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Sections and dates of meetings in College year of 1940-41 (between convocations):—

Objects: The American College of Dentists "was established to promote the ideals of the dental profession; to advance the standards and efficiency of dentistry; to stimulate graduate study and effort by dentists; to confer Fellowship in recognition of meritorious achievement, especially in dental science, art, education and literature; and to improve public understanding and appreciation of oral health-service."—Constitution, Article I.

Classes of members (each member receives the title of Fellow—"F.A.C.D."): (1) "The active members consist of dentists and others who have made notable contributions to dentistry, or who have done graduate, scientific, literary, or educational work 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 II.

Forfeiture of membership. "Membership in the College shall be automatically forfeited by members who (a) give courses of instruction in dentistry, for remuneration, under any condition other than those of an appointed teacher serving publicly under the auspices of a dental school, dental society, hospital, or other accredited 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 is not an organic part of it; or (c) exact exorbitant fees for courses of instruction in dentistry under any auspices." . . . —Constitution, Article II.
DENTISTRY AS A PROFESSION

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Marquette University, Milwaukee

It is an honor and a privilege to have been invited to be your guest upon this memorable occasion, and to convey greetings and congratulations to you from the institution which I represent, upon the seventy-fifth anniversary of the founding of Washington University, School of Dentistry. This is indeed a most joyful and significant event in your history. It commemorates three quarters of a century of service in dental education. It is a pleasure to join you in this hour of joy in your achievements.

A celebration of this kind may be ordinary or extraordinary. It may mean little or much. This is obviously no ordinary celebration, and it is obvious, too, that it does mean much, not only to the administrative officers, faculty, and alumni of Washington University, but it is especially important in its relationship to the prestige and advancement of dentistry as a profession, and to the improvement of public understanding and appreciation of oral health service.

It is no ordinary celebration, because it was conceived, planned, developed, and made a reality by an interested, loyal, and willing alumni, on a large and broad scale. The plan developed by the Committee, in which dental health service, prevention and repair are emphasized, is appropriate and significant. By this event, you, the alumni, have expressed a deep appreciation of the enduring value of the professional education you have received from a worthy alma mater. You are worthy sons. Your University has justifiable reasons to be proud of you and thankful for your un-

3Presented at the Seventy-fifth Anniversary Celebration of Washington University, School of Dentistry, St. Louis, April 9, 1941.
selfish efforts to give impressive public testimony of your devotion to its principles.

Your celebration this week marks a milestone, not only in your history, but also in the progress of dentistry. It is closely linked with the celebration of the Centennial of American Dentistry, which had its formal beginning in Baltimore in March, 1940, and its formal ending in Cleveland in September of that same year. Both of these long-to-be-remembered events will focus attention upon the significance and influence of dentistry as a profession in the evolution of the human race. Your notable celebration amplifies the Centennial Celebration in all its aspects, and will make its beneficial effects more lasting.

The principal objectives of the Centennial were twofold. The first was to acquaint the public with the origin, growth, and progress made by dentistry through a century, in organization, literature, and education. The second was to reveal the present and future possibilities of dentistry as a profession of oral health service to the public. In effect, it went far beyond these initial objectives. Stimulated by a strong interest in the possibilities for good of this notable birthday, leaders in the profession revealed, through research in dental history, new and pertinent facts regarding the origin of dentistry. Through a better understanding of its origin, a new and deeper respect for dentistry as a division of health service has been born. Heretofore, the course of dentistry's origin and growth has been vague and uncertain in the minds of most people. There were many who felt that dentistry had no solid foundation in its own right. A more complete revelation and interpretation of the foundations of dentistry as a profession, has served to define more clearly than ever before, its true philosophy. Your Seventy-fifth Anniversary Celebration will clarify this definition still further.

One of the most valuable and beneficial effects upon the status of dentistry emanating from the establishment of a deeper understanding of historical events has been the revelation that the autonomy of dentistry came about naturally, and was not caused by outside or artificial influences. In his treatise, "The Foundations
of American Dentistry," the author, Dr. J. Ben Robinson, has shown, by means of a portrayal of pertinent facts, how dentistry began its career as a separate profession. He corrects the erroneous concept of dentistry's beginning that was held until recently by many students of dental history. He proves as false the tradition that dentistry deserves no standing among medical specialties because it was allegedly rejected by medicine. He has clarified further, by revealed facts, that the requirements involved in the restoration of the teeth to form and function, and in the replacement of those lost through various causes, inevitably established certain fundamental differences that created dentistry as a distinct and separate health service profession, though one that is closely related to medicine. These natural differences, as seen in 1840 by Hayden, Harris, and their colleagues, are the basic reasons for the autonomy of dentistry. It is a profession in its own right.

Since dentistry is naturally and essentially a complex, highly specialized art, the complete and satisfactory application of which depends upon both biological and mechanical principles, it cannot be successfully partitioned. To maintain the autonomy and unity of dentistry, working in intelligent collaboration with the medical profession will best serve in the treatment of human ills.

But dentistry, because of its comparative youth as a profession in its own right; because of the advancement and perfection it has attained in the restorative art; because of the rapid development of the biological aspects which resulted in providing a better quality of oral health service; because it has been accused in some quarters of having failed to solve its problems; and further, because of the pressure of social and economic revolutionary forces, has become paradoxically susceptible to dismemberment. Because of these factors, dentistry has for some time been threatened with the loss of its status as an independent profession.

Some would turn much of the art of dentistry over to the laboratory technician; others would educate young men and women on various levels, i.e., the well trained and the lesser trained, the super-

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dentist and the sub-dentist; and still others would deliver undergraduate dental education to medicine.

Dentistry in the United States has definitely emerged from the level of a mechanical art. The prevention of loss, and the restoration of oral function, through the application of bio-mechanical procedures will always be the dominating characteristic of dental practice. During the past quarter century, a broader knowledge and appreciation of biological principles has improved the quality of dental art, and enlarged the scope and usefulness of dentistry as a division of health service. While it is obvious that advances made in the restorative features of dental practice are the most conspicuous factors that have elevated dentistry in usefulness and appreciation by the public, the fact must not be overlooked that these advances were founded upon equal and simultaneous advances in the appreciation and application of biological principles.

The general aims of the undergraduate course in dental education are to prepare young men and women for the general practice of dentistry. They are not to prepare them partially for the practice of medicine nor partially for the practice of dentistry, nor for the practice of mechanical dentistry nor for some particular type of dental operation, simple or complex. The aims are to make them safe beginners in the application of their knowledge of the art and science of dentistry in the interests of human health needs; to make them competent immediately after graduation to diagnose and treat oral disease, disorders, deficiencies, and deformities, based upon an understanding and appreciation of oral and constitutional relationships in health and disease. Scientific men have demonstrated the danger of oral disease to the general health. Medicine and dentistry therefore have a joint responsibility and opportunity for safeguarding public health.

Dentistry has neither failed to meet the demands of a health service profession, nor wasted its opportunities as such. In fact, dentists, generally, have met their responsibilities as professional people, as much as have other health service specialists. Dentistry requires no elevation in order that it may become the health service equivalent of an oral specialty of medicine. Dentistry does not
need to be made essentially different. It, like every profession, needs to be made better.

In a letter addressed to Dr. B. N. Pippin of your University Dental School in 1931, in response to a circular inquiry regarding the elevation of dentistry to a standard whereby it could be recognized as a specialty of medicine, and also on the question whether dentistry should be considered a specialty of medicine, and the dental and medical curricula reorganized to bring about this relation, the late Dr. W. McKim Marriott, \(^3\) then dean of your School of Medicine, states appropriately in part, and in reply to the above questions:

"Dentistry requires no 'elevation' in order to become a specialty of medicine. It is, in the ultimate analysis, a specialty of medicine because the teeth are parts of the body and the dentist is concerned with the maintenance of health and normal function of the teeth.

"The important question at issue is not the academic one of nomenclature or of professional degrees, but of the character of training of the practitioner in the specialty concerned. In determining upon the character of training, the first consideration should, of course, be ultimate service to the patient.

"It might be argued that the more prolonged, more scientific, and more diversified the course of training, the better qualified would be the practitioner; but at the same time it must be realized that the capacity of the human brain is limited and that life is short. A profession which requires a course of training which is too greatly out of proportion to the ultimate returns will attract but few individuals to its ranks, and the public will suffer from a dearth of adequate service."

Dean Merriott then stated further, in substance, that most medical specialties require a knowledge of the biological sciences, but that dentistry as a specialty, in effect, occupies an intermediate position. He expressed the belief that the dentist does not have need for all that comprises the medical curriculum. He further states:

"There is no very good reason why every dentist should be a trained physician. Dental training should include sufficient of the basic biological sciences, so that its practitioners may fulfill the demands placed upon them by the needs of the public."

\(^3\)Marriott, W. McKim: J. D. Res., 11, 807-10; 1931, Oct.
Dean Marriott maintained also that even if the dental student studied more of the medical sciences and medical practice, he would have no opportunity, professionally or legally, of putting the knowledge so gained into sufficient use to remain proficient. He would do better, he believed, to consult the internist when problems arise which are beyond his field of everyday practice. There is nothing to be gained, he stated, "by converting a first-class dentist into a mediocre medical practitioner."

With the above point of view I believe most medical and dental men will agree. To combine dental and medical training to any considerable extent, and to provide the same training for both, is impractical; it would serve no useful purpose. There would be a tendency in such a plan of academic training to emphasize the medical aspects while the technical aspects would suffer.

Dentistry is threatened further with dismemberment by those who advocate academic training for practice on varying levels. They would prepare some practitioners to perform complex operations, and others to perform so-called simple operations. This plan might have working potentialities if it were possible to define "a simple dental operation," and also to limit these sub-dentists in practice to the performance of such and to satisfy the demands of the public. This proposal was conceived as a means of improving the dental condition of children. The idea has been extended to adults, as a means of providing more dentists and more service to the low-income group. This theory of training for practice has not been given serious or favorable consideration by dental educators. It will perhaps be forgotten entirely with the advent of more favorable socio-economic conditions.

If dentistry were to be dominated by medicine on one hand, or the technician on the other, what would happen to the future autonomy and unity of dentistry? One would train inadequately in the medical aspects, the other inadequately in the mechanical aspects. The objectives of dental education will not be served by a system which emphasizes either at the expense of the other. The independence and autonomy of dentistry, upon which the proficiency of dentistry in restorative procedures is founded, will be lost under
any plan of education and practice which idealizes theory and loses
sight of the reality of dental health needs.

One of the most important influences in the development of
the autonomy of dentistry as a profession has been the restorative
aspect of dental practice, particularly dental prosthesis. For this
reason, those who seek to break up the unity of dentistry would
strike the knock-out blow in this vulnerable spot by surrendering
prosthesis to the technician. There appears to be a feeling on the
part of some educators, medical practitioners, and dentists, that
rendering oral health service by means of artificial restorations is
a degrading and menial task and should be separated from under-
grade training or greatly minimized in it. Further, they seem
to feel that in practice this service should be delegated to the tech-
nician. There is no need for apology because dentistry is inherently
a bio-mechanical art. The fact that all mechanical appliances must
be constructed with a thorough understanding and application of
biological principles must never be overlooked.

Two agencies are destined to influence specifically and favorably
the continuance of dentistry as an independent profession. They
are the National Association of Dental Examiners and the Council
on Dental Education. Organized in 1883, the Examiners’ Asso-
ciation has served effectively through the years in improvement
of the standards of dental practice. The several state boards of
dental examiners have occupied a distinctive position in the dental
profession. Besides representing authority in professional duties,
they have been given legal authority to determine the qualifications
of applicants for licensure, and to administer the statutes.

In the performance of these duties and responsibilities, they have
stimulated the elevation of professional standards, improved the
quality of applicants to dental schools, stimulated a better quality
of undergraduate instruction and content of the undergraduate
course.

In the latter relation, they have worked in close understanding
and cooperation with the former Dental Educational Council of
America. With the passing of the first century for dentistry, within
which most of our fine traditions were established, one may look
confidently to a new period of even greater influence from the newly established Council on Dental Education to perpetuate high standards for dentistry.

The published aims and purposes of the Council clearly indicate a sound and broad philosophy of dental education. They offer opportunities for experimentation and expansion of the curriculum. They promulgate the principle of dental education under university auspices, and reject dental education which is on a basis of anything other than that which will make it a true university discipline. Its aims and purposes encourage development of initiative and capacity for independent thought and action by students and faculty. Through this policy the Council will bring encouragement and assistance in making dentistry better.

The first Congress on Dental Education and Licensure was evidence of the broad vision of the Council. Here were brought together the representatives of all departments of dental education and practice, for a thorough discussion of mutual problems. The preparation for this first congress and the subjects presented were evidences of the viewpoint that licensure and preparation and practice are innately flexible entities and that regulatory bodies in dentistry wish to encourage elasticity and experimentation in professional development. All of this favors a perpetuation of dentistry as a profession. It is to be hoped that the congress will become an annual event.

The dental profession has consistently demonstrated a willingness to improve the quality and extent of service to the public. This attitude is revealed by the constant improvement in the dental course of training; by the establishment of closer medico-dental relations; by expansion in dental research; by the improvement of dental literature; by the creation of ways and means to provide a wider distribution of dental service to the public; and self-improvement of the profession through society planned and controlled educational programs. This willingness of dentistry to improve its standing so that it may compare favorably with other learned professions has already accomplished much. These facts give prom-
ise of further advances in the new day following dentistry’s first century.

Our obligations as practicing dentists are clear. They are based upon the dental needs of those we are called upon to serve. As long as human beings are blessed with dental organs, they will be damaged and lost by the ravages of dental caries, accident, disease, and deformity. There will always be need for dentists with a balanced training to preserve and restore dental organs to service through bio-mechanical means. Human nature is weak and inconsistent, however, and the fruition of the preventive program seems a long way off.

The new horizon of dentistry reveals well-defined opportunities and their concurrent obligations. The achievements of dentistry as a profession during the first century have been recorded with justifiable satisfaction and pride. Should dentistry be transferred wholly or in part to other groups, or does the progress made by dentistry in the past justify its continuance as a separate profession?

This question can be answered only in the affirmative because the public welfare would not be served in the best possible way by partitionment or by transfer. The new horizon of dentistry calls for a continuance and further improvement in preparation for the practice in charge of its own destiny as a separate profession. This plan has brought dentistry to its present high level of value. May we not logically expect continued improvement under this same plan for the future, especially with the cooperation of related professional groups? Your celebration, commemorating a three-quarter century of service and advancement in dental education, manifests faith in dentistry’s new era as a profession in its own right.
I

Partisanship tends, through its emotional stresses, to distort judgment and to disguise reality. Covetousness, through its acquisitive aspirations, never promotes fairness or generosity. These generalizations, which apply not only to persons but also to professions, should be clarifying influences in a review of some medico-dental relationships.

The author of these notes is a layman who has profound respect for physicians and dentists as public health-servants, and earnestly appreciates the value and importance of their professional services. For many years he was a teacher, in two universities, of two of the so-called "medical" sciences, his intimate relationships during this period having included active service in faculties of medicine, dentistry and pharmacy. He feels that all conditions that would disparage or degrade any phase of licensed health-service, or dishearten those devotedly engaged therein, are inimical to the public good, and that all such unfavorable influences should be removed. It is not a cause for public congratulation when any person or any group of accredited health-servants, within or without any profession, belittle or hinder the efforts of others likewise accredited, instead of helping sympathetically and generously to perfect the coordinate functions of all practitioners. Pomposity and complacency are often indices of inefficiency. It is useless to try to determine which leg of a tripod should be regarded as functionally the most important, relatively the most distinguished, etc. There is plenty of honor and respect for all practitioners, in any field, who deserve them. In health service, real nobility radiates from unselfish, sincere, faithful, and effective effort for the protection and betterment of others, not from conceit or self-exaltation. The attainment of perfect success in practice is quite as difficult in one division as in another. The
public welfare everywhere will be served best by the unprejudiced and earnest promotion of all accredited professions of health service to the highest attainable usefulness, standing, and appreciation of each.

