the interrelationship and the interdependence of medicine and dentistry

in health-service. There are no facts to indicate that oral surgery is "recognized as a specialty of medical practice." The undergraduate dental curriculum includes adequate instruction preparatory to specialization in oral surgery, the undergraduate *medical* curriculum does not.

There is a constant tendency among some physicians to seek to dominate dentistry, and to dictate the policies and practice of oral surgery. This attitude is particularly evident in hospital relations of oral surgery. Coördinated effort should be made to guard against medical interference in matters in which the physician is not well informed, as the best interests of the public health can be served by the continuance of oral surgery as a specialty of dental practice.

Future advancement in oral surgery is dependent upon the concern and efforts of dentists. An increasing number of highly trained practitioners in oral surgery should be developed for the specialty, and those thus qualified should direct it in the hospitals and medical centers. Some dentists in responsible attending appointments in large hospitals are unqualified in oral surgery and, because of their lack of special training, are confusing issues and impeding progress in the recognition of oral surgery as a dental specialty. It is important, for the future development of oral surgery, that a systematic plan of management of the oral-surgical service as an integral part of hospital organization be standardized.

Oral surgery should be more effectively organized as a distinct specialty of dentistry. Local oral-surgical societies, restricted in membership to qualified oral surgeons holding either the D.D.S. or D.M.D. degree, or either dental degree and the M.D. degree, should be organized. The creation of a journal devoted to the advancement of oral surgery is most important for the future development of the specialty. The need for such an independent journal has long been recognized. Although the only effective means of raising the standard of specialized practice is through legal requirement, a national board of oral surgery would be very useful.

Existing variations in the statutes affecting oral surgery as a specialty of dental practice should be analyzed and compared. In appropriate circumstances, dentists should be legally empowered by law to sign certificates of death.—*M. W. Carr, chairman; Harry Bear, W. J. Gies.*

X. RELATIONS

Besides general discussion of several well-known conditions, the report included references to (*a*) the need for greater support for dental research; (*b*) "the active part taken by the College in the winter meetings of the American Association for the Advancement of Science;"[3] (*c*) "the support given by the College to the publication of the *Journal of Dental Research;*" and (*d*) the desirability of improved relationships between dentists and physicians, and also with "members of other professions into whose realms" dental problems extend; namely, "physical and physiological chemists, physicists, curators, non-professional as well as professional journalists, anthropologists and sociologists."—*T. J. Hill, chairman; A. R. McDowell, T. A. Hardgrove, H. G. Fisher, R. L. Sprau.*

XI. SOCIO-ECONOMICS

The Committee discussed "four important conclusions:" (1) "Social and economic forces of tremendous power have been, and are, in motion in the United States." (2) "The health-service professions are not immune to the changes that may be produced by these forces." (3) "Dentistry has distinct problems of its own in addition to those that are common to both medicine and dentistry." (4) "Only by intelligent and unemotional consideration of these problems can dentistry hope to secure the sympathetic understanding and coöperation of legislators, and of the political and social groups that are committed to a social-security program." In a discussion of the last conclusion the Committee said in part: Although health insurance laws have been proposed in a number of states, none of these laws even approaches acceptability to either the medical or dental profession. However, it is insufficient that dentistry should beat its chest in the Tarzan manner, and shriek disapproval. Dentistry should not only disapprove unsound health-insurance laws, but must be able intelligently to discuss such laws, and point out to legislators why unsound proposals are against the public interest. Dentistry, if confronted with the question, "What have you to offer in

[3] See *J. Am. Col. Den.*, 1935, *2*, 106; 1936, *3*, 79. The Chairman of the Committee now represents dentistry in the Council of the American Association for the Advancement of Science.—[*Ed.*]

place of these proposed laws?," must be prepared to present a model dental section to be included in any statute. Such a dental section cannot be formulated overnight, and it is not too soon for the dental profession to recognize both its opportunities and responsibilities in these matters. In any approach to the establishment of a sound health-insurance system in the United States, it must be emphasized that the best interests of the public are inevitably intertwined with the best interests of the health-service professions. What is bad for the public, in a health-insurance law, is bad for the professions. If poor quality of service is to be rendered to the public, both the public and the professions suffer as a result. The Pennsylvania State Dental Society and the First District Dental Society of the State of New York have appointed committees to draft model dental sections that could be incorporated, in their respective states, into any health insurance laws that might be proposed. The Indiana and Wisconsin State Dental Societies, recognizing the actualities in the situation, have approached their respective state governors with offers of coöperation in any legislative program that may be developed. The dental profession in California has gone through a nightmare during the past year in attempting effectively to meet the emergency created by the introduction of health-insurance bills in the legislature of that state. Well-informed persons are unanimous in the opinion that the experience of California will be repeated in one state after another during the next few years.

Believing that the most important contribution the College can make to dentistry, and to the public welfare, at present, is a further study of health insurance and of the various other current proposals intended to help to meet the costs of dental care for the low-wage group of the population, the Committee recommended that the College should (a) "make available the results of its studies in these fields to dental organizations anywhere in the United States" and (b) "offer to coöperate with the Committee on Socio-economics, or any other interested agencies, of the American Dental Association." *—B. B. Palmer, chairman; C. E. Rudolph, M. W. Prince, W. R. Davis, G. W. Wilson, Maurice William.*

Minority report. Strong dissent was expressed in a minority report by Dr. Louis Brach who, as "the result of observations of the operation

of the Dental Emergency Relief and Civil Works Service programs," has been "disillusioned" and now concludes that the health-service professions "cannot expect to remain immune to change because of the impact of the aforementioned tremendous social and economic forces in motion. Neither can society as a whole or any part of it. "That the oft mentioned 80 percent cannot afford private treatment is the collective problem of the whole of society of which the professions are but a small part. It is a problem created by the economic system under which we live. Inadequate pay by industry is the root of the problem, and we must not be misled by terms like "humanitarianism" into taking on the burden of the whole of society and sacrificing what we hold most dear; namely, the *quality* of our services. Health insurance would do just that. Nor does it, in practice, really lower cost to recipients nor maintain a contented professional body without which *quality* service is impossible. 'State medicine' at least maintains standards better and provides pensions, vacations, etc., as in the public-school system. Study, more study, is certainly called for, coupled with a comprehensive plan to educate the public, whose understanding and support we have neither sought nor developed, to see clearly that our best interests are also theirs."—*Louis Brach.*

AMERICAN COLLEGE OF DENTISTS

Blank Form for Nomination for Fellowship[1,2]

To the Secretary:

We hereby present the following nominee for Fellowship, together with information as to his professional activities and standing:

1. Name.....
2. Present address (to which mail should be sent).....
3. Place and date of birth.....

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[1] New form prepared by the committee appointed at the New Orleans convocation; abstract of minutes, item (19): *J. Am. Col. Den.*, 1935, *2*, 270; Dec. All extra blank lines have been omitted from this compacted arrangement.—[*Ed.*]

[2] "Nominators would violate the Constitution, if they revealed the names of nominees to anyone except the Secretary of the College. If more space is needed for any item, attach an extra sheet. Nominations, to receive official action at the next succeeding annual meeting, must be delivered to the Secretary in time to enable him to forward them to the Board of Censors at least three months before that meeting." [These statements appear conspicuously on the form.—*Ed.*]

4. (a) Attendance at *secondary school* (high school or academy). Name of school, number of years in attendance, with dates.....
   (b) If graduated, state year.....
5. (a) Attendance at *college of liberal arts.* Name of school, number of years in attendance, with dates.....
   (b) If graduated, state degree.....Year.....
6. (a) Attendance at *dental school.* Name of school, number of years in attendance, with dates.....
   (b) If graduated, state degree.....Year.....
7. (a) Attendance at *medical school.* Name of school, number of years in attendance, with dates.....
   (b) If graduated, state degree.....Year.....
8. (a) If attended *any other school*, for regular, post-graduate, or graduate work, name school, and state courses taken, years of attendance and length of periods of attendance.....
   (b) What degree was earned, if any?.....Year.....
9. *Honorary degrees* conferred; name college or university, with dates.....
10. *Dispensary or hospital service*, as intern, staff member, or in other capacity; state character of service and time devoted to it, with dates.....
11. (a) *Teaching service* in dental or medical schools; name school, and state range of years, subjects taught, character of work (lecture, recitation, laboratory, clinical), and time devoted to it, with dates.....
    (b) If appointment was held as professor, associate professor, assistant professor, lecturer, etc., state rank with subject taught, and dates.....
12. How many years in *general dental practice*, with dates?.....
13. (a) How many years in *special practice?* State specialty and percentage of time devoted to specialty, with dates.....
    (b) Indicate when and where education and training for specialty were acquired (see 8).....
14. (a) *Membership in dental societies;* names, and dates of membership.....
    (b) Dental societies in which *honorary membership* is now held.....
15. Membership in *medical or other professional or scientific societies;* names, and dates of membership.....
16. *Chief official positions* held in dental, medical or other professional or scientific societies, with dates.....
17. *Government service:* state rank, kind and character of service, with dates.....
18. *Titles of books* or monographs published, or journals or bulletins edited, with dates.....
19. *List of chief contributions to research and literature* (not mentioned under 18), with references to journal, year, page, etc.....
20. If nominee contributed articles to *proprietary* dental journals since November 3, 1935, indicate subjects of these articles, and names of journals and volumes in which said articles appeared.....
21. List of papers read or clinics given, by nominee, before professional or other societies during past three years, including any at meetings in which representatives of *trade-houses participated*, with dates.....
22. If nominee is member or fellow of *international dental organizations*, give names, and years in which membership was begun.....

23. Did nominee ever testify for prosecution in *malpractice suit?* If so, state circumstances.....
24. Did nominee ever give *course of instruction in, or under auspices of, trade-house;* or in dental office, for which fee was charged? If so, when and where?.....
25. *General Remarks.* Enter here any other accomplishments, honors, or information regarding nominee to make this record more complete.....
26. We present this nominee as a person who would consistently uphold the principles and ideals of the American College of Dentists.

Presented by.....
Seconded by.....

(*To be signed by two Fellows only, who reside in state in which nominee lives*—excepting *states* where this is impossible, and *nominees* resident outside of U. S.)
Date.....

[Here follow spaces for indications of official action, etc., and the "pledge of membership in the American College of Dentists", as published in the *J. Am. Col. Den.*, *1*, 164; 1933, Oct.]

AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE

PROCEEDINGS OF THE SUBSECTION ON DENTISTRY[1]

FIRST MEETING: ST. LOUIS, MO., JANUARY 4, 1936

COMPILED BY WILLIAM J. GIES, PH.D., SC.D., LL.D.

Assistant Secretary of the American College of Dentists, School of Medicine, Columbia University, New York City

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[1] Dentistry, since 1932, has been well represented, in independent scientific sessions, at the annual winter meetings of the American Association for the Advancement of Science. The dental programs at these meetings in 1932, 1933 and 1934 were conducted by the American College of Dentists, with the cooperation of members of the International Association for Dental Research, the American Dental Association and the American Association of Dental Schools. In 1931 and 1932, the A.C.D., A.A.D.S. and A.D.A., in

I. Quotation from a General Report, in *Science*, on the Proceedings of Section N (Medical Sciences), Subsection on Dentistry, of the A.A.A.S., at the St. Louis Meeting[2]

Research in dental science and in oral health-service has been increasingly active, especially in its biological phases, since the decade of 1911–20, during which the American Dental Association created its Research Commission, and the *Journal of Dental Research* and the International Association for Dental Research were established, all of which have been influential in their several fields. The American Division of the International Association for Dental Research now consists of 17 sections in as many university centers in the United States, its members, selected in recognition of achievement in research, now numbering 266. The American Division, recently made an affiliate of the American Association for the Advancement of Science, sponsored on January 4 a very successful all-day "meeting for the advancement of dental science," with the coöperation of the American Dental Association, American Association of Dental Schools, and American College of Dentists, these four organizations constituting the Subsection on Dentistry. The program included morning, afternoon and evening sessions. A dinner, at which the St. Louis Dental Society was the host, preceded the last session. The presiding officers at the three scientific sessions were successively Drs. G. B. Winter, President, American Dental Association; G. D. Timmons, Secretary, American Association of Dental Schools; and W. R. Davis, President, American College of Dentists. At the dinner, the Chairman was Dr. R. C. Seibert, President, St. Louis Dental Society; the Toastmaster, Dr. T. B. Beust, President, American Division, International Association for Dental Research. Among the after-dinner speakers were Drs. H. B. Ward, Permanent Secretary, A.A.A.S.; T. J. Hill, dental representative in the Council, A.A.A.S.; G. B. Winter, President, American Dental Association; Rudolf Kronfeld, member of the Foundation for Dental

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this sequence, were admitted to the "associate" relationship with the A.A.A.S. In April, 1935, the A.A.A.S. (a) admitted the American Division of the I.A.D.R. to the *affiliate* relationship; (b) gave this dental *affiliate* a representative in the Council; and (c) created in Section N (Medical Sciences) the *Subsection on Dentistry*, to consist of the official representatives of the said four dental organizations. A record of the publication of the proceedings of the three dental meetings under the leadership of the A.C.D. follows: (1) Atlantic City, N. J., Dec. 30, 1932: *J. Den. Res.*, 1933, *13*, 135–172. (2) Boston, Mass., Dec. 29, 1933: *J. Am. Col. Den.*, 1934, *1*, 44–62. (3) Pittsburgh, Pa., Dec. 29, 1934: *J. Am. Col. Den.*, 1935, *2*, 106–120. [(4) St. Louis, Jan. 4, 1936—fourth consecutive annual meeting in this series, and *the first meeting of the Section on Dentistry:* the present account.]

