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Journal

AMERICAN COLLEGE OF DENTISTS

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Is Dentistry a Dying Profession? *By the Editor*

Dental Education: Objective and Purpose

American College of Dentists:

Minutes of the Meeting of the Board of Regents

Report of Committee on Research Fellowship

Board

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Journal

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AMERICAN COLLEGE OF DENTISTS

Objects: The American College of Dentists "was established to promote the ideals of the dental profession; to advance the standards of 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.*

Announcements

Next Meeting, Board of Regents: Boston, August 2, 3, 1947.

Next Convocation: Boston, August 3, 1947.

Fellowships and awards in dental research. The American College of Dentists, at its annual meeting in 1937 [*J. Am. Col. Den.*, 4, 100; Sep. and 256, Dec., 1937] 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

AMERICAN COLLEGE OF DENTISTS



Journal

AMERICAN COLLEGE OF DENTISTS

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A practical man is one who practices the errors of his forefathers.

— BENJAMIN DISRAELI.

IS DENTISTRY A DYING PROFESSION?

BY THE EDITOR

Assuming that dentistry has during the past quarter century or more, been duly established as a profession, the query comes up now as to whether or not it is a *dying profession*.

The question is prompted, although not over-seriously as such, by two different and diametrically opposed suggestions. It is not uncommon in these days as one goes in and out among dental groups, including fraternities, specialty groups, honor groups and other groups to a certain extent, representative of the profession as a whole—committees, study groups, etc.—to have the question put, what is the matter with this or that group or with the profession as a whole? Is it or are we, dead? In so many places there seems to be so little if any activity—what is the trouble?

The answer to this ought to be obvious—for during the past five years we have been in a war. All of our effort, all of our energy and all of our resources have been turned in one direction, namely, to win that war. There has been nothing constructive, save only as we developed that which would make destruction more certain. Of course, there are always by-products of a war which will serve a constructive purpose in civil life and as these and their uses filter to the surface of things, we will find some benefit even out of such a holocaust. Our minds have been turned toward this one thing and not much else has been accomplished. We have not been allowed to have any meetings, therefore we have not been able to work together, to plan, to develop, or to do anything else. There has been nothing creative nor created.

But the war is over and we are now headed aright again. This is being written enroute from Chicago to San Francisco, and in the former city there were meetings and conferences of the greatest magnitude ever presented to the dental profession.

There were many American Dental Association Committees in

session. These enjoyed nearly full attendance in membership and abundance of interest and determination. There was evidence of new life and new hope everywhere. It was eminently clear that an old order had gone and that a new order was in the offing. This is not without profound respect to the "old order," for always do we build the new out of the old. The truth and the significance of the dictum of John Stuart Mill, namely, that "education is the total culture taken by one generation from the preceding, raised to a higher level and handed on to its successor for similar action," was easily demonstrated.

Just to be specific in a few instances, what was to be seen? The *Educational Council* held an all-day session of its own, followed by an Educational Conference of one day duration, participated in by the Council on Education, Deans of Schools, members of Faculties of Dental Schools, Boards of Dental Examiners and members of the profession generally. It was presided over by the Chairman of the Council, Dr. J. Ben Robinson, in the morning and by Dr. T. M. Barlow, President of the American Association of Dental Examiners in the afternoon. It was well and enthusiastically attended, having had one paper by Dr. John T. O'Rourke, said to be the best address ever made to dentists by a dentist on the subject of Dental Education. It was prophetic or idealistic in character yet realistic to the end that dental education must meet such requirements.

There was a lengthy meeting of several days duration by the Public Health Committee of the A.D.A. and a one-day conference of several agencies on the subject of Better Dental Service for Children. Here an effort is being made to find out why dentists won't take care of children.

Many other meetings and conferences were held none-the-less of which was that of the Library and Indexing Service Committee. The place of the library and of libraries was given detailed consideration, while the value of the index was forced upon us even perhaps as it had not been before. We have subscribers from all parts of the world and expressions of appreciation of its content, form

and concomitant usefulness. This was so forcefully pressed upon that committee, that a conference on the subject of indexing will be asked for next February. There is very great need now of establishing correct names for various conditions, that confusion may be avoided and that the index may provide correct information. It is apparent, too, that a conference must be held with editors and authors, that proper titles may be selected, e.g., one may write under the title, *Removable Bridgework*, but discuss and use the term, *Partial Dentures*. Which is which and what is what?

All these things and more indicate advancement as we go now into that new era or the new world as is so often heard. All was climaxed by the Annual Meeting of the Chicago Dental Society, with a stupendous program and the largest attendance in its history.

NO! Dentistry is not dead nor is it dying.

The following letter is interesting. One may be inclined to laugh just a little, but this should not be for there is an element of seriousness in it.

"Dear Sir:

"Would appreciate very much some information on the *future* of Dentistry.

"I am enrolled under the G.I. Bill as a pre-dental student and would naturally be interested in anything dental.

"Now I have read various articles recently that made a 'big-to-do' over the recent discoveries in preventative Dental Medicine.

"One in particular, which was carried by several leading magazines and newspapers, was the use of *fluorine* in prevention of dental caries. I understand this experiment has been going on for the last five years, with some reports indicating that tooth decay can be checked almost overnight.

"The Army is working on a vaccine to halt dental caries and of course there are still other experiments with different approaches and different medicines.

"Obviously, with all this going on I have been worried considerably; that is, it will be four more years before I graduate and it will be approximately four later before a good practice could be built up. And, eight to ten years from now preventative dental medicine will have advanced to such a stage that there may not be any work for all the dentists.

"So, I'm just wondering whether or not I'm getting into a dying profession.

"Would certainly appreciate any light you could throw on the future of Dentistry."

While it is not at all probable that the outcome as the writer suggests will ever obtain; yet it does indicate the seriousness with which dentistry's efforts are being taken. Dentistry not only is not dead, but on the other hand, is very much alive and one to be sought by young men and young women as a life-work.

NO! Dentistry is not dead, nor is it dying.

In this issue of the Journal is begun an undertaking of no small magnitude. The Journal presents the schools of the United States and Canada, including photographs of each school with the Dean and a statement in answer to the question: "What is the object of dental education?" There is also a short statement of the school's history. It is planned to continue this until the dental schools of the world have been listed and portrayed as well as possible. Out of this it is hoped that a better understanding and a fuller knowledge of world conditions in dentistry may be developed. It should serve as an approach at least to a better and fuller and a mutual appreciation of dentistry and among dentists the world over. It is another avenue of developing international relations. It should help to equalize dental standards and requirements and thus allow dentistry to play her part in the world of things, professionally, socially and to some extent, politically.

NO! Dentistry is not dead, neither is it dying.

Some of our United States' schools are now offering graduate courses for dentists from other countries. It is essential to know their immediate needs educationally as to dental requirements, preparation for meeting our presentation of subjects, and language difficulties. This latter is of great importance in an English-speaking land and demands much courteous consideration by our school administrators.

In an article, "Educating Students From Other Lands," Nestrick¹

¹Nestrick, W. V.: *The Phi Delta Kappan*, 28, 253; 1947 (Feb.).

discusses this subject very ably and very fully, including the professions. We need to make some refinements within our field, but otherwise we are already engaged in that work. His introductory paragraph reads as follows:

"Over night the United States has become the educational center of the world. Over twelve thousand students from all parts of the world are enrolled in our colleges and universities from coast to coast. Several thousand more young men and women eagerly await the time when they, too, may come to this country to study in our colleges and universities."

The dental schools are meeting these demands also.

NO! Dentistry is not dead, neither is it dying.

A new and younger generation is about to take over the responsibilities involved in all that goes with the teaching and practice of dentistry. No definite line of demarcation can be indicated for there is none. Always are young and old found together—(that is in years—age is not dependent on years but on attitude—many men advanced in years are young, while many young in years are old)—there is always a sort of liaison body affecting the change.

Some of us can realize that with which we began and we can see that which we turn over. It is ours to trust and to have faith—others will not do it as we did—but in their way, they must do it better. It is the task of some of us to help them take hold, then let go and on goes the procession.

NO! Dentistry is not dead, not in any part, neither is it dying.

RETURN OF DENTAL MEETINGS

The Journal is happy to cooperate with the Dental Societies in various parts of the world in announcing a return of their meetings, or at least the first meetings of such societies, following the war. Ordinarily it has not been the policy of the Journal to carry announcements since it is not one of that nature, being published quarterly and with a high degree of irregularity in these later years, it has not been possible. But as we have continued through the years, our exchange list and readers generally throughout the world have increased to such an extent that we find ourselves asso-

ciated with everybody everywhere so it is with a great deal of pleasure that we submit to this apparently new requirement. We have announced meetings of societies before in these columns and it is our pleasure now to announce meetings as follows:

CZECHOSLOVAK STOMATOLOGICAL CONGRESS

The Czechoslovak Stomatological Society announces a meeting to be held in Prague which will be in the nature of a Congress, celebrating their 50th Anniversary, from June 11th to 15th, 1947. During that time, from the 11th to the 13th of June, the 10th Annual Congress of the ARPA Internationale will also be held. Members of the profession from all over the world are invited to attend. Further information may be had by applying to

Spolek ceskych zubnich lekard

Praha II., Sokolska 31, Lekarsky dum.

FEDERACION ODONTOLOGICA ARGENTINA

The V Congress of the Federacion Odontologica Latino-Americana (Latin American Dental Federation) and Interamerical Dental Congress will be held during the month of October, 1947, in the city of Buenos Aires, Argentina.

This congress will be held under the auspices of the F.O.L.A. in which the American Dental and the Canadian Dental Associations will be greatly interested. A general invitation is extended to dentists everywhere to attend.

