Contents

American College of Dentists:
  President's Address. E. G. Meisel, D.D.S. ................................................. 285
Pediatrician and Orthodontist. Walter Hyde, D.D.S. .................................... 300
An Account of First Use of Sulphuric Ether by Inhalation as an Anesthetic in Surgical
  Operations. C. W. Long, M.D. .............................................................. 309
Proceedings of the St. Louis Meeting of the Board Regents and Committee Chair-
  men, Aug. 27-28, 1942:
    I. Journalism. J. Cannon Black, D.D.S., Chairman .................................. 318
Editorials:
  What Is the Difference? ................................................................................. 325
  Anesthesia Centenary .................................................................................. 329
  Moisture Spoils Amalgam .......................................................................... 331
Correspondence and Comment:
  Was John Harris "The Founder of American Dental Education?" .................. 333
  Further Comment on the "Proposed Degradation of Dentists in a Medico-Dental
    Society" ...................................................................................................... 336
  History of the Army Dental Corps ............................................................ 338
  "Admiralty in the Navy Dental Corps" ....................................................... 339
  Dentistry: An Autonomous Profession ..................................................... 342
Notes:
  God Bless Them! ......................................................................................... 345
  What Does F.A.C.D. Mean? ......................................................................... 345
  New Chief of the Army Dental Corps ....................................................... 345
  Where Is McFarland Now? ......................................................................... 346
  Teeth: Those Isolated-Insulated Organs .................................................... 346
  Collective Views on the Commercial Exploitation of the Journal of Dental Research 347
New Books ..................................................................................................... 349

Sections and dates of meetings in College year of 1941-42 (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.

JOURNAL OF THE AMERICAN COLLEGE OF DENTISTS

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Only ten months have elapsed since you bestowed upon me the honor of President of the College. In those ten fleet months the map of the world has changed; the hopes, ambitions, and pursuits of men have been altered; civilization has wavered and stood still. This is not a time for sedate, scholarly discourse; our minds are engrossed with the serious business of defending the ideals which we cherish and the democratic existence which makes those ideals possible, while we bend all our energies to defeat the jackals who seek to overcome the free institutions which are our guarantee of high ideals for the future.

Patriotism, sacrifice and noble endeavor are the sentiments of the moment, their holy fire purging us of dross ambitions and at the same time clearing our minds so we may take inventory and look with fresh eyes at the problems ahead. While our sons and nephews struggle for the principles of freedom and security, shall not we, spurred by their sacrifice, strive with equal fervor to carry on in promoting the principles of honesty, decency and altruism in our allotted sphere? It is our hope, and our belief, that every member of the College has given and is giving every measure of strength, of which he is capable, to the discharge of his particular portion of the national struggle. It is the privilege and the duty of every man to do his full share.

That Fellows of the College are assuming their full responsibilities is shown by the testimony of the standing committees, spread all over the country, and from whom come the story of great ac-

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1Address delivered to the Board of Regents and Committees in session in St. Louis, Mo., Aug. 27, 1942, the regular Convocation announced to be held in Boston having been postponed on account of the war.
tivity everywhere. Indeed, many committeemen have been unable to devote sufficient time to their assignments because of pressure of other duties. No effort has been made to press these workers beyond the increased responsibilities of practice and the additional tasks imposed by the war. The diversion of large numbers of younger practitioners to active military service has measurably increased the load already carried by those remaining in civilian practice, which load is further increased by the closer attention to dental conditions being given industrial workers, and is further increased by the voluntary participation of large numbers of dentists in preparation for Civilian Defense. I have considered justifiable a certain laxity in the performance of College assignments because of these additional demands on our time and energy.

If civilization is indeed standing still, it will not long remain stationary. Already there is a new force stirring abroad, and among us, a leveling force induced by an almost universal demand for equal opportunities, equal rights, greater equality in social position, and better guarantees of civil liberty, and protection in that liberty. These demands have been so insistent in certain places that at times they have threatened the success of every venture in their behalf.