[2] Gies: *Science*, 1936, *83*, 141–42.

Research, Chicago College of Dental Surgery; P. C. Kitchin, Vice-president, International Association for Dental Research; and G. D. Timmons, Secretary, American Association of Dental Schools. At the scientific sessions, 16 papers were read and discussed, and 8 papers were read by title. In the general scientific exhibit, under the auspices of the A.A.A.S., dental features were contributed by the Council on Dental Therapeutics; Research Commission of the American Dental Association; St. Louis Dental Society; dental schools at Illinois, Louisville, and Northwestern universities; and Drs. E. P. Brady, A. C. Engel, V. H. Frederick, O. A. Kelly, R. C. Wheeler, and G. B. Winter, of St. Louis.

The research described in the sixteen papers that were orally presented carried dental science definitely forward on several fronts. To illustrate: Dr. Philip Jay (Ann Arbor), after an analysis of dietary recommendations by other observers for the control or prevention of decay of teeth and on the basis of results of his own studies, concluded that such decay is commonly increased in children by excessive ingestion of sugar (candy); that it is not associated with disturbance of nutrition; and that it is apparently a "bacterial disease which may be influenced by dietary changes in which the sugar content is highly important." In a study of dental decay among the Maya and Navajo Indians, Drs. T. J. Hill (Cleveland) and Morris Steggerda (Cold Spring Harbor, N. Y.) noted a very low incidence in both deciduous and permanent teeth and a definite correlation between the kind of diet and the location of decay, cavities on smooth surfaces of teeth being most frequent with diets high in content of carbohydrate. A definite topographical relationship between the germs of all deciduous teeth and their permanent successors has been established by Dr. W. H. G. Logan (Chicago), which relationship is very important in plastic surgery, orthodontia, and other branches of health-service related to the oral structure of children. In a collateral study, Dr. Rudolf Kronfeld (Chicago) made definite corrections in the knowledge of postnatal development and calcification of the permanent dentition. Dr. Isaac Schour (Chicago) showed further influences of the pituitary, thyroid, parathyroid, adrenal and gonad glands, on the eruption, formation, and calcification of the teeth. In the field of preventive orthodontia, Dr. S. J. Lewis (Detroit) demonstrated that ectopic eruptions of certain permanent teeth cause premature resorption (loss) of deciduous teeth, with resultant malocclusion, both of which can be obviated by diagnosis and corrective treatment of this abnormal process in its earliest stages. Drs. L. S. Fosdick and H. L. Hansen, and Miss Charlotte Epple (Chicago), noting that saliva of various individuals converted sugar into lactic acid at different rates, found that saliva from "caries

susceptible mouths" caused the reaction to occur at a much greater speed than saliva from "immune mouths," and on the basis of these results devised a chemical salivary-test for susceptibility to dental decay. Significant technical advances were noted in studies of tooth form (Dr. R. C. Wheeler, St. Louis); minute anatomy of edentulous jaws (Dr. E. C. Pendleton, Chicago); movements of the temporomandibular joint caused by contractions of muscles of mastication (Dr. O. H. Stuteville, Chicago); phosphatase activity of various mouth organisms (Drs. L. S. Fosdick and H. L. Hansen, and Miss Charlotte Epple, Chicago); microbiology of gingival inflammations (Dr. T. B. Beust, Louisville); relationship of oral tuberculous lesions to dental practice (Drs. C. G. Darlington and Irving Salman, New York City); reaction of enamel and dentin to various chemical reagents (Dr. E. P. Brady, St. Louis); improvement of materials for denture bases (Dr. E. B. Owen, St. Louis); and use of sodium alkyl sulphate as a detergent in tooth pastes (Drs. P. C. Kitchin and W. C. Graham, Columbus). Abstracts of all the papers will be published together in the issue of the *Journal of the American College of Dentists* for March, 1936.

This meeting, the fourth successive annual dental program in conjunction with the A.A.A.S., was notable for its evidence of marked progress in dental research; the initiation of the stimulating affiliate relationship of the organized American workers in dental science; the beginning of practical coöperation among national dental organizations (four) for the advancement of science in dentistry; and the large attendance and increased interest not only of those engaged in dental research, but also of local practitioners and lay auditors. The scientific content and import of the meeting foreshadow cumulative achievement in dental science in this country.

II. Index of Names of Participants, and Sequence Numerals of the Corresponding Abstracts on the Suceeding Pages[3]

Ashley-Montagu, 17; Beust, 1; Bödecker, 18; Brady, 5; Crawford, 19; Darlington, 10; Diamond, 20; Epple, 3, 4; Fosdick, 3, 4; Goldstein, 22, 23; Graham, 7; Hansen, 3, 4; Hill, 2; Jay, 14; Kitchin, 7; Krasnow, 21; Kronfeld, 12; Lewis, 8; Logan, 13; Oblatt, 21; Owen, 11; Pendleton, 16; Salman, 10; Schour, 15; Stanton, 22, 23; Steggerda, 2; Stuteville, 6; Wheeler, 9; Ziskin, 24.

III. First Session: Morning; Abstracts 1–6[4]

1. Microbiology of gingival inflammations. *Theodore B. Beust, M.D., D.D.S., F.A.C.D., Dental School, University of Louisville,*

[3] The abstracts are condensed forms of manuscripts presented for publication by the individual authors.

[4] Local arrangements were made very effectively by a committee of which Dr. O. W. Brandhorst was Chairman. The meeting was held in the Ballroom of the Hotel Statler. The general Chairman was Dr. Theodore B. Beust, President of the I.A.D.R. The

Louisville, Ky. Data on 20 cases of active gingivitis were given: 12 featured Spirillum sputigenum; 6, spirochetes; 2, fusiform bacillus. Descriptions and illustrations of developmental phases of organisms commensaled with these forms disclosed significant relationship between fusiform bacilli and thread forms.

2. INCIDENCE OF DENTAL CARIES AMONG MAYA AND NAVAJO INDIANS. *Thomas J. Hill, D.D.S., F.A.C.D., Dental School, Western Reserve University, Cleveland, Ohio, and Morris Steggerda, Ph.D., Carnegie Institution of Washington, Cold Spring Harbor, N. Y.* Statistical analysis of number of persons affected and amount of caries. Deciduous and permanent teeth analyzed separately and according to age groups. Navajo and Maya Indians have low incidence of caries in both deciduous and permanent teeth; only small percentage of persons affected. In Dutch and Jamaica groups, incidence high, both as to number of persons affected and percentage of teeth involved. Caries in any group dependent largely upon age of individuals. Findings suggest resistance to caries racial characteristic; definite correlation between kind of diet and location of caries; cavities in smooth surfaces more common in races on high-carbohydrate diet. (To be published in *J. Den. Res.*)

3. ENAMEL DECALCIFICATION BY VARIOUS MOUTH ORGANISMS, WITH RESPECT TO DENTAL CARIES; SUGGESTED CHEMICAL TEST FOR CARIES SUSCEPTIBILITY. *Leonard S. Fosdick, Ph.D., Harold L. Hansen, Ph.D., and Charlotte Epple, B.S., Dental School, Northwestern University, Chicago, Ill.* Saliva of various individuals caused degradation of sugar to lactic acid at different rates. Saliva from caries-susceptibles caused much more rapid reaction than saliva from immune mouths, conditions suggesting chemical test for susceptibility

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"session chairmen" were Dr. George B. Winter, President of the A.D.A. (morning); Dr. G. D. Timmons, Secretary of the A.A.D.S. (afternoon); Dr. W. R. Davis, President of the A.C.D. (evening). The Local Committee on Arrangements was unusually successful in making well known, among dentists, the plans for the meeting. The enthusiastic response clearly indicated wide-spread appreciation of the importance of active support of dental research, and of furtherance of the efforts of the Subsection on Dentistry. This progressive spirit accords with that now steadily growing in the dental schools and in the dental journals—and also among the leading practitioners of dentistry who, aided by the results of research, are continually promoting more advanced achievement in the dental division of medical care. See the quotation on page 80.

to caries. Test, correlated with clinical findings, fairly accurate. Attempting to find organism or group of organisms responsible for observed difference between carious and immune salivas, sterile saliva inoculated with pure-strain organisms and rate of degradation of sugar to lactic acid by each organism determined; rate by definite mixtures of pure-strain organisms also determined. (See abstract 4.)

4. PHOSPHATASE ACTIVITY OF VARIOUS MOUTH ORGANISMS. *Leonard S. Fosdick, Ph.D., Harold L. Hansen, Ph.D., and Charlotte Epple B.S., Dental School, Northwestern University, Chicago, Ill.* Specific activity of organisms in relation to carbohydrate degradation not function of organism, but of enzymes in or excreted by it. First step in degradation of sugar: production of hexose phosphate; rate governed by phosphatase activity of organism. Assumption: determination of enzyme content or activity of mouth organisms makes most potent combination for production of lactic acid predictable. Phosphatase content of various mouth organisms determined; results: indicate content function of rate of production of lactic acid. (See abstract 3.)

5. REACTION OF ENAMEL AND DENTIN TO CERTAIN CHEMICAL REAGENTS. *Ewing P. Brady, D.D.S., F.A.C.D., Dental School, Washington University, St. Louis, Mo.* Enamel and cementum variously affected by chemical reagents and dyes. Abrasive materials constantly affect exposed surfaces of teeth. Effects of abrasives and other chemical compounds on tooth surfaces discussed. Dyes used to trace differences in absorptive powers of enamel and dentin. Coagulants suggested to control excessive absorption and carious processes.

6. MOVEMENTS OF TEMPOROMANDIBULAR JOINT INDUCED BY CONTRACTION OF MUSCLES OF MASTICATION. *O. H. Stuteville, B.S., D.D.S., M.S.D., Medical School, Northwestern University, Chicago, Ill.* Very little work heretofore on action of muscles of mastication. Moving pictures shown: temporomandibular joint in human cadaver; mandible put through various masticatory adjustments by hand pressure. Also, moving pictures of jaws of anesthetized rhesus monkeys (Nembutal); muscles of mastication and temporomandibular joint exposed; contraction of various muscles produced by stimulation with tetanizing current. Author assumed, comparing masticatory apparatus of monkey and man, that actions of various muscles of mastication upon

temporomandibular joint identical. *Conclusions:* (*a*) Temporal muscle strongest in mastication; action closes jaws and pulls head of condyle posteriorly (dorsally) in glenoid fossa. (*b*) Masseter closes jaws and pulls head of condyle anteriorly (ventrally) in glenoid fossa. (*c*) Internal pterygoid closes jaws and pulls head of condyle anteriorly and medially in glenoid fossa—both sides acting together: heads of condyles pulled anteriorly. (*d*) External pterygoid pulls cartilage and head of condyle anteriorly and medially in glenoid fossa—both sides acting together: heads of condyles pulled anteriorly. (*e*) Buccinator and muscles of facial expression which insert into angle of mouth: accessory muscles that close jaws. (*f*) Muscles that open jaws: (1) supra- and infra-hyoid. (2) Accessory: platysma.

IV. Second Session: Afternoon; Abstracts 7–13

7. Sodium alkyl sulphate as detergent in tooth-paste. *Paul C. Kitchin, M.S., D.D.S., F.A.C.D., and W. C. Graham, D.D.S., F.A.C.D., Dental School, Ohio State University, Columbus, Ohio.* Two pastes compared under exactly similar local conditions and methods of individual brushing. In each mouth (39), respective paste used for thirty days, after thorough cleaning of all tooth surfaces. Alkyl-sulphate paste superior, as cleanser, to soap paste in 12 cases; soap paste superior to alkyl paste in 8; no marked superiority of either in 19. Soft tissues brushed also; no evidence of inflammatory reaction in any case. Dogs subjected to massage of soft tissues around teeth showed no microscopic evidence of inflammation. Difference in abrasive actions of two pastes negligible.

8. Etiological factors in malocclusion. *Samuel J. Lewis, D.D.S., F.A.C.D., Dental School, University of Detroit, Detroit, Mich.* Problem of malocclusion essentially one of growth and development of jaws and factors determining form. Disharmony of teeth, jaws, and growth mechanism by which erupting permanent teeth guided into occlusion, shown in Class I (Angle) particularly. In 1923, study of group of pre-school children begun at Merrill-Palmer School (Detroit), including yearly records in casts of teeth and dental arches, to ascertain changes incident to growth and development, and to discover possible etiological factors in malocclusion. Among many phenomena: frequent occurrence of early loss of certain deciduous

teeth, and effect upon form of dental arches and occlusion. Dentists generally believe premature loss of deciduous teeth caused only by dental caries and sequelae, and by accidents or trauma. True in majority of cases; losses in absence of caries or accidents not thus explained. Author found ectopic eruptions of certain permanent teeth cause premature resorption of deciduous teeth, and resultant malocclusion, especially in anterior segment of arch—notably in canine area, less commonly in molar area. Now possible to discover this abnormal process in earliest stages, and largely prevent loss of deciduous teeth and resultant malocclusion.

9. TOOTH-FORM DEMONSTRATING PHYSIOLOGICAL ANATOMY. *R. C. Wheeler, D.D.S., Dental School, Washington University, St. Louis, Mo.* Photographs of five aspects of each tooth—mesial, distal, labial or buccal, lingual, and incisal or occlusal—made in exactly two diameters to show each tooth with dimensions squared; then superimposed on squared, millimeter, cross-section paper, keeping long axes at 90° to horizontal, reducing tooth outlines of each aspect to accurate graph for comparison and record of contours. Incisal and occlusal surfaces thus portrayed at acute angle to long axes; further photographic studies to determine this relationship. Using ensuing information: models of 32 permanent teeth carved in Ivorine; teeth set up into normal-arch form; lower arch mounted on anatomical articulator in relationship to condyles as originally described by Bonwill, and occlusal curvature bisecting condyle as originally described by Monson. This set-up demonstrates nearly ideal occlusion in centric; dentures show good balance in right and left lateral, and in protrusive, relationships. Final and convincing observation: roots of carved teeth show positions and spacing in artificial alveolus similar to those in dissected normal human skull.