DENTAL EDUCATION: OBJECTIVE AND PURPOSE

In this issue of the Journal begins a presentation of Dental Schools. Preliminary to that we present pictures and statements by four men who have had much to do with the development of the Dental Schools of the United States and Canada. It is the hope that this undertaking may be of value to dental education, dental schools and dentists everywhere. It is planned to take a similar step with schools over the world, thus establishing an international relationship, and ultimately, perhaps, a philosophy for dentistry. (Ed.)

THE RENDEZVOUS OF MEDICINE AND DENTISTRY

ALBERT L. MIDGLEY, D.M.D., Sc.D.,¹ Providence



Since medicine and dentistry have unsolved problems of common interest and concern in education, practice and research, it logically follows that solution of them rests upon effective collaboration between the two professions. Public welfare demands and professional ideals require prompt acceptance of this responsibility with unity of action in purpose and interest.

Devotion and loyalty to service is the first law of a profession consecrated to the alleviation of mental and physical distress. If allegiance to the cause of health service is instinctive in medicine and in dentistry, why should there be delay in meeting this pressing obligation? Will not their joint contributions illumine the way to the furtherance of sound learning, mutual understanding, human comfort and happiness?

All phases of health service in education and in practice should

¹Secretary, Dental Educational Council of America, 1921-1935.

be given equal study and attention in order to develop to the highest degree of perfection. Today, some health service ministrations are not what they might or should be because the growth of the medico-dental relationship is inhibited or stunted by an effort that is more or less spasmodic and sporadic. What reason can be offered for the delay in assembling the mechanism of this two-fold power and putting it in motion? Is it neglect born of indifference and indecision, and the adoption of a policy of sitting idly by awaiting what the transforming power of time may bring forth?

Attainments in dental education and professional ministrations during the past decade indicate plainly that dentistry is well prepared and fully qualified to meet the responsibilities of a dynamic dual relationship.

Study of the subject for the past decade by the Research Committee of the American College of Dentists reveals that medical and dental leadership and the observing public recognize the importance and usefulness of this unity in any comprehensive health-service program. For, they realize much suffering can be relieved, prevented or eliminated through an enduring medico-dental relationship.

What better or more natural way to invigorate the growth of all the interrelationships of medicine and dentistry than through an abiding alliance in education and practice? Will not this unified effort develop a truly comprehensive program of research and add vigor to the status quo of dental autonomy? Is not the solution of this problem an immediate joint moral obligation of the Councils on Medical and Dental Education, collaborating with the Associations of American Medical and Dental Schools? What other organizations or influence have the power to develop the guidance and drive so essential to attainment?

There is greater need than ever for devotion to the high ideals of the dental profession. Its real and permanent welfare depends on men whose study and training have given them a keen interest in every phase—biological, manipulative, esthetic—of each prob-

lem in practice, and deepened their sense of responsibility for the true good of their patients. Such men can keep dentistry from becoming a mere handmaid to medicine. Let them never fail in the conscientious performance of the honest, intelligent, painstaking, courageous work for which they have been educated. Theirs should be the spirit of the founders of American dentistry; theirs is the opportunity to rekindle zeal for the profession and maintain dentistry as a health-service in its own right, not subordinated to but coordinated with medical care.

A NATURAL DIVISION OF HEALTH SERVICE¹

WILLIAM GIËS,² Ph.D., Sc.D., LL.D., *New York*



Dentistry is a natural division of health service related directly to the teeth and their supporting structures; also to the associated oral tissues and to the body as a whole. This health service is being performed by the separately organized dental profession which, like the medical profession, is accredited and regulated in the United States by statutes in the public interest. In this country practically all dental schools have become accepted units of professional education in universities and share equally with other schools in the

advantages of this intellectual relationship. The dental profession has been endeavoring, in accord with its public responsibilities in health care, to develop dentistry into the *service equivalent* of an oral specialty of medical practice—a specialty which medicine has

¹*N. Y. J. of Den.*, 16, 187; 1946 (May).

²See *Bulletin*, No. 19, Dental Education in the United States and Canada, published by the Carnegie Foundation for the Advancement of Teaching, 1926.

not created. The medical profession, with few exceptions, traditionally has been unconcerned about the need for recurrent treatment to prevent, or delay the onset or arrest the progress of, dental disorders and their systemic consequences, and to maintain dental health and functions; and has usually regarded extraction of affected teeth as a direct and conclusive solution of the problems of dental disease. In the United States during the past century, the autonomous dental profession, owing to its concern, understanding, fidelity and successful endeavors, has acquired special competence in the related sciences and arts of dental health-care and has given world preeminence to "American dentistry." All of the understanding and experience in every science, art and type of health service that may be incorporated usefully into dental health-care is being included in dental education and in dental practice. Dentistry's infirmities are no greater or more disabling than those of other professions. All in dental education and in dental practice that becomes obsolete is, from time to time, being excluded from each. For the attainment of cumulative growth, in accord with these and other conditions of progressive change under the most favorable constructive influences, the time-tested autonomy of dentistry as a self-determining and self-directing profession in health service should be maintained in the public interest.

THE TEACHERS IN DENTISTRY

LLOYD E. BLAUCH,¹ A.B., A.M., Ph.D., *Washington (D. C.)*

The character and progress of a profession depend very largely upon its teachers. There is no such thing as a great profession without the creative work of great teachers. They are the embodiment of a profession; they represent its aims and motives, its knowledge and skill. In general, they are looked to as symbolizing the best the profession has to offer. They are chosen to set forth to young people the things for which the profession stands. Through the teachers the future practitioners have their first intimate and extensive contact with the profession. The teachers determine what these young men

¹Author, "A Course of Study in Dentistry," and Executive Secretary, Curriculum Survey Committee, American Association of Dental Schools, 1931-1935.



and women will learn, what professional attitudes they will develop, what ideals of service they will espouse.

The dental profession will do well, therefore, to cherish its teachers, to take a lively interest in their problems, to help to improve the financial and other forms of recognition for superior teaching service, and to encourage able young graduates to take up the work of teaching. These things help to assure continued growth of a profession; they are a pledge that it will perpetuate itself on a sound basis.

PUBLIC APPRAISAL

HARLAN H. HORNER,¹ A.B., A.M., Pd.D., LL.D., *Chicago*

In the entire history of dental education and practice in this country there has never been keener interest displayed than we witness today—

1. By qualified *students* seeking admission to our dental schools.

2. By *dentists* desiring to improve themselves in service through the pursuit of graduate, post-graduate and refresher courses offered in our dental schools and by attendance upon clinics, conferences and round tables conducted by dental societies and other agencies.



¹Secretary, Council on Dental Education.

3. By the *public* in its desire for competent dental service and in its awakened appreciation of the importance of oral health.

This upward curve in the public appraisal of dentistry as an educational discipline and as a means of building a useful and satisfying career should never again be allowed to fall below its present level. We must continue to search out by every means at our command the young men and women in all sections of the country whose qualities of mind and hand and personality give promise of success in the dental profession and to encourage them to enter it. We must continue to enrich and strengthen our undergraduate program of dental education on the university level; and we must not fail to meet the growing needs of the graduates who desire opportunity for advanced or specialized study.

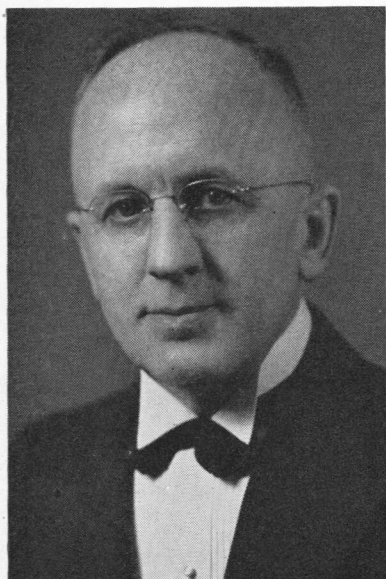
And, perhaps above all, we must challenge society, which at length has happily come to understand the meaning of dentistry as a measure of individual comfort and public health, to give dental education and research the material support they richly deserve.

Herewith follows the proposed presentation of Dental Schools of Canada and the United States. They are introduced through the Deans, including a picture of the school and comments on the general subject by the Dean. The schools of Canada are presented in the first group of five.

Presenting Schools of Canada
UNIVERSITY OF ALBERTA

Faculty of Dentistry

W. SCOTT HAMILTON, D.D.S., *Dean, Edmonton*



When one thinks of dental education as it is today, he is reminded of the contributions made by the great men of the past, and those being made by the equally great and more modern minds of our own generation. But these men are all too few.

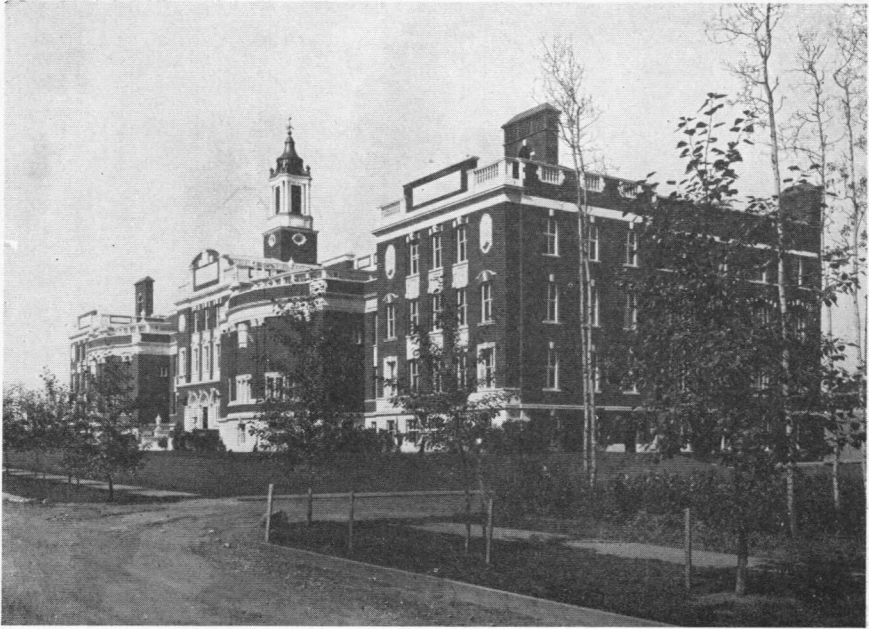
If by some means or other the practitioners could be brought to a realization of the value of the advances in our profession, dental education would indeed make a much greater contribution. Instead of our graduates leaving our universities with the opinion that they

are finished products, we should impress them with the value of graduate and post-graduate instruction.