To aspire to better things and to hope for their achievement is an attribute of the human soul. Through the pages of history men have struggled forward toward better things, blindly, by devious routes and tortuous effort, paying dearly for each advance, but nevertheless going on, and upward.

"On a huge hill,
Cragged, and steep, Truth stands, and hee that will
Reach her, about must, and about must goe."

One of the truths to be reached and to be learned by man in the struggle after greater equalities and greater liberties is that the achievement of those objectives brings him at the same time, into possession of a most sobering influence, namely, responsibility. Freedom and responsibility go hand in hand so that if one would have the first he must also accept the other.

To relate these thoughts to the problems in our own family, dentists should take cognizance of the tremendous strides achieved in
the past fifty years, and try to determine if full responsibility for
dentistry's position in the social fabric is being recognized and is
being accepted. Acceptance of responsibility implies recognition of
resultant obligations. Dentists, then, may not enjoy the fruits of
their improved social status without incurring the attached obliga-
tions.

Debates that raged up and down the land a few years ago re-
vealed clearly enough the reluctance of dentists to acknowledge
their responsibilities to society and also indicated some desire to
sidestep the obligations. How is it today? How alert will dentistry
be toward its problems of tomorrow when the war is over and more
people will demand more care than dentists have been able to de-
liver up to the present? These are serious problems which need dis-
passionate study. They should be envisioned through an altruistic
eye, albeit a practical and well balanced head must be in the back-
ground.

From time to time voices have been raised like that of St. John
in the wilderness, urging dentists to dwell upon the potentialities
of their existence, to weigh the privileges and opportunities granted
them, against concomitant duties and responsibilities. Something
has been accomplished. The College participated in that accom-
plishment. Something more is now being done, in which the Col-
lege is taking a part, but I believe nothing big will be accomplished
until all dentists begin to think less of fat fees derived from slick
mechanical restorations and learn to think more of why those res-
torations become necessary and how they can be avoided.

Ten months ago I suggested that dentistry should study the feasi-
bility and desirability of compulsory dental care for children. The
statement did not create a ripple. Ten years ago the makers of such
statements were ostracized and looked upon as suspicious characters.
One capable and eminently qualified candidate was defeated for
high office in the dental world because he was believed to champion
ideas like the one just cited. Is the idea less repugnant today than
it was ten years ago? Have we advanced in that direction, and will
the condition be an accomplished fact ten years hence? If com-
pulsory provision for dental care for children is a good and desirable thing, why wait another decade to inaugurate it?

I have said the exigencies of the times and the stress of additional duties have interfered with the prosecution of certain assignments and investigations, but I warn you that the nearer we come to the end of the war and to that post-war era with its altered living conditions and revised social conditions and changed industrial conditions, the more acute will become the problem of more dental service for more people. Perhaps, I should say more good dental service for more poor people. That problem must not be met haphazardly. Much depends upon the manner of its solution. It is a global problem, with American dentistry in the focal spot. American dentistry is in the focal spot because it has been advertised far and wide as the world’s best. Will it rise to the occasion?

Dentists exist because there is a need for the service they render to the public. In a sense, they are public servants. If the public should decide that the dental service now being rendered is inadequate and in other ways unsatisfactory, and that the present dental practitioners are incapable of handling the situation to the public liking, what might happen? It need not happen if a little forethought is exercised, provided the motivating force is a sincere desire to build unselfishly for the welfare of the great mass of the people.

Dentists are not banded together for the purpose of collective bargaining, but all dentists are bound by the principles of Leo to give an honest measure of service in return for a fair recompense. A dental society is not a trade union, but as an organization of professional men it has the responsibility of providing the means by which studies of its problems may be made and progressive programs of service developed. The following is quoted from a report by Simons and Sinai:

"Social evolution is not foreordained. Social institutions are humanly created out of previous ones and present conditions. . . . Whatever is done

during the formative period sets a pattern which persists long after many of its features have been painfully altered.

"Guidance in the formation of any health program must depend fundamentally upon the wisdom and intelligent leadership of the medical professions. Many of the defects of existing systems are due to the unwillingness of those professions to assume the position of informed leadership in a program of which, whether they desire it or not, or whether others recognize it or not, they will always be the essential factor; and that unwillingness depends in turn upon a failure of professional bodies to study and consider these problems."