II

Medical practice constitutes the most general and comprehensive division of direct health-service. Physicians treat diseases in all parts of the body excepting the teeth, to which they give immediate attention as a rule only casually or in emergencies. Disorders of the teeth are reserved for the attention of dentists, who in turn treat chiefly and directly only teeth and the tissues that support and keep teeth in position. This natural allocation of direct health-service responsibilities, which has been approved for many years by both professions, is due mainly—so far as it affects teeth—to the fact that the treatment of most dental diseases and their local effects requires expertness in very difficult and exacting mechanical procedures within the mouth of the patient. These procedures can be performed usefully and safely only by persons who have the necessary talent and aptitude, and who also have received the requisite professional education. This division of health-service functions accords with the principle that separate organization assures intensive and sustained attention to objectives, interests, or causes that would not be effectively furthered without such special collective effort.

Training in the exacting methods of dental practice has been excluded from the professional education of physicians for a number of reasons, among which are these: (a) The special mechanical procedures of dental practice are not suitable for the treatment of diseases elsewhere in the body, and (b) too much time is needed for the instruction required to develop expertness in their use. The first of these two reasons is a statement of the obvious. The second reason raises this question: Why does the treatment of most dental disorders, and of their local consequences, require the scientific use of mechanical procedures that are too special and exacting to be included in the professional training of physicians? The answer to this question is determined by various peculiarities of the teeth and their disorders, some of which will be mentioned.
(1) Teeth, with their cutting and crushing surfaces, apply strong pressures in the function of chewing food. Teeth are dense and hard enough, and sufficiently mineralized and rigid, to perform this important mechanical function.

(2) Nearly all portions of the body are continually undergoing internal metabolic transformations, including self-repair and self-replacement. When a part is injured, if not excessively—when, say, skin is cut—the damage usually is repaired promptly by these self-repairing processes. Teeth—owing to their high degree of calcification and the static qualities their mechanical functions require—almost completely lack these powers. The enamel coat of a tooth contains neither active nucleated cells nor enzymes, and is not a positively vital tissue; and the solid body of a tooth is deficient in blood capillaries and lymph channels for rapid circulation and exchange of chemical units of nutrition; and, thus isolated from active participation in metabolism, these solid parts of an erupted human tooth undergo internal changes at a very slow rate, are weak in powers of self-repair, and lack capacity for self-replacement. The development of two sets of teeth—one mechanically replacing the other—is a striking expression of the physiological restrictions on the constructive and reparative processes in teeth.

(3) Because of deficiency in powers of self-repair, which is nature’s provision, diseases that affect teeth directly are not curable by measures commonly used by physicians. As a rule, diseases that affect teeth directly can be remedied, or the damage repaired, solely or chiefly by mechanical means. Successful treatment of the most common of all diseases—dental caries—cannot be accomplished by advice, medicinal dosage, application of disinfectants, use of ointments, dietary regulation, rest in bed, exercise, physical therapy, change of climate, or other measures that are useful in control of many ailments. Fully formed human teeth are feebly or wholly unresponsive to systemic interventions. A physician, in most of his treatments, aims to help nature to bring about a cure. In treatments of dental disorders, a dentist cannot as a rule have such expectations. Nature, by depriving teeth of active powers of self-repair, has apparently abandoned diseased teeth to the dentist’s protective care.
(4) Teeth are unlike many other parts of the body in producing nothing that passes from them to exert useful dynamic influences elsewhere in the system. They are not organs of internal secretion, and do not participate in chemical coordination in the body. This non-dynamic condition of teeth emphasizes the mechanical nature of their functions and relationships.

(5) Although artificial substitutes can never fully replace natural portions of the body, teeth are unlike most other parts in the fact that sanitary substitutes for the exposed hard portions of teeth, singly or in groups, can be mechanically adapted for comfortable and effective maintenance of the chief dental functions.

(6) These striking coordinations (1-5) of high-pressure mechanical functions, dense mineralogic construction, absent or slight metabolic activity, and deficiency in physiologic powers of self-repair and self-replacement, restrict the range of both the science and the art of dental health-care chiefly to mechanical principles and procedures. These coordinations (1-5) account (a) for the inability of fully formed permanent human teeth effectively to repair traumatic injury, replace material removed in functional use, or repel bacterial invasion; also (b) for the impressive facts that permanent teeth, owing to the relatively inactive metabolism in their solid portions—their biologic defenselessness—are more commonly diseased, from early childhood in civilized man, than any other part of the body; and, when diseased, cannot as a rule be cured, even in periodontal aspects, by measures commonly used by physicians in the therapy of many maladies. These anatomic, physiologic and pathologic relationships—and the associated reparative and restorative procedures in dental practice—have given teeth a unique position in health service, and account for the fact that, owing to the ensuing intricate mechanical requirements in the treatment of dental disorders, the number of dentists in active practice in this country is nearly half the number of physicians.

The foregoing summary (1-6) presents some fundamental and factual reasons why dentistry, although an important division of health service, is neither a part of general medical practice nor a specialty of medical practice. Additional conditions, arising in part
from those just summarized, have been influential. From the earliest times physicians, usually regarding dental disorders as relatively superficial and temporary in their relation to human welfare, have been correspondingly unconcerned about means for the amelioration of dental disabilities. This medical inattention occasioned the gradual development, by craftsmen, of interest and proficiency in the mechanical alleviation of dental infirmities. A prolonged trade-era of improving craftsmanship, of attendant increasing personnel, and of growing acceptability of the ensuing reparative and restorative dental service, prepared the way for the evolution in understanding and responsibility that resulted, a century ago, in the establishment of dentistry as a separately organized profession. This evolution of dentistry as an autonomous profession, and the development of institutional dental education to its present state of proficiency—in a four-year curriculum based upon at least two years of acceptable work in an accredited academic college—have been impressive professional realities in North America. Although dentists continue to use methods which, owing to the nature of teeth, make dentistry a highly mechanical division of health service—which it will remain because teeth are deficient in powers of self-repair—dental science and practice are being steadily improved through increasing application, to dental problems, of those portions of clinical medicine and of the basic physical and biological sciences that are relevant to oral conditions. The health-service concept in dental education—one of its most stimulating and constructive current influences—is leading dentistry into accredited service-equivalence with the best possible oral specialty of medical practice.

III

For many decades there have been occasional indications of regret that the medical profession, through centuries of inattention to the health-service aspects of dental diseases, lost its opportunity to develop dentistry as a part of medical practice. In recent years this regret has been expressed in occasional suggestions that dentistry, which has acquired unexpected attractiveness for some physicians, should be made a specialty of medical practice; that this could be accomplished by including in the education of a small number of
physicians what are said to be “the few additional facts of dental conditions that physicians would need to know to enable them to practice dentistry—the mechanical work, being relatively unimportant, to be done by cooperating technicians.” These suggestions commonly represent partisan desire “to have and to hold,” and also complacent assumption of dental inferiority. “Development on this line is at present unthinkable for a number of reasons,” said Dean Frederick B. Noyes recently . . . “if for no other reason, it is unthinkable because of the ignorance of the medical profession in all matters of oral anatomy, histology, physiology and pathology—in general, I believe it is a correct statement that the dentist is better grounded than the physician in the facts and principles which make judgment of the relation of mouth conditions to general health possible.”

The view that the mental part of dentistry should be transferred to medical practice and the manual part relegated to technicians—the idea that better dental health-care than any now serviced could be given by a “physician who would know how, and would direct technicians to do as told”—implies the assumption that dentists, as now educated for their allotted health-service functions, do not attain the relative excellence of practitioners of medical specialties. Among those who have presented competent testimony in this regard, the Dean of the Medical School of Washington University, shortly after the recent erection of the new building for that University’s associated Dental School, published this comment:2

“Nothing is to be gained by converting a first-class dentist into a mediocre medical practitioner. . . . I do not believe it is practical to unify the dental and medical curricula so as to provide for the same training of dentists and physicians during any considerable part of their academic careers. . . . Dentistry is a very specialized field of medicine which has already been elevated to a standard of professional excellence entirely comparable with that of other medical specialties. The average American dentist is at least as well qualified to render adequate service in his field of work as is the average otolaryngologist, ophthalmologist, or surgeon. Dental education in America has been notably effective, and that is to the credit of the profession. . . . Changes should not be made at the expense of that which has been found good through long

practical experience. . . . I am . . . entirely unconvinced that any plan for
the unification of the dental and medical curricula would result in the train-
ing of better qualified dentists. Dentistry is a profession which has become
firmly established in its own right, and one which comprises a number of
specialties. It would lose much by becoming a minor subdivision of medi-
cine. It had best retain its independence.”—[Italic not in original.]

This published recent statement by the informed dean of a medi-
cal school, and other similar opinions of equal reliability that might
be quoted—to the effect that the average American dentist is as
competent in dental care as are average medical specialists in medical
care—raise this question: Who can present trustworthy factual
evidence, as distinct from partisan assertions, showing that this
medical judgment of relative current medical and dental efficiencies
in health care is not correct?

In agreement with the foregoing quotation, the history of medi-
cine, the history of dentistry, and the history of human nature,
collectively warrant the belief that dentistry will be cumulatively
more useful to the public, if its practice is conducted by a separately
organized profession, giving it intensive attention and promotion,
than it would if it were included in medical practice and then sub-
jected to prospective relative neglect. Two general considerations
support this deduction: (a) Independence with interdependence of
persons, groups and professions—animated by understanding, good-
will and sympathy, and based on the Golden Rule—is a useful
working ideal for the promotion of efficiency and contentment in all
relationships. (b) The rapid extensions and the growing complexi-
ties of knowledge in every field, and especially in that of health
service—despite all preferences to the contrary—are steadily restrict-
ing the relative scope of understanding that any person can acquire,
and in which he can give proficient service.

The suggested conversion of dental practice into a specialty of
medical practice—the manual work to be done chiefly by techni-
cians—ignores many important considerations, among them the fact
that, in dental practice, mechanical precision represents therapeutic
exactness. Fortunately for the patient, mechanical precision attains
this high degree of significance in the service of the modern, trained,
conscientious dentist. Those who minimize the importance of the
mechanical procedures in dental service disregard such essential considerations as these, which are now well known to informed laymen and should not be ignored by physicians: Unlike some specialties of medical practice, such as that relating to disorders of the eyes, direct dental treatment cannot be shared by a dentist, legally or morally, with a technician. All terminal mechanical treatment of dental disorders must be applied within the mouth of the patient. Such treatment—including the placement of dental substitutes—cannot be done safely for the patient by anyone not well trained and experienced in the dental arts and sciences, because the variable oral conditions affecting a patient's health and comfort must be understood and the corresponding handwork skilfully performed in harmony therewith. On a physician's prescription, glasses are commonly fitted to a patient's eyes, nose, and ears, by an optician, without any further attention from the physician. It is customary, with medical approval, for opticians to fit glasses within a relatively wide range of mechanical and biological variations, presumably without injury to the patient. In the mouth, however, dental analogues of glasses—say, inlays for supports for a bridge—must be fitted by a dentist with microscopic exactness to prevent entrance of bacteria into the substance of the supporting teeth, and also to maintain other anatomical and physiological conditions. Owing to normal variations in the mouth, dental substitutes, however well planned and prepared mechanically, may not fit perfectly when first tested. For this reason a dental substitute made from a dentist's models or specifications cannot be fitted as superficially as a pair of glasses may be adjusted by an optician. The substitute must be tested in the mouth by the dentist, and usually modified until its adaptation is perfect and it is ready for effective service, in harmony with the extreme degree of accuracy involved as well as the complex anatomical and physiological requirements. Finally, after placement, the substitute must be adjudged by the dentist to be mechanically sound, esthetically satisfactory, phonetically adequate, and healthfully safe. A cooperating technician, by helping in a laboratory to make and adapt dental substitutes, on a dentist's specifications, can greatly increase the amount of time available to a dentist for direct personal service
within the mouths of patients. But without the prolonged special education in the sciences and arts now required by law in each state for the practice of dentistry, the most expert mechanic could not be safely entrusted with the health responsibility of fitting dental substitutes.

Now and then it is suggested that, if dental practice were conducted by physicians aided by technicians, the directive physicians would neither permit treatment that might cause dental infection nor allow infected teeth to be retained, as dentists are said to do; and thus these physicians would prevent the consequences of focal infection for which dentists, in their so-called "medical illiteracy," are now responsible. Just what pertinent information such a physician would have on this subject that dentists are not taught in dental schools is conjectural; and how the technicians—deficient in knowledge of focal infection but instructed to apply treatment—would be prevented from making mechanical errors that might induce infection is not evident. This claim—ignoring the many important differences in current opinions relating to teeth and focal infection—might be persuasive, if prevention of focal infection from sources other than teeth were made more impressive.

Ten years ago, during a general discussion of a suggested plan for the assimilation of dentistry into medicine, the following views were expressed by an associate dean of a medical school at an annual meeting of the Association of American Medical Colleges; there heartily approved as representing prevailing sentiment in medical faculties; and published in the official proceedings:

"Medicine and medical education have troubles of their own which will not be alleviated by attempting to swallow whole another profession; a profession [dentistry], which, by and large, does not want to be engulfed. And a profession like dentistry, with a hundred-year history, deserves to have its feelings considered. You may call dentistry a specialty of medicine, but that does not make it so; and it is none the less valuable for that fact. I can see no reason why the degree, Doctor of Dental Surgery, honestly held and honorably upheld, should not in the future deserve equal respect and esteem from the public with the degree of Doctor of Medicine, provided it is held by a similar type of man. And whatever their future relationship may be,

let medicine and dentistry now go forward side by side as friendly collaborators in the estimable undertaking of offering help to those who need it and adding to the happiness of life as much as to the length of its span."

These views were expressed by a distinguished medical democrat in successful opposition to proposals of dental dismemberment by influential medical imperialists. Ideals of professional democracy, and determination by the dental profession to accept no substitutes for such ideals, will protect dentistry in independence and freedom. There are no reasons why dentistry should be permitted to become another Poland. It may be predicted with confidence that the dental profession—in devoted and competent attention to its public obligations—will, as an autonomous profession, go forward to the status of the full health-service equivalent of the best possible oral specialty of medical practice.
It is 1941 and the profession has completed the celebration of its centenary of existence; the Mecca that was Baltimore and Cleveland is no more. The milestones of achievement since 1840 are at our backs. The spotlight of accomplishment, in which our Ten Decades glittered, has dimmed. The halo of a hundred years with which we crowned our far-seeing pioneers, has faded. The celebration is over. We stand now on the threshold of the second century, looking ahead to dentistry's new horizon. Each lane of the super-highway which ribbons toward the year 2040 has a marker—education, research, organization, and journalism. Along these will pass our march of progress. How far will we go? How fast will we travel? How safe are our vehicles? What will be the preparations and precautions we must consider, if we are to have a good journey into the next one hundred years?

The years of our history have brought us to this new beginning, and have built for us an ideal vantage point at which to pause, take stock, and chart carefully, intelligently, and efficiently the way we are to go. It is proper that we should scrutinize objectively the way we have come, so that we might determine which of the things achieved made for advancement, and which impeded development. Then, in our plans for the future, we might be guided in what to emphasize and expand and what to discard and avoid. It is now, like Macbeth, that we can "look into the seeds of time, and say which grain will grow and which will not." Then, if we are wise and earnest husbandmen, we should cultivate the one, uproot the other. We need to ferret out of the past certain of the vital questions. Why was it we pushed on to success in some undertakings, and crept to failure in others? Where was the strength in our building, and where did the weaknesses show? How was it we climbed far toward an ideal

1Prepared for the Journal as part of the activities of the contributing editors.
in one phase, and fell short in another? Which of our methods have the years commended, and which have they censured? When were we wise beyond our time, and when foolish to the utmost? If we were to come up the road again, what would we repeat? How much better we might point the progress of the future, if we were to pose such questions at each phase of our professional activities.