One of our deans has said that it is difficult to find men who are willing to make the financial sacrifice necessitated by the acceptance of a teaching appointment. If in addition we are to require graduate or post-graduate training of our teachers, it will be impossible to compete financially with dental practice. The alternative then is to convince our suitable graduates of the higher ideals of life and the opportunities that teaching affords for making a really worthwhile contribution to humanity.

It would be an interesting experiment for some one of our organizations to call a convention and announce that no technics would be shown and that instead the presentations would deal with such sub-

jects as pathology, bacteriology, diagnosis, applied physiology and biochemistry, public health, preventive orthodontia, etc. Unless we apply these sciences to dental practice more than we have done, the pain, so well described by Dean Bunting in one of his articles.



UNIVERSITY OF ALBERTA

DALHOUSIE UNIVERSITY

Faculty of Dentistry

W. W. WOODBURY, B.Sc., D.D.S., *Dean, Halifax*

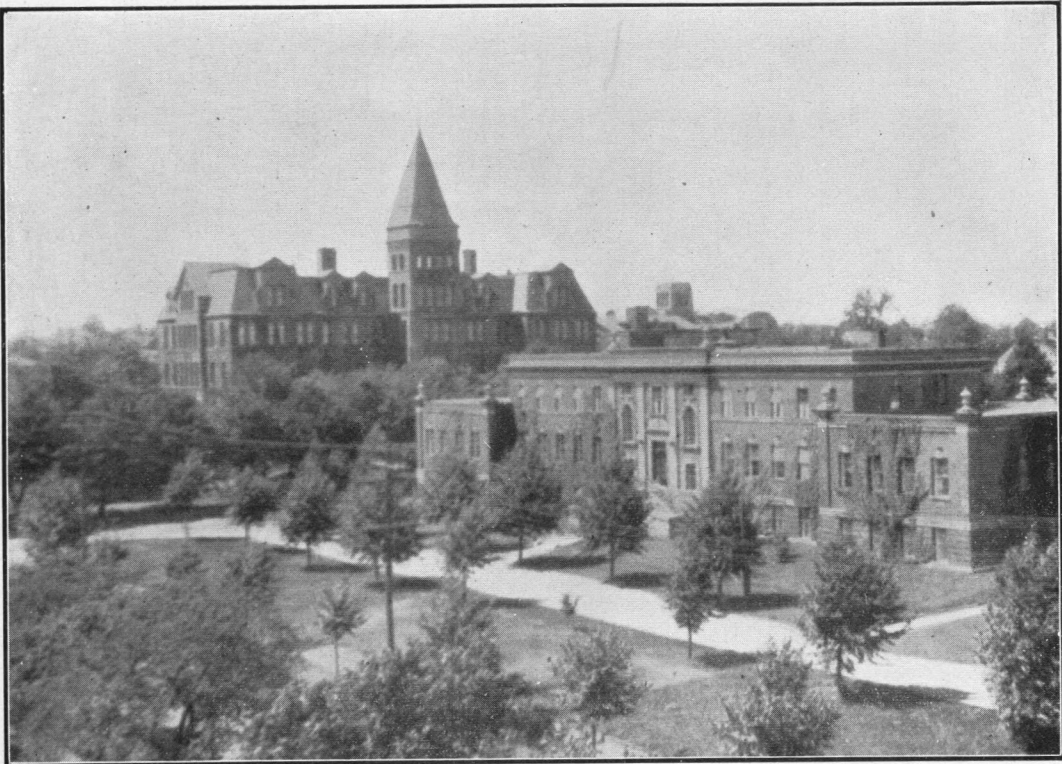
Dentistry determined years ago to be a profession and has invoked the aid of the universities to that end. The response has been generous but is logical only on the supposition that dentistry being in essence a therapeutics based on fundamental medical science requires a professional education rather than a technical training.

A real profession must be a Learned Profession as Flexner has reminded us, otherwise it should make no demands on the university. Only a confirmed optimist could describe dentistry by and large as a Learned Profession today, but it shows encouraging signs of being



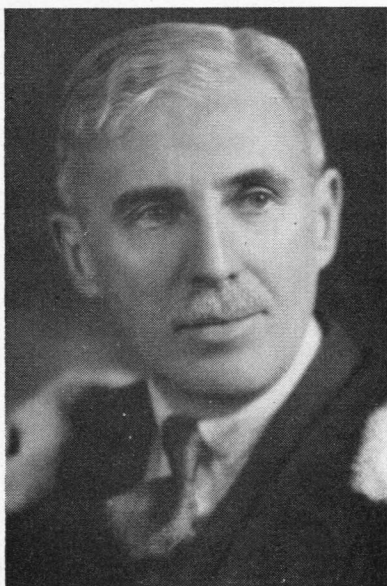
a *Learning* Profession and if it persists in this attitude it can with the cooperation of the universities become a true Profession.

Our graduates should go out conscious of their ignorance as well as their knowledge, their therapeutic skills resting securely on fundamental medicine. An attitude of scientific curiosity and healthy doubt on the part of their teachers should have convinced them that their education has only begun, and should foster that "capacity for growth that is the essence of the educated man."



DALHOUSIE UNIVERSITY

UNIVERSITY OF MONTREAL

*Faculty of Dentistry*ERNEST CHARRON, D.D.S., *Montreal*

In my opinion, the profession of dentistry has suffered too long from an inferiority complex. Its object has been largely the training of Dentists to become largely technicians in the practice of Dentistry.

A successful dentist is not only one who enjoys an excellent and reputable practice in his chosen field, but also one who by virtue of his background and training, is an expert in the civil life and leadership of the community in which he lives.

I am, therefore, convinced that before a young man enters upon the technical training of dentistry, he should have a broad background in the basic sciences and in the so-called cultural subjects, to fit him afterwards to take his rightful place in the affairs of his Community and Nation.

Mere training in dentistry will not do this. We have a right to expect that dentists, like physicians, or lawyers, or teachers, will become leaders in their Community and will take an active part in promoting the welfare of their fellow men.

In order to realize this objective, care should be taken in the selection of men who are to become trained not only as Dentists, but as leaders of men. They should be well versed in the fields of sciences to the point where they can keep abreast of rapid advancement of this scientific age.

Their training in dentistry should include sufficient ground work to enable them to maintain a lively interest in the promotion of

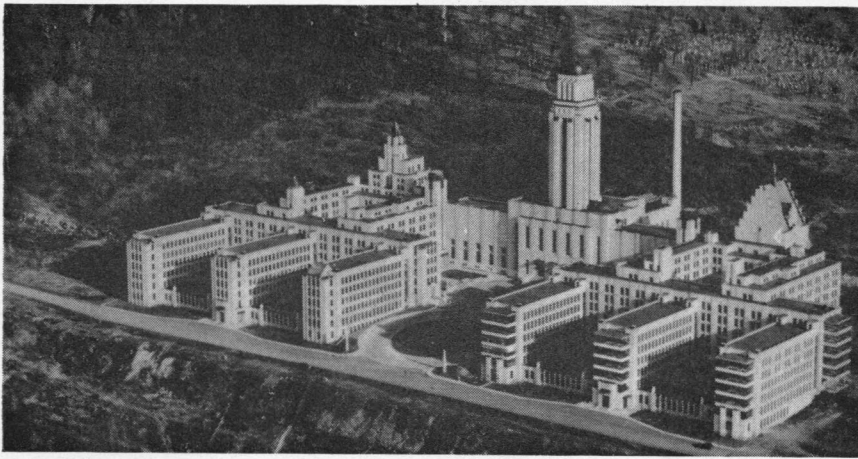
dentistry and in new dental techniques, as well as in all the other programs that go to make up a rich, well-rounded Community life.

Essentially, dentists are expected to have the same amount of pre-professional and professional training as such professional men as Physicians and Jurists.

Surely they should be expected with their background and training, to take active part in all that goes on around them. They are to be genuinely interested in preventive as well as curative dentistry.

They are to be equally interested in the health and welfare of the members of the community in which they choose to work. They should be trained not to be the last group of scientists to accept new theories, new methods, new techniques, new discoveries. In short, dentistry should build men as well as dentists.

Research work, post-graduate study, even refresher work, ought to be the concern and interest of all dentists everywhere, for they perform their duties on the premise that they can and still advance according to new knowledge, new skills, and new techniques.