10. ORAL TUBERCULOUS LESIONS. *Charles G. Darlington, M.D., and Irving Salman, D.D.S., Dental School, New York University, New York City.* Fact-finding critical analysis of 27 cases of antemortem diagnosis of oral tuberculous lesion; clinical study supported by histopathological evidence. Tuberculous lesions of sockets, gingivae, palate and tongue, and cases illustrating difficulties in diagnosis, discussed. Diagnosis of tuberculosis well founded in 24 cases, most having dental application. Tuberculous oral lesions tend to occur in

well advanced cases of pulmonary tuberculosis. Two main groups of lesions: involving (a) apex or socket, or (b) mucous membrane. *Apex and socket cases:* especially former, most frequently accompanied by bone destruction radiographically around tooth root; tubercle bacilli believed to reach oral cavity by way of blood stream. *Mucous-membrane cases:* most frequently involve gingiva, and present mouse-eaten ulcerative appearance usually associated with looseness of tooth; infection spreads by direct and lymphatic extension, and in blood; laryngeal involvement frequently associated; prognosis particularly grave. Histological tissue-picture of tuberculosis very characteristic, but may be simulated by syphilis.

11. DENTURE-BASE MATERIALS. *E. B. Owen, D.D.S., F.A.C.D., St. Louis, Mo.* Discussion of classification: (A) as to method of processing—(*a*) thermo-plastic, (*b*) thermo-cure. (B) As to material —(*c*) cellulose products, (*d*) vinyl resins, (*e*) styrol resins, (*f*) styro-vinyl resins, (*g*) vulcanite, (*h*) phenol-formaldehyde resins. Advantages and disadvantages of each stated; also necessary precautions.

12. POSTNATAL DEVELOPMENT AND CALCIFICATION OF HUMAN PERMANENT DENTITION. *Rudolf Kronfeld, B.S., D.D.S., M.D., Foundation for Dental Research, Chicago College of Dental Surgery, Chicago, Ill.* Summary of work during past six years. Great lack of agreement among leading dental authorities of past and present century concerning onset and progress of calcification of human dentition, especially of permanent teeth. No previous record of systematic histologic study of jaws of infants and children of various ages. More than thirty upper and lower human jaws, decalcified and sectioned, yielded data on onset of calcification of permanent dentition; also on dental conditions in jaws at birth, 6 months, 1 year, 2 years, 3 years, etc. New data for onset of calcification of first permanent molars (birth), of permanent central incisors and lower lateral incisors (3 to 4 months), of permanent cuspids (4 to 5 months), of upper lateral permanent incisors (1 year), of bicuspids (1.5 to 2.5 years), and of second permanent molars (2.5 to 3 years), vary widely from statements heretofore considered authoritative. (Several articles describing study in detail: in *J. Am. Den. Assoc.* during past three years.)

13. POSITION OF GERMS OF DECIDUOUS AND PERMANENT TEETH IN JAWS OF INFANTS AND CHILDREN. *William H. G. Logan, M.S., D.D.S.,*

M.D., F.A.C.S., F.A.C.D., Foundation for Dental Research, Chicago College of Dental Surgery, Chicago, Ill. Accurate knowledge of location and degree of development of deciduous and permanent tooth-germs during early years important in plastic surgery, orthodontia, and other branches of healing art concerned with health of oral structure in children. Present study initiated in 1928; first sections not available for study until May, 1929; initial report in October, 1929; continued on histologic sections through jaws of infants and children ranging from new-born to 11 years. Progress reports, meanwhile: either by author, or in collaboration with Dr. Kronfeld (abstract 12). Definite topographical relationship found between germs of all deciduous teeth and permanent successors. At first: permanent tooth-germ located in fibrous tissue of jaw ridge on occlusal side of corresponding deciduous tooth-germ. Later: permanent tooth-germ embedded in jaw bone on lingual side of deciduous tooth. Finally: situated above or between roots of deciduous tooth. Change in relative position of deciduous and permanent tooth-germs occurs in different groups of teeth—incisors, cuspids, and premolars—at different periods, in keeping with chronologic order of development.

V. Third Session: Evening; Abstracts 14–16[5]

14. Problem of dental caries, with relation to bacteriology and diet. *Philip Jay, M.S., D.D.S., Dental School, University of Michigan, Ann Arbor, Mich.* Problem of dental caries attacked by host of investigators during past few years, resulting in accumulation of much conflicting data. Tendencies: to emphasize nutritional possibilities; to disregard entirely (or take lightly) findings concerning relationship of lactobacilli. Several investigators, reporting successful control of dental caries by diet, not agreed as to exact nutritional requirements. If dissimilar dietary programs equally satisfactory, either dental caries due to number of things, or "protective" diets have common factor responsible for favorable results reported. Daily

[5] The evening session was preceded by a very enjoyable informal dinner, at which the St. Louis Dental Society was the host. Dr. R. C. Seibert presided and introduced Dr. T. B. Beust as toastmaster. Among the after-dinner speakers were Drs. Henry B. Ward, Rudolf Kronfeld, Paul C. Kitchin, George B. Winter, Thomas J. Hill, and G. D. Timmons. See the quotation on page 80.

diet having corrective factors considered essential by Mellanby, Howe, Hanke, Agnew, Hawkins, Boyd and Drain, and Klein and McCollum, contains optimal amounts of Ca and P; least possible amount of cereal; liberal supply of butter and eggs; cod-liver oil; and at least pint of orange juice. Lowest incidence of dental caries recently reported exists in institution where diet quite markedly deficient in all these respects; also unusually high in cereal and *almost completely sugar free.* Sugar not stressed by any of above-named investigators, but candy intake limited in each instance; Boyd and Drain first reported arrested caries in children on diabetic diets—*low in sugar.* Bacteriology of dental caries, studied intensively, indicates clinical change in caries always preceded by change in mouth flora, and characterized by presence or absence of lactobacilli. Lactobacilli not influenced by vitamin or mineral content of diet; consumption of refined sugar strikingly affects growth in mouth. Caries activity stimulated, in children, by addition to diet of excessive amounts of sugar as candy. Conclusion: dental caries not associated with disturbance of nutrition; apparently bacterial disease influenced by dietary changes—sugar content highly important.

15. INTERRELATIONSHIP OF ENDOCRINES AND TEETH. *Isaac Schour, D.D.S., Ph.D., Dental School, University of Illinois, Chicago, Ill.* Experimental studies of dysfunction of pituitary, parathyroid, adrenal and gonad glands, supported in some instances by clinical findings, demonstrate endocrines profoundly influence formation, calcification, and eruption of teeth. Influence of each gland so characteristic that often, by radiographic or histologic examination of teeth, experimental condition diagnosed without knowledge of laboratory records. (To be published in *Proc. IX Int. Den. Congr.*, 1936.)

16. MINUTE ANATOMY OF EDENTULOUS HUMAN JAWS. *E. C. Pendleton, D.D.S., M.D.S., Foundation for Dental Research, Chicago College of Dental Surgery, Chicago, Ill.* Minute structure of edentulous jaws studied in serial sections, decalcified and stained. Character, arrangement, and distribution of tissues considered with reference to regional location and variations in (1) architectural form of bone; (2) quality of fatty and connective tissues; (3) form and nature of attachments of muscle system. Quality of connective tissues and character of musculature: associated with, and influenced by, atrophic processes in bone.

VI. Papers Read by Title: Abstracts 17–24

17. Evolution of anterior maxillary region in face of man. *M. F. Ashley-Montagu, M.A., Ph.D., Dental School, New York University, New York City.* Embryological and comparative anatomical study of 10,000 Primate crania; results: indicate factors in peculiar development of maxillary portion of face, including normal and abnormal relations of teeth. Description of premaxilla in man given for first time. Reasons for missing lateral incisors, and other disturbances of dentition—this portion of skull, including varieties of cleft palate—clarified.

18. Fallacy of regarding single factor as complete cause of caries. *Charles F. Bödecker, D.D.S., F.A.C.D., Dental School, Columbia University, New York City.* Caries attributed to various causes: food retention, oral bacteria, deficiencies of vitamins or mineral salts, excesses of acid-forming foods, lack of function, ill effects of heredity, improper constituents of saliva, dysfunction of dental pulps, etc. Caries in one locality possibly due to single factor; example: lack of vitamin D possibly responsible for caries in temperate zones, but not in Hawaii, where sunshine abundant and acid-ash food believed cause of tooth destruction. Following grouping of factors clarifies difficulties and removes apparent contradictions: (a) *Systemic predisposing factors* (such as deficiencies or excesses of dietary elements, systemic disturbances, ill effects of heredity) release (b) *local predisposing factors* (abnormal activity of dental pulps or improper chemical constituents of saliva, or both); *thereafter* (c) *exciting factors* (food retention and bacteria) cause caries. Thus oral hygiene *reduces* but cannot *prevent* carious activity in presence of systemic and local predisposing factor. This conception suggests why some unclean teeth decay; why some caries not preventable by "adequate" diet. Also indicates relationships between general and dental health—welfare of teeth of young persons dependent not only on oral hygiene, but also on certain phases of systemic health.

19. Research in dental materials. *William H. Crawford, D.D.S., Dental School, Columbia University, New York City.* Research in dental materials roughly divisible into three periods: first, extending *to about 1920*, marked by few outstanding achievements—chiefly

investigations by G. V. Black, whose scientific efforts, combined with practical knowledge, effected many important developments, especially in operative dentistry. Casting process installed and dealt with quite empirically. *About 1920* wide-spread scientific interest in physical prospectus of dental materials developed from efforts at National Bureau of Standards. Test methods and testing equipment developed, and physical properties of nearly all available materials established. Dental schools and manufacturers equipped with instruments; dental profession becoming versed in physical properties and terminology. *Most productive period* will begin on large scale with carefully planned, well organized efforts to determine requirements of materials used in dental restorations, when scientific investigation will provide solid foundation for production of satisfactory materials.

20. VARIATIONS AND ANOMALIES OF TEETH OF MODERN MIXED EUROPEANS. *M. Diamond, D.D.S., Dental School, Columbia University, New York City.* Attempt to establish standard classification for study of racial differences and evolutionary changes of form. Source of clinical material: random collection of extracted teeth from institutions in metropolitan area, chiefly Columbia University Dental School. Such collection not most desirable, because source of individual teeth unknown. Variations divided into natural and acquired. *Acquired variations:* produced either in developmental or pre-eruptive period, and not phylogenetically perpetuated; or, in post-eruptive period, generally grouped as "functional modifications." Many morphological deficiency-defects developmental in character, directly related to metabolic disturbances, and prevalent in modern civilized races. *Natural variations:* congenital, ontogenetically determined, and phylogenetically perpetuated, conforming to laws of heredity and genetics. Classification of natural variations dependent on constants in terms of arrangements and proportions of lobes of individual teeth. Anomalies: unusual occurrences of natural variations; therefore ontogenetically determined and phylogenetically perpetuated; not explainable by theory of reversion to atavistic forms.

21. BIOCHEMICAL STUDIES OF SALIVA AS RELATED TO DENTAL DISEASE. *Frances Krasnow, Ph.D., and Edith B. Oblatt, B.A., Guggenheim Dental Clinic, New York City.* Study of relative significance

of saliva, as factor in dental disease-processes, showed: (1) standardization of physiological plane of subjects before saliva collection, and critical control of laboratory technic, result in limiting values for H-ion concentration (pH), Ca, P, Mg, protein, lecithin (alcohol-ether-soluble P), and cholesterol, magnitude of range-intervals closely approximating those for blood and urine. (2) Stimulation often produces saliva containing lower concentration of constituents thus far investigated. (3) pH and Ca values appeared to vary with type of tooth destruction; observed for samples of post-absorptive unstimulated, evening unstimulated, and evening stimulated, saliva. (4) Phosphorus (inorganic PO_4): irregular correlation. (5) Salivary protein in caries appeared less stable than for individuals free from caries—perhaps because of greater acidity, lowered Ca-content, or combination of several conditions. (6) Concentration of salivary cholesterol markedly dependent upon dental condition; close association between cholesterol and other components: Ca, protein, lecithin. (7) Ultrafiltration withheld more Ca than Mg; more Mg than P. (8) Barium sulphate often absorbed more Ca than Mg or P. (9) Definiteness not yet attained, but regular tendency to higher or lower concentrations of salivary substances apparently not accidental. Further investigation necessary to determine whether chemical constitution of saliva (a) any limiting value in initiating tooth disease; (b) resultant of metabolic factors that cause tooth condition; (c) diagnostic import.