EDUCATION

Many are the problems of dental education which will cry for solution in the near years ahead. It is understood, and hoped, that current efforts toward solving them will be continued, increased, and well projected; and it is further understood, and hoped, that the mistakes of the past will not be carried over into this new and better epoch. The pressing problems of dental education should now become a matter of consideration by all members of the profession; for a weakness in the schools will mean a weakness in the profession. The practicing dentist and the dental society should become active proponents of ever-mounting standards in the schools, and active participants in the endeavors to determine the needs and meet the deficiencies of dental training. The formation of the American Dental Association's Council on Dental Education is a beginning in that direction.

A more thorough study of the major problems of dental education is one of the first essentials. What shall be the objectives of dental training? What shall be the relation with medical education? What kind of practitioners will be needed in the years just ahead? How may they be best prepared—under the ægis of dental or medical educators? How shall the curriculum be adjusted to better correlate the teaching of technics and sciences? Should the relation with the "medical sciences," which is recognized in practice, be foreshadowed in the undergraduate instruction? And where will this needed co-ordination and co-operation best be effected—in general laboratories, in common dissecting rooms, hospital dispensaries, or medical schools proper? These and similar questions should be answered before we go too far along the road ahead.

Also, better teaching will be needed in the schools. In the past there have been indications that dental teaching has lagged with the
improvement in general teacher-training, and with the increasing knowledge of modern teaching methods. Should faculties of our dental schools continue to look upon their duties as an incidental part of their professional activities? Should not teaching be a whole-time responsibility, if it is to fit into the newer scheme of dental education? There should be more incentive for teachers to improve themselves, to keep pace with expanding knowledge of educational methods. Dental schools should consider it a definite responsibility to bring about more security in tenure for their teachers, to give them more adequate remuneration, and to offer them improved means for modern teacher-training. Dental teachers will need be selected more carefully in the future, and will have to be “... men who have a broad general education, who have made highly creditable records in their undergraduate dental study and who have gone on to the attainment of [additional] degrees ... [who] should have proceeded from two to four years beyond the educational stage of [their] students ... [who are acquainted] with pedagogic method and considerable skill in its use ... [and who have] a pleasing and inspiring personality.”

Then, there is the matter of selection and admission of students. Requirements must assure dentists for the future who will exemplify the highest standards for professional men and women, who will be able to practice competently and intelligently all that a health-service demands. Only those should be admitted who show promise of the character and qualifications which will make for success in a true professional calling. The aptitude, skill, and personality measurements, so common in general education, must come into more frequent usage in dental-school entrance examinations. Many other problems which must be met jut up in the road ahead: additional research in the schools by men fitted to conduct such work; greater thought to graduate work and short “refresher” courses for practitioners; ways and means to instruct dental technicians and assistants in the schools; much better and more standardized training for dental hygienists; and a more politic and astute presentation of the

financial needs of dental schools to the trustees of those universities of which they are integral parts.

RESEARCH

Research in dentistry will need cumulative impetus and encouragement in the years to come. A healing art must ever drive toward better practices in the control, prevention, and cure of disease. One of our vital responsibilities in this particular endeavor will be to train or select men capable of searching out new facts, to offer them opportunity, and to give them support. Adequate funds are an urgent necessity. We must so recognize the importance of research that we will give such help gladly. And we must never overlook means or method of acquainting philanthropic agencies with our needs, and of enlisting their valuable aid.

Another factor, of importance in the stimulation and support of research in dentistry, is our own mental attitude toward scientific investigation and its results. The tendency, still a part of too many professional minds, to sneer at facts and laugh at proofs which disturb traditional ways of thinking and practice, must not be carried over into the next century. We cannot continue to belittle research as too frequently we have, with such comments as: the investigators are not dentists; it isn't practical; it's too scientific. These, as well as other minor ones, have been obstacles to development in the past; they must not be in our future. Research in dentistry will go on, but the way will be easier, the results more fruitful, the goals approached more nearly, if we will train our minds to be receptive to facts and their interpretations. Greater even than the greatest discovery is the need to keep open the way to future discovery. We will have to help in this by supplying the funds, and accepting the findings.

ORGANIZATION

Organizations become great, and more useful, in proportion to the degree they serve their constituency. Ours now serve us better, but the future will be more insistent. We must meet that demand with men who are capable of leadership—who have the intelligence to conceive, the ability to plan, and the courage to execute. Much that has appeared on the landscape of the past should not be pro-
jected into the future. Personal, sectional, and group animosities and petty bickerings do not make for unity and co-operation. The quest for individual power ends too frequently in submerging the needs of the group. Incompetency and sinecures in the high places make for inefficiency and muddling. Where the few ignore the many, there is no accomplishment and no advance. Minorities which dictate and control, black-out progress.

Organizational machinery should function smoothly and productively from the local component, up through the state society, to the national association. In the offices of that triple-built structure there should be intelligence of the highest order. The organizations of the future, all of them, should be more representative, democratic, efficient, capable, informed, and knowingly active in behalf of the individual good and the effective harmony of the whole group.

**JOURNALISM**

In the past our journalism has not been worthy of a profession; now there are efforts to make it that; in the future it must be that. We need a program for journalism which is capably and intelligently written and edited; which exemplifies the ideals of a health-service profession; which is not tongue-tied by authority; which is not the parrot of any one group's thinking; and which is under the sponsorship of professional organizations. We need better editors, better writers, and better readers. One stimulating factor in such improvement will be the further development and use of libraries. The consistent use of such facilities will aid materially in educating readers especially to appreciate and understand good journalism. Another factor will be improved journalistic training and a better development of journalistic appreciation in the schools.

Above all, there should be a journalism which meets adequately the needs of all dentists. To meet this deficiency, outlines for a planned journalism have been prepared by the American Association of Dental Editors. That organization has presented recently a long-range program for dental journalism, consisting of eleven units, which constitutes a real plan for the future: a plan based on an objective study of the profession's journalistic needs in their related totality, and built to meet all reasonable requirements. It is under-
stood that the plan, while desirable, is not presently attainable. But with such a plan for journalism, or a similar one, before the profession, it should be possible to focus journalistic activity so that the program could be executed by degrees or as rapidly as economic and other conditions permit. That plan is known and is now available to the American Dental Association, if that organization chooses to for-sake its traditional dilly-dallying and fumbling journalistic en-deavors, and assumes the leadership it should. To date, the American Dental Association has not concerned itself publicly with any plans for the broad, general field of dental journalism.

If the profession is to maintain the recent gains that have been made in journalism, it must advance now. The start of the second century affords ideal opportunity. If neglected now, the responsibility will not be difficult to place.

Proud as we are of our progress, we must not forget our failures and shortcomings, and must ever be alert to the dangers of repeating them in the years of achievement ahead. We must not let our minds become plaster-casted by the thoughts of how far we have come and how great we are. We must begin to examine defects, recognize needs, explore possibilities, and bring light to all the problems. Our essential aim should be greater completion in all phases of our activities; and now is the time to “open and stir the earth a little about the roots.”

Truly, at this moment when we face the new horizon, we have time by the tail—the future is ours as it has never been before. We know many of the things which should be done . . . we know a little of how they can be done . . . we need only to plan and to begin building . . . we need only to begin . . . and even this moment is not too soon. The spirits of Hayden and Harris must envy our opportunities!

MY CREDO
WILLIAM R. DAVIS, D.D.S.¹
Lansing, Mich.

It is trite to say that "these are times that try men's souls." The evidence is all around us and we wonder if we have a working philosophy which can stand the strain. There is a tendency to give way to cynicism, defeatism, and despair. We see much of the finest fruits of man's inventive and scientific genius being used not for the benefit of mankind, but for destruction and misery. We are appalled at the result, and ashamed of the lag in social and ethical control. However, we cannot afford to lose faith in some fundamentals which give hope and courage.

It happens that some four or five years ago a small club to which the writer belongs asked each of a few of the members to present, before the club in brief form, his philosophy of life. If the reader has never undertaken such a task, we commend it to him. If taken seriously, it will cause some healthful meditation. Occasionally, friends who have read what was there presented by the writer have suggested its publication, but he has been reluctant to do this. However, in these times its publication may cause others to "think through" satisfying philosophies of their own, or bolster them in their present beliefs. With that thought in mind, we present it for what it may be worth.

Notwithstanding the science of astronomy, which proves that our earth is but a tiny speck in a vast universe—that even our sun is but a pigmy compared to other suns in the immense galaxy of the heavens;

Notwithstanding the sciences of biology and geology, which prove that our evolution from the lower forms of life has been a long and painful process;

Notwithstanding the findings of eugenics and sociology, which prove how powerful are the elements of instinct, heredity, and environment, and how puny may be the elements of choice;

Notwithstanding the cruelty, injustice, greed, selfishness, avariciousness and beastliness that seem to control mankind to a high degree; and

¹Prepared for the Journal as part of the activities of the contributing editors.
Notwithstanding the fact that these things alone may provoke some feeling of cynicism, fatalism, and despair;

Nevertheless, I also see in mankind evidences of beauty, love, unselfishness, charity, kindness, and especially aspiration toward those things we call "the good life."

Above all, I see evidences of marvelous power and possibilities for the development of this good life, not only for the few as at present, but also for the many.

I realize that mankind is just in swaddling clothes, so far as possibilities on this earth are concerned. It may be that mankind will have to go through more cycles of dark ages as, at times, it drops back a few rungs on the ladder of progress. I see as through a glass darkly, but I cannot lose the vision of the possibilities.

Consequently, I consider it the part of good judgment and sense to have faith, or to believe, in the progress of mankind toward more elimination of the socially undesirable qualities and toward attainment of those more socially desirable. I believe evolution is not confined to the physical, but also applies to the social and moral.

Since I believe this, it behooves me to contribute my own small mite toward this end, by striving to curb my unsocial tendencies and those of society and by working for what I believe to be the highest good through organizations and otherwise. This means that I have both personal and social obligations.

Concretely, it means that I believe in what are called the homely virtues, because they promote human progress.

Perhaps this philosophy is really based on selfish ideas after all, for I believe it is not only for the highest interest of mankind, but it also gives me most enduring pleasure and satisfaction. At any rate, as nearly as I can phrase them, these are my sentiments.

In a nutshell my philosophy is: Believe in and work for the highest good, have as good time as you can in the process, and "don’t take yourself too . . . . . seriously."
During the past year, the work of the Committee has progressed under the guidance of two sub-chairmen, Doctors Grant and Nelson.


The Committee report for the year 1937-38 included the following recommendation which was approved by the Regents and presented by the Chairman to the Executive Committee of the American Association of Dental Schools during the annual meeting of that body in Cleveland, March, 1939:

“The College should suggest to the American Association of Dental Schools that they sponsor a study of the need for, and of plans for training, examining, certifying and supervising dental technicians by the dental profession.”

After an interim of one year the Committee of the American Association of Dental Schools submitted the following report at the annual meeting in Philadelphia, in March, 1940.

REPORT OF COMMITTEE ON DENTAL TECHNICIANS
American Association of Dental Schools
Wm. H. Crawford, D.D.S., Chairman
Indianapolis, Ind.

There has been in recent years considerable interest in the fate of the laboratory technician because there has appeared a possibility that he may attempt to extend his activities legally into the oral cavity. We all realize that the type of service which would be rendered would be far below the high standards of service the profession has attained. Most of us are familiar

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15 For other committee reports, see J. Am. Col. Den., 8, 25; 1941, Mar.
16 The other members of this Committee are (1939-40): W. H. Grant, C. A. Nelson, A. P. O’Hare, A. H. Paterson.
with instances in which the laboratory technician has overstepped his bounds and has performed operations which have been rightfully assigned by legislation to those with proper and adequate training.

The laboratory technician is a product of the dental profession and can rightfully be considered an asset when his services are intelligently used. In many instances the dentist has made intelligent use of the technician and the opportunities thus provided have created a fairly large number of high-class technicians. However, many in the profession have made improper and perhaps excessive use of the technician, assigning duties to him which should properly be performed by the dentist himself. This indiscriminate use of technicians has given rise to a large group of men in this endeavor who have false conceptions of their value and importance to society. There is every probability that with their desires granted, the technicians, organized and recognized, would place dentistry back many years in its progress.

Organized technicians have for some time been pressing toward recognition by legislative licensure. Attempts have been made under the guise of "laboratory regulation" to license technicians by legislature. This move has precipitated careful study by committees appointed by the American Dental Association and the American College of Dentists.

The Committee from the American College of Dentists suggested that the American Association of Dental Schools appoint a committee to study and make recommendations as regards the use of dental technicians. The three members of this committee are in complete accord regarding their attitude toward technicians.

We recognize the far-reaching effects that the licensing of technicians could have on the practice of dentistry. In this regard we wish to recommend that the American Association of Dental Schools go on record as opposing any legislative licensure of laboratory technicians. This action has been taken by the American Dental Association and the American College of Dentists. Both organizations are taking active measures to prevent licensing of technicians. It is our feeling, however, that we can serve best to create an intelligent use of the technician by education of the student, tomorrow's practitioner, in the proper use of the technician.

One member of your Committee (personal correspondence) writes, "I am of the opinion that the only effective method of control for the laboratory industry is through our patronage." If dentists would patronize only the technician of high standards and would use him intelligently the problems offered by those seeking opportunities to perform oral operations would be largely minimized.

It is believed that by more adequate training of students in college in the use of the technician there will be less likelihood of abuse of this adjunct to dentistry after graduation. In defence of the use of the technician decried
by many teachers, I should like to quote from Dr. Flagstad’s report in the Proceedings of the Tenth Annual Meeting of this organization.

“The Chairman who sent the invitation to write this paper suggested I might include a discussion of what should be the attitude of the prosthetic teacher toward the use of the commercial laboratory. He sent along the answers he had received to the question ‘Should students in colleges be taught how to submit work to the commercial laboratory?’ The answers indicate there is a considerable diversion of opinion. There were about as many of the two dozen colleges written to, answering ‘yes’ as there were answering ‘no.’

“I desire to present some definite facts before venturing a conclusion. (1) The commercial laboratory has firmly established itself as an adjunct to the dental profession; (2) The dental mechanic in an efficient laboratory will produce a better mechanical result than the average dentist; (3) The busy dentist (referring, of course, to normal times) can render more service and do it at less cost if he uses the dental laboratory to assist him.

“I further believe that the subject of the commercial laboratory and the dental technician could be presented, without fear of being misunderstood, to the senior class near the termination of their course. They should be given all available information as to the function of the commercial laboratory and how it can best serve them. They should be cautioned against surrendering their prerogatives and attempting to transfer responsibility that belongs to them to the laboratory. I can see no fallacy in instructing them how work should be submitted to dental laboratories. I have frequently surveyed impressions and casts submitted to dental laboratories for them to construct work upon and I have been amazed at the carelessness of the dentist. If it is possible, through instruction to improve the future dentist in this direction I should certainly lend my aid to the necessary procedure.”

Some schools are attempting to teach the students the place and use of the technician by giving the student an opportunity to use laboratory assistance for such time-consuming operations as packing, vulcanizing and polishing, if and when the student proves himself qualified to perform the operations himself. This presents the technician in his proper relation to the practice of dentistry and also permits the student to utilize the time thus saved. I offer this only as a method felt logical by some schools to acquaint the student with the technician and not as a recommendation of this Committee.

It is our recommendation, however, that the dental schools and the prosthetic departments should train the dental students how to take advantage of the dental technicians and to use them intelligently.
II. NORTH CAROLINA DENTAL SOCIETY ACTS ON PROFESSION-TECHNICIAN RELATIONS

In its report for 1938-39 the Committee made some seven recommendations, the second of which is: "The Committee advises a joint study of the profession-technician relation and suggests that the professional representatives on the committee shall be informed dental leaders who previously have thoroughly considered the objectives to be attained through such a joint study."

The work of this Committee has begun to bear fruit through the activities of the Committee on Professional Relations of the North Carolina Dental Society under the Chairman, Dr. H. O. Lineberger. The following report of that Committee was adopted on May 6, 1940, by the House of Delegates of the North Carolina Dental Society.

REPORT OF COMMITTEE ON PROFESSIONAL RELATIONS

"The Committee on Professional Relations, having studied the problems, abuses and responsibilities incident to the current practice of dental prosthesis, submits the following report, proposed standing resolutions and recommendations:

"On the 9th day of March, 1915, the General Assembly of the State of North Carolina ratified a Dental Law which prescribes the preliminary educational requirements, methods for examination, license and registration of applicants, and the professional conduct of practitioners of dentistry.