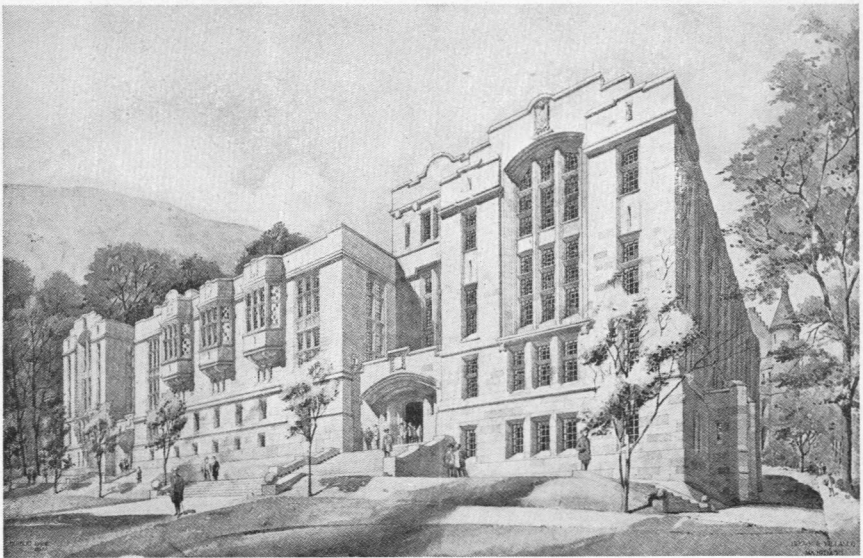


UNIVERSITE DE MONTREAL

MCGILL UNIVERSITY

*Faculty of Dentistry*ARTHUR L. WALSH, D.D.S., *Dean, Montreal*

This University is located in the City of Montreal, Canada, the largest city in Canada with its one and quarter millions citizens and definitely metropolitan. Montreal is an island surrounded by waters from the St. Lawrence and Ottawa rivers. McGill University is located on the southern slope of Mount Royal, in the center of the city. It is privately endowed, having been founded by the late James McGill. Its many buildings are crowded to the doors with a total of 8000 students, including the faculty of graduate studies.



MCGILL UNIVERSITY

Dentistry was accepted into the University in 1904 as a department of the Faculty of Medicine. In 1920 it became the Faculty of Dentistry, with the late Dean A. W. Thornton as its first Dean. The physical setup of the dental faculty was such that it was deemed advisable to only accept a maximum of twenty students per class. Immediately after World War II it was decided that the veterans must be accommodated as far as possible with the result that the maximum is now thirty-eight per class. May I take this opportunity to pay tribute to the present dental classes composed of 80 per cent war veterans. With two to four years of arts and science background, plus war experience, the dental classes of today ranks among the finest in the history of this school and with those serious minded, courageous and loyal young men about to graduate, the future of our noble profession of Dentistry will be in excellent hands.

UNIVERSITY OF TORONTO

Faculty of Dentistry

ARNOLD D. MASON, D.D.S., *Dean, Toronto*



The formal education of the dental profession in Ontario dates from 1875, when the Royal College of Dental Surgeons (the corporate name of the members of the profession in the Province) founded in Toronto a School of Dentistry. This school was affiliated with the University of Toronto in 1888, and at that date the Senate established the degree of Doctor of Dental Surgery, and adopted the curriculum of the School of Dentistry as the qualification for this degree.

In 1925 the School of Dentistry

became an integral part of the University as the Faculty of Dentistry, and its standing is exceptionally high among dental schools. To obtain the degree of Doctor of Dental Surgery, the course of study is four years beyond pre-dental requirements of two college years in a recognized university or its equivalent.

The degrees of Bachelor of Science in Dentistry and Master of Science in Dentistry were established in 1927, and at the same time it was made possible for graduates to proceed to the degree of Doctor of Philosophy in the Departments of Preventive Dentistry, and Oral Surgery and Therapeutics. In 1946 graduate courses leading to diplomas were established in the following departments: Dental Public Health, Periodontology, Orthodontics, and Dental Surgery and Anaesthesia.

The dental course is designed to unify the cultural subjects,



UNIVERSITY OF TORONTO

fundamental sciences and dental studies, as it is believed that cultural, scientific and professional development cannot be sharply differentiated, but should proceed concurrently throughout the entire dental course.

As good dental services depend on the operative ability of the dentist it is essential that laboratory instruction be given the students in technical procedures and that they be trained in digital skill. However, stress must also be placed on instruction in preventive measures and on the biological studies basic to all phases of dental service.

Presenting Schools of the United States

UNIVERSITY OF MARYLAND

College of Dentistry (Baltimore College of Dental Surgery)

J. BEN ROBINSON, D.D.S., *Dean, Baltimore*



If I interpret the facts of dental history correctly, the objectives and purposes of dental education are the same in 1946 as they were at the time of the founding of the first dental college in 1840, namely, to provide suitable opportunities for the education and training of dentists who will be prepared to minister competently and fully to the oral health needs of society. Now, as then, it is believed that in the dental curriculum appropriate emphasis must be placed on instruction in both the basic sciences and the art of dental practice,

and that the basic and related sciences, which are included in the dental curriculum, are of value only in proportion to their effective application to problems of dental practice.

While the substance of our philosophy remains unchanged there have been many fundamental changes in the form of dental practice and in the approaches that lead to it. The boundaries of scientific knowledge have been broadened through research and new discoveries, and fresh points of view have been contributed by practical experience and thoughtful experiment that have altered our health concepts and practices. The gradually rising level of the educational status of the American people has provided them with a keener interest in and has produced a better understanding of health as a desirable personal possession. As a consequence of these developments society has become acutely health conscious. The health professions have recognized the increased demand for their types of services and, in order to provide a complete and competent health care, have responded by including in their educational plans courses of instruction in preventive health measures as supplements to their training in traditional curative procedures.

Dentistry has recognized its responsibilities under these altered conditions and has sought diligently, as far as it is within its power,



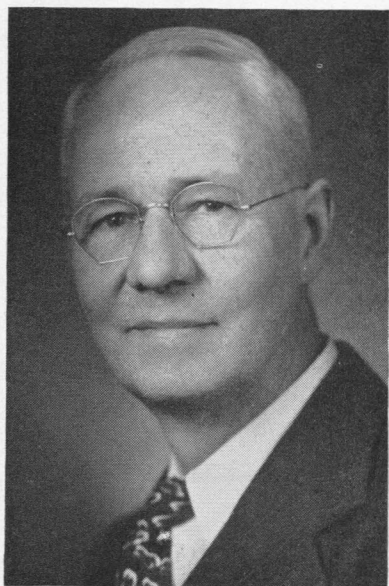
UNIVERSITY OF MARYLAND

to adjust its programs to them. Its earnest intentions is evidenced by a continued broadening of the health aspects of dental teaching, by efforts at coordination of dental and medical health programs and by a more effective correlation of the efforts of the dentist with those of the physician. Great progress has been made toward the achievement of the fundamental objectives of the dental program; greater steps forward are imminent.

CREIGHTON UNIVERSITY

College of Dentistry

H. E. KING, D.D.S., *Dean, Omaha*



The term "dental education" has to my mind two general implications—the education of the public in the personal health value of good, sound teeth and the education of professional dentists.

The later is my chief concern. In the selection of students, we try to find persons of acquisitive and inquisitive mind, interested in fine workmanship, plus an integrity of mind and spirit—an ideal prospect for any type of education—professional, scientific, etc.

In conformity with modern trends, I might say pioneering in the field, we work in small groups with special attention paid to the particular needs of the individual. We have for years done much work in special clinics instructed and supervised by men outstanding in their specialties.

A firm grounding in the basic sciences plus a thorough professional instruction in general and specialized fields is my idea of adequate dental instruction. While I am not insensible to the necessity—or should I say—the desirability of "success," it should be emphasized that amicable dealings plus good, sound workmanship make for the truly sound professional dentist, be what the world terms his success great or small.



CREIGHTON UNIVERSITY

UNIVERSITY OF MINNESOTA

*College of Dentistry*WM. H. CRAWFORD, D.D.S., *Dean, Minneapolis*

Most of us are in dentistry because we like it very much. Feeling that way about it, we are anxious to see it grow, improve and become a better profession. This can only be accomplished by the careful selection of men who enter it and by improving the educational facilities of those who now comprise the profession.

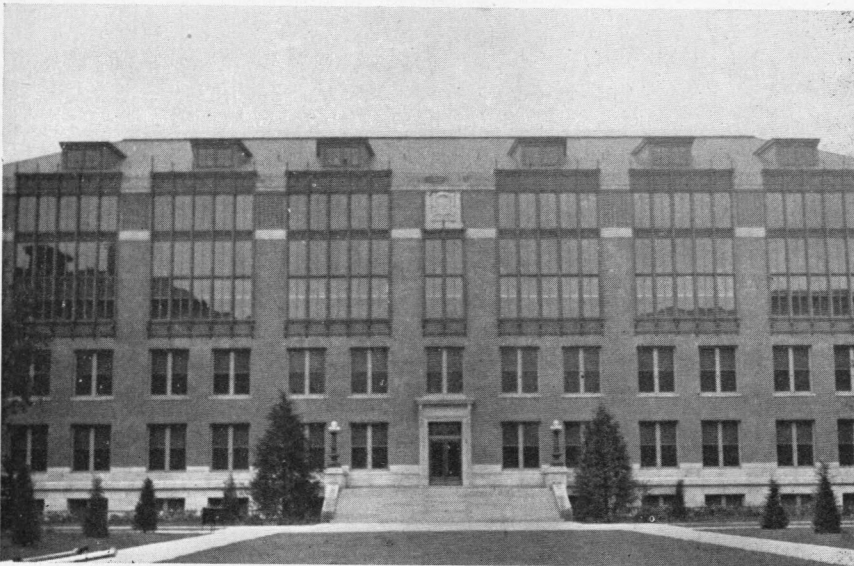
The responsibility of attracting the right young men to study den-



tistry is not the schools' alone, but should be shared by the entire profession collectively and individually. Organized dentistry should be more active in accepting its responsibility. Dentists' boy banquets such as have been conducted in Cincinnati and few other places should become a part of the business of dental societies. The Cincinnati dinner and program is well supported by the profession, which makes it their business to see that the right boys are there to hear the well organized program which explains quickly, clearly and point-

edly just what dentistry is and what it offers.