22. ANTERIOR MOVEMENTS OF TEETH BETWEEN TWO AND TEN YEARS. *M. S. Goldstein and F. L. Stanton, D.D.S., Dental School, New York University, New York City.* Experimental attempt to verify new method suggested to determine antero-posterior movements of teeth in alveolar arches proper. Observations on dentitions of 183 children between 2 and 10; yearly intervals, two to six years. Data treated according to age, movements of individual teeth in upper and lower arches, deciduous and permanent teeth, and normal and abnormal occlusion. Movements of deciduous teeth not confined to one direction, anterior and posterior shifts occurring. Generally greater tendency toward backward movement apparent in early years (about 2 to 7); afterward, trend forward. First permanent molars, especially of lower arch: greater tendency to anterior shifts throughout. All teeth: substantial percentage of cases practically no movement within

single age-interval. Teeth in malocclusion generally more susceptible, and in larger average amounts, to antero-posterior movements, than teeth in normal occlusion. Greatest amount of movement or change in position occurred for incisors during transition from deciduous to permanent teeth. Labial edges of permanent incisors erupted appreciably in front of labial surfaces of deciduous predecessors. In transition between deciduous and permanent incisors, in *normal occlusion*, lower incisors moved forward (labial surfaces taken as landmark) somewhat more than upper teeth, implying diminution of horizontal overbite. Conversely, in *malocclusion*, labial surfaces of upper incisors shifted forward more than lower—increasing horizontal overbite, with protrusion of upper teeth in relation to lower.

23. CHANGES IN HORIZONTAL AND VERTICAL OVERBITE WITH AGE, IN NORMAL AND ABNORMAL OCCLUSION. *M. S. Goldstein and F. L. Stanton, D.D.S., Dental School, New York University, New York City.* Horizontal and vertical overbites in incisor region: quantitatively determined in 826 plaster-of-Paris dental-impressions of children ranging between 17 months and 12 years. Material segregated according to age, deciduous and permanent anterior teeth, occlusion and type of bite. *Horizontal overbite:* in normal occlusion, no appreciable difference in extent of bite with age until ninth year, when definite increase observed. Gradual increase in abnormal occlusion until eighth and ninth years; here also appreciable increase evident. Protrusion of lower incisors beyond upper, horizontally, diminishes appreciably in permanent compared with deciduous teeth, becoming 43 percent less in extent in former. *Vertical overbite:* increase about eighth year, doubtless due to larger size of permanent teeth. Openbite disappears after seventh year. Overbite usually greatest in cases having Class II malocclusion. Range and distribution of diameters demonstrate considerable overlapping in normal or abnormal occlusion—horizontal or vertical overbite. Descriptive terms "little," "much," "moderate," regarding horizontal or vertical overbite, given precise and quantitative bases. Further information on incidence of normal and abnormal occlusion, respectively, and various types of bite. Fifty-eight percent of all cases manifested malocclusion. Classifying latter according to Angle, 74.7 percent fell in Class I; 24.5 percent, Class II; 0.5 percent, Class III. No significant difference between

males and females. Regarding bite: results indicate disturbances in occlusion appear first in anterior teeth, especially in extent of vertical or horizontal overbite.

24. EFFECT OF CERTAIN HORMONES ON GUMS AND ORAL MUCOUS MEMBRANES OF MONKEYS: (1) EXPERIMENTAL PREGNANCY GINGIVITIS; (2) EXPERIMENTAL VINCENT INFECTION; (3) OTHER GINGIVAL CHANGES. *D. E. Ziskin, D.D.S., Dental School, Columbia University, New York City.* "Pregnancy gingivitis:" earliest manifestation usually bleeding of gums in trauma, as with tooth-brush, food, etc. Then, interdental papillae swell, lose "stippled" appearance, assume old-rose color. Irritation by local factors—food debris, tartar, bacteria, faulty dentistry, etc.—exaggerates changes. Gums assume characteristics of hypertrophic gingivitis of pregnancy; in more chronic forms, highly inflamed, usually along gingival margin, simulating color and effect of raspberry. Sometimes, pregnancy tumors, resembling epulides, occur—mushroom-shaped; pedunculated attachment; often attain considerable size; and—differing from epulides—may disappear entirely or shrink greatly after parturition. Similar lesions (swelling and old-rose color of interdental papillae) induced in normal rhesus monkeys by injection of gonadotropic hormone from human *pregnancy urine* (PU). Microscopic change: hyperplasia of epithelium; in humans, finding similar, plus progressive loss of keratin layer. In ovariectomized monkeys, injected with gonadotropic hormone—*Folluetin* Squibb (refinement of extract of pregnancy urine)—gums acquired clinical appearance of Vincent infection: tendency to easy bleeding, swelling of interdental papillae, necrosis along crests. Microscopic findings: degenerative tendency in epithelium; seeming disappearance of many nuclei in germinal layer, leaving more intercellular substance; nuclei near surface altered in size and form, and pyknotic nuclei seen; surface keratin reduced, in some places absent, leaving rough margin. With injection into ovariectomized monkeys of estrogenic hormone—*Amniotin* Squibb, or *Progynon B*—gum tissue firmer and able to resist infection to greater degree than normally. Microscopic changes: hyperplasia of epithelium, with production of keratin. In areas where keratin occurs normally, layer thicker. Keratin in germinativum and on surface of oral mucous membranes, where not normally present. Results

similar to those with Amniotin (just described): induced in normal monkeys with two gonadotropic hormones—extract of *anterior pituitary* gland of sheep (Ap), and extract of *urine of castrated women* (CU). Two methods of control utilized: pre-experimental tissue obtained whenever possible; tissue of untreated castrated female monkeys also taken. Changes noted above not observed. *Conclusions:* Estrogenic and gonadotropic hormones cause changes in gums and oral mucous membranes of normal and castrated rhesus monkeys. Changes with PU, in normal monkeys, resemble so-called "pregnancy gingivitis" ("hormonal gingivitis"); in castrated group, Vincent infection. Amniotin, Progynon B, AP, and CU, apparently strengthen gums, probably owing to increased cellular activity and rapid production of keratin. (To be published in *J. Den. Res.*)

AMERICAN COLLEGE OF DENTISTS[1]

San Francisco Convocation: Abstract of Minutes July 12, 1936, and Attendant Sessions of Board of Regents[2]

OTTO W. BRANDHORST, D.D.S., *Secretary*

St. Louis, Mo.

I. BOARD OF REGENTS

July 10 (9:30 a.m.); first session: present—Brandhorst, Davis, Gies, Gurley, Midgley, Miller, Smith. (1)Minutes of sessions in New Orleans read and approved.[1] *Reports of officers*—(2)Secretary, (3)Assistant Secretary, (4)Treasurer, (5)Editor; all approved; see minutes of convocation(80–81). Actions and conditions reported by officers and endorsed by Regents include: (6)fiscal year hereafter to run from July 1 to June 30, inclusive; (7)balance in treasury, $12,324.92 [Treasurer's report referred to auditing committee (32)]; (8)number of contributing editors of *Journal* increased from eight to ten; (9)$2.00 of each member's dues allocated to *Journal*. *Reports of committees*—(10)By-laws, (11)Centennial celebration, (12)Certi-

[1] Delay in the publication of this double number has made it possible to include this abstract. Minutes of the convocation in 1935 (New Orleans) were published in the *J. Am. Col. Den.:* 1935, *2*, 269; Dec.; editorial, p. 273. For corresponding addresses, reports, etc., see *Ibid.*, 1936, *3*, 1–79 [this issue.—*Ed.*]

[2] All sessions of the College and Regents were held in the St. Francis Hotel.

fication of specialists, (13)Editorial medal awards, (14)Education and research; all received; see minutes of convocation(50–63, 70, 79, 82); for additional reports see 16–24, 30, 32, 43. (15)*Action relating to proprietary journalism.*—Question no. 20 on membership-nomination form,[3] reads: "If nominee contributed articles to proprietary dental journals since Nov. 3, 1935, indicate subjects of these articles, and names of journals and volumes in which said articles appeared." In response to request from Censors, Regents voted that "papers published by societies in proprietary publications *over protest*, or *without consent of* author," shall not be accounted as unfavorable to nominee.

July 10 (2:00 p.m.); second session: present—Brandhorst, Davis, Frew, Gies, Gurley, Smith. *Reports of committees (continued)*—(16)Commission on journalism, (17)Legislation, (18)Oral surgery, (19)Relations, (20)Socio-economics, (21)Hospital dental service, (22)Finance and budget, (23)Advertisements; all received; see minutes of convocation(50–63, 70, 79, 82). (24)*Committee on Nomination of Officers, authorized;* President appointed J. E. Gurley, Chairman, J. B. Robinson and U. G. Rickert. *Resignations of committee chairmanships:* (25)B. B. Palmer, Socio-economics; (26)W. C. Graham, Editorial medal awards; both accepted with regret.

July 10 (9:00 p.m.); third session: present—Brandhorst, Davis, Frew, Gies, Gurley, Midgley, Miller, Smith. (27)President Davis read presidential address: approved. (28)Communication from Drs. L. E. Van Kirk and T. F. McBride, suggesting appointment of committee to coördinate findings of *research on caries* tabled, pending prospective related action by American Dental Association. (29)Secretary instructed to indicate *disposition of nominations*, when nominators request information.

July 11 (5:00 p.m.); fourth session: present—Brandhorst, Davis, Frew, Gurley, Midgley, Miller, Smith. (30)Report of *Board of Censors* considered in detail. (31)Of nominees approved by Censors, 81 elected by Regents(65). (32)Auditors stated Treasurer's report correct (7, 81).

July 15 (9:00 a.m.); fifth session [first of new administration(82)]: present—Black, Brandhorst, Bryan, Davis, Gies, Gurley, Midgley, Smith, Swinehart. (33)Matters relating to *Journal of Dental Research*, presented by Dr. A. H. Merritt, referred with approval to appropriate committees. (34)Secretary's report on *inventory of College property* received. (35)Remaining copies of *Report of Commission on Journalism* (1932) ordered held by Secretary for future disposition. (36)Regents expressed appreciation of Dr. Davis' service as President during past year. (37)*Automatic forfeiture of membership*—following, not having replied to Secretary's letters, forfeited membership in accordance with Sec. 5, Art. III, of By-laws.

[3] See page 77 of this issue of the *J. Am. Col. Den.*

reading, "Membership in the College shall be automatically forfeited by members who may . . . (e) be in arrears for two fiscal years in the payment of dues, unless the reason therefor is presented to the Regents and the delay approved by them:" *F. C. Babcock*, Appleton, Wis. *S. H. Chase*, Madison, Wis. *William Finn*, Pittsburgh, Pa. *H. E. King*, Omaha, Neb. *P. G. Puterbaugh*, Chicago, Ill. *E. C. Wetzel*, Milwaukee, Wis. (38)*Resignations of membership:* accepted.—*M. M. Eble*, Louisville, Ky. *M. N. Federspiel*, Milwaukee, Wis. *William Kettler*, Milwaukee, Wis. (39)*Contracts:* all major matters of expense to be annually submitted to competitive bids. *Sections:* (40)application of Iowa members to be chartered as Iowa Section approved. Secretary instructed (41)to proceed with plans for conference of sectional representatives next year, and (42)to charge $5.00 for each sectional charter (certificate). (43)*Non-proprietary dental journalism:* discussion of pending important developments relating to advancement. (44)*Sub-section on Dentistry, American Association for the Advancement of Science:* Regents approved pro-rated expense (one-fourth of $180.14) incurred for combined meeting of American Division of International Association for Dental Research, American Dental Association, American Association of Dental Schools, and American College of Dentists (as *Sub-section on Dentistry* of A.A.A.S.), St. Louis, Mo., Jan. 4, 1936.[4] (45)*Election* of editors(1936–37): Editor, W. J. Gies; Associate Editor, J. E. Gurley; Assistant Editor, O. W. Brandhorst. (46)*Assistant Secretary* (1936–37): Dr. Gies reappointed. (47)Special *Committee on Committees* created, to reorganize committee functions, including that of proper publicity for activities of College; appointed: O. W. Brandhorst, chairman; H. S. Smith, and J. C. Black.

II. CONVOCATION

July 12 (10:30 a.m.); first session: President Davis in chair, 40 members present. (48)Dr. R. H. Blanquie, Chairman of Local Arrangements Committee, American Dental Association, extended Committee's greetings. (49)Dr. W. D. Cutter, Secretary of Council on Medical Education and Hospitals, American Medical Association, and accredited representative to Dental Educational Council from American Medical Association, introduced as guest(72). *Reports of committees*—all received and referred to Regents for executive attention—(50)Centennial celebration; Assistant Secretary for H. S. Smith, Chairman(11). (51)Certification of specialists, C. O. Flagstad, Chairman(12). (52)Dental prosthetic service, W. H. Wright, Chairman. (53)Education and research, A. W. Bryan,

[4] See page 79 of this issue of the *J. Am. Col. Den.*

Chairman(14). (54)Endowments; A. H. Merritt for J. V. Conzett, Chairman (33). (55)Legislation; W. O. Talbot for W. A. McCready, Chairman(17). (56)Oral surgery; J. O. Goodsell for M. W. Carr, Chairman(18). (57)Gies testimonial; A. R. McDowell for H. E. Friesell, Chairman. (58) Hospital dental service, Howard C. Miller, Chairman(21). (59)Relations; Secretary for T. J. Hill, Chairman(19). (60)Socio-economics; Secretary for B. B. Palmer, Chairman(20). (61)Editorial medal awards; Secretary for W. C. Graham, Chairman(13). (62)Journalism; Secretary for H. O. Lineberger, Chairman(16). Assistant Secretary, presenting report of (63)Committee on By-laws, indicated proposed changes in *new forms of constitution and by-laws* as distributed in multigraphed copies, and suggested each be brought to vote as *amendment by substitution*—by-laws, later at present meeting; constitution, after remaining on table until convocation in 1937(10, 70).