"The purpose of this law, in common with other dental laws, is to prohibit acts or practices that impair or threaten the health of the citizens, and to secure the people against the consequences of ignorance, incapacity, deception, or fraud. This right of the State has been upheld on the broad grounds that since any mode of health service, if ignorantly or ineffectually conducted, may endanger the welfare of those to whom it is applied, its practice can be safely entrusted to such persons only as are learned, trained and skilled in the art, science and practice of dentistry.

"License to practice dentistry places a heavy responsibility upon the members of the dental profession. The dentist's mode of living, his conduct, his professional interests, his methods of dental treatment are of public concern, since they are in some measure related to the service which the dentist renders to his patients. The presumption that a dentist can do as he pleases is not supported by fact. The license to practice dentistry is not a

right, but a privilege which is granted by the people for their own protection, and may be revoked for the same reason.

"The public holds the dental profession accountable not only for the quality of the service which it renders, but also for progressive improvements in its oral health service. In fact, every dentist is a guardian of the public health.

"Contrary to this concept of public health guardianship, some dentists have neither conceived dentistry in its proper light nor lived up to the ideals of the health service it is expected to render. 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. This is particularly true of the practice of prosthetic dentistry, and to this field the Committee has directed its attention.

"In its study, the Committee has found numerous dental practices which it believes are detrimental to the welfare of the public, as well as subversive of the ideals, responsibilities, future effectiveness, and unity of the profession. These, for the most part, are viewed by the Committee as symptoms of thoughtlessness or carelessness on the part of the dentist regarding the important trust and responsibility which he assumes when he is licensed to practice. A brief review of the curricula of dental schools, State Board examination requirements, educational facilities of dental societies, postgraduate and graduate courses offered by dental schools, the content of current dental publications, and the library service of the American Dental Association, leads to the conclusion that failure to render a high-grade prosthetic oral health service cannot be attributed to lack of available training or information.

"In this light, the Committee finds it difficult to understand why any dentist would delegate to any other person, not a dentist, the performance of dental operations, which, according to law, a dentist only may perform. We refer particularly to the not uncommon violations of the dental law by dentists who request the dental technician to come to the dental office for the purpose of performing intraoral dental procedures, such as making impressions, recording jaw relations, selecting artificial teeth, adjusting prosthetic appliances, etc., or send patients directly to the dental technician who performs intraoral and extraoral dental procedures, which the dentist only is licensed to do. This violation of the dental law by dentists has led in some localities to similar violations by dental technicians who carry on an illicit and secret practice of dental prosthesis for patients, some of whom learned about the dental technician from the dentist himself. Continuation of such abuses will ultimately discredit the dental profession and increase the public sympathy for the dental technicians who apparently are being exploited.

"The illegal use of dental technicians by dentists is further incompre-
hensible in view of the fact that technicians are not trained in the science, art or practice of dentistry, and rarely have more than a superficial knowledge of the laboratory procedures. According to law, the dentist's responsibility compels him to test, from time to time, the dental appliance, which he has delegated to the technician. He must adjust the same to living tissues so that no injury or disease may result from such restorations. Further, when the appliance is finished by the technician, the dentist is obliged to examine and test it in the mouth, to modify it until it is ready for effective service in harmony with the extreme degree of accuracy which is demanded by the complex anatomic and physiologic requirements of the patient. To do less will ultimately expose the entire profession to public censure and, in turn, lay open the way for a low-grade oral health service rendered by those whose qualifications to practice dental prosthodontics may be greatly inferior to those required by the present Dental Law. This deduction is based on the Committee's knowledge of the outcome of similar dentist-technician relations in some countries of Europe. Therefore, in order to protect the public health by the correction of current abuses in the practice of prosthetic dentistry, to prevent further implication of dental technicians in illegal practices, to promote a better understanding and co-operation between the dental profession and its adjuncts, and to assure an increasingly better grade of prosthetic oral health service to the public, the Committee recommends the adoption of the following resolutions:

RESOLUTIONS

"Inasmuch as the following practices are derogatory to a high-grade oral health service to the public, unfair to dental technicians, and contrary to the obligations and responsibilities implicit in the license to practice dentistry; therefore, be it resolved that they shall hereafter be proscribed by this Society as unethical, subversive of professional ideals, and unworthy of the sanction of the dental profession:

1. The use of a dental technician by a dentist to assist in performing, or to perform intraoral dental operations, or related technical procedures upon the patient;

2. Misrepresenting, to the patient, the true identity of any non-dentist technician or assistant by introducing him as a 'denture specialist', or by calling him 'doctor' or any other title that would lead the patient to believe that the assistant or technician is legally qualified to render such dental service;

3. Directing, sending or taking a patient to a dental technician for the purpose of having the technician perform any intraoral or extraoral dental operation or procedure of any nature, as for example, making impressions, making jaw relation records, selecting artificial teeth, repairing dentures, etc."
"4. Co-operating in any manner with a dental technician so as to aid him in serving the public directly. Such co-operation refers not only to the doing of dental operations, but also to serving as a go-between for the receiving of fees, from a patient, which in whole, or in part, are given to the technician.

"5. Sending dental work out of the office to a dental technician for fabrication without accompanying the same with a signed order authorizing and defining the work which the technician is expected to do.

"6. Sending dental work such as impressions, jaw relation records, etc., out of the office to a dental technician unless they have been properly packed or protected against changes in shape, which may impair the form and fit of the finished appliance.

"7. Sending to a dental technician any improperly made or inaccurate impression, cast or model, jaw relation record, etc., which is to be used in fabricating a dental appliance. Such practice imposes an unjustifiable responsibility on the technician and is detrimental to the oral health of the patient.

"8. Requiring or demanding of the technician unnecessary haste in fabricating dental appliances whereby their quality, fit or usefulness may be impaired.

"9. Demanding or requiring cash discounts, rebates, special concessions, cheaper prices, etc., of the technician, whereby the quality of the materials and workmanship are reduced to the point where such appliances may be detrimental to the prosthetic oral health service rendered to the public.

"The Committee further recommends the appointment of a Standing Committee whose duties shall be as follows:

"1. To represent the Dental Society at meetings with dental technicians and laboratory representatives who desire to co-operate with the Society in effecting the desired reforms.

"2. To encourage the development of a code of ethics among the co-operating technicians and laboratories in keeping with the service which they are expected to render to the profession;

"3. To devise ways and means of approving those adjuncts whose service is satisfactory to the Society;

"4. To suggest methods for securing discriminate patronage of the co-operating adjuncts by the dental profession;

"5. To serve as a Committee on arbitration when required.

Respectfully submitted,

Z. L. Edwards,
John A. McClung,
H. O. Lineberger, Chairman
Committee on Professional Relations."

"Adopted May 6, 1940."
This action by the North Carolina Dental Society indicates a willingness to discharge its professional responsibilities, to correct unfavorable practices among the profession and to co-operate with such laboratories as recognize the leadership of the dental profession.

Information at hand indicates that laboratories have gladly accepted such action as desirable and helpful and have stated their willingness to co-operate with the society in correcting undesirable practices.

III. A. D. A. REQUESTED TO APPOINT COMMITTEE TO STUDY PROFESSION-ADJUNCT COOPERATION

Last year's report contained the following recommendation which was submitted to the Trustees of the American Dental Association during the annual meeting of that association in Milwaukee, July, 1939.

"The College should suggest to the American Dental Association that a professional relations committee be appointed to study the need and to formulate plans for the effective and harmonious co-operation of agencies and adjuncts which contribute to the professional services of the dental profession. This committee should lend assistance in co-ordinating the efforts of affiliated dental groups toward conciliation and agreement in the present dental laboratory controversy."

There are indications that such a committee of the A. D. A. will be appointed at the Cleveland meeting in September, 1940.

IV. MANUFACTURER ATTEMPTS VOLUNTARY LICENSURE OF DENTAL PROFESSION TO USE ACRYLIC RESIN

During the past year there has been much controversy about acrylic resin, regarding the form in which it is available to the profession and the right to manufacture and to use it.

Briefly, the patents controlling the methyl methacrylate resins are owned by the Du Pont Company and Rohm & Haas Company, the two manufacturers of these products. Through exclusive licensure the L. D. Caulk Company distributes "Lucitone" for Du Pont while Rohm & Hass has licensed Vernon-Benshoff Company to distribute "Vernonite" and The Detroit Dental Manufacturing Company to distribute "Crystolex".

These two manufacturers contend that all other manufacture of methyl methacrylate denture material is a violation of their
patent rights and they have issued injunctions to all violators of those rights. Law suits in defense of these patent rights have been planned, (1) to protect their own legal rights, (2) to protect the profession and the public against inferior acrylic products.

They claim that all other acrylic resins for dentures except those trade marked denture materials named under their patents, are produced from commercial grades of methacrylate moulding powders, or from methacrylate scraps obtained from discarded acrylic products. They state further that cheaper commercial grades of methyl methacrylates used in the industries, contain plasticizers, dyes, and other ingredients which make them unfit for use in dentistry.

Ostensibly to protect the profession, but, in reality, to protect their patent rights, the owners discontinued the sale of the powder-liquid form which was greatly in demand by the profession. The discontinuance of the powder-liquid form brought a storm of protests from the profession.

The Research Commission, through its fellowship at the National Bureau of Standards, communicated with Rohm & Haas Company and the Du Pont Company regarding the withdrawal of the powder-liquid form from the market and found their reasons, such as, the explosive nature of the material, dangerous fumes from the monomer, violations of printed instructions, substitution of liquids, mixing by hand instead of by machine, purchasing of boot-legal material, which were insufficient to justify the withdrawal of the powder-liquid acrylic resin from the market.

In spite of the reluctance of the manufacturers and distributors to supply the powder-liquid acrylic resin, the research commission found that it had the following advantages over the gel form: (1) practically age-proof, (2) more economical, (3) more plastic, (4) easier to pack, and (5) the shade can be controlled by the dentist.

Unable to come to a satisfactory agreement with the producers and distributors of these resins, the commission called a meeting of its executive council in Chicago in February, 1940, and invited the manufacturers and distributors to this meeting. The commis-
sion took a firm stand that dentists should be the sole judge of the physical form of the acrylic resin they were to use, and that they would do all in their power to make both the powder-liquid and the gel form available to the profession.

Shortly after the meeting the Du Pont Company notified the Commission that the company had decided to permit the sale of methyl methacrylate denture material in powder-liquid form by the company's licensed distributors. Both forms are now available to the profession.

On April 1, 1940, the L. D. Caulk Company issued restraining orders against all companies and persons supplying resins in powder-liquid form, and circularized the profession with an "important announcement" requiring voluntary licensure of all dentists who desired to use acrylic resins in powder-liquid form. A copy of the "license agreement" was enclosed and the members of the profession were asked to sign and return it to the L. D. Caulk Company.

The entire profession took the firm stand that they were licensed under state laws, and required no further licensure by commercial interests.

During the April (1940) meeting of the Wisconsin State Dental Society a motion together with the resolution as published in the May-June (1940) Journal of that society was sent to the Caulk and Du Pont Companies. These companies were censured for their restraining orders on the use of acrylic resins in powder-liquid form, and for the license-agreement sent to the profession.

The Process Patent Committee of the A. D. A., in the June issue of the A. D. A. Journal, suggested that the membership defer signing the agreement sent out by the L. D. Caulk Company.

Whether the licensure agreement was just a gesture to protect Du Pont against legal difficulties with commercial moulders, or merely an advertising gesture that fell wide of its mark, is not known. Outside of the office of the manufacturer it is generally admitted by commercial representatives that a mistake was made.

The profession by concerted action has again sustained its right to decide what is best for the profession and in turn for the oral health service which it renders to the public.
V. THE NEW HARVARD SCHOOL OF DENTAL MEDICINE

In former reports the Committee has called attention to trends which were regarded as potential threats to the unity of dentistry as it is now practiced. One of these, a paper by Dr. C. D. Leake, revoiced an opinion, prevalent in certain quarters of the medical profession, that dental education should be under the control of the medical profession and that the mechanical procedures of dental practice be delegated to non-dentist technicians. This and similar pronouncements in the past were but a prelude to a more recent attempt at dismemberment of the dental profession which was announced by President Conant of Harvard University on June 17, 1940. With assets totalling $2,550,000 Harvard will inaugurate in 1941 an entirely new five-year course in dental education which will combine the basic knowledge and skills of both medicine and dentistry and is designed to train new types of scientific workers for the attack on the great public health problem of dental disease. The new program contemplates a more complete and formal integration of dental and medical education than has heretofore been attempted in this country. It is a move in the direction of attacking the great public health problem of dental disease at its source—through advancement of the study of causes of such disease and of its prevention. It is hoped that through the plan, the scope of adequate dental protection may be extended to large numbers of our people for whom dental attention is not now available.

Under the new program, the Harvard Dental School will be renamed the Harvard School of Dental Medicine. Dental students will register in both the new School of Dental Medicine and in the Harvard Medical School, taking three and one-half years of the same medical courses as other students in the Harvard Medical School, and in addition one and one-half years of specific dental training. Graduates will receive both the M.D. and the D.M.D. degree.

It is planned to limit admissions to the new school to a small

21Released to Monday morning papers, June 17, 1940. See, also, J. Am. Col. Den., 7, 278; 1940, Sep.
number of (perhaps fifteen) highly qualified men, who will be prepared for certain particular opportunities in the dental field: in teaching, research, special types of practice, general practice, and public health. These men will be equipped to attack the manifold problems of dental medicine in private practice as clinical specialists of particularly broad training, or to teach the science of dentistry in dental schools, or to investigate and treat dental disease in hospitals and clinics.

Certain important changes of method in dental education will be involved, bringing dental education at Harvard closer in line with the methods and standards of medical training. The plan envisages the development, in hospital and other dental clinics, of opportunities for training after graduation. As in the medical school there will be left to postgraduate experience some of the preparation for complete technical proficiency in specialized fields.

Plans for the School of Dental Medicine have been developed by a committee of the Faculty of Medicine composed of eight members, five with the M.D. degree, two with dental degrees, and one with both medical and dental degrees.

Other details of the report, not included in the announcement disclose that (1) the committee's report was submitted to the Faculty of Medicine, not to the dental faculty, (2) the "Administrative Board of the Medical School" is to be renamed the "Administrative Board of the Faculty of Medicine" which will include representatives of the School of Dental Medicine, and (3) the immediate administrative supervision of teaching in the School of Dental Medicine is to be in charge of a Committee on Instruction, headed by the administrative officer of the School of Dental Medicine and this committee is to be responsible to the Faculty of Medicine.

**Discussion of the Harvard Plan**

In discussing the "Harvard Plan" of dental education, this committee will confine its comments to those aspects which imply a change in the present autonomy and unity of the dental profession and involve a threat to the quality of prosthetic oral health service as it is now practiced, namely, (1) the control of dental education
by medical educators, (2) excess medical training for dentists, and (3) implied separation of prosthodontia from the practice of dentistry.

I. THE CONTROL OF DENTAL EDUCATION BY MEDICAL EDUCATORS

The Harvard plan is an excellent example of high sounding phrases designed to encourage financial support for a project which avoids present realities in its quest for vagaries of the future. While such statements may sound logical to those who prefer to give financial support to so-called new and experimental projects, they will hardly win the widespread support of informed dental educators who have seen the collapse of such dental educational projects at Rochester and Yale and who are familiar with medically-dominated-dentistry in Europe.

The Harvard plan is presented by the committee as new and revolutionary, but Dr. Conant states correctly that this idea is not new to dentistry, or to Harvard. Unfortunately there is no reference in the report to the fact that similar plans of dental education in Europe and America have ended in a high score of failures for dentistry, but not for medicine. In Europe where dentists are medically trained, such dentists (1) did not possess technical skills equal to those of American dentists, as shown by the universal preference for American trained dentists in Europe, and (2) they do not conduct more significant researches in the cause and control of dental diseases as shown by reports of such researches. European dental students and practising dentists have come in large numbers and for many years to America to learn American dentistry. On the contrary, American medical students and medical practitioners have gone for many years past, to Europe for medical training.