I have been asked to write a few words concerning dental education. What I have written may not sound as if it were concerned with dental education, but our profession will need to have no fear about its educational programs if it succeeds in interesting the right calibre of men to enter it.



UNIVERSITY OF MINNESOTA

UNIVERSITY OF PENNSYLVANIA

*College of Dentistry, Thomas W. Evans Institute*J. L. T. APPLETON, D.D.S., *Dean, Philadelphia*

The school offers to the student an opportunity to prepare himself, under guidance, for the intelligent and successful practice of dentistry. Dentistry is the health service specifically concerned with the establishment, maintenance, restoration, and improvement of the health, function, and appearance of the oral cavity and its associated parts, in their relation to the individual as a whole. The student should learn to continue his professional growth throughout the rest of his professional life. In school he should learn how to think and how

to learn. He should not be sheltered from the facts of life—the everchanging social climate in which he will practice. He should be encouraged to welcome the social responsibilities and opportunities of the dentistry of tomorrow. There will be greater demands for preventive or protective dentistry. More individuals will expect more continuous, complete, and extensive dental service. To work effectively and economically, the dentist will have to learn the wise employment of auxiliary personnel. Without lessening the need for high technical skill, the biologic aspects of dentistry will receive wider clinical application. Dentistry will be more closely integrated with the other health services: and more will be expected of the dentist as a diagnostician. Like all education that is not mere vocational training, dental education is more concerned with the future than with the present.



UNIVERSITY OF PENNSYLVANIA

LOYOLA UNIVERSITY

*College of Dentistry*THOS. D. SPEIDEL, D.D.S., M.S., *Dean, New Orleans*

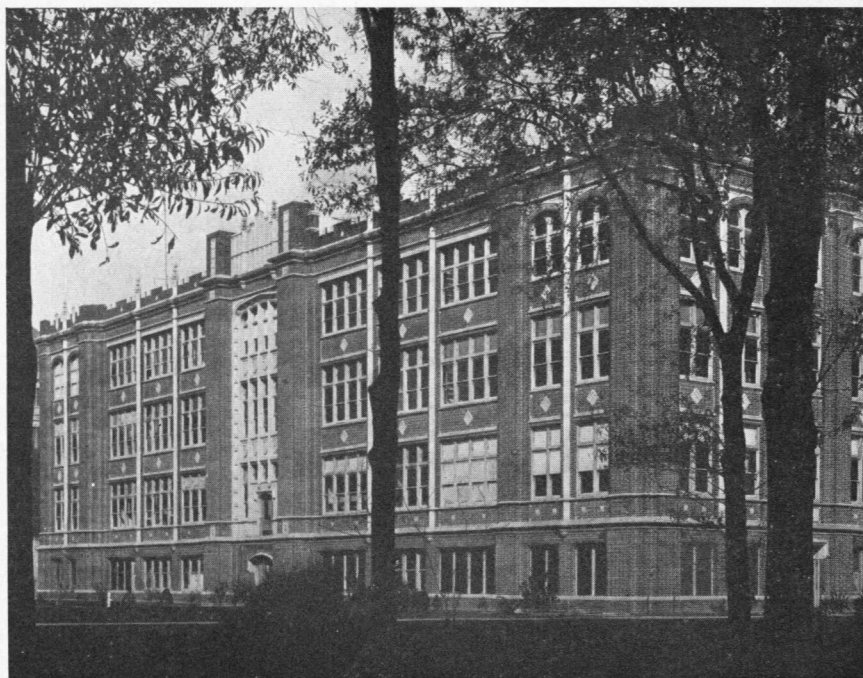
Dental education, that is, the persons devoting their resources of time, energy, and funds to a dental educational institution, is confronted by the age-old problems that educators have been striving long to solve. Every effort is being made (1) to assemble an outstanding teaching and research staff, (2) to recruit and select students who by natural endowment, training, and inclination can profit most from the guidance and counsel offered by the teachers, and (3) to provide the assistance, facilities, equipment, and atmosphere necessary for the

activities of the teachers and students in their work of teaching and learning. The impediments to the achievement of these objectives

differ today from past years only in proportion or degree, not in type.

This year there are many more applicants for the entering class in dentistry than can be accommodated. The scarcity of experienced personnel interested in devoting their careers to teaching is more aggravated than formerly. School finances, never sufficient to do everything that is desirable, must meet the current increases in costs and patiently await the time when materials and equipment can be delivered promptly. All of these items influence the net result of our present educational activities.

However, the fact that there is little quiescence and much determined effort evident in dental education permits confident expectation of continued progress in the years before us. Schools generally are doing very satisfactory jobs of preparing undergraduate stu-



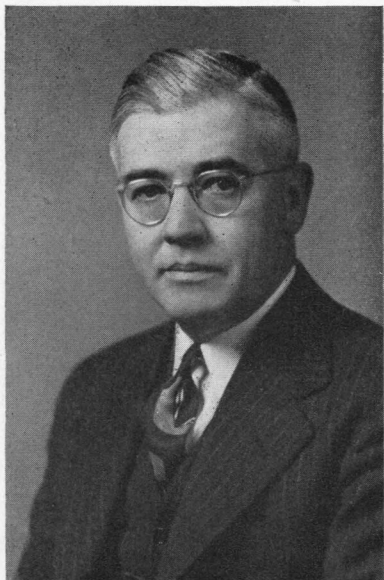
LOYOLA UNIVERSITY, SCHOOL OF DENTISTRY

dents to begin practice of dentistry. Realization of the importance of providing opportunities (1) for graduate study, (2) for continuation training for the graduate dentist, and (3) for training of auxiliary personnel for the profession is on the increase. Society's progress in understanding and appreciating dental education's purposes and problems will be reflected in the resources made available for university work and thus determine the rate of advancement of our dental educational enterprises. School and student must be prepared to meet both current and future responsibilities.

MARQUETTE UNIVERSITY

College of Dentistry

GEO. W. WILSON, B.S., D.D.S., *Dean, Milwaukee*



Primarily the basic objective of undergraduate dental education is to prepare students enrolled in the curriculum of the dental school to become safe beginners in the general practice of dentistry upon graduation.

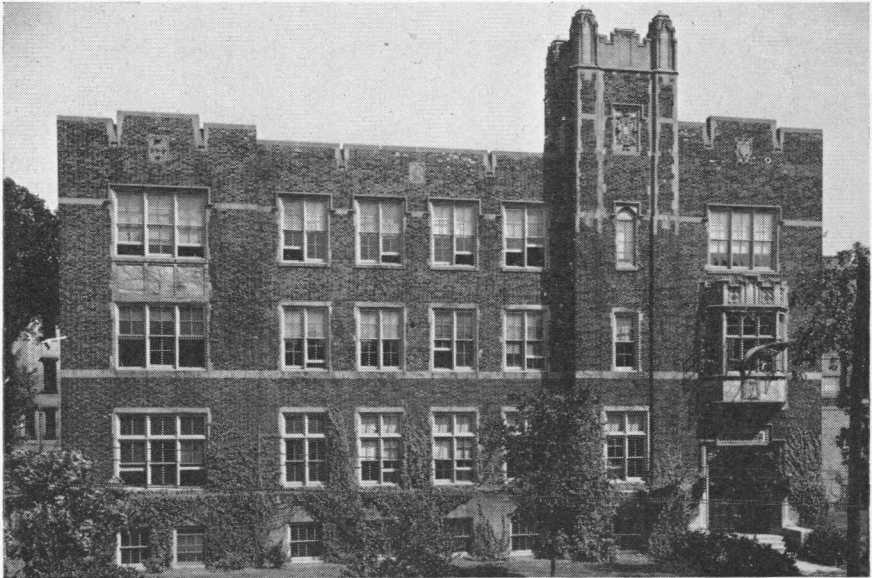
The system of dental education which has evolved in America in the past quarter century is commendably adequate for the gaining of that principal objective. The establishment and application of prescribed courses in the pre-dental curriculum and the requirements in the biological sciences in the dental curriculum has, without doubt, been the most potent influence in advancing dental education.

The quality of instruction in the dental technique courses and the clinical application of them has kept pace with biological advances. The effect has been that dentistry is now recognized as a bio-

mechanical art, practiced by graduates generally well prepared to give the public the best quality of service.

Two situations threaten to disrupt this system of dental education, with subsequent lowering of quality of service. The first is the tendency to liberalize the pre-dental curriculum to the extent of eliminating the prescribed laboratory science courses. The second is the continued threat to separate dentistry into the mechanical and bio-mechanical phases.

Dental educators must move cautiously in any form of liberalization. The American Dental Association and the National Association of Dental Examiners must stand guard over the unity and autonomy of dentistry.



MARQUETTE UNIVERSITY

UNIVERSITY OF TEXAS

*College of Dentistry*F. C. ELLIOTT, D.D.S., *Dean, Houston*

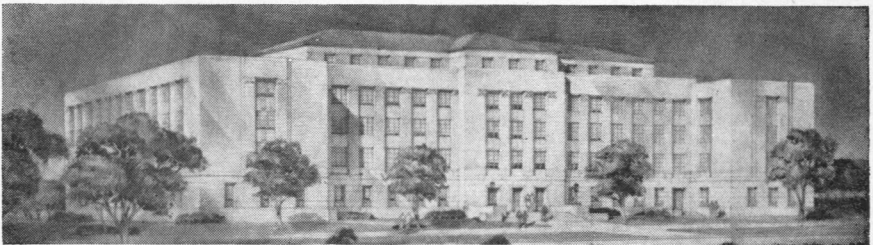
Dentistry, like medicine, like law, is a branch of society. As a branch of society it must meet its obligations of service—it must accept its full responsibility. It is necessary that the educational pursuits in dentistry be planned to embrace sound educational procedures.