July 12 (12:30 p.m.); luncheon: President Davis in chair, 45 members present. (64)Address—What may we expect of the American College of Dentists?: Emile F. Holman, A.B., M.D., F.A.C.S., Prof. of Surgery, School of Medicine, Stanford University. (65)Secretary read names and addresses of new members-elect(31):

Adams, P. E., Boston, Mass. *Addie*, C. B., Sr., Philadelphia, Pa. *Alcorn*, J. F., St. Louis, Mo. *Arnold*, J. P., Houston, Tex. *Atkinson*, S. R., Pasadena, Calif. *Bailey*, E. E., Denver, Colo. *Ballau*, N. T., Richmond, Va. *Baumann*, C. J., Milwaukee, Wis. *Bettman*, M. M., Portland, Ore. *Blake*, R. L., San Francisco, Calif. *Blanquie*, R. H., San Francisco, Calif. *Boydston*, W. J., Fairmont, W. Va. *Bradford*, Harry, Birmingham, Ala. *Bronner*, F. J., New York, N. Y. *Bryant*, E. R., New Haven, Conn. *Chase*, D. T., Portland, Ore. *Clark*, H. B., St. Paul, Minn. *Conley*, C. E., Le Suer, Minn. *Delaney*, H. R., Washington, D. C. *Dillon*, C. F. S., Hollywood, Calif. *Dort*, W. C., Boston, Mass. *Engel*, A. C., St. Louis, Mo. *Erikson*, B. E., Washington, D. C. *Frederich*, V. H., St. Louis, Mo. *Frisbie*, H. E., San Francisco, Calif. *Girardot*, R. L., Detroit, Mich. *Grant*, G. C., Portland, Me. *Hagemann*, H. F., St. Louis, Mo. *Hale*, G. F., Raleigh, N. C. *Harris*, H. L., St. Paul, Minn. *Harris*, M. C., Eugene, Ore. *Harrison*, W. P., Hollywood, Calif. *Hogeboom*, F. E., Los Angeles, Calif. *Hyde*, Walter, Minneapolis, Minn. *Irwin*, V. D., Minneapolis, Minn. *Jeserich*, P. H., Ann Arbor, Mich. *Juett*, Brooks, Lexington, Ky. *Keith*, H. L., Wilmington, N. C. *Kelly*, O. A., St. Louis, Mo. *Kitchin*, P. C., Columbus, Ohio. *Klaffenbach*, A. O., Iowa City, Iowa. *Koch*, C. W., Little Rock, Ark. *Lewis*, S. J., Detroit, Mich. *Loughery*, J. A., Cleveland, Ohio. *Lum*, F. H., Jr., Chatham, N. J. *Main*, L. R., St. Louis, Mo. *Maycock*, J. H., East Gardner, Mass. *Mauer*, J. F., Los Angeles, Calif. *Mentzer*, W. E., Duluth, Minn. *Mitchell*, E. L., Indianapolis, Ind. *Nelson*, Charles, Fergus Falls, Minn. *Nesbitt*, K. I., San Francisco, Calif. *O'Hare*, A. P., St. Louis, Mo. *Pankey*, L. D., Coral Gables, Fla. *Peters*, M. E., Boston, Mass. *Porter*, C. G., Kansas City, Mo. *Psayla*, J. E., New Orleans, La. *Sapienza*, B. F., Birmingham, Ala. *Sausser*, E. R., Philadelphia, Pa. *Scott*, J. D., Kansas City, Mo. *Simmons*, R. F., Norfolk, Va. *Smith*, A. M., Tampa, Fla. *Smith*, D. E., Los Angeles, Calif. *Smith*, P. E., New Orleans, La. *Sorensen*, H. W.,

San Francisco, Calif. *Stickney*, T. L., Crookston, Minn. *Strosnider*, C. W., Columbus, Ohio. *Taylor*, R. P., Jacksonville, Fla. *Tennent*, E. H., Norfolk, Va. *Thompson*, W. S., Los Angeles, Calif. *Timmons*, G. D., Indianapolis, Ind. *Tison*, G. B., Gainesville, Fla. *Travis*, J. J., Ann Arbor, Mich. *Weiss*, O. A., Minneapolis, Minn. *Wells*, A. S., Minneapolis, Minn. *Wiethoff*, C. A., Minneapolis, Minn. *Willett*, R. C., Peoria, Ill. *Williams*, A. P., Louisville, Ky. *Williams*, J. H., St. Louis, Mo. *Zeisz*, R. C., San Francisco, Calif. *Zimmerman*, N. L., Portland, Ore.; *total*, 81. [See three additions: *in absentia*(75) and honorary(76).]

July 12 (2:45 p.m.); second session: President Davis in chair, 50 members present. (66)Address—The dentist; trained or educated: Chauncy D. Leake, Ph.D., Prof. of Pharmacy, School of Medicine, University of California(72, 76). *Dental journalism:* presented by (67)President Davis as subject for discussion, in which (68)Drs. J. Ben Robinson and (69)U. G. Rickert participated. (70)*By-laws Committee* repeated explanation of proposed changes(62); by-laws then adopted. (71)*Report on constitution amended* to include Editor in Board of Regents; proposed new constitution then laid on table for action at convocation in 1937.

July 12 (6:30 p.m.); third session, following annual dinner: President Davis in chair, 115 members present. (72)*Guests:* Drs. C. D. Leake(66, 76) and W. D. Cutter(49). (73)Fellowship conferred upon following new members (*asterisks indicate election to membership at meeting before 1936*)—

(74)*Present: Bailey*, E. E., Denver, Colo. *Baumann*, C. J., Milwaukee, Wis. *Bettman*, M. M., Portland, Ore. *Blake*, R. L., San Francisco, Calif. *Blanquie*, R. H., San Francisco, Calif. **Coleman*, B. F., San Francisco, Calif. **Crosby*, A. W., New Haven, Conn. **Day*, R. A.,San Francisco, Calif. **Dean*, O. T., Seattle, Wash. **Fleming*, W. C., Oakland, Calif. **Fontaine*, S. B., Oakland, Calif. *Frisbie*, H. E., San Francisco, Calif. **Green*, R. A., Sacramento, Calif. **Haas*, A. M., Philadelphia, Pa. *Harris*, M. C., Eugene, Ore. *Hogeboom*, F. E., Los Angeles, Calif. **Johnson*, L. R., Chicago, Ill. **Johnson*, R. E., St. Paul, Minn. **Kingsbury*, B. C., San Francisco, Calif. *Klaffenbach*, A. O., Iowa City, Iowa. *Koch*, C. W., Little Rock, Ark. **Leggett*, J. W., San Francisco, Calif. *Lum*, F. H., Jr., Chatham, N. J. **McCarthy*, C. J., San Francisco, Calif. *Mauer*, J. F., Los Angeles, Calif. **Murlless*, F. T., Jr., Hartford, Conn. *Nesbitt*, K. I., San Francisco, Calif. *Pankey*, L. D., Coral Gables, Fla. **Parkinson*, D. T., Wichita, Kan. **Sheffer*, W. G., San Jose, Calif. *Smith*, P. E., New Orleans, La. *Sorensen*, H. W., San Francisco, Calif. *Thompson*, W. S., Los Angeles, Calif. *Timmons*, G. D., Indianapolis, Ind. *Willett*, R. C., Peoria, Ill. *Williams*, A. P., Louisville, Ky. *Zeisz*, R. C., San Francisco, Calif. *Zimmerman*, N. L., Portland, Ore.; *total, 38*. (75)*In absentia: H. C. Moxham*, Sydney, Australia, and *H. J. Mullett*, Chengtu, Szechwan, China. (76)*Honorary:* C. D. Leake (66, 71).

Addresses: (77)Presidential—W. R. Davis. (78)Modern trends in professional standards—W. J. Kerr, B.S., M.D., F.A.C.P., Prof. of Medicine, School of Medicine, University of California. (79)*Committee on Necrology*, J. B. Robinson, Chairman, reported "with sorrow the names of the Fellows who passed on since the last convocation:" *L. P. Bethel*, Columbus, Ohio.

G. A. Bowers, Nashua, N. H. *C. W. Hall*, Milwaukee, Wis. *A. H. Ketcham*, Denver, Colo. *C. T. Messner*, Washington, D. C. *A. T. Rowe*, New York, N. Y. *Wallace Seccombe*, Toronto, Ont. *Reports of officers:* (80)Secretary reported "ad-interim" activities, and also transactions of Regents at sessions preceding this convocation(1–47). (81)Treasurer presented report of income and expenditures(4, 7, 32). *(82)Report of Committee on Nominations of Officers*, U. G. Rickert, for J. E. Gurley, Chairman: *President-elect*—C. E. Rudolph, Minneapolis, Minn. *Vice-president*—A. W. Bryan, Iowa City, Ia. *Secretary*—O. W. Brandhorst, St. Louis, Mo., *Treasurer*—H. S. Smith, Chicago, Ill. *Regent* (5 years)—J. C. Black, Chicago, Ill. *Regent* (4 years)—E. W. Swinehart, Baltimore, Md. All unanimously elected. (83)*Installation:* President-elect A. L. Midgley, inducted into office of President, outlined plans for ensuing year and asked cooperation of all members. (84)Regent J. E. Gurley, representing College, presented to President Midgley scroll expressing appreciation of "many years of service to the College as Secretary;" also silver service as "a token of our esteem." (85)President Midgley expressed hearty appreciation.

[Next convocation: Atlantic City, July 11, 1937]

EDITORIALS

American Association of Dental Schools

The thirteenth annual meeting of the American Association of Dental Schools, in Louisville, Ky., March 16–18, 1936, Dean A. R. McDowell presiding, indicated that the Association was not only fully aware of the problems in dental education, but willing to discuss them in liberal and constructive ways, to the end that effective solutions may be found. In general the meeting was effective in demonstrating the progress which is taking place in the Association and in dental education. The program included items which, in terms of educational thought and practice, were important and timely. Among the subjects discussed by guest speakers were "Social and professional trends," by R. L. Kelly, of the American Association of Colleges; "Preserved specimen or living cell," by President R. A. Kent, University of Louisville; "The philosophy of standardization," by Dr. George K. Zook, Director, American Council on Education; "The outlook in higher education," by President William

L. Bryan, University of Indiana; and "The standardization policies and procedures of the North Central Association," by Dr. George A. Works, Secretary.

The much discussed question of prerequisites for admission to dental schools was presented, in a well organized symposium, by Dean Henry L. Banzhaf, Marquette University; Dean Guy S. Millberry, University of California; Dr. R. W. Bunting, University of Michigan; and Dr. J. B. Carr, President, National Association of Dental Examiners. The subject of predental education stimulated vigorous discussion, which resulted in adoption of the following resolutions:

"*Be It Resolved:* That it is the consensus of opinion of the accredited delegates of the member schools of the Association, that the next two years should be considered as a period of experimentation, both in the requirements for admission, and in the use of the curriculum survey; and

"*Be It further Resolved:* That, during the next two years, the minimum required specifications for the two pre-dental years should include satisfactory courses in the following subjects; a course in English, a course in chemistry, and a course in either biology or physics, taken in an approved college or university; also that these minimum specifications should not prevent freedom of action, by any school which may desire to maintain or establish higher or more rigid requirements; and

"*Be It further Resolved:* That, during this two-year period of experimentation, additional regulation, beyond those mentioned in the preceding resolution (Paragraph 2), should not be imposed by any standardizing group; and

"*Be It further Resolved:* That copies of these resolutions be sent to the members of the Dental Educational Council; the officers of the National Association of Dental Examiners; the Secretaries of the Boards of Dental Examiners of the several states; and the Secretary of the American Dental Association, for transmission to the Board of Trustees and House of Delegates of that organization."

Other outstanding features of the meeting were papers and discussions at group conferences, arranged at the request of the Curriculum Survey Committee of the Association, by representatives of practically all of the dental schools. The frank and open manner in which the problems were discussed, at these conferences, indicated a significant relation to future progress in the curriculum phases of

dental education. The question of standardization received special attention. In this relation, the Committee on the President's Address, in speaking of the achievements in dental education, expressed the opinion "that the influence of our national dental accrediting agency, the Dental Educational Council of America, has played a most important part in their development. Because of its earnest devotion to the task of dental education and allied interests, your Committee recommends that this Association reaffirm its allegiance to and confidence in the Dental Educational Council of America as now constituted." [Approved.]

Officers elected for 1936–37: *President*, Ralph R. Byrnes, Dean, Atlanta-Southern Dental School; *President-elect*, Harry M. Semans, Dean, College of Dentistry, Ohio State University; *Vice-president*, Charles R. Turner, Dean, School of Dentistry, University of Pennsylvania; and *Secretary-treasurer* (re-election), Dr. Gerald D. Timmons, School of Dentistry, Indiana University. To fill a vacancy on the *Curriculum Survey Committee*, created by the death of Dr. Wallace Seccombe, Dr. A. D. A. Mason, Faculty of Dentistry, University of Toronto, was elected.

At this meeting, the Association voted to establish the *Journal of Dental Education* (see the succeeding editorial). The next meeting of the Association will be held in Baltimore, Md., March 15–17, 1937. —J. T. O'R.

Journal of Dental Education

For many years, in the field of dental education, there has been need for a means of disseminating information and thought on the problems in the work of the dental schools. At present the only publication in the field is the *Annual Report of the Proceedings of the American Association of Dental Schools*. In view of the progress being made in dental education, and the many important happenings normally accompanying any healthy advance, the need for a journal became apparent. To meet this need the American Association of Dental Schools, at its meeting in Louisville, March 16–18, 1936, voted to establish the *Journal of Dental Education*, publication to be begun in October 1936. The Association's decision to publish this journal is indicative of the desire of its members to advance dental

education. It follows closely the significant curriculum survey which the Association initiated and conducted. A further indication of the aggressive research spirit characterizing the attitude and activities of this organization is its present study of methods of teaching, which will be completed in 1937.