The high standards of American dentistry are further demonstrated in the recent immigration of dentists and physicians from Europe. All dentists (most of whom are medically trained and possess the M.D. degree) who desire to be licensed to practice dentistry in the United States must complete at least a two-year course in an American dental school and pass the examinations of the State Board of Dental Examiners. On the contrary, many of
the European trained physicians are admitted to medical practice without further training in American medical schools.

These facts justify the conclusion that, European dental education under the control of medical educators (who are recognized as equal to, or perhaps superior to American medical educators) is definitely inferior to American dental education which is under the control of dental, not medical, educators. If medically-dominated dental education were likely to succeed anywhere, it should have been abundantly successful in Europe, precisely where it failed!

For a number of years, the now out-moded dental school at Harvard has been under the immediate charge of the Faculty of Medicine, contrary to the general Harvard policy of having each school under the charge of its own faculty. While the faculties of other schools at Harvard are composed of all teachers including and above the grade of tutor, professors only of the dental school are members of the medical faculty. Further, the report states that medicine has failed to advance dental medicine adequately during the period in which research in other aspects of medicine has made tremendous strides.

These unfavorable conditions under which dentistry at Harvard has struggled for existence are to be expected wherever dental education is dominated by medicine. Medical educators have too many familiar problems of their own to be greatly concerned with the problems peculiar to dental education.

What can be expected of the new school at Harvard under the same medical control which for many years has disregarded the plight of the dental school, allowing it to go improperly supported almost to the point of being discontinued? Can it be that the present endowment is particularly alluring to the medical group at Harvard, especially since the proposed School of Dental Medicine stands an excellent chance of being unsuccessful?

II. EXCESS MEDICAL TRAINING FOR DENTISTS

The danger in a plan that proposes three and one-half years of training "essentially identical with the basic course given in medical school as preparation for medicine" and "one and one-half years
of specific dental training" is that the graduates will be outcasts among the medical and dental professions. Lacking the standard training of the physician and deficient in the exacting and diversified requirements of dental practice these graduates will find no common ground with either profession.

The awarding of two professional degrees, M.D., and D.M.D. in five years cheapens both degrees and degrades the standards of medical and dental education instead of raising them to "equivalence with those of other university discipline". Such disregard for scholastic integrity will do much to bring both medical and dental degrees into disrepute among university educators and the laity.

The report states that this opportunity challenges some one of the leading dental schools of America to become a farsighted pioneer by breaking entirely and sharply with outworn traditions of the present and calls for a transformation of a leading dental school into an institution of higher learning of university caliber.

There can be no doubt that the awarding of two professional degrees in five years is breaking entirely and sharply with traditions of the present. The future will show whether or not the traditions of the present are outworn and how farsighted the Harvard plan really is.

Medical and dental education of the present prepares physicians and dentists to meet the realities of practice and, at the same time, to contribute to the advancement of knowledge of disease through broad experience gained in daily practice.

Dental education which partially trains physician-dentists with the expectation that they will be able to advance understanding of causes and prevention of dental disease is unsound, because after many years of medical supervision, dental education in Europe is decidedly inferior to that in America.

Preponderant medical training is neither the solution to dentistry’s problems nor is it advantageous to dentistry’s future, since it tends to deprive the dental profession of those who are so trained. Having been medically trained, it is natural for the physician-dentist to pursue postgraduate studies in medical specialties, the practice
of which is less confining and requires less technical effort and visual acuity than the specialties of dentistry.

Dentistry insists on having what belongs to it. Today, as in the past, it objects to any subterfuge by which sincere applicants for dental education may be diverted, by high sounding phrases and glowing promises, from pursuing an accredited dental course and from entering the practice of dentistry. Fortunately for dentistry, the American Association of Dental Schools has conducted a study and published a report on the dental curriculum. This report “A Course of Study in Dentistry”, is now used as a guide in curriculum planning by practically all of the forty-two schools which belong to that association.

It appears to this Committee that the Harvard Committee could have shown professional courtesy and received sound counsel and advice by consulting some of the many experienced dental educators who are fellow-members with Harvard of the American Association of Dental Schools. The secrecy attending the preparation of the Harvard Plan would lead dental educators to believe that the dental advisors at Harvard were unusually competent and informed, or, as may be inferred from the report, the medically-dominated committee worked with minds closed to dentistry.

III. IMPLIED SEPARATION OF PROSTHODONTIA FROM THE PRACTICE OF DENTISTRY

The report states that the “achievements of American Dentistry are great, and current dental educational methods produce practitioners able to carry out reparative procedures of mechanical nature with extraordinary precision and ingenuity, but modern dentistry has not been as successful in advancing understanding of causes and prevention of dental disease, or in training dentists capable of solving these problems, as it could be under a different plan of education.”

In spite of dentistry’s ability to successfully carry out reparative procedures, the Harvard plan proposes to decrease the training in this field and to increase training in the medical sciences. This presumption on the part of physicians is difficult to understand in view of the fact that the degree of success resulting from the treat-
ment of dental disorders by dentists is appreciably greater than that attained by physicians in the medical treatment of general disorders. Likewise the resourcefulness and ingenuity demanded in the practice of general dentistry is scarcely rivalled in the practice of general medicine.

Further the lack of understanding in medicine of the cause and cure of diseases would scarcely qualify medical educators to lead dentistry out of the wilderness of its so-called lack of understanding of causes and prevention of dental diseases. Some of the most common diseases are enigmas to the medical profession.

The curtailment of training in the bio-mechanical reparative procedures (not mechanical as stated in the report) sounds the death knell of dentistry. So long as the public suffers from the ravages of dental diseases the dental profession must be trained and prepared to render relief even thought the cause and cure are unknown, just as the medical profession must alleviate suffering by the use of treatment which does not cure. In this respect the dental profession leads the world, since it can repair the ravages and prevent the recurrence of dental disease and at the same time restore the functional efficiency of the dental organs by means of ingenious bio-mechanical devices so that the patient’s comfort, health, and usefulness to society are restored.

To take from dentistry its proficiency in restorative procedures would rob it of the unity of practice which has made American dentistry world renowned. Any plan that proposes to pioneer must make provision for all dental services which the public now receives at the hands of the profession, otherwise a new group of workers will be called in to supply such additional treatment as the public may require. Dentistry has stubbornly and effectively resisted the inroads of all those who, unqualified, have sought to exploit the oral health of the public. Medicine has not; now it is surrounded by groups of licensed practitioners who give peculiar, unorthodox, and sometimes dangerous treatment yet they have entrenched themselves in public favor and hold their position through political power. Dentistry under medical control would be infested with the same
kinds of quacks and pretenders who prey upon the public under the eyes of the helpless medical profession.

The proposed medically-dominated Harvard Plan if widely adopted would lead to the same lack of unity in dentistry that now exists in medicine. The first group of squatters to stake out a claim in medically-controlled-dentistry would be the dental technicians who, at present, are held at bay only by a vigilant and militant autonomous dental profession. This group, who are agitating for licensure, would soon secure the license to practice those aspects of prosthodontia which the physician-dentists had not been trained to do; or regard as beneath their dignity.

This dismemberment of dentistry is not an idle speculation in view of the fact that medically trained dentists (Zahnärztzen) in Germany have been outnumbered two to one by the dental technicians (Dentisten) who are now licensed to practice all phases of dentistry, including insurance dentistry, even though their training does not at all equal that required of Zahnärztzen. Thus the public of Germany is at the mercy of those who, at first, presumed to practice only denture prosthesis, but gradually extended the scope of their service to include all types of dental treatment.

The same appropriation of professional privileges by technicians can and will occur in America unless dental education of the future continues to follow and to perfect the American plan of dental education which under the guidance of dental educators has been increasingly successful in educating dentists to render a complete and inclusive dental service to the public.

The history of dental education both in the United States and in Europe shows that the present broad outlook, the rapid development, the enviable quality, and the professional autonomy and unity of American dentistry cannot be maintained or promoted if dental education is under the control of medical educators.
The work of the 1940 Dental Relations Committee has been so organized as to make each member responsible for some part of the Committee’s activity. Each one, and some others, have been assigned definite duties and they have maintained contacts with many groups who can be and have been of value to dentistry and the public.

1. RADIO

Those of your Dental Relations Committee who were in charge of radio activities, with representatives of the American Dental Association and the American Medical Association, concerned themselves primarily with the control of objectionable radio advertising. Also, positive dental education came in for its share of consideration. The first aim was accomplished by communicating instances of questionable advertising to the Federal Trade Commission who have direct jurisdiction over all complaints relating to radio advertising although they will not act on any complaint unless it is based specifically upon their discovery of false, fraudulent or misleading representation of the product in question. To keep informed as to the activities of the Federal Trade Commission our committee-men are in daily receipt of the Commission’s findings. No action to date has been taken against any dental proprietaries because of lack of definite evidence upon which a complaint could be based.

We wish to state at this time that we are grateful for the close cooperation and helpful suggestions of the Council on Dental Therapeutics. Their experience in relation to ethical advertising of dental proprietaries would be a revelation to anyone not cognizant of the many ramifications of this question, especially in relation to dentifrice advertising. To those of us who desire ethical advertising of dentifrices, based upon the rules laid down by the American Dental

22 The other members of this Committee are (1939-40): L. E. Kurth, T. E. Purcell, Nathan Sinai, Wilmer Souder.
Association, through its Council on Dental Therapeutics, it is enlightening to observe by comparison how the advertising of dentifrices has improved during this past decade. Since the acceptance of the seal by some dentifrice manufacturers, various representations made in their advertising were considered by members of the dental profession to be misleading or undesirable. Those who have followed the advertising program of these dentifrice manufacturers will have noted the voluntary abandonment of certain advertised claims which has resulted in a progressively improved condition.

It is not unlikely that the Council may deem it desirable to introduce other changes in the same dentifrice advertising when reconsideration of these products is undertaken from time to time. The point to be considered is that dentifrice advertising, as a whole, must be scrutinized in orderly sequence, so that there can be no doubt that the Council is acting strictly in accordance with its published rules, which not only govern the use of the seal, but also that there is a strongly implied invitation to all manufacturers to attempt to live up to those rules.

Contact with the American Dental Association was made through its Bureau of Public Relations, in regard to increasing the time devoted to the current dental educational radio programs. They report that the Columbia Broadcasting System has been extremely cooperative in furnishing broadcasting time, and, as the Mutual Broadcasting System is so cooperative with the Chicago Dental Society, the American Dental Association felt it was unnecessary to ask for additional time.

Contacts with the American Medical Association and the Chicago Dental Society were made and maintained throughout the year in relation to radio advertising and dental education by radio.

2. U. S. PUBLIC HEALTH SERVICE,
   CHILDREN’S BUREAU,
   BUREAU OF STANDARDS,
   AMERICAN RED CROSS, ETC.

Members of the Washington section have kept in close touch with the above Governmental and affiliated dental agencies as well as others of similar nature.
The U. S. Public Health Service is conducting research on the effects on teeth of fluorine and other associated salts found in public water supplies.

The national defense program has also received its share of attention and in this connection it might be stated that Dr. C. W. Camelier and his committee are now sponsoring a bill for a comprehensive, general dental research activity. This is an essential element in our national defense program.

The cooperative research between the American Dental Association and the National Bureau of Standards is taking its stride. The lists of certified materials and researches on new materials (such as denture resins) give the profession a valuable service.

A bill regulating the practice of dentistry in the District of Columbia has been passed and signed by the President. One of the important provisions of the act places ethical problems in the hands of a committee on ethics.

Because of the danger of confusion your committee has not appeared as such in most Washington affairs but has confined its efforts to cooperation with the American Dental Association. It has attempted to keep informed as to developments affecting dentistry which so often originate in our National Capitol. It would seem that this attitude is proper.

3. INTERNATIONAL ASSOCIATION FOR DENTAL RESEARCH,
AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE,
AMERICAN ASSOCIATION OF DENTAL EDITORS,
OMICRON KAPPA UPSILON, ETC.

The Baltimore meeting gave the College an opportunity to pursue and continue its fine relationships with the American Dental Association, Canadian Dental Association, American Association of Dental Schools, National Association of Dental Examiners, International Association for Dental Research, American Association for the Advancement of Science, American Association of Dental Editors, and Omicron Kappa Upsilon. All of these organizations cooperated in the meeting of March 17, 1940.
4. BOY SCOUTS, GIRL SCOUTS, ETC.

Our contacts with the various character-building agencies such as the Boy Scouts, Girl Scouts, etc., are not very frequent but are being maintained.

5. DENTAL RELATIONS AND LAY MAGAZINES

We quote from item 3 on page 2 of last year’s report by this Committee:

“A third zone of activity might involve someone whose obligation lay in the development of education through lay magazines. Those of us who saw Life’s pictorial view of dentistry and read the article accompanying it were impressed by the power of such publicity. Among other things, Life emphasized the need of funds for dental research. Doesn’t it seem possible that, if this were followed up, some value might be derived from the suggestion that we need financial assistance? If other magazines were induced to publish articles showing what dentistry is doing in spite of its economic handicaps, doesn’t it seem reasonable that funds might more easily be obtained? This type of activity is in the public interest. The foregoing is but one example of what might be done if programs were organized through these channels.”

Your Dental Relations Committee feels that proper use of lay magazines can be made a vital factor in the development of public dental knowledge. For that reason we have, in 1940, emphasized this phase of our activity and are planning to intensify our efforts in that direction in the future. Dr. E. G. Van Valey agreed to follow up our interest in lay magazines. Because of his familiarity with the Dental Information Bureau which functions in the Greater New York area, Dr. Van Valey has been able to bring to your Committee a valuable experience. He has made numerous suggestions and it seems that the best way to report on this part of our work is to quote from his statement:

“The first official meeting of the Bureau was held on January 17, 1938. During these past two and a half years we have become a practical working organization recognized and respected by news and magazine writers and editors as an authentic source of dental information and as an organization familiar with and capable of providing newsworthy material. More than 80% of our releases have been used.

“Magazine and newspaper response has been gratifying and the results

of our efforts speak for themselves. During this period we have distributed about 200 releases. More than 1000 newspaper clippings have been reported (this represents less than 25% of those actually appearing.) The unusually high percentage of material accepted and used by newspapers demonstrates the fact that educational material for dentistry can be presented as 'news'.

"What has been accomplished in the newspaper field can be effected in the magazine field. Although we already have a laudable record with various national magazines, thus far our work with them has been restricted to providing them with information, requested by them. Our efforts must go further than this. With practically every national magazine having headquarters in or near New York City, we have an opportunity of presenting the story of dentistry to a nation-wide audience. We must take the initiative. Our only hindrance is lack of funds. Despite this hindrance we list herewith those magazines with which we have already cooperated, and which are again available to us: Life, McCall's, Parents Magazine, You, Time, Newsweek, Modern Screen.

"There are other magazines with which we have had contact, but for which thus far, we have prepared no material. They might become more interested and have formed a continuous association if it were made possible for us to deliver acceptable material and meet them regularly. They are: Saturday Evening Post, Ladies Home Journal, Collier's, McFadden Publications (Liberty, etc.), The New Yorker, Fortune, Harper's Bazaar, Cosmopolitan, American, Good Housekeeping, Red Book, American Mercury, Esquire, and others.

"Magazine stories concerning the care of the teeth, their importance to health as well as beauty, the progress of American dentistry and the need for funds to finance dental research, are all subjects which can be turned into interesting magazine material. The advantages of the publication of such material are too obvious to merit additional comment. Through the medium of annual "Press Dinners" we are cementing our friendship and close association with prominent news and magazine writers. These dinners will continue but we must have the means to follow them up. The time and research involved in the creation of a single story is great, but the time seems to be fast approaching when dentistry will need strong and powerful friends to aid in molding public opinion.