It is time that we examine carefully the division of the dental curriculum—a pre-clinical division—a clinical division. The education of dentists as mouth physicians and surgeons requires that we lend more emphasis to the biological sciences in relation to their clinical importance. Too many courses in the biological sciences are taught in a way that precludes a use of them in clinical practice. The course of study in dentistry should be under constant scrutiny, with study given to both vertical and horizontal integration of course material. It is unlikely that the student can understand fully the manner in which he should integrate anatomy, physiology and like courses, throughout his educational career under the prevalent plan of dental education. Integration of the science courses throughout the four years of study seems to be a logical answer to the lack of use of his knowledge of science by the advanced student.

The obvious need for an expansion of dental services requires that Dental Schools make plans for the education of ancillary groups who may serve the dentist in the same manner that ancillary groups serve the general physician and those in other specialties of health service.

The education of dental technicians and dental nurses should be planned by dental educators, whether the courses are taught in the Dental School or elsewhere. Also the need for continuous education by the graduate dentist requires that facilities for post-graduate education be provided for graduate dentists. Careful study should be given to the post-doctoral courses which are planned in post-graduate schools.

It is apparent that if dental education is to meet its full responsibility, the legislatures which support the various State Universities, and the Boards of Trustees of endowed institutions, will need to look to a rapid increase in the amount of funds that are allocated to the Dental Schools. There is no reason to assume that the education of a dental student should be less than that of a medical student; therefore, an immediate necessity in dental education is the provision of ample funds for the maintenance of the institutions, expansion of the research programs, and a sizeable increase in the salaries of the teachers.



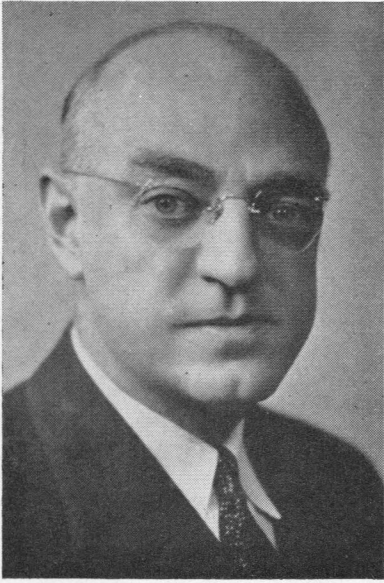
UNIVERSITY OF TEXAS

MEDICAL COLLEGE OF VIRGINIA

College of Dentistry

HARRY BEAR, D.D.S., Sc.D., *Dean, Richmond*

The aim of dental education should be to develop as far as possible good undergraduate institutions for the training of dental students. The goal of the school should be to train and equip the student to be adequately prepared for the general practice of dentistry. There should be a further desire to inculcate in the student the responsibilities involved in the practice of dentistry in order that he



may understand the functions which are essential in rendering this service and that he maintain high ethical standards in the performance of his duties.

It is also the purpose of dental education to adjust the student in his training to take his rightful place in the health service agencies so that he may understand fully the cooperation necessary in working with physicians and others in rendering a full health service. It is important that the student be taught to appreciate his civic responsibilities and the position he should

occupy in his community.

An effort should also be made to awaken within the student an interest in research and that he should recognize that his education is a continuing process and that he must attend and participate in scientific meetings, keep abreast of the literature of the times, take post-graduate courses, and in other ways keep fully informed of the progress and development of the dental profession.



MEDICAL COLLEGE OF VIRGINIA

WESTERN RESERVE UNIVERSITY

*College of Dentistry*WILLIAM L. WYLIE, B.S., D.D.S., *Dean, Cleveland*

Dental education should have as specific objectives: extension of the student's socio-cultural viewpoint that he may appreciate fully his community obligations as a professional man; application of a well grounded knowledge of the basic biological and technical sciences to broad clinical use as fruitful in experience as time provisions of the schedule will permit; and, finally, an appreciation of the literature, of the accomplishments of research, and the benefits to be derived from organized professional effort, that there may be an effective

and lasting impression that dentistry is a dynamic and not a static endeavor.



WESTERN RESERVE UNIVERSITY

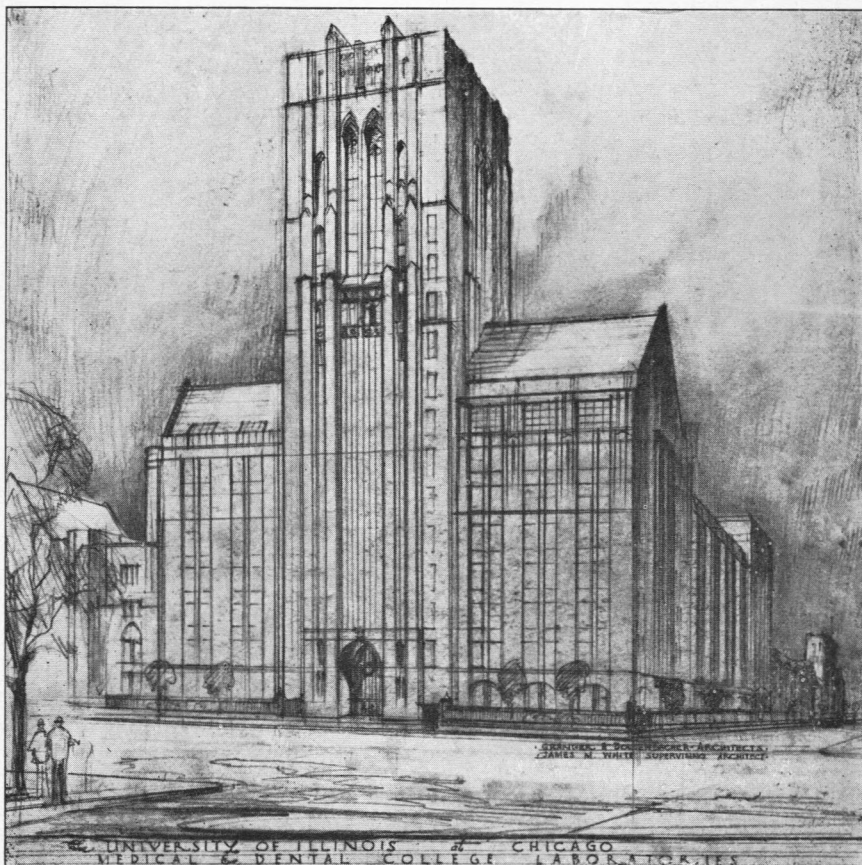
UNIVERSITY OF ILLINOIS

*College of Dentistry*ALLAN G. BRODIE, D.D.S., Ph.D., *Acting Dean, Chicago*

In its efforts to pattern itself after medicine, dental education has lost sight of a very striking difference between the educational demands of the two fields. The dental student in our leading universities is required to carry the same load of science courses for the first two years as is the medical student and, in addition, to acquire the digital skills of dental technics. It is small wonder that he makes a poorer showing in the medical sciences and that he turns his back on books once he has emerged from the nightmare.

The dental curriculum of the future should not slavishly follow that of medicine if dentistry is ever to attain equal status. Courses of study have to be better motivated to the end that the dental student will be more curious about basic sciences as these relate to the treatment of his patients. This does not mean that less science should be taught but it should be placed in the curriculum so that it better serves the purposes of dental study.

The healing arts have always moved from empiricism to science, yet the educational process has reversed this. Both medical and dental students would be better motivated toward serious study if, through early contact with patients, they gain an insight into their need for such study, and through extension of medical sciences through the entire four years, an appreciation of their meaning.



UNIVERSITY OF ILLINOIS

EMORY UNIVERSITY

College of Dentistry

RALPH R. BYRNES, D.D.S., *Dean, Atlanta*

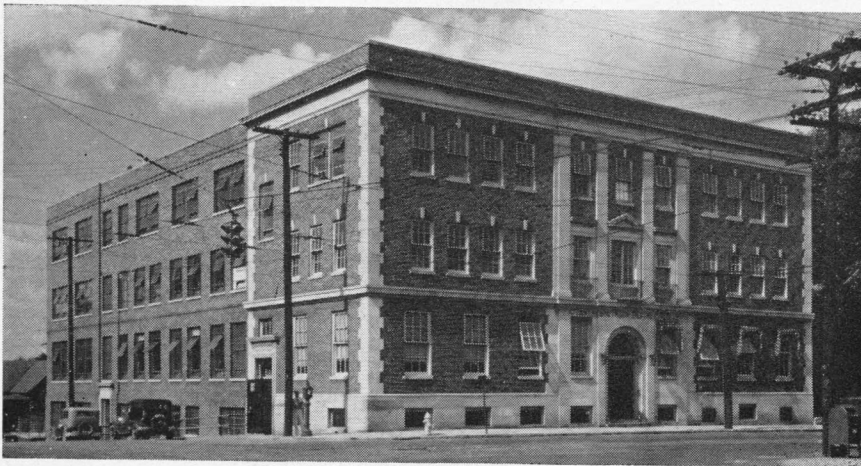
The real objective of dental education is to provide a group of highly trained individuals for the rendition of dental health service to the population. In our effort to accomplish this objective, we first attempt to select those with the best minds and the highest promise of developing the skills necessary to the rendition of this service. We then subject those selected to a curriculum, under university dis-



cipline, designed to equip them with a broad knowledge of the basic biological sciences fundamental to health service and of the technical procedures necessary to the restorative art of dentistry. Effective correlation of these divisions is sought through clinical practice designed to compel a complete diagnosis of mouth conditions in the light of the knowledge of the basic sciences before a plan of treatment of conditions requiring restorative procedures is approved. Fundamental training should be provided, also, in the history of the profession,

practice management and the social and economic problems involved in providing dental health service to the population.