The various activities of the American Association of Dental Schools, the questions they raise, and the general high interest in dental education, make the adoption of the journal project exceptionally appropriate and timely. The pages of the new journal will be open to frank, earnest discussion by administrators, teachers, and others interested in dental education. It will be free from entanglements of any kind, and will be devoted entirely to the purpose for which it is intended, that of contributing to further progress in dental education. Plans for the organization of the *Journal of Dental Education* include provision for original articles, book reviews, abstracts of educational articles, and current news of the schools and faculties, or other related topics. No advertisements will be carried.—J. T. O'R.

Projected Discussion of Dental Journalism

In accord with the growth of the truly professional spirit in dentistry, desire for continual betterment of dental journalism is steadily becoming stronger. Ways and means to improve individual dental journals are receiving increasing attention. Stated objections to the continuance of proprietary journalism in dentistry were never more direct, vigorous, or numerous. Dentists who voice these objections feel that the best interests of dentistry require not only marked betterment of non-proprietary dental journals, but also discontinuance of proprietary control of journals that purport to represent dentistry. Impending important developments in this field suggest the desirability of a broad and searching reëxamination of the problems of dental journalism.

In the evolution of opinion and decision on any subject, there are proverbially "two sides to the question." Postponing an intended public consideration of the great need for increased support for, and more effective development of, *non-proprietary* dental journals—a

need that is now engaging the special attention of the American Association of Dental Editors—we hereby initiate an open discussion of the facts and conditions that may be stated in behalf of *proprietary* dental journalism, as a system and also as represented by any existing publication. We invite expression of opinion for publication in succeeding issues. In inaugurating this discussion, in anticipation of ensuing benefits to dentistry and to dental journalism, we have not followed the dictates of our own present beliefs and preferences in this field, which are opposed to proprietary journalism *as a system.* Instead, we have yielded to the promptings of our desire to ascertain, understand, evaluate, and publish views and conclusions that influence others; and which, if meritorious, we may after due reconsideration be able to endorse. In this self-discipline—wishing to illuminate every aspect of the problem—we have asked ourselves many questions, "*on both sides,*" among them those that follow:

(1) Does any statement, to the effect that, for dentistry, non-proprietary journalism is more desirable than proprietary journalism overlook, ignore, or misrepresent any important fact or condition?

(2) Have opponents of proprietary journalism failed to note, or properly to evaluate, any circumstance that justifies continuance of proprietary dental journalism as a system?

(3) Where may one find a complete or convincing statement of reasons for preferring proprietary over non-proprietary control of journalism in dentistry?

(4) Does proprietary control of dental *journals* have any merit that was not included, in principle, in proprietary control of dental *schools,* which the dental profession rejected as an undesirable system of professional education?

(5) Does proprietary journalism have any inherent virtue or superiority that is not, or cannot be, included among the merits of non-proprietary dental journalism?

(6) Are there grades of quality or utility in proprietary journalism that justify approval and support, by the dental profession, of any variety or group of proprietary dental journals as exceptions to the rule of general undesirability of proprietary journalism as a system?

(7) Does any particular proprietary journal consistently and reliably provide so much useful support for professional causes or in-

terests—so much real service to the dental profession—that the ensuing advantages to dentistry outweigh all the disadvantages of proprietary control of that journal?

(8) What benefits now accruing to dentistry would be lost, if control of all proprietary dental journals were transferred to societies representing the organized dental profession?

(9) Would it be impossible, in transferring control of a proprietary dental journal to a society representing the organized dental profession, to continue, under such non-proprietary management, all of that journal's merits?

(10) Does the editor of any proprietary dental journal have greater editorial ability, greater professional opportunity, or greater public influence in the service of a commercial employer than he would if the journal he edits were controlled by, and given the same support under the auspices of, a society representing the organized dental profession?

(11) Does the opportunity to gain or share in the large financial income from unworthy or irresponsible advertisements have any influence on the desires of some dentists to participate in the conduct of proprietary dental journals?

(12) Does the diversion of profits to private pockets make a dental journal better, more useful, or more influential than it would be if, with the same employees, the same profits then accruing to a dental organization were used for professional purposes?

In the foregoing twelve illustrative questions, of the many we have asked ourselves, the terms "proprietary" and "non-proprietary" are used in accord with the following published definitions:[1] "*Non-proprietary* [dental] periodicals are those that are owned by philanthropic or dental organizations which are not conducted for financial profit to their members, or other persons." [Example: *Journal of the American Dental Association.*] "*Proprietary* [dental] periodicals are those that are published under conditions which may or do yield financial profit to persons as private owners, or as stockholders in owning corporations." [Example: *Dental Items of Interest.*] Should either or both of these definitions be revised?

[1] *Status of dental journalism in the United States:* Report of the Commission on Journalism (1928–31), p. 57; American College of Dentists, 1932.

The persons most competent and ready to indicate the merits of proprietary dental journalism are presumably the dentists who bear the most intimate relationships to proprietary journals. Accordingly, to provide a definite basis for the projected discussion and also to facilitate direct responses, a brief statement of the affirmative side of the question, "*Should proprietary dental journalism be discontinued,*" will be included in a circular letter to editors of proprietary dental journals inviting them to present the negative side. This circular letter, a statement of our procedure with correspondents, and the collected responses, will be published in our next issue. Thereafter the discussion of related problems will be continued so long as this may seem to be desirable.

Notes

Dental laboratory technicians comment on curriculum survey report. "One of the most serious criticisms voiced by the committee [Curriculum Survey, 1935] against the [dental] profession's conception of prosthetic service is that the mechanical aspects of the service are over-emphasized at the expense of the biological by a large part of the profession, whereas another, smaller part, over-emphasizes the biological without fully appreciating the mechanical. . . . Of the two criticisms voiced by the committee, over-emphasis of the mechanical is the more prevalent, as any laboratory owner knows. Therein lies the chief cause of most of the troubles dental laboratories experience. Surely, a true appreciation of the biological factors would never permit the types of impressions and bites which are all too common in any dental laboratory. It is also this over-emphasis of the mechanical which is responsible for the cause of another serious criticism the committee voices—the tendency of the profession to delegate almost entirely the construction of dentures to dental laboratories. While the report uses such unkind phrases as the profession 'playing into the hands of commercial interests,' 'the degradation of the practice of dental prosthesis,' that 'dental prosthesis has been much exploited by commercial interests,' etc., the fact remains, as every laboratory operator knows, that the dental laboratory is just what the profession made it. We have yet to find the dental laboratory owner who relished the added responsibilities the profession wished upon him and which he had to assume or lose a customer. . . . Adventures of the laboratories into the biological have done much harm, creating the impression among many dentists that the technicians were seeking to take

over the entire prosthetic field. The jealousies and opposition aroused finally convinced all ethical laboratory men that the farther they kept away from any phase of prosthetic work, except the purely mechanical, the better for all concerned. . . . It is and always has been, economically and ethically unsound for the laboratory to dabble in biological, diagnostic and preparatory phases of prosthetic work. They lack the necessary scientific background, they can not ethically or legally have the necessary contact with the patients. Those who have, with the collusion of some members of the profession, messed around with impression taking and examining the mouth for hard areas, soft tissue, protuberances or what have you, have found it love's labor lost. Valuable time is spent for which there is no remuneration. If the case fails they are then solely to blame. They lay themselves open to the charge of an over-weening ambition to encroach upon professional ground. They are apt to become implicated with patients or, at best, to be suspected of being implicated. No laboratory man has followed this course from choice. It has been wished upon him by dentists who lack the modicum of biological knowledge the mechanic might have scraped together. Denture designing is an equally bootless activity for the laboratory man. While his extensive experience and intensive practice do give him particular skill in practical design, he has at best only a lifeless stone model upon which to work and no opportunity to know anything about the biological features of the case. Most laboratory men who supply a denture-designing service will admit that it is largely a matter of submitting a plan which the dentist can take around for competing estimates. However, that has been another activity forced upon laboratories by the failure of a large part of the profession to submit plans. It was an attempt by the laboratories to get some tangible, agreed basis upon which to proceed with a case. Selection, or recommendation of materials is another activity assumed by laboratories by default. And it is another source of innumerable headaches. That the condition opened the way for conscious or unconscious commercial exploitation of some materials by gullible, careless or profit-seeking laboratories is as undeniable as it was inevitable. The dentist should specify every material going into a denture as carefully and in as great detail as the physician prescribes the drugs going into a prescription. . . . While the [Curriculum] report does not recognize the laboratories as a necessary aid to the profession but to the contrary indicates that its ideal would be to have dentists construct their own restorations, there is little possibility of this ever coming about. But if the report should have the ultimate effect of reforming the instruction in dental prosthesis to produce dentists who had attained the committee's objectives, skilled in all

the biological phases of prosthetic work, skilled in the designing of denture restorations, well versed in the merits of denture materials, skilled in the theoretical, if not practical mechanics of denture construction, how easily would all the past and present sources of irritation and jealousy between these two groups disappear." . . . Review: *Lab. Technician*, *8*, 10; 1935, Oct.; *9*, 20; 1935, Nov.

Laboratory technicians in medicine. "The laboratory technician is a comparatively new creation. As was true of the training of the physician not so long ago there has been a woeful lack of uniformity in educational qualifications and laboratory training of the members of this new profession. Minnesota has had its quota of privately owned schools for technicians operated by lay individuals as commercial enterprises and which have not hesitated to use high pressure advertising methods in obtaining students. The need for establishment of some order in the evident chaos in this new field has been manifested for some time. The American Society of Clinical Pathologists accepted the challenge by the formation, in 1928, of a Board of Registry of Laboratory Technicians. This Board is entirely voluntary and has no legal status, but has been devoting its energies in the interest of better medical laboratory work. The American Medical Association and the American College of Surgeons have coöperated with the Board, and, following a survey of some two hundred schools for technicians in this country now being made by the Council on Medical Education of the American Medical Association, the schools meeting the minimum standards will receive certificates issued jointly by the Board and the Council. The medical profession is directly interested in better laboratory service and it is proper that our national organization should have a large part in regulating laboratory work. The present educational requirement consists of four years of high school, a year of college (to be expanded to two years of college in 1936) and at least twelve months' training in a recognized laboratory. Regulation must move forward gradually. One year of college work devoted to chemistry and biology which is included in the present requirement of the Board on preliminary education seems advisable. The proposed increase to two years of college may be desirable but more than two years of college work would seem a needless expenditure of time and money in preparation for this work."—*Minn. Med.*, *17*, 542; 1934, Sep.

"Master-servant" plan. "The advocates of the stomatologist . . . suggested a unique scheme to lead us out of the wilderness of dentistry into the land of promise, medicine and culture. They would take a medical graduate; have him do intensive graduate work until he reaches the point of perfection, in fact becomes a superman. He would then go into the high-

ways and byways and pick up some machinists, plumbers, carpenters, and perhaps a bond salesman; give them a year of instruction in dental technics; and then place these technicians under the supervision of this superman—and this combination was to serve a community. They claimed that one superman could handle twenty technicians. . . . What a substitute for the splendid product that annually leaves our dental colleges."—Gallie: *Bur, 35*, 129; 1935, Nov.

Council on Pharmacy and Chemistry of the American Medical Association: light for dentists. "Prior to the establishment of the Council on Pharmacy and Chemistry of the American Medical Association, in 1905, there was no way for American physicians to ascertain the value of new therapeutic remedies aside from their use clinically. While clinical experience in the use of remedies is a valuable test, this must be supplemented by accurate knowledge of the chemical composition of any preparation. Before 1905, medical journals had no way of verifying the claims of advertisers and it is not surprising that even the *Journal of the American Medical Association* accepted advertising which in the light of present knowledge and ethics is not considered acceptable by American medical journals. Foreign countries, even England, have been very backward in this matter of reliable medical advertising. It is surprising to find in some of the best British journals, advertisements which would not be carried in our journals. Recently several inquiries have been received by the Council from foreign medical journals, indicating that they are commencing to see the light. Today all the state medical journals, except the *Illinois State Medical Journal*, restrict their advertising of therapeutic remedies to those approved by the Council. Physicians throughout the country may, therefore, place their confidence in the advertising columns of the state journals—Illinois excepted."—Editorial: *Minn. Med., 18*, 799; 1935, Dec.

"*American Board of Internal Medicine.* During the recent session of the American Medical Association at Kansas City, Mo., May 11 to 15, 1936, the American Board of Internal Medicine was given final official approval by the Advisory Board for Medical Specialties, the Council on Medical Education and Hospitals, and the Section on Practice of Medicine of the American Medical Association. . . . The historic significance of this action was manifest to all who were present. Within one year after the Regents of the American College of Physicians at the Philadelphia session in 1935 adopted the resolution to underwrite the necessary expense and join with the Section on Practice of the American Medical Association in the organization of a qualifying board for the certification of internists in the United States and Canada, the purpose was accomplished."—Editorial: *Ann. Int. Med., 9*, 1751; 1936, June.

"*Danger of overdoing vitamin therapy.* In our March issue, on page 149, Prof. Chauncey D. Leake [F.A.C.D.], of the department of pharmacology of the University of California Medical School, sounded a needed warning on the dangers of indiscriminate and indefinite use of vitamins. The fact that a death has already been recorded in California, presumably because of improper vitamin therapy, should make physicians willing to reconsider the entire subject of vitamins; and this suggests, also, that whenever possible, the public should be cautioned to accept with hesitancy many of the bold and extreme promises concerning the value of vitamins so greatly exploited in the last several years in lay periodicals and the press. We are sure that Doctor Leake's article will be followed by reports in medical journals from the pens of other observers which will add to the knowledge concerning the potency of vitamin principles, and thus favor a more scientific usage and dosage.—Editorial: *Calif. and West. Med., 44*, 253; 1936, Apr.