"At the last monthly meeting of the Bureau, we had a lengthy discussion of the increasing use which is being made of paid advertising by dentistry as evidenced by the Massachusetts plan and the similar paid advertising set-up of the Akron, Ohio, dental group and others. It was the unanimous opinion of all members of the board that this type of approach, besides being very expensive (actually prohibitive in many large centers) has certain other objectionable features. From the calls that have come to the Bureau from national
publications, it is evident that dental information is sought, and, if any direct effort were made, considerable material could be placed in such publications. Such material would have a much greater reader appeal than any paid advertising. It would cause little, if any, adverse reaction from the profession and cost very much less.

"Here are some specific suggestions for a formal 'tie-up' of the College with the Dental Information Bureau:

1. Elect a member from the College, preferably one from the Dental Relations Committee, to represent the College officially on the New York Dental Information Bureau.

2. The Bureau, in conference with its public relations counsel, (already retained on a fee basis) to work out a plan not only for handling any magazine matters which may come to its attention but also to precipitate such action.

3. This national magazine work would considerably increase the labor of the public relations counsel and it is to pay for this that increased financing would be necessary. The actual amount necessary would have to be discovered by actual trial. As a suggestion for trial over a period of one year, the sum of $1,500 might be used as follows:

a. Twelve hundred dollars additional to Mr. Mork, through whose organization all of the work and most of the contacts will be made.

b. Three hundred dollars for incidental expenses which may develop. The total amount might be underwritten by the College and earmarked for informative material for national coverage.

4. As a check on Mr. Mork, all material released must be authorized by the Bureau. This system is, of course, used by us now with all local releases and has proven very valuable.

"It would seem that the opportunity is present to further develop public dental relations by utilizing the Dental Information Bureau. An organized effort to promote continuous national dental education through channels which reach large audiences should be our aim. Spasmodic, unplanned releases may have some value, but relentless, intelligent application should pay dividends in proportion to the investment and gain for dentistry the attention and friends it deserves and needs."

RECOMMENDATIONS

(1) Your Committee believes that the nature of its work requires a slight increase in its numbers. The addition of two or three members would be helpful, as most of our work is of the personal contact type.

(2) We also believe that, if the College can afford it, a program of cooperation with the Dental Information Bureau such as pre-
viously outlined should be supported. If the College does not feel that it can or should underwrite this project we feel that the attention of such others as might be interested should be invited to the opportunity which exists.

(3) We believe that the Regents should advise the National Defense Committee of the American Dental Association their desire to be used and consulted when and if needed.

8. RESEARCH

PAUL C. KITCHIN, M.S., D.D.S., Secretary

Columbus, Ohio

1. The Committee has devoted its attention to the relationship between medicine and dentistry as one of its problems of major and immediate importance.

2. It recognizes that this problem must be studied in two of its larger aspects.

(a) The relationship in professional practice between medicine and dentistry; and

(b) The relationship in educational activities between medicine and dentistry.

3. The Committee has determined to study the relationship in practice first so that upon this study may be later based, the study of educational relationships.

4. The Committee has resolved that the study of relationships in practice should include:

(a) A collection of case histories illustrative of the relationship between medical and dental practice;

(b) Analysis of such a collection of case histories; a definition of areas of concern in the treatment of the patient, common to medicine and dentistry;

(c) Formulation of principles basic in the relationship of medicine and dentistry; and

(d) Recommendations to the two professions.

The other members of this Committee are (1939-40): L. E. Blauch, W. D. Cutter, J. E. Gurley, P. J. Hauzlik, P. C. Kitchin, A. B. Luckhardt, L. R. Main, L. M. S. Miner, Irvine McQuarrie, Fr. A. M. Schwitalla.

Memorandum on the Committee's Activity Concerning the Relations Between Medicine and Dentistry.
5. Incidental to this discussion, two suggestions were made:
(a) That bibliographies be compiled of studies dealing with the relationships of dental and medical practice; and
(b) That a book be ultimately planned, the content of which should serve as a stimulus to physicians and dentists in developing a closer working relationship in the treatment of each patient.

9. FELLOWSHIPS AND GRANTS-IN-AID IN RESEARCH

L. R. MAIN, D.D.S., Chairman
St. Louis, Mo.

Not many years ago the word research was foreign to dental literature. It was almost a new word; it had a place in many avenues of endeavor, but there seemed to be little use in dentistry for a word with implications of so much meaning. Not until the twentieth century was well on its way did it become current in dental literature.

Research, like the word science, is used loosely in general conversation, and apparently without due consideration of its true meaning. However, a growing appreciation of the meaning of both terms in dentistry is now evident at every turn. Today one of the channels through which the dental horizon has been expanded is in the field of research.

That dentistry has made great strides in the past twenty-five years in operative and prosthetic effort is well known to all, but the factors which make restorative dentistry necessary are still, to a great extent, beyond our grasp. Extensive and intensive investigation along several lines are not only important but necessary if we are to keep step with advances made in other fields of endeavor. As our ideal is to render maximum service to mankind, it seems that the causes of dental ailments must be thoroughly studied.

The intricacies of dental problems are known to every practitioner, but for their solution he may have to look to the research worker. Some theories have been advanced which can scarcely be

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26 Address delivered at the Cleveland Convocation, Cleveland, Ohio, Sep. 8, 1940, as part of the report of the Research Committee.
27 The other members of this Sub-committee are: P. C. Kitchin, A. B. Luckhardt, Irvine McQuarrie, A. L. Midgley, and Fr. A. M. Schwitalla.
supported by careful investigation. Theoretical knowledge must find its practical application at the dental chair, or become a fallacy and of no value in dentistry. The average practitioner and the average dental teacher have neither the time nor the ability to fathom these problems, and therefore cannot make adequate contributions to the advancement of dentistry. In the field of research may be found the answer to these and many other vital questions.

As important as is the repair of lost dental structures, the subject of prevention is more important. If prevention is to be the ultimate goal in dentistry, as it seems now to be in medicine, then further information about dental conditions must be obtained. Nature still withholds some very deep-seated secrets about the human economy. She is slow in divulging the processes by which the destruction of tissue is brought about. Hence the necessity of constant application by some industrious mind to find her methods of work.

The attitude of the American College of Dentists to all dental problems has been of the highest order, always striving for the unselfish advancement of the profession. It would be untimely to emphasize further that fact in this address. But as the whole subject of research is paramount to dental progress, it is therefore of special interest to the members of the College. Our dissatisfaction with conditions as we found them led to a healthy criticism of the limitations of knowledge, and created a desire to push back the horizon so as to include a broader scope of our responsibility. Some three years ago the Committee on Research was appointed to study this problem. The need for moral encouragement and monetary support in the prosecution of some of these problems became apparent.

It will be recalled from previous reports that the activities of the Research Committee have been along three important lines of endeavor, viz., the William John Gies Fellowships and Grants-in-Aid, the Gies Award for Outstanding Achievement in Research, and a Study of Medico-Dental Relationships. Three sub-committees were appointed for detail study and planning in each of the three divisions, and some of the plans are now being executed. Definite progress in two of the three important lines of endeavor has been re-
ported in *Science*; and in our own journals, by the chairman, Dr. Midgley. Much has already been done on the third which has not as yet received any publicity.

It was with pleasure the Committee recommended to the Regents that the initial William John Gies Award be made at the convocation of the College, held at the time of the centennial celebration in Baltimore last March. The award, in the form of a citation, was bestowed upon Peter John Brekhus of the University of Minnesota for distinguished contribution to dental education and research.

Many applications for Fellowships and Grants-in-Aid have been received. It is impossible to grant all of them, but it is necessary to study carefully each individual application, and the applicant himself, his qualifications, his experience, the proposed field of investigation, where the work is to be carried on, and the amount of money asked for must be duly considered in every instance. During this year the first Research Fellowships and Grants-in-Aid were assigned to eight qualified workers in seven different fields of endeavor as follows:

"Inheritance factor in resistance and susceptibility to dental caries in rats."
"The factors in saliva which influence the growth of lactobacillus acidophilus and are indicative of the presence or absence of dental caries."
"The anti-bacterial action of drugs which have been recommended for cavity sterilization."
"The general problems involved in the evaluation of the abrasiveness of dentifrices and their individual constituents."
"The primary centers of lobular development, growth and calcification in the tooth."
"Wound healing after different methods of gingivectomy and post-operative treatment."
"Histologic study of the effect of various mineral deficiencies in dental and oral structures in animals."

The ultimate good to be gained in dental advancement by this activity of the College can scarcely be appreciated at this early date.

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"MEDICAL" SCIENCES: ANickname

An influential factor in the misjudgment that would endeavor to convert dentistry into a specialty of medical practice is the common misinterpretation of the status and import of the so-called "medical" sciences. Many physicians and dentists have concluded erroneously that the so-called "medical" sciences are intrinsic divisions of medicine; that any use of "medical" sciences in dental education and dentistry makes dentistry, to that extent, a part of medical practice; and that dentistry, to become what it should be, must include all details of the "medical" sciences as taught in "courses for the M.D. degree." An associated factor in these misjudgments is the assumption that "medical" science and science of medicine are two terms for the same thing. The science of medicine contains not only the parts of the so-called "medical" sciences that are related to medical practice, but also that additional body of knowledge which, peculiar to the clinical aspects of medical practice, is not included in any of the "medical" sciences. The science of dentistry also consists of much more than an aggregation of parts of "medical" sciences.

When one endeavors to "get down to realities" affecting the "medical" sciences, questions like these arise: Are such divisions of general science as botany, chemistry, physics, psychology, zoology, which are used freely in medicine, called "medical" sciences? Why not? Because they have been developed chiefly outside of medical schools and independently of the interest of physicians. Are such divisions of general science as anatomy, bacteriology, biochemistry, physiology, called "medical" sciences? Yes. Why? Because their development has been actively promoted in medical schools, in response to progressive medical influences, very greatly to the credit of medical faculties. Owing to special medical promotion of these divisions of general science, and to their very direct relation to the development of medical practice, physicians, for their own convenience, have been calling these sciences "medical" sciences. But
"medical" science, as a term, is neither a description nor a definition. It is only a label—a medical provincialism that is equivalent to a nickname.

The unreality of the idea that "medical" sciences are divisions of medicine rather than of general science is emphasized by some well known conditions. The "medical" sciences have been developed chiefly by persons who have not "taken courses for the M.D. degree." It is not necessary for bacteriologists, for example, to become physicians before qualifying as experts in teaching and research in bacteriology in medical schools. Most of the active teachers of "medical" sciences in medical schools have been specially trained in graduate work for their duties in these sciences, and have not received the M.D. degree. Current developments in this field were indicated, ten years ago, by a leading bacteriologist, in the following published statement:

"At the present time over half of the professors of the medical sciences in this country, and a still larger percentage of the essential contributors to them, are not medical men in the strict and old-fashioned sense. This shift in personnel means to me two things: namely, that these sciences are becoming increasingly autonomous and important in their general relations, and that they are becoming 'purer,' by which we mean that their main objectives are theoretical and fundamental rather than practical and applied. These medical sciences, anatomy, physiology, bacteriology and biochemistry, have widely assumed general university importance as educational disciplines, alongside physics, chemistry, zoology and botany, and are no longer simple handmaidens of clinical medicine."—[Italic not in original.]

Individually each "medical" science—because it is primarily a branch of general science—"belongs" unreservedly, like physics or chemistry, wherever it may be applied. When physics or chemistry is used in medical education or practice, medical practice is thereby made more scientific, but does not become a branch of physics or chemistry. When a "medical" science, say bacteriology, is used in an industry that industry is thereby made more scientific, but does not become a branch of medicine or bacteriology. When results of research at an agricultural experiment station—in, say, biochemistry—are useful in medical practice, physicians apply such results

1Gay: Science, 76, 111; 1932, Aug. 5.
freely for human betterment, but do not label these results "agri-
cultural" science; and medical use of scientific facts established at
an agricultural experiment station does not convert any portion of
medicine into agriculture. On the same principle, any fact in any
so-called "medical" science that is useful in dentistry may be appro-
priately used freely in dental education and dental practice. The
use of "medical" sciences for the development of dentistry makes
dentistry more scientific, and therefore more efficient, but does not
change dental practice into medical practice. It would be quite as
appropriate to call bacteriology or biochemistry a "dental" science
as to call it a "medical" science.

Results of biochemical researches about ten years ago, indepen-
dently in an industrial laboratory and in an agricultural experiment
station, showed that mottled enamel is caused by excessive propor-
tions of fluoride in drinking water in districts where this dental lesion
is endemic. Physicians did not participate in this useful discovery.
After important preparatory clinical and scientific work by dentists,
the facts as to causation were ascertained under industrial and agri-
cultural auspices, and became parts of several so-called "medical"
sciences. These conditions of discovery do not restrict to industry
or agriculture the opportunity or obligation to prevent the incidence
of mottled enamel, nor do these circumstances convert procedures
for its prevention into "industrial" science. These scientific results
affecting mottled enamel obviously are freely available not only to
medicine and to dentistry, but also wherever they can be advan-
tageously used, e.g., in water-works engineering and in public sani-
tation. The expression, "There should be more medicine in den-
tistry," is commonly intended to suggest that there should be more
"medical" science in dentistry, i.e., more of the biological sciences
that are basic for each health-service profession, without patent-
rights or royalties for any. One of the aims of current institutional
dental education is the attainment of this desirable scientific objec-
tive, without distortion or disbalance, under the guidance of
informed leadership that understands the actual requirements of
progressive dental health-care.

A term that has long been in common use has a "vested right"
that prolongs its life, despite the verdicts of logic or the indications of preference. In this case, however, there is a growing tendency, even in medical schools, to discontinue use of the term "medical" sciences and to substitute "basic" or "fundamental" biologic sciences—not only as more accurate, but also as less proprietary and provincial.—W. J. G.

**Dental Materials Group of the International Association for Dental Research**

There are several groups that are carrying on worthwhile research in the field of dental materials. Included among them are individual practitioners, a few dental schools, Federal agencies, and many dental manufacturing concerns. Obviously there should be a dental organization in which research men who are conducting investigations in dental materials could hold membership, and before which they could present their findings. As most of the men who are doing such research are not dentists but chemists, physicists, engineers, and so forth, they could not belong to such bodies as the American Dental Association, whose membership is restricted to dentists.

Many of the men engaged in dental-materials research belong to the International Association for Dental Research and, when approached in 1938 about the possibility of forming such a distinct group, responded favorably. Thus was created a Dental Materials Group, before which anyone who has pertinent information on the physical and chemical properties of dental materials can get an audience and have his findings criticized. During the first three years of the Group's existence, it has served this purpose admirably. To Floyd A. Peyton (chemist), School of Dentistry, University of Michigan, goes the credit for organizing the workers and guiding the Group during its initial endeavors.

The present officers of the Group are: Chairman, N. O. Taylor (chemist), S. S. White Dental Manufacturing Company; Vice-chairman, P. B. Taylor (physicist), Sanitary Corps, United States Army; Secretary, E. W. Skinner (physicist), Northwestern University Dental School; Treasurer, W. T. Sweeney (physicist), American Dental Association Fellow, National Bureau of Standards; Coun-
EDITORIALS

cillor, W. S. Crowell (chemist), S. S. White Dental Manufacturing Company; Editor, R. L. Coleman (engineer), J. M. Ney Company. These men typify the heterogeneous training, experience, and environment of the Group’s membership.

The principal benefits that may be expected from the organization of this Group are (a) the circulation of much technical material that heretofore has been buried in the files of manufacturers’ laboratories; and (b) the open discussion of controversial issues in the testing and formulation of specifications for dental materials. These advantages are now assured. Men from the dental industry will hereafter have ample opportunity to present scientific data at meetings for the advancement of dental research.—G. C. P.

PROPOSED BULLETIN OF A. D. A. ACTIVITIES

According to those who have made a study of the reading habits of the public, the average reader dislikes to be jarred by a new idea. This, it is agreed, applies to the average professional, as well as to the average lay reader. In the case of the average dental reader, this innate aversion to disturbing new ideas has no doubt been intensified by what Dr. William B. Dunning described as “the easy going regime of the proprietary journal.” So, it is not surprising that dentistry’s development of an adequate, non-proprietary journalism proceeds haltingly and indifferently. Belief in the ancient folly of expecting to receive “something for nothing” is an influence that is hard to overcome.