As the result of the training received as an undergraduate student of dentistry, the prospective dental practitioner should be able to enter upon private practice, qualified and confident of his ability to render an adequate health service from the biologic, as well as from the restorative standpoint. He should be an individual of broad interests, cognizant of his importance to the community and of the responsibilities incumbent upon him because of the benevolent monopoly which society has placed in his hands.



EMORY UNIVERSITY

AMERICAN COLLEGE OF DENTISTS
REPORT OF BOARD OF REGENTS; REPRESENTATIVES OF SECTIONS
AND COMMITTEES, CHICAGO, FEBRUARY 8, 9, 1947:
(Abbreviated)

I.	Board of Regents. Otto W. Brandhorst, D.D.S., <i>Secretary</i>	38
II.	Committees:	
	a. Research Fellowship Board. Paul C. Kitchin, D.D.S., <i>Secretary</i>	39

I

BOARD OF REGENTS
OTTO W. BRANDHORST, D.D.S., *Secretary*

The Board of Regents met in the Stevens Hotel, Chicago, Ill., February 8 and 9, 1947.

The first session convened on Saturday evening, February 8, at 7:30 o'clock. President Hodgkin presided. Eight members were present. Minutes of Miami, Fla., meeting approved. Secretary's report on Minutes accepted.

The Secretary reported as follows:

Present total membership as of February 1, 1947..... 1306
Fellowships conferred by Sections, fall of 1946..... 57
Fellowships conferred in Absentia, fall of 1946..... 3
With sincere regret, we note the passing of the following Fellows since the Miami meeting:

J. Cannon Black, Chicago, Ill.....	January 28, 1947
Lt. Clarence R. Benney (Army).....	November 30, 1946
David S. K. Dai, China (killed in airplane accident) ..	December 10, 1946
Lewis W. Ender, LaCrosse, Wis.....	December 19, 1946
John Norborn Johnson, Goldsboro, N. C.....	December 2, 1946
Harry B. Shuman, Boston, Mass.....	November 1, 1946
Arthur E. Wrigley, Eureka, Calif.....	November 27, 1946

The officers and Regents present, reported on their attendance at Section meetings, offering suggestions for later consideration. Adjournment at 10:15 p. m.

Second Session: The Board met again on Sunday morning from 9:30 to 11:45 o'clock, to hear special committee reports and make plans for the Boston meeting.

Plans were agreed upon for a full-day meeting in Boston on Sunday, August 4, 1947, in the Statler Hotel, details of which will be announced later. The meeting adjourned in time to participate in the Illinois Section luncheon meeting.

Third Session: The Board met again at 7:30 p. m., to hear several committee reports. The report of the Committee on Research was accepted with appreciation for its accomplishments. The report was ordered published. (See below.)

Adjournment at 10:00 p. m.

II

RESEARCH FELLOWSHIP BOARD, 1945-6

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

I. GRANTS FOR 1945-46

There was only one research grant made for this period. It was for \$500.00 to Drs. H. R. Hunt and C. A. Hoppert of Michigan State College, East Lansing, Michigan. The project was a continuation of their study of inheritance in rat caries.

In the report for this period Hunt and Hoppert state that their study has included a total of 5069 rats. They have reached the 16th generation of caries susceptibles and the 13th generation of caries resistants.

Their susceptible animals continue to show low variability in time of caries development. This indicates an almost homozygous condition. The resistant line is still so variable in time of caries development that it is not homozygous.

Evidence has been secured that the mechanical breakage of upper molars of caries resistant animals interferes with the development of caries in the opposing lower molars. To overcome this they plan to reduce the particle size of the food somewhat to reduce this tooth breakage and minimize this condition.

II. RESULTS OF RECENT RESEARCHES

A. There is now, according to Hunt and Hoppert, strong evidence to support the following claims:

1. The presence of an hereditary factor in rat caries.
2. Rat caries is due to fermentation of carbohydrates.
3. Coarse rice particles in diet facilitates caries production.
4. Age increases caries resistance.
5. Normal use of molar teeth facilitates rat caries.
6. The phenotype is a very unreliable index of the genotype.

B. Hunt and Hoppert state that they do not know:

1. What role tooth structure plays in the caries process.
2. The chemical situation in the mouth that retards the growth of acid forming bacteria. They theorize that this is perhaps the thing that is inherited.

Drs. Hunt and Hoppert "extend sincere thanks to the American College of Dentists for very generous assistance in the financial support of this research."

III. PUBLICATIONS OF RESEARCHES BY GRANTEES

Publication of researches by grantees during the period July 1, 1945, to June 30, 1946, have appeared during this time as follows:

Grantee: William H. Bauer (1941-42), School of Dentistry, St. Louis University, St. Louis, Mo.

(1) *Paper:* William H. Bauer, M.D., D.D.S. Effect of estrone on tooth buds and bones in growing dogs. *J. Am. Col. Den.*, 12, 192; 1945 (Sept.).

Dr. Bauer reviewed the results of other workers who had administered estrogenic (female sex hormone) substances to experimental animals and points out that none had been interested in the effects on the teeth and their surrounding hard tissues. He attempted to answer three questions with this own experimental project: "(1) Is there a hyperestrone effect on the tooth buds? (2) Are jaws and bones affected? (3) Is the dentition influenced?"

Six puppies, 8 weeks old, 3 males and 3 females were used. One of each sex served as controls. The experimental animals received totals of 210,000 to 340,000 I.U. Estrone (in sesame oil) distributed over periods of 9 and 21 weeks. The administration was

by intramuscular injection. All animals had the same diet of Purina Chow cubes, milk and water.

At the end of the experimental period (63 or 147 days) microscopic examinations were made of a number of bones (including maxilla and mandible) and glands. Clinical examination and X-rays showed shortened snouts and long bones of estrone treated dogs. X-rays showed increased bone density between the roots of erupting permanent teeth of the experimental dogs. There were no apparent variations in hard tissues of tooth buds from that shown in control X-rays.

In summary of his paper Dr. Bauer stated:

"Observations on the tooth buds and the skeletons of puppies which had received intramuscular injections of estrone over a period of two to five months showed a proliferation of the united enamel epithelium and a multiplication of the epithelium of the gingivae associated with keratinization but failed to reveal the very distinct and intensive changes in the bone and cartilage as seen in other experimental animals. Sporadic foci of osteosclerotic endosteal bone were found in the mandible, in the lower end of the femur and the upper end of the tibia fairly close to the epiphyseal line. They consisted of irregularly arranged but well calcified young trabeculae encroaching upon hyperemic, fibrous, and occasionally degenerated bone marrow. Whether these localized areas of hyperossification around fibrous bone marrow were due to the growth of the bones or the estrone remains to be proved."

The paper contains one table of weights, one of the results of experimental treatment on the dogs used, and seven photographic plates illustrating histologic and X-ray findings.

(2) *Paper*: William H. Bauer, M.D., D.D.S. Action of Cystine on bones and teeth of young dogs. J. Am. Col. Den., 13, 34; 1946 (March).

Four young dogs, litter mates, were used. Three were fed excessive amounts of cystine in addition to a normal diet and one was used as a control. The experiment lasted about one year.

All animals had normal growth and roentgenograms of skeletons of experimental dogs showed no variations from the control dog.

Microscopic examinations of long bones, ribs, parts of the cranium,

jaws, kidneys, liver, spleen, endocrine glands and some lymph nodes gave negative results in contrast with previous results reported by others on rats, where severe kidney damage and degenerative liver changes were observed. Previous workers had not reported on bones and teeth.

Grantee: June R. Schamp (1941-42), School of Dentistry, College of Physicians and Surgeons, San Francisco.

(3) *Paper:* J. R. Schamp, Ph.D., and H. M. Schamp, Ph.D. Variability of the pain threshold in man. *J. Den. Res.* 25, 101; 1946 (April).

The work of previous investigators using a new method for finding the threshold of human pain is summarized. The authors point out that former results fall into 2 categories. (1) Those indicating little variation in the pain threshold from person to person or in the same person on successive days and (2) those indicating considerable variation.

The object of the work presented was to determine the value and limitations of the technique of Hardy, Wolff and Goodell, essentially a measurement with a radiometer of the pain threshold intensity of infra-red stimulation of the skin of the forehead.

Sixteen persons underwent a total of 327 pain threshold determinations. On each subject there were 2 to 6 determinations per sitting. Sittings were at intervals of 1 to 3 weeks for periods up to one year.

The authors summarized their findings as follows:

"A significant variability was found in the pain threshold determinations in different persons and also in the same person over a period of time. The average pain threshold of 16 young adults was 67.7 millvolts with a standard deviation of 23.5 millvolts. About two-thirds of the persons showed a gradual rise in the threshold over a period of months."

The article has one table containing data on the 16 subjects tested and a graph showing the pain threshold variations in 3 subjects over a 13-month period.

With the publication of the three papers listed above the Research Fellowship Board can now state that all grants in aid of

SUMMARY OF A. C. D. GRANTEES, GRANTS
AND PUBLICATIONS THEREFROM
July 1, 1940 - July 1, 1946

Grantee No.	Name and Institution	Amount and Period of Grant						No. Published Articles to July 1, 1946
		1940-41	1941-42	1942-43	1943-44	1944-45	1945-46	
1	H. R. Hunt C. A. Hoppert Mich. State Col.	\$100.00	\$680.00	\$750.00	\$425.00	\$500.00	\$500.00	2
2	A. H. Kneisner West Res. Univ.	500.00	.....	.....	.....	.....	.....	2
4	S. Seltzer Univ. of Pa.	416.60	.....	.....	.....	.....	.....	2
5	M. L. Tainter Col. P. & S.-S. F.	400.00	500.00	.....	.....	.....	.....	6
6	J. Nuckolls..... Univ. of Cal.	482.35	.....	.....	.....	.....	.....	3
8	W. J. Furuta Univ. of Ill.	999.53	.....	.....	.....	.....	.....	1
9	J. R. Schamp Col. P. & S.-S. F.	.....	1,200.00	.....	.....	.....	.....	1
10	W. H. Bauer St. Louis Univ.	.....	500.00	.....	.....	.....	.....	2
11	W. D. Armstrong Univ. of Minn.	.....	500.00	1,200.00	con't.	con't.	.....	3
12	M. F. Bales Tufts Col.	.....	.....	465.00	.....	.....	.....	1
13	M. Steggerda Car.Inst.of Wn.	.....	.....	225.00	.....	.....	.....	1
14	B. Gottlieb Baylor Univ.	.....	.....	.....	.....	243.17	.....	2
Total for each year		\$2,898.48	\$3,380.00	\$2,640.00	\$425.00	\$743.17	\$500.00	26

Total Grants 1940-46..... \$10,586.65
Cost per publication..... 407.18

research have resulted in one or more publications by the individuals so aided. There is reason to believe that several more may be added in the future as a result of grants made in the period 1940-46.