Jaws and teeth: normally variable. "The object of these few informal remarks is to help to widen the horizon of the dental student, and to aid him with the results of investigation in the biological sciences, on the jaws and teeth. It is to impress him with the modern view of all living entities, jaws and teeth included, which shows that these entities, even under the most normal conditions, are not stable, definite, standard features, but instead just so many variables. It follows, except in a very general way, that the jaws and teeth of any given subject must, in the practice of dentistry, always receive individualized study and attention."—Hrdlička: *J. Den. Res., 15*, 5; 1935; Feb.

Professional workers unionize . . . "Shortly after the beginning of the economic crisis many professional workers were forced to recognize the fact that they face the same conditions as other workers. Salary cuts, unemployment and lack of promotion brought home to them the insecurity of their status. Dispossessed professional workers, formerly self-employed practitioners, added their numbers to an ever growing mass of workers seeking employment, while schools and colleges continued sending graduates in search of jobs for which there were already too many applicants. Many professional workers have perceived that they are at the crossroads. Either they must accept limitation of their numbers, with consequent loss of needed services to the people, or they must bring organized pressure for extension of essential services which they are prepared to give. They are learning that not only is the economic welfare of the individual and hence of the group at stake, but the social basis of the professions itself is challenged. Today some kind of trade union is available to every worker in the dozen or so of the largest professional fields. . . . Trade unionism has spread recently to

workers in medical and allied professions. The Interne Council of Greater New York has organized two-thirds of the 1,500 internes of the city and has succeeded in gaining for internes in city-operated hospitals a cash salary of $15 per month. The Association of Hospital and Medical Professionals, a new A. F. of L. union which consolidated two older independent unions, has jurisdiction over nurses, laboratory technicians and staff physicians in hospitals. The Pharmacists' Union of Greater New York, with a membership of over 1,000, has carried on a number of strikes and is now seeking affiliation with the A. F. of L. . . . Salaried workers constitute the majority of all workers in the professions today. According to a government study, "National Income, 1929–32," only one and a third million professional workers out of 3,000,000 in 1929 were engaged in independent professional practice. Like all others who work for hire, professional workers are resorting to collective action for bargaining power to protect their own welfare and that of society at large."—Hartwell and Whitney: *New Republic, 86*, 42; 1936, Feb. 19.

Betterment of medical literature: dental, ditto. "It is no new thing to talk of the bettering of medical literature, but we must look for improvement chiefly by an unsparing elimination, not supinely wait for a survival of the fittest. . . . It is small honor and less reputation to have read a textbook upon a given subject (or 2 or 3 textbooks if one be writing a truly epoch-making article) and to serve up a digest of the same as an original contribution in a journal. We are not speaking of careful compilations of what is really the literature of a subject, but of the many articles which are practically nothing but abstracts of what is in the reach of nearly every one. Why, when there is a little to say, preface it with all the common things that other men have said before and said better? Say the little, report the rare case, offer your theory if it be new and honest, or your new argument in support of an old theory, but spare us the much writing that only obscures or entirely covers the gem it may contain. Thus even if your work be not wise or great it will at least be worthy of an *individual.* Doctors are much like other persons and, so long as there be vanity and desire of personal advertisement, these evils will continue. It rests with the physicians themselves to improve the organs of their profession; the scientific portion of their journals is generally what they make them. They should learn to support only the periodicals which deserve their support, and to write only really original or really valuable articles."—Editorial: *Penn. Med. J., 38*, 723; 1935, June.

"Orthodontia of the future: shall it be a profession or a racket? With concrete examples constantly appearing before our eyes, demonstrating so

clearly the downward trend of professional ideals, aims and ethics, notably to be taken from the allied field of law, is it not time that all orthodontists who hold within their hearts some feeling of concern for the welfare of the profession that they practice, take stock, unite and immediately set in activity ways and means whereby the future may be made safe for children who need our special services and our field guarded from the inroads of the financial propagandist and the ethical pirate? Has the time not come when such a plea will no longer be considered as the sentiments of a fanatic or an alarmist?"—Editorial ("A. H. A." and "R. H. W. S."): *Angle Orthod.*, *6*, 128; 1936, Apr.

"*Specialty licenses for Oklahoma.* The Oklahoma Dental Society was successful in getting an entirely new dental act passed at the 1935 session of the legislature. It was signed by the governor and became operative on May 2. The act [replaces] . . . all other existing [state] dental laws. . . . In the past, *graduate* education leading to specialization has not been fortified by legislation and the subsequent moral support it provides for the stabilization of higher education. . . . Those sections of the act which deal with the licensing of the specialties has attracted great interest, especially in orthodontia circles, as it has been without any legal standards. . . . The Board, upon satisfactory proof that the applicant has had a minimum of thirty semester hours of *graduate* work in any one of the several recognized branches of dentistry in an approved college or university, or its equivalent to be determined by the Board, may issue a license to such member to hold himself out or to announce to the public that he is especially qualified in, or limits his practice to, or gives special attention to, any one of the recognized branches of the dental profession. Examinations shall be in writing and shall include all the subjects represented in the different branches of approved *graduate* schools. Written examinations may be supplemented with an oral examination. Demonstrations of the applicant's skill are also included. A special license is required for the practice of each recognized branch of dentistry in order for the member to hold himself out to the public as limiting his practice to, or being especially qualified in, any branch of dentistry. . . . The phrase "or its equivalent," as a substitute for thirty semester hours [of *graduate* work], authorizes the Board to examine members on their professional record to determine whether, in the opinion of the Board, the applicant has acquired in knowledge and skill the equal of thirty semester hours [of] *graduate* instruction as provided in the approved colleges. Every [licensed dentist] . . . is privileged to practice any and all branches of dentistry without obtaining special licenses so long as he does not represent himself as defined within the act. The reader will find in the provisions

relating to specialized practice that all practitioners of dentistry are prohibited from representing themselves as specialists in the classified section of telephone directories and other media, unless they hold a specialist's license." The act "is designed to establish legal standards for admission to practice the specialties that coördinate with the educational standards being established by the colleges and universities. *According to the modern concept of education, dentistry can no longer afford to look with satisfaction upon the proprietary schools and apprenticeship system as meeting the American standards in education for specialization. . . . The reader should observe that commercial orthodontia laboratories are in effect outlawed in Oklahoma.* In the first place, any such laboratory would have to be manned with licensed dentists operating under their own name. In the second place, they would have to obtain special orthodontia licenses and in addition comply with the code restraining advertising, for such methods as they use are specifically defined as the practice of dentistry and the specialized practice of orthodontia. . . . Sixteen practitioners have secured specialist's licenses in the different branches since the law became operative: eight in orthodontia, three in periodontia, four in exodontia, and one in prosthodontia. There is every indication that these special features of the act are proving highly satisfactory [italic not in original].—Sorrels: *Int. J. Orthod. and Den. for Childr.*, *21*, 1090; 1935, Nov.

CORRESPONDENCE AND COMMENT

Demoralizing influence of "prominent" dentists. "I have received three or four invitations to write a series of articles for two of our most prolific commercial journals. In my desire to support ethical dental journalism, I have declined each of them; and then, to my surprise, I see the photographs and articles of two of our prominent deans in these journals. It is also a disappointment to see other prominent dentists accept positions on the editorial board of magazines of this type. I have declined a position on the editorial board of two magazines of this character. . . ."—(1). The few who lack professional and personal self-respect are never good examples to follow, and certainly are not to be envied. What they do never sets the pace—unless it be in the direction of disgrace. Aspiring young dentists are moving toward higher ground, where there is plenty of company for which no apology need be made. Selfishness and vanity, the mainsprings of commercial perversities in a profession, are never lovely, persuasive, or respected, but always transparent, and usually ridiculous when not pathetic.—[*Ed.*]

"Leaders in dentistry" and "throw-away" dental journals. "A New York statute (Civil Rights Law, Article 5, Sections 50, 51) provides that a person, firm, or corporation that uses, for *advertising purposes* or for *purposes of trade*, the name, portrait, or picture of any living person without having first obtained the *written* consent of such person . . . is guilty of a misdemeanor, and an action in the civil courts may be maintained for an injunction and damages. Please write an editorial on this theme, for the special benefit

of the 'leaders in dentistry' who of course do not *wish* 'throw-away' dental journals to use them for '*advertising purposes*' or '*purposes of trade,*' but who, having no guardians to look out for their interests, now protect (?) themselves by accepting cooperative relationships with such journals. Or am I mistaken—are they 'Yes men,' notable chiefly for infantile vanity?"—(2). Our correspondent seems to overlook the fact that the law to which he refers is not a federal enactment and is effective only in New York. As for editorial comment—see *J. Am. Col. Den., 2*, 289–92; 1935, Dec.—[*Ed.*]

Supply-house branches in dental schools. "The following notable statement, by the Dean of one of the self-styled 'better dental schools,' deserves special attention: 'One of the most important changes is the taking over of the dental supply stores by the University. This enterprise is not in opposition to the dental manufacturing companies but is being planned with their cooperation and approval. It is simply an attempt to apply the principles of cooperative buying and selling to the best interests of the dental student and dental teaching. I am sure that eventually it will result in economy to the student.' This announcement, although a sign of progress, is surprising, for it indicates the sustained strength of commercial influences where one would suppose, from loud and reiterated admissions of superiority, that such relationships had long ago been eliminated. On examining the index of the Carnegie Foundation's Bulletin No. 19, the following was found: 'Dental supply-houses: branch stores in dental schools; objections, 147.' Turning to that page I read: '*Thirteen* schools, most of them integral parts of universities and four in state universities, reserve rooms in their buildings for retail stores conducted independently by one or more supply-houses for the direct sale of dental merchandise to students.' Then follows a half-page presentation of reasons why this arrangement is 'unnecessary, undignified and unprofessional.' In 1926 there were thirteen schools in this category—*most of them in universities*. How many continue in this group? Was Illinois the last?"—(3). We are unable to answer these questions, but hope that the supply-house chain-store system in dental schools has become, or will soon be, extinct.—[*Ed.*]

Diet and caries."I had occasion recently to read the following comment by Hanson, on 'malnutrition in the Amazon Basin' (*Science, 78*, 38; 1933, July 14), which apparently has not been recorded in any dental journal: 'One other matter, that may be of interest in connection with the problem of diet and dental caries, might well be mentioned here. In Manaos I met Mr. Desmond Holdridge, of the Brooklyn Museum, who had with him a Makuxi Indian boy called Moi-i. This boy had lived for some fifteen years with his tribe, living the usual native tribal life. Here he had never known or seen any signs of dental decay. He had found it necessary, however, at the age of fifteen, to leave his tribe and to establish himself as a hired hand on the Brazilian National Ranch in the cattle plains. After a year and a half there, he came to Manaos with Holdridge, where the latter found it necessary to take him to the dentist to repair the ravages of a bad case of caries. This was told to me by Moi-i, and confirmed by Holdridge, who had known the boy well when he first left his tribe. Inquiring about the changes of diet, etc., that had accompanied this change in dental health, I found the following to have taken place. While living with his own people, Moi-i had eaten a great many fresh vegetables of various kinds, a good deal of hard cassava bread, little meat and almost no salt. On the ranch, living with white men, he had eaten a great deal of meat, mainly dried and salted, also milk, cheese, etc., almost no vegetables and a great deal of salt. The point about salt is interesting in view of the fact that the Indians of Southern Venezuela seem to believe that the white men have bad teeth because they eat so much salt. Moreover, while living with his own people, Moi-i had had the habit of constantly cleaning his teeth with charcoal, a habit

that he had dropped when he went to live with the white man. The matter throws an interesting light on the widespread modern idea that our teeth are bad because our soft foods do not give them enough exercise. While with his own people, Moi-i had found plenty of exercise for his teeth, in chewing the hard cassava bread. Here they stayed healthy. But later, when he lived with the white man, he had to chew still harder in order to get down the quantities of dried meat. If exercise is the determining factor, his teeth should have improved instead of deteriorating.' "—(4).

Dental apprentices: history made while you wait. "One should never take seriously anything printed in a proprietary 'throw away,' but the following by Dr. B. W. Weinberger deserves passing notice (*Den. Survey, 12*, 49; 1936, Feb.): 'How many of our early [sic] pioneers actually adopted this means [apprenticeship] of entering the dental profession cannot now be ascertained. *Why it [apprenticeship] has escaped the attention of our dental educators from 1839 until the present likewise cannot now be answered*' [italic mine]. When I saw this impressive announcement, and realized that here was another instance where the 'college professors' were shown 'where to get off,' I turned to an 'educational' book conveniently at hand (*Carn. Found. Bul. Den. Ed.*), where I expected to find a complete blank on the subject, but there the index pointed out such references as the two that follow: (*a*) 'As recently as 1901 . . . about 40 per cent of the number of dentists in the U. S. had acquired all of their preliminary training as apprentices; of the 28,142 dentists who, then in active practice, had been admitted since 1840, exactly 16,831 were graduates of dental schools and 11,311 were not' (p. 45). (*b*) 'Before 1885 . . . in many instances apprenticed dental practitioners were admitted to [dental] schools as late as the middle of the senior year, and, in three months or less, were graduated and given the degree of D.D.S.' . . . (p. 116). When I mentioned these quotations to a *young* member of a dental faculty, he replied: 'Old stuff, old stuff; everybody knows a lot about this early condition—similar to that in medicine. What about it?' "—(5).