The Journal of the American Dental Association, representing as it does the organized dental profession in the United States, is obviously the most important periodical in dentistry. In it are now combined the functions of both journal and bulletin. Many of its pages are devoted to organization activities and, because the state and county publications that comprise so much of our journalism are limited in circulation, it is the medium of choice for most dentists who prepare scientific articles for publication. As a consequence, although the “J.A.D.A.” begins to assume the proportions of a mail-order house-catalogue, it lags far behind in the scientific procession. The recent March issue, for example, presented two scientific articles that had been read at meetings held thirteen months previously; one
scientific article that had been read at a meeting held ten months previously; five scientific articles that had been read at meetings held six months previously; and two scientific articles that had been read at meetings held five months previously. This record is reminiscent of the response by the Chairman of a Necrology Committee who, upon being aroused from a sound after-dinner nap by a request for the report by his Committee, answered impulsively: “Progress, Mr. President, progress!”

This is not to say that there exists any present need for more dental periodicals. On the contrary, as was pointed out in the report of the Commission on Journalism of the American College of Dentists (1932)¹: “Existence of so many dental publications seems to be unwarranted, and is evidently productive of much waste of funds, and unnecessary duplication of effort. Serious attention to this problem is recommended to the end that dentistry will have fewer, but more important periodicals.” This is a consummation devoutly to be wished, but we believe there remains an opportunity to improve and to add to our journalism by making two important publications grow where only one grows at present. We refer to our “national journal.”

During the past few years the Committee on Economics of the American Dental Association has been distributing a monthly “release” of items of more or less interest to the editors of dental journals, and many of these syndicated articles are being published. But, as some critics have pertinently observed, this is a service that tends to produce a “paste-and-scissors” type of journalism, which is not conducive to the highest standards of editorial effort. It is a service that may well be discontinued. If, in its place, the A.D.A. would publish a monthly bulletin of organization activities, such as now are currently reported in the “J.A.D.A.,” from fifty to eighty more of that Journal’s pages each month would be available to the Editor for advantageous use in his endeavors to keep pace with the profession’s scientific output. While this would not solve the problem of providing an adequate, non-proprietary dental journalism, it

would expand one bottle-neck and, by that much, would widen the profession's journalistic horizon.—C. F. H.

Dental Students Register—1940

The Council on Dental Education has recently released the 1940 report,¹ a study of which reveals some interesting information. It consists of a series of ten tables, which upon analysis show the following:

Table No. 1 presents enrollment figures for each of the four college classes, with a loss of thirty per cent of students from freshman to senior class.

Table No. 2 gives the total enrollment of all schools for each year from 1932 to 1940, both years included. The year 1940 shows a greater enrollment than the year 1932, although all the intervening years had enrollments smaller than 1932. Prior to 1932 enrollments in dental schools were very large with the result that graduating classes held up moderately well for a time following that year. But since 1932 total enrollments dropped. Now, the fact is, enrollments dropped; reasons for this are no doubt factual though it may be hazarding an opinion as to what the facts are. Two reasons do appear to stand out: first and most important was the economic situation, and second, extension of the course of study had no little to do with it, for those who might otherwise have entered dental college from high school directly were forced into the two years of pre-dental study. In these latter years, the economic situation has picked up a little, but in addition to that, we have now caught up with the extension of time of study so that we may see enrollments increasing.

All of the above has to do with the total enrollment. The graduating classes present a little different picture. This year, 1941, shows a possible number graduating to be 1601, as of October 15, 1940, but it may be reduced approximately to 1550 by the end of the school year. This is the smallest number of graduates since 1920. In 1906 there were 1519 graduates, and in 1896 there were 1432. With the greatly increased population since that date and the present call

¹See J.A.D.A., 28, 835; 1941, May.
of the army, we stand to be short by considerable of a normal supply of dentists. This no doubt is but a temporary condition of things, and on readjustment of our social and economic relations after this world holocaust is over, this condition will stand to be corrected.

Table No. 3 presents data relative to pre-dental studies. It is interesting to note the large number of students who have had more than the required two years of academic work, and the surprisingly large number who have a bachelor’s degree. In the freshman class of 1940, nearly one-fourth of those taking dentistry have this degree.

Table No. 4 indicates twenty-five per cent of those graduating in 1940 had a bachelor or other degree. The majority had the required two years.

Table No. 5 shows a gain in the number of students graduating with a bachelor or other degree from 1935 to 1940.

Table No. 6 shows the distribution of all undergraduates by states.

Table No. 7 presents the situation concerning present-day faculties. About one-fourth of the teachers are employed on full time. Nearly one-third have a bachelor’s degree. A few more than one-eighth have a master’s degree. Nearly one-twelfth have the degree of philosophy and nearly one-sixth have the medical degree. Less than one-fifth of faculty members are selected from graduates of other schools.

Tables 8, 9 and 10 have to do with questions not especially pertinent to this consideration and are therefore omitted.

These tables are interesting in that they appear to reveal present tendencies in dental education. There is a considerable loss of students during college days, probably due to the fact that the student finds he is not fitted for a professional career. This is the time to stop and he stops. There has been an irregular decrease in the number of students from 1932 until in 1940 the total enrollment passed that of 1932. There is an increasing number of students with the A. B., B. S., M. A., M. S., Ph. D., or M. D. degree. This is as it should be and augurs well for the future practitioner of dentistry. However, it is not to be conceived that dental ills may be treated by college degrees any more than the number of degrees may indi-
cate the caliber of a teacher. They do, nevertheless, serve as an index to the ability of the man.

The situation regarding faculties is at once interesting and instructive. The part-time teacher still holds his own and always must so far as professional schools are concerned. He brings an intrinsic "something" to the student, not to be had from the full-time teacher. He brings the atmosphere at least of that which is required of one out in the field of practice. But both full-time and part-time teachers are possessors of degrees other than D. D. S. in increasing numbers. Here again, this does not in itself indicate better teaching, but it does indicate a desire to advance, and should mean better teaching. Nor is there any doubt but that it does. It does mean more research and this means more knowledge by both teacher and taught. This last thought takes us back a quarter of a century, to the time when we had no research and to the battles of those early days for funds that research might be inaugurated.

Faculties are in the main made up from graduates of their own schools. Just as research has added to the sum total of our knowledge and has forced men into deeper study, thus gaining other degrees and in turn advancing dentistry both in teaching and in practice, so, too, if more teachers were sought from other schools, new ideas and new methods might be introduced which would add another rung to our ladder of advancement. On the whole, however, much satisfaction may be had in the advance that has been made, and all eyes will now be turned to those who are to lead in the era ahead.

DENTISTRY: A DIMINISHING PERSONNEL

During the last decade the total number of dentists in active practice in this country has been decreasing. This means that more dentists are lost to practice through death, disability or retirement than are coming into practice. That this decrease has reached alarming proportions is evidenced by the fact that this year approximately 1600 seniors will be graduated from dental schools, and 2200 dentists will retire from practice from one cause or another—an anticipated net decrease of about 600 dentists. Why is this so? Perhaps it is because other professional, trade, or business careers appear more promising to the prospective student in view of the comparatively
expensive training involved. What other basic reason could there be? If this is true, it is true because you and I, and the dental profession as a whole, have not interested promising young people in dental careers. How many young patients have, through your efforts and persuasion, decided to make a life career of dentistry? My count is zero but it is not going to stay there.—G. C. P.

IS THE M.D. DEGREE A PREREQUISITE FOR EFFECTIVE RESEARCH IN DENTISTRY: A FOOTNOTE

The issue of this Journal for March, 1941, contained a paper (pp. 1–8) showing that the M.D. degree is not a prerequisite for effective research in either medicine or dentistry, and accordingly that the stated major purpose of the new dental program at Harvard University is based upon a fallacy. An addition to the facts stated in that paper, in harmony with them, is contained in the following more recent observation:

The second edition of the international volume on “Dental Caries,” compiled for the American Dental Association—now in press—contains summaries of findings and conclusions on the causes and control of dental caries by 237 authors, or groups of authors, representing accumulated research in this field in twenty-six countries. The book presents the academic and professional degrees received by the authors. Of the total number of authors and co-workers, 55 have received the M.D. degree. Notwithstanding the earnest efforts of these 55 physicians among the many workers in caries research—which it is hoped that they and many more physicians will extend—agreement as to how dental caries may be prevented has not yet been attained. There are no indications in the said volume that the research accomplished by dentists has been inferior, in any respect, to that done by those who received the M.D. degree.—W. J. G.

DENTISTRY AND SELECTIVE SERVICE

What has happened during the past few years? We have labored earnestly as a profession that we might provide those dependent upon us with adequate dental care and we have even been boastful of the proficiency of that care. We have spread the gospel of prevention and have extended our service among children that they
might grow up with better teeth than did their progenitors. But now that we are confronted with the registration of a large part of our young men, what do we find? A glance at the following table may serve as a notice that something is wrong somewhere:

<table>
<thead>
<tr>
<th>Defect</th>
<th>Percent of Total Rejections</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Selective Service</td>
</tr>
<tr>
<td>Teeth</td>
<td>18.55</td>
</tr>
<tr>
<td>Eyes</td>
<td>10.56</td>
</tr>
<tr>
<td>Cardiovascular system</td>
<td>10.06</td>
</tr>
<tr>
<td>Musculo-skeletal defects</td>
<td>8.36</td>
</tr>
<tr>
<td>Mental and nervous</td>
<td>6.24</td>
</tr>
<tr>
<td>Ears</td>
<td>4.45</td>
</tr>
<tr>
<td>Hernia</td>
<td>4.20</td>
</tr>
<tr>
<td>Lungs</td>
<td>3.86</td>
</tr>
<tr>
<td>Venereal</td>
<td>3.49</td>
</tr>
<tr>
<td>Feet</td>
<td>3.07</td>
</tr>
</tbody>
</table>

72.84  82.01

Are we to be found wanting? Or is there too great a number for us to serve adequately? Or is it that the people just do not visit the dentist?

According to these figures, teeth serve as the principal cause of rejections, both in Selective Service and in the Army. This fact should serve as a warning, and the profession must not let the opportunity pass to correct this evil. Somehow we must lay plans to reach more of our people. This is a big job, but it is the one now confronting us.
CORRESPONDENCE AND COMMENT

SUBORDINATION OF DENTISTRY IN GOVERNMENTAL SERVICES

In the Proceedings of the Board of Trustees and Reports of Officers and Committees of the American Dental Association, September 9-13, 1940, appeared the following very illuminating report of the Legislative Committee, on the status of the dentist in the governmental services (pp. 49-50):

"The Committee on Legislation respectfully directs the attention of the Board of Trustees to the subordinate position of dentistry and the dental officers in governmental services, a subject of some considerable study by the committee over the past several years.

"These governmental services are the Army Dental Corps, the Navy Dental Corps, the United States Public Health Service, the Veterans Bureau, the Civilian Conservation Corps, and we may consider also the possibility of a new dental agency as proposed by the National Health Program Committee.

"Since dental service is rendered in all existing governmental agencies enumerated above, it is of importance that the dental profession announce the same policy of administration with regard to these existing dental agencies as well as to any proposed dental agencies.

"The Committee on Legislation is concerned with the establishment of a basic policy for dental administration in all public health agencies. The committee directs your attention to regulations now in effect in governmental agencies which do not permit the dental officer equality in administrative authority with the medical officer in spite of the equality in rank provided by law.

"We further find that a study of the qualifications for commission in these services reveals no disparity in professional standards or administrative ability. It would, therefore, appear that no basis exists for the denial to dental officers of administrative authority on an equality with medical officers in governmental service.

"While proper dental administrative authority is essential to the efficiency of governmental dental services, the committee is opposed to any plan which would disturb the present basic organization of government medical departments.

"We, therefore, have arrived at the following conclusion: no adequate administration of dental service can be hoped for until the dental personnel
of the governmental agencies are granted administrative authority by regulation or law and charged with all activities pertaining to dental personnel, service, training and supply under the direction and authority of the respective Surgeon Generals.

"The Committee on Legislation respectfully recommends that a policy be adopted by the American Dental Association, the aim of which shall be the establishment by regulation or law of balanced administrative authority between the dental and medical professions, in all federal agencies providing dental health service.

[A. B. Patterson, Chairman; Charles D. Cole, Vice-Chairman; W. N. Hodgkin, Chas. J. Baumann, Carl O. Flagstad, Committee on Legislation].

"... It was voted that the report be referred to the Contact Committee on Legislation..." [Italic not in original.]

Does this reference mean consignment to action or inaction? (4).¹

Comment. We commend to the said Contact Committee the following philosophy, as directly applicable to the situation indicated in the foregoing report: Independence with interdependence, i.e., coordination without subordination, of professions—animated by understanding, good-will and sympathy, and based on the Golden Rule—is a useful and persuasive working ideal for the promotion of efficiency and contentment in all relationships.—[C. Ed. (4)].

"FILLING TEETH WITH COLLEGE DEGREES"

The following statement, under the above caption, was written by a leading dentist, as an expression of some of his present views:

"In this age of intellectual specialization, we swallow a mass of facts about some phase of dentistry and lose a broad comprehension of the practical. You can't fill a tooth with a college degree; or extract a tooth with a dissertation on the condition of dentistry in the United States in 1880; or construct an inlay with a discussion of the average patient's reflexes. In recent years there has risen a school of practitioners who would have you think so. They write for the dental magazines. They wonder about the results of mating between a black fly and an albino. Will the offspring be white or black? Or two whites and one black? Or vice-versa?

"Here is another one that bewilders. If all the triangles as drawn in our periodicals are shown on a mechanical articulator, will the upper and lower dentures work, i.e., when transferred from a mechanical to a muscular status—to the oral cavity and surrounding tissue—will they give a proper

¹The terminal numerals in parenthesis are inserted for purposes of identification in the records of this Journal.
result to the patient in a physiological rest position? Our periodicals stress socio-economics, guarding frontiers of public interest, the value of research work, and other intellect-popping factors. But rarely do you find an exposition on how to work an inlay into a shattered molar. You would think, to read our periodicals, that dentists are units in an army of scholars whose lives are devoted to the splitting of intellectual hairs. We are not. Working, we are strictly mechanics, dealing at first-hand with mechanical problems. Some of the problems require the utmost in skill and craftsmanship in our profession.

"Oh for a return of Allen, Darby, Gritman, Peso, Seymour—God save Jacko, Zerphing, and others with their slant! Their habit was to sit beside a student and demonstrate how and why. They didn't do it by expounding a theorem like $2 \text{HCl} + \text{FeS} \rightarrow \text{H}_2\text{S} + \text{FeCl}_2$. They merely showed him how to repair a lame tooth and, by this particular technique, prevent possible abscesses and other future pathological conditions. An ailing tooth needs treatment, not scholarly discussion. Essays are static.—Horse and Buggy Dentist."

The foregoing—considering its source and the high standing of its author—is further evidence in support of the view, held by many, that "only a small proportion of American dentists read articles of over three pages on any subject whatever."—(5).

Comment. The author of the foregoing statement on "filling teeth with college degrees" intimates much that is true, but probably resorted to distortion for the sake of emphasis rather than persuasion. He seems to have reacted explosively to the Harvard proposal to make "bigger and better" dentists by giving a few "superior persons" M.D. (⅔) and D.M.D. (⅔) degrees, as symbols of more theoretical medicine and less practical dentistry than the "dental degree" now conventionally represents. The conditions he derides do not interfere in any way with the full development and appropriate application of the mechanical procedures and requirements of the most competent dental practice. In his concentration on the need for treatment he seems to have forgotten all about prevention and the need for research to achieve it. His high standing in the dental profession implies that he knows that dental practice was never more competent, or more highly appreciated by the public, than it is now; and that dentistry's health-service is steadily becoming more comprehensive in scope and more effective in character. He knows that
cooperative work in Government laboratories has been facilitating the best possible service of the kind he exalts. The magazine articles he ridicules deal with the principles and theories on which professional growth depends. Perhaps he knows, but temporarily ignored, such outstanding examples of "impractical men" as Pasteur, who was derided by the contemporary medical profession as a chemical theorist, yet who—although most physicians of his day were annoyed by their inability to understand his chemical formulas—made the greatest discoveries in modern medicine, and thereby facilitated varieties of preventive and remedial treatment that are now routine triumphs in every-day medical practice. Pasteur's published articles were incomprehensible to physicians who regarded themselves as very practical. But men of understanding afforded the leadership that brought to medical practice improvements that Truth always assures in any long contest with Error, even when "authorities" back the latter. The number of dentists who are not active readers of dental or other literature may not be as large as the increasing responsibilities of dental service require of each faithful practitioner. But it is very evident that sustained trends in institutional dental education, and the increasing attention given to graduate ("continuation") courses for practitioners, are bringing about steady multiplication in the number of young practising dentists who continue systematically to be real students. These are, and in growing number will be, the readers of dental journals—and they are looking to dental journalism not only for information but also for professional leadership and inspiration. Dental practice is not only hand-work but also head-work.\-[C. Ed. (5)].