The Research Fellowship Board reports with pleasure that the past year has witnessed a very welcome and important event in research in the dental field. The U. S. Public Health Service has included Dentistry in its Research Grants program, authorized under Public Law 410 and amendments to that law. During the first half of 1946 a group of special consultants of the U.S.P.H.S. were appointed from the ranks of dental research men. This "nine-man" group has the function of acting as advisors to the National Advisory Health Council concerning all requests for dental research grants from the U. S. Public Health Service. The dental group is known as the Dental Studies Section of the U. S. Public Health Service. They meet about four times a year at times sufficiently in advance of the meetings of the National Advisory Health Council so that their recommendations on applications for research grants may be considered by that Council. Since the initiation of the dental program about \$76,000 has been approved to 15 applicants for the investigation of dental projects.

The personnel of the Dental Studies Section is:

Paul C. Kitchen, Ohio State University College of Dentistry, Chairman; H. Trendley Dean, National Institute of Health, Executive Secretary; Hermann Becks, University of California; Harold C. Hodge, University of Rochester; George Paffenbarger, National Bureau of Standards; Isaac Schour, University of Illinois, School of Dentistry; Lt. Col. Joseph L. Bernier, U. S. Army; Cdr. Carl A. Schlack (DC), U. S. Navy; Edwin M. Kennedy, Veterans Administration.

A more complete description of the research grants activity of the U. S. Public Health Service may be found in Science for December 13, 1946. The title is "New Horizons in Medical Research" by C. J. Van Slyke.

There are no requests to the American College of Dentists for grants in aid for research for 1947-48.

BOOK REVIEWS

Man Against Pain (The Epic of Anesthesia), by Howard Riley Raper, D.D.S.: This book of 337 pages, including an index, appeared during the year 1945 and has been reviewed very extensively by the public press, some medical journals and perhaps a limited number of dental journals. The sale of the book has exceeded expectations as a best seller because of the story that is told and the way in which it is told. The author, a dentist, is without doubt one of the best known men in the profession and he has reached back 100 years and dug up the truth of the introduction of anesthesia to the world of sufferers from pain. It is written in popular language so that the layman as well as the professional man or the scientist may understand and enjoy it.

In the early pages Dr. Raper makes a most interesting statement: "I had hoped that if I stuck stubbornly to the truth as I found it that loyalty would somehow be constantly apparent and would protect me against any appearance of prejudice." But as he proceeded he finds there was "no poorer way of seeming to be impartial toward individuals than to stick to the truth; for truth does not bother to be, or to appear to be, impartial. Quite selfishly, even ruthlessly, it favors some and disfavors others. I have deliberately subscribed to this kind of partiality. It has ruined my noble purpose of protecting everybody and blaming nobody, but it has, I hope, preserved the integrity of the story." This plan on the part of the author is well illustrated on page 128 in discussing the incident of "acid-throwing." He states that "he (Wells) cut a V-shaped slit along the side of the cork of a small vial, thus making a sprinkler bottle. . . ."

History may be written as descriptive or as chronological, the latter being essential so far as the enumeration of facts is concerned, but the former being more desirable from the reader's standpoint. This book is narrative in form and among others may be philosophical or interpretative as well as factual to a degree. Dr. Raper has presented his subject well under this form. It is a book that should

be read by every dentist, not only because of the facts of history and the story of the life of a man as related to those facts and the interpretation which conduces to the good of the profession in the future, but for this very reason, our professional tradition is very greatly strengthened. Dentistry is a comparatively new profession and little has been done to develop both its history and its tradition, so that we may have really authoritative ground upon which to stand and thus allowing ourselves to be known as a real profession. Raper's book, *Man Against Pain*, is a splendid contribution to that phase of our professional existence. It was published by Prentice Hall, Inc., 75th Ave., New York 11. Price \$3.50.

Dental Education Today: This is the title of a new book on dental education by Dr. Harlan H. Horner, Secretary of the Council on Dental Education of the American Dental Association. It consists of 420 pages including appendices and index. In this, Dr. Horner has demonstrated the comprehensive understanding which he has of dental education. He is an educator and for the past several years has been devoting his time and energy to dental education in particular, as Secretary of the Council. As a result he has come to this point of clear understanding.

In his book he answers many of the questions that confront us at the present time relating to the equality of the dental profession with other professions, its autonomy and its possible value as a public health service. There are questions about which we of the profession have been so greatly concerned for a considerable time and perhaps they have been answered by Dr. Horner, as of today at least. It would appear that Dr. Horner has approached his subject from the proper standpoint, namely, he has written in terms of "objectives" and "objective standards." That has made essential then his last and tenth chapter under the general title "Tomorrow." In the concluding pages of this chapter, he enumerates a number of challenges of the future: "American dental schools have clearly won world leadership" (in the profession)¹; the task of the future

¹Not in original.

is to hold it. The next challenge is that of holding its rightful place in the social order; here will be involved teaching and research. The next challenge is that of broadening its education from formal, professional education to that manifesting a "true scientific spirit." The next challenge involves "licensure and regulation." The next refers to the "operation and observation of professional codes of ethics"; the next and greatest, that of carrying its service to all of humankind.

"The responsibility for bridging the gap between what we are professionally able to do and what needs and ought to be done rests, first, upon society and, second, upon the profession. In the mercy of God and in the light of true dental science the meanest human sufferer is entitled to all the relief, comfort, and care the science and the art of dentistry can bring to him. . . . Whatever the outcome of this far-reaching economic, social, and professional problem, the dental school of tomorrow must continue to build upon the dental school of today." Published by University of Chicago Press. Price \$6.00.

Applied Anatomy on the Head and Neck, Harry H. Shapiro, D.M.D. 2nd Ed. 1947: This text appears to lack a logical sequence in presentation with the exception that it has been divided into two general sections—Examination of the Patient and Anatomy of the Head and Neck. The divisions of the latter section are not well correlated nor are they in a logical sequence from the standpoint of instruction.

Section 14 deals with the Edentulous Mouth. However, in the treatise on the normal anatomy, edentulous or partially edentulous, illustrations are utilized. (Figures 12, 19, 78, 81, 88.) The use of photography is not well taken as a means of illustration, the indistinctness is apparent throughout. (Figures 13, 20, 56, 57, 58, 145, 156, 191.)

Many illustrations are marked as "after Spalteholz." In checking over Spalteholz one finds the reproductions to be inferior and

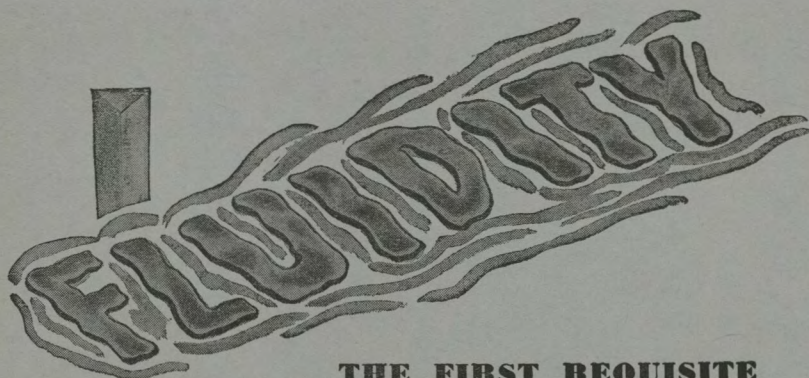
changes apparently have been made altering suggestions offered in the original. One example may be seen in Fig. 16.

The artists' illustrations are inaccurate, to say the least. Examples are all too numerous. For one example, the author's enumeration of the paired and unpaired bones of the skull, Fig. 63 is offered as an anterior view. Note the atypically "paired" frontal bone. The anatomy offered by these illustrations is highly erroneous. Another example is offered in Fig. 89 in which 34 teeth are present. Figures 78, 66, 71, 81, 83, 84, 116, 219 and many others are in the same category. The black and white illustrations can hardly be considered as even fair.

In the light of the great need for more accurate instruction methods and materials, and the modern methods now available for procuring these, it seems that such a "text" deserves little consideration.

W.G.I.

The National Formulary (8th edition): The National Formulary is a book well known among medical, dental and pharmaceutical students. It consists of a discussion of the various drugs and chemical compounds from the standpoint of their chemical, physical and to a certain extent, pharmacological actions including dosage. It is prepared by the Committee on National Formulary under the supervision of the Council and by the authority of the American Pharmaceutical Association. This one just off the press is official after April 1, 1947. It is a book consisting of 850 pages including an Index. A large section of it is devoted to reagents and preparations for use in the clinical laboratory. It includes much of use in our own clinical work. It can be a valuable reference book for the dentist in practice. It is printed and distributed by the Mack Printing Co., Easton, Pa. and may be secured through the printers or the publishers, the American Pharmaceutical Association, Washington 7, D. C.



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