Medico-dental interdependence.—"The following editorial comment in *Minnesota Medicine* (*17*, 544; 1934, Sep.), shortly after the St. Paul dental meetings, has apparently not been seen by dentists. Its import has presumably not been noted in dental circles, but should not be overlooked; so please 'put it into the record:' *'Conservative dentists.* American physicians watched with great interest the deliberations of the House of Delegates of the American Dental Association in Saint Paul. The economic and social problems of medicine and dentistry have much in common. Certain it is, at any rate, that any official reorganization of one will inevitably involve the other. *If the dental association had officially accepted health insurance, and, specifically, prepayment plans for the provision of dental service, the position of organized medicine which defined its policy on these matters in no uncertain terms at Cleveland might well have been weakened.*' There is every indication, however, that the dentists will stand by their traditional professional conservatism in all matters that might lead to socialization of professional services.' "—(6).

Research activities of the American Dental Association. "A paper by Dr. Homer C. Brown, entitled 'Historical review of the research activities of organized dentistry' (*J. Am. Den. Assoc., 22*, 1172; 1935, July), should have borne a title, judging from the content, to show definitely that it excluded consideration of dental research conducted under the auspices of local or state dental societies (units in organized dentistry); also the activities of the International Association for Dental Research, the service of the *J. Den. Res.* as the official publication of the I.A.D.R., and other important factors. Much of the constructive work in research to which Dr. Brown refers, as is well known to all the active workers, was due chiefly to the direct influence of one or more of the agencies he excluded."—(7).

OUR ADVERTISEMENTS

A policy intended to safeguard professional interests and to encourage the worthiest industrial endeavor

The basis and conditions of our policy relating to advertisements are set forth below (*J. Am. Col. Den.*, 1935, *2*, 199):

I. Advancement of the material aspects of civilization is largely dependent upon the expanding production and distribution of commodities, and their correlation with individual needs and desires. Successful practice of modern dentistry, on a broad scale, would be impossible without an abundance of the useful products of dental industries. Leading dental manufacturers and dealers have been providing invaluable merchandise for the dental practitioner. The business of supplying dental commodities has been effectually organized and, as an auxiliary to oral health-service, is more than sufficient to tax the greatest ingenuity and all the attention and integrity of each dental producer and distributor.

The American College of Dentists aims, in the public interest, to strengthen all wholesome relations and activities that facilitate the development of dentistry and advance the welfare of the dental profession. The College commends all worthy endeavors to promote useful dental industries, *and regards honorable business in dental merchandise as a respected assistant of the dental profession.* Our Board of Editors has formulated "minimum requirements" for the acceptance of commercial advertisements of useful dental commodities (*J. Am. Col. Den.*, 1935, *2*, 173). These "minimum requirements" are intended, by rigorous selection on a high level of business integrity and achievement, to create *an accredited list of Class-A dental products and services*, and include these specifications: Advertisements may state nothing that, by any reasonable interpretation, might mislead, deceive, or defraud the reader. Extravagant or inappropriate phraseology, disparagement, unfairness, triviality, and vulgarity must be excluded. Advertisements relating to drugs or cosmetics, foods, dental materials, education, finance—to any phase of interest or activity—will be accepted for only such commodities or services as merit the commendation, approval or acceptance of the National Bureau of Standards, American Dental Association, American Medical Association, Council on Dental Therapeutics, Dental Educational Council, Better Business Bureau, and other official bodies in their respective fields of authoritative pronouncement. *The welfare of the consumer is our paramount consideration.* In accordance with the recommendation of the American Association of Dental Editors, the placement of advertisements will be restricted to the advertising section.

II. An advertisement, to be accepted or repeated, not only must conform with the said "minimum requirements," but also *must meet the special test applied through a questionnaire* that will be repeatedly exchanged confiden-

tially with numerous referees in all parts of the United States, and which contains the following inquiries:

Questionnaire for referees on acceptance of advertisements.—(1) Has ..... (person, company, service, etc.) always been honorable and fair in (his, their) dealing with you personally? (2) If not, indicate confidentially your experience to the contrary. (3) Has ..... (commodity, service, etc.) always been, in your use of it, what its advertisers claim for it? (4) If not, indicate claims that were unwarranted when made. (5) Would the accompanying (copy of a proposed) advertisement of.....(commodity, service, etc.) be warranted, in your judgment, as a recognition and encouragement of useful dental commercialism? (6) If your answer to Question 5 is Yes, will you agree to use, *critically*, the above-named commodity (service, etc.) and to respond at intervals to our further inquiries as to whether all the claims published currently in its behalf, in advertisements *in the Journal of the American College of Dentists or elsewhere*, are justified?

III. The advertisers whose claims are published on the succeeding pages stand high in commercial character and on the recognized merits of their products (services, etc.). They are not among those who seek advantage from misrepresentation, and need no assistance from a prejudiced or insincere journalistic policy. They are above the temptation to try to control or influence any aspect of the conduct of this *Journal*, which in all its phases is completely independent, and fully representative of the professional ideals and the professional obligations of the American College of Dentists. We commend each advertiser in this issue to the patronage of all ethical dentists.

NEW BOOKS

MODERN DENTAL DICTIONARY

A dictionary of dental science and art, comprising the words and phrases proper to dental literature, with their pronunciation and derivation. By WILLIAM B. DUNNING, D.D.S., F.A.C.D., Professor of Dentistry, School of Dental and Oral Surgery, Columbia University; member, Committee on Nomenclature, American Dental Association; formerly editor, *Journal of the Allied Dental Societies*, and S. ELLSWORTH DAVENPORT, Jr., D.M.D., F.A.C.D., formerly Associate Editor, *Journal of the Allied Dental Societies*. 1936: Pp. 635—$7\frac{3}{4}$ x $4\frac{3}{4}$ in.; 79 illustrations—12 colored; $6.50. P. Blakiston's Son and Co., Inc., 1012 Walnut St., Philadelphia.

IMPORTANT ENGLISH BOOKS OF SPECIAL INTEREST TO AMERICAN DENTISTS

Clinical surgery for dental practitioners. By Hamilton Bailey, F.R.C.S. (Eng.); Surgeon, Royal Northern Hospital; Surgeon and Urologist, Essex County Council; Surgeon, Italian Hospital; Consulting Surgeon, Clacton Hospital. 1937: Pp. 156—$6\frac{5}{8}$ x $3\frac{3}{4}$ in.; 173 illustrations—21 colored; 15s net. H. K. Lewis and Co., Ltd., 136 Gower St., London, W.C. 1.

What is wrong with British diet? Being an exposition of the factors responsible for the undersized jaws and appalling prevalence of dental disease among British peoples. By Harry Campbell, M.D., Fellow of the Royal Anthropological Institute. 1936: Pp. 253—$5\frac{7}{8}$ x 4 in.; 24 illustrations; 10/6 net. Messrs. William Heinemann (Medical Books) Ltd., 99 Great Russell St., London, W.C. 1.

RESOLUTIONS RELATING TO PROPRIETARY DENTAL JOURNALS

I. Adopted by Dental-school Faculties

(1) *University of Pittsburgh: May 10, 1934.*—The Faculty of the School of Dentistry, University of Pittsburgh, at a meeting on May 10, voted unanimously as disapproving of any faculty member participating in any editorial capacity on a dental-trade journal, or contributing papers to such a publication, either directly or through the proceedings of dental societies whose transactions are published in dental-trade journals.

(2) *Marquette University: June 4, 1934.—Whereas:* Trade journalism and trade journals tend to commercialize the professional aspects of dentistry and therefore lower its standing as a profession; and

Whereas: Journals supported by the American Dental Association, and other dental societies and groups, are striving to maintain the present high status of dentistry, and are worthy and in need of undivided encouragement by the members of the dental profession; *therefore*, be it

Resolved: By the members of the Marquette University Dental School Faculty that no member of their group will in the future contribute to the support of a trade-dental journal as an editor or writer, either directly or through the proceedings of dental societies whose transactions are published in dental-trade journals.

(3) *San Francisco "P and S":* Oct. 22, 1935—*Whereas*, there exists at the present time a strong sentiment in the dental profession against those proprietary periodicals which solicit professional papers from ethical dentists and use these to give their periodicals a professional appearance; and

Whereas, these proprietary periodicals are mailed free of cost to all dentists—the cost being borne by the advertiser—the advertisements being unrestricted; and

Whereas, it is evident that the cost of publishing and distributing these periodicals is not a philanthropic activity of the publishers but comes ultimately from the dental profession; and

Whereas, the faculties of other dental colleges have taken similar action; be it

Resolved, that the faculty of the College of Physicians and Surgeons, a School of Dentistry, requests its members not to write professional papers using the name of the College of Physicians and Surgeons, a School of Dentistry, for trade-house periodicals;

Resolved, that all titles of papers to be published by members of the faculty shall be given in writing to the Dean of the College, together with the name of the periodical in which publication is intended;

Resolved, that a copy of this resolution be given to each new member of the faculty;

Resolved, that a copy of this resolution be sent to the Dean of each dental college in the United States.

II. Adopted by the American Association of Dental Editors: Annual Meetings, St. Paul, Minn., August 4, 1934

Resolved: That we convey to the dental faculties in the University of Pittsburgh and Marquette University this Association's commendation for their notable action in support of non-proprietary dental journalism; and that copies of the resolutions in this regard as adopted by these faculties, and a copy of this resolu tion, be sent to each dental faculty in Canada and the United States.

New Orleans, La., November 2, 1935

Recommendation of the Committee on Current Dental Literature: Your Committee regrets to make mention of the fact that men of prominence in dentistry still consider it no disloyalty to their professional obligations to lend their names and support to a *new* proprietary dental journal, thereby discrediting the work of the American Dental Association to protect the public from proprietary dental remedies and totally ignoring the effort of the American Association of Dental Editors to protect the profession from the purchasing power and influence of commercial interests in guarding the right of dentistry to control its own literature. We refer specifically to the Editors and to the members of the Editorial Board of the new proprietary journal, '*Nutrition and Dental Health*,' No. 1, Vol. 1, Oct., 1935.

Resolution adopted by the Association: Resolved, that the American Association of Dental Editors has learned with surprise and regret that some of the Fellows of the American College of Dentists, which brought about the establishment of this Associa-

tion, are members of the Editorial Staff of the newly established "*Nutrition and Dental Health*" (a proprietary journal); and that the Secretary be instructed to transmit to the American College of Dentists a copy of this resolution.

III. Adopted by the American Association of Dental Schools: Annual Meeting, Chicago, Ill., March 18, 1935

Whereas, one of the important functions of a dental educational institution is the development of a proper attitude of the students toward professional literature and journalism; and

Whereas, the free distribution of commercial and proprietary dental publications to the students develops the wrong psychological attitude toward dental literature; and

Whereas, the articles published and advertisements carried are uncensored, and often present erroneous and distorted concepts of professional conduct; be it

Resolved that it is the sense of the American Association of Dental Schools that distribution of the *Dental Students' Magazine* and other similar publications to dental students be discouraged by the administrative officers of the various schools, and that official lists of students be not furnished to the publishers of such magazines.

IV. Adopted by the American College of Dentists: Annual Meeting, New Orleans, Nov. 3, 1935

The Secretary is hereby instructed to inform our entire membership that the College notes with disfavor and regret that some of its members hold positions on the editorial staffs of proprietary dental journals.

V. Adopted by the New York Academy of Dentistry, Mar. 12, 1936

Clause *added* to first paragraph of Art. II of by-laws: [The objects of the Academy shall be] . . . "to urge upon its Fellows that they refuse to accept positions on editorial boards of proprietary dental journals, or lend their influence to proprietary dental journalism by the preparation of articles for publication in such journals."

VI. Adopted by the International Association for Dental Research: General Meeting, Louisville, Ky., Mar. 15, 1936

Whereas, it is the consensus of opinion of our members that association, either as a contributor or as a member of the editorial staff, with proprietary publications that are distributed free of charge to the members of the dental profession—and whose chief object is the advertisement of commercial products—is undesirable; therefore be it *Resolved* that the International Association for Dental Research disapproves such association by its members, and by applicants for membership in the Association.

SUMMARY OF RESPONSES TO A QUESTIONNAIRE REGARDING ACTION, BY INDIVIDUAL DENTAL FACULTIES (U. S.), ON PROPRIETARY JOURNALISM

(1) Each dental journal or publication should stand on its merits, whether proprietary or not.—*California* (Advisory Committee of College of Dentistry).

(2) Dental journalism should be in hands of profession, conducted without commercial entanglements; faculty ready to support movements to this end; no action taken to restrict freedom of individual teachers.—*Harvard* (Administrative Board of Dental School).

(3) Faculty will not contribute articles to proprietary journals having free distribution, nor aid distribution of such journals to student body.—*Iowa*, *Loyola* (New Orleans)

(4) Faculty will refrain from publication in all proprietary dental journals: *Georgetown*, *Marquette*, *Ohio State*, *Pittsburgh*, *San Francisco* "*P and S*," *Texas*.

(5) Faculty adverse to proprietary dental journalism, but favors discrimination until profession provides ample substitutes for best proprietary journals.—*Baylor*, *Atlanta-Southern*, *Michigan*, *New York*, *North Pacific*.

(6) *Faculty has not yet acted:* Buffalo, Indiana, Kansas City-Western, Louisville, Meharry, Pennsylvania, Temple, Tufts, Virginia, Western Reserve.

(7) There have been *no responses* as yet from the 14 schools not named above.

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