"Oral Diagnosis:" What Does It Mean?

What is the meaning of "oral diagnosis?" There is an American Association for the Advancement of Oral Diagnosis. Why? What is it all about? (6)

Comment. The term "diagnosis" is a combination of two Greek words, one of which means "between" or "apart;" the other, "knowledge." Together—as "diagnosis"—they mean knowledge acquired by noting resemblances and differences—a process of discernment. "Diagnosis," as a term and process, has long been used
in many fields to signify scientific discrimination of any kind. Thus, in botany and zoology, it is used for specific characterization, for exclusively pertinent definition; and objects of natural history are distinguished by “differential diagnosis.”

In all divisions of health service, “diagnosis” signifies the act, or art, of determining the nature, location, causes, progress or decline of an existing disorder; or of distinguishing one disease or condition of disease from another; or of achieving related definitions. In health service, diagnosis is an intellectual effort, by any of all available means, to establish understanding on which to base procedure—to plan treatment.

Many adjectives are commonly used to indicate, loosely or accurately, various conditions, methods, or procedures in the diagnosis of diseases. Among these are clinical, differential, direct, group, laboratory, pathologic, physical, regional (topographical), roentgen (x-ray), serum. These adjectives emphasize ways and means by which diagnosis may be achieved. Only one of these terms—regional (topographical)—refers, or is related to localities in which diseases may occur; and, in its specific use, the concept of region applies to any locus of occurrence as merely a factor in the complete understanding of an existing disorder and its relationships—regionally close or remote. Thus, the disease may be located in any particular part, and a determination of the relationships, treatment, etc., of that disease thereby facilitated. But, excepting “oral diagnosis,” the writer has never heard the diagnosis of disorders in a part of the body referred to seriously as diagnosis of that part—never of, say, disease of a kidney as “kidney diagnosis.” Of course—with the abandon of a nickname—the term “kidney diagnosis” might be used loosely and colloquially by some to mean “diagnosis of disease of the kidney.” But for those in this secret, K.D. would be shorter, mean as much, and do as well.

“Oral diagnosis,” as a term, appears to be in a class with such curiosities as “kidney diagnosis.” As a term—a nickname—“oral diagnosis” seems to imply intent to allude to application of all the accumulated ways and means for the diagnosis of diseases within the oral domain, and in any part of that domain. Just how far back in
the mouth, or how far up or down at its posterior portion, the domain of “oral diagnosis” extends—and whether the lips are included in it—has probably been left to the discretion of those who use the term “oral diagnosis.” The anomaly of “oral diagnosis,” as a term, is emphasized by its conversion into literal equivalents, e.g., “mouth diagnosis” and “diagnosis of the mouth,” which obviously are inept. Using, for purposes of illustration, the same test of the import of the term “oral hygiene,” one sees that “mouth hygiene” and “hygiene of the mouth” are not incongruous and need no explanation. Diagnosis is an intellectual procedure to an objective in understanding and discrimination; hygiene is a physical condition related to procedures for the maintenance of health. The same adjective may not apply to them with analogous effects.—[C. Ed. (6)].

NOTES

DR. RUDOLF KRONFELD’S OPINION OF IPANA TOOTH PASTE

The Federal Trade Commission’s Docket No. 3872, “in the matter of Hearst Magazines,” contains ten volumes having a total of about eight thousand pages, and gives the testimony relating to Good Housekeeping’s testing, approval, and seal. Of special interest to dentists is the testimony of the late Doctor Rudolf Kronfeld, eminent histopathologist and former President of the American Academy of Periodontia—and at his death President-elect of the International Association for Dental Research—part of which follows (pages 1072-74; Nov. 29, 1939):

“Q. Doctor, are you familiar with the dentifrice known as Ipana toothpaste?

“A. Yes.

“Q. You know its principal ingredients?

“A. Yes.

“Q. Will it have any substantial effect on the gums?

“A. No.

“Q. In the cleansing of the teeth with the use of a brush and paste, which of the two affects the teeth substantially?

“A. The brush.
"Q. What is that?
"A. The brush.
"Q. Does the dentifrice Ipana, or any other dentifrice, have a substantial effect on the gums and the teeth?
"A. No. It may have in the cleansing to some extent, but the major cleansing action is that of the toothbrush bristles.
"Q. Will Ipana or any other toothpaste prevent pyorrhea?
"A. No.
"Q. Will it prevent pink toothbrush?
"A. No.
"Q. Will the use of Ipana as a massage have any appreciable effect on the gums?
"A. No.
"Q. Would a massage without Ipana be as effective as with it?
"A. Yes.
"Q. Will the use of Ipana toothpaste have any effect in preventing gingivitis, Vincent's disease, or pyorrhea?
"A. No.
"Q. Will the use of Ipana massage mean sparkling teeth and healthy gums?
"A. No.
"Q. Can you rub Ipana into your gums when you brush your teeth?
"A. Not to my knowledge.
"Q. Have you found it to be a modern dental practice to encourage the use of Ipana plus massage?
"A. Not among the dentists that I know of."—[C. Ed. (3)].

COMMERCIAL GRANTS FOR RESEARCH IN UNIVERSITIES

The question often arises: Can a professional school in a university appropriately accept funds from industrial organizations to support research having commercial import? In some universities the answer is No. In others, the answer is Yes. In universities which permit members of faculties of professional schools to conduct, in university laboratories, research having industrial correlations, worthy plans always include agreements that the research shall be done responsibly for the establishment of truth and not to promote commercial propaganda; and also that those who perform the experiments shall conduct them as true research unaffected by any com-
mercial bias or any other prejudgments. An illustration of current procedures in such relations was stated in detail for the Northwestern University Dental School, in the issue of the *Northwestern University Bulletin* for April 7, 1941 (vol. 41, no. 24, p. 10), a portion of which follows:

"Believing that the alumni and friends of Northwestern University Dental School have a legitimate interest in the conditions under which . . . grants [in support of special research projects] are accepted from a commercial organization, the faculty has authorized the publication [below] of the usual agreement.

"The conditions under which a fellowship grant may be accepted by Northwestern University Dental School from a commercial organization are as follows:

"1. The study will be directed solely by a committee of the faculty.

"2. The results are assembled and discussed by those taking part in the study, with the faculty committee, and publication of all or any part of the findings is made only by direction of the committee.

"3. Public use of information obtained in these studies by the grantor of the fund is by agreement limited to material authorized for publication.

"4. It is understood that neither the name of the School nor [of] any one connected with the faculty will be used in any manner whatsoever in connection with advertising or other publicity.

"5. Articles published which are reports of studies under this grant will carry the following statement: 'This study was made at Northwestern University Dental School, aided by a grant from . . . . . . . . . . . Company.'

"6. The officers and employees of the grantor will be welcome to discuss the problems and offer suggestions, but shall have no authority to direct the course of the investigations.

"7. Reports of progress will be made to the grantor from time to time, but no part of such report may be used in advertising or other public statement except after publication authorized by the committee.

"8. An initial sum agreed upon shall be deposited with Northwestern University Dental School and other payments shall be arranged for a definite period.

"9. Northwestern University Dental School agrees to use its best judgment in directing the study along the general lines of the initial plan, and further agrees to utilize the funds as advantageously as practical. No agreement or promise is made regarding results to be obtained and publication of findings will be entirely at the discretion of the committee of the faculty."
A concluding note presents this additional comment:

“At the present time, the School is working with funds furnished by the following philanthropic organizations and commercial companies:

- Abbott Foundation for the study of cleft palate and associated diseases;
- Abbott Foundation for chemical research;
- Alumni Foundation of Northwestern University for general research;
- Good Teeth Council for Children grant for studies in dental caries;
- Colgate-Palmolive-Peet Company grant for studies in oral hygiene;
- Lambert Pharmacal Company grant for studies in oral hygiene;
- Xtrrium Company grant for studies in the cause of periodontal disease.

All of these grants are for the purpose of promoting the advancement of dental science and the health and well-being of the people. The dental profession and the public whom it serves will be the beneficiaries of the results obtained, since any accomplishments in these researches will be freely presented to the profession.”—[C. Ed. (4)].

**Allergy To Novocain**

Some dentists develop dermatitis when handling novocain. However, there is a possibility that, in individual instances, this seeming allergy may be masked by, or at least confused with, hypersensitivity to other materials. This possibility is indicated definitely in a discussion of allergy by that eminent authority, Dr. Warren T. Vaughan, in his book entitled “Strange Malady—The Story of Allergy” (Doubleday, Doran & Co., New York, 1941; 1st ed.), from which the following is quoted (p. 212; italic not in original):

“A dentist was allergic to novocain, developing eczema of the hands after each tooth extraction. This is not uncommon. He wore rubber gloves, using every precaution to avoid handling novocain, but continued with his attacks of eczema. *Patch tests showed sensitization to latex rubber gloves. He was negative to one of the older types of composition rubber. After changing the brand of gloves he ceased having trouble.*”—[C. Ed. (5)].

**Sales by Dental Supply-Houses**

The following note in *Dental News* for April, 1941 (page 14), presents an interesting summary of sales data in the business of dental supply-houses during the year 1939, including comparative data for the years 1929 and 1935 that show some effects of the depression and of the trend to recovery:

“Sales of dental supply-houses amounted to $31,917,000 in 1939, an
increase of 37.6 per cent over the total recorded in the previous census for 1935, but 5.9 per cent below 1929, according to an announcement by William L. Austin, Director of the Census, last month. There were 324 establishments in business in 1939, according to Mr. Austin's report, and they did an average business of $98,509. A summary of facts disclosed for the census years 1939, 1935, and 1929 is shown in the accompanying table.

<table>
<thead>
<tr>
<th>Year</th>
<th>Establishments</th>
<th>Sales</th>
<th>Proprietors</th>
<th>Employees</th>
<th>Payroll</th>
</tr>
</thead>
<tbody>
<tr>
<td>1939</td>
<td>324</td>
<td>$31,917,000</td>
<td>155</td>
<td>3,200</td>
<td>$5,237,000</td>
</tr>
<tr>
<td>1935</td>
<td>256</td>
<td>$23,202,000</td>
<td>110</td>
<td>2,416</td>
<td>$4,120,000</td>
</tr>
<tr>
<td>1929</td>
<td>276</td>
<td>$33,901,000</td>
<td>2,700</td>
<td>4,753,000</td>
<td></td>
</tr>
</tbody>
</table>

"The report shows that the largest number of houses and the greatest volume of sales are to be found in New York State, where 64 dental supply-houses did a total business of $6,585,000. California's 37 establishments did $2,904,000 worth of sales, and Illinois, with its 22 establishments, had sales of $1,924,000. The report shows that dental supply-houses, in 1939, averaged 10 employees per house for a total of 3,200 employees, who received in salaries and wages during the year $5,237,000, or an average of $1,637 per employee." — [C. Ed. (6)].

ERRATA

On page 55 of the March issue of the Journal, there appeared the name, F. William Sunderman, D.D.S., which should read F. William Sunderman, M.D., Ph.D.

DEATHS


Alfred Enloe, Atlanta, Ga. Died Feb. 12, 1941.
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., 2, 199; 1935):

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., 2, 173; 1935). 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 confidentially 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 test, 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.
GUIDEPOST

TO BETTER DENTISTRY

WILLIAMS XXX
ONE OF DENTISTRY'S FINEST PARTIAL DENTURE CASTING GOLDS
AMERICAN COLLEGE OF DENTISTS
STANDING COMMITTEES (1940-1941)

Certification of Specialists—E. W. Swinehart (45), chairman; Max Ernst (42), H. C. Fixott (44), W. E. Flesher (41), C. O. Flagstad (41), J. O. McCall (43).

Education—W. C. Fleming (44), chairman; A. W. Bryan (43), Harry Lyons (45), J. T. O'Rourke (43), R. S. Vinsant (41), L. M. Waugh (42), F. W. Hinds (42).

Endowments—A. H. Merritt (42), chairman; H. J. Burkhart (45), Dan U. Cameron (41), Oscar J. Chase (44), Wm. J. Gies (45), E. W. Morris (43).

History—W. N. Hodgkin (44), chairman; W. H. Archer (45), H. L. Banzhaf (41), E. E. Haverstick (42), J. B. Robinson (43).

Hospital Dental Service—Howard C. Miller (43), chairman; R. W. Bunting (44), E. A. Charbonnel (45), L. M. Fitz-Gerald (41), Leo Stern (42).

Journalism—J. Cannon Black (45), chairman; J. M. Donovan (45), W. B. Dunning (44), Walter Hyde (44), B. E. Lischer (43), T. F. McBride (41), E. G. Meisel (42), E. B. Spalding (44), R. C. Willett (42).

Necrology—J. V. Conzett (41), chairman; F. H. Cushman (42), P. V. McParland (45), R. H. Volland (43), M. L. Ward (44).

Nominations—H. E. Friessell (45), chairman; E. N. Bach (41), G. M. Damon (44), H. O. Lineberger (43), H. W. Titus (42).

Oral Surgery—M. W. Carr (41), chairman; E. R. Bryant (42), C. W. Freeman (44), W. I. Macfarlane (43), W. H. Scherer (45).

Preventive Service—L. A. Cadarette (45), chairman; Hermann Becks (44), C. S. Foster (43), E. M. Jones (42), E. W. Swanson (41).

Prosthetic Service—W. H. Wright (43), chairman; W. H. Grant (41), C. A. Nelson (45), A. P. O'Hare (42), A. H. Paterson (44).

Relations—J. O. Goodsell (43), chairman; H. F. Hoffman (45), L. E. Kurth (41), T. E. Purcell (44), Nathan Sinai (45), Wilmer Souder (42), E. G. Van Valey (45).

Research—A. L. Midgley (42), chairman; L. E. Blauch (44), W. D. Cutter (43), J. E. Gurley (42), P. J. Hanzlik (45), P. C. Kitchin (43), A. B. Luckhardt (41), L. R. Main (44), L. M. S. Miner (41), Irvine McQuarrie (45), Fr. A. M. Schwitalla (44).

Socio-Economics—C. E. Rudolph (43), chairman; E. H. Bruening (44), W. R. Davis (41), Waldo H. Mork (43), B. B. Palmer (45), M. W. Prince (45), Maurice William (44), G. W. Wilson (42).

Announcements

Next Annual Convocation: Houston, Texas, Sunday, October 26, 1941.

Fellowships and awards in dental research. The American College of Dentists, at its annual meeting in 1937 [J. Am. Col. Den., 1937, 4; pp. 100 (Sep.) and 256 (Dec.)], inaugurated plans to promote research in dentistry. These plans include grants of funds (The William John Gies Fellowships) to applicants, in support of projected investigations; and also the formal recognition, through annual awards (The William John Gies Awards), of distinguished achievement in dental research. A standing committee of the International Association for Dental Research will actively cooperate with the College in the furtherance of these plans. Applications for grants in aid of projected researches, and requests for information, may be sent to the Chairman of the Committee on Dental Research of the American College of Dentists, Dr. Albert L. Midgley, 1108 Union Trust Bldg., Providence, R. I. [See "The Gies Dental Research Fellowships and Awards for Achievement in Research." J. Am. Col. Den., 5, 115; 1938, Sep.]

JOURNAL OF THE AMERICAN COLLEGE OF DENTISTS

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