Ten years ago those statements were published. In the last decade, has the dental profession made an honest and sincere effort to bring forth a program of such significance that it could be said to be constructive and promising for the future? Considerable has been done in those ten years, but the effort seems to have lacked coordination and determination. It lacked what might be called "punch."

An approach to the problem, characterized by obstructive and defensive tactics, will not likely bring forth a constructive and workable program, worthy of a great profession, and fair to all concerned. What part will the College play in developing a sound program for post-war dental practice? Other opportunities for unselfish investigation and study there are, but this is probably the most important, and may be broken down to include many of the others. One of these is the situation developing in prosthetic dentistry, which may become a major problem in a few years.

A review of the accomplishments of the College since its institution twenty years ago indicates it has more than justified its existence. Nevertheless, there may be some lean years ahead and quite surely many years packed with hard work, so this is not the time for us to rest on our laurels. The term "giant gone soft" must not be applied to the College.

Wise and thrifty management will go far in keeping the College alive and active, but the problems of the immediate future are likely to require greater resources than we presently possess.

Our Endowment Committee has been developing plans to increase our financial stability. We have had to live on an income
which passed its peak some time ago. The College has assisted generously in the support of deserving dental enterprises, and will continue to do so, but the expanding field of activities and obligations and opportunities makes it imperative that there be more resources available. When the Endowment Committee eventually begins its campaign for funds, every member should be primed to do his share with credit to himself and to the College.

Growth of the College to date has been steady, solid and most gratifying. Its members are active, loyal and well esteemed. The College is a progressive, forward-looking, compact organization in which an earnest and upright worker finds himself among friends. It is a power for good in the dental profession.

The time has now arrived, in my opinion, when a little deeper thought should be given to any further expansion. A larger membership makes for a less compact and more unwieldy body, though it does provide more sinews. A football coach would say a good big man is more valuable than a good little man, but most of us who have had experience with committees would say a small committee is better and more productive than a large one, if the timber is of the right quality.

If the College may be viewed as a committee of the dental profession, whose special business is the advancement of the objectives laid down in its first constitution, it would seem that quality of timber rather than numerical strength should be a proper goal for the future.

It is a great disappointment to be unable personally to confer Fellowship upon the newly elected class of this year, and to welcome them into our membership. However, we are in harmony over the reasons for the altered procedure, and my congratulations are just as cordially extended, even though from this distance. My personal message, if face to face, would be "Be good members."

Finally, I desire to express sincere appreciation for the cooperation and assistance I have received from the officers and Regents, and especially from that most competent secretary, Dr. Brandhorst, whose tireless energy and willing hands made light work of the president's duties.
It is with a solemn sense of responsibility that I accept the trust you have committed to me as President of the American College of Dentists and I ask for, and will rely upon, your aid in the grave task of carrying on the work of the College during these troubled times.

In addressing you I shall not undertake to mention principles or measures of administration, but rather to speak of conditions which should stimulate us to attain certain objectives as essential to the welfare of our profession and our country. I believe we should strive for a permanent pacification of the whole world by such measures as will secure the complete protection of all its people. I believe in the continuance of our representative form of government and the autonomy of the dental profession.

The health professions constitute but a part of the body politic but they play a major role in our democratic way of life. Their activities are closely associated with local, state and national policies and are responsible for the health of the people.

There has never been a time in the history of our country when we have been faced with so many health problems. The appalling figures on the loss of man power, now so vital in war, through lack of health-care has caused the government and the individual citizen to be confronted with the grim reality that the neglect of such care has not only taken a heavy toll of our population but has greatly emphasized the need of making health service available to those who are economically unable to obtain it.

Little interest was shown in this problem until about twenty years ago. Up to that time the organized health professions had not been
concerned so much with care for the masses as with requirements of
the individual. In the last quarter of a century our profession has
made great progress in education and scientific research but its ad-
vancement has been slow in recognizing social changes and their
exactions.

As far back as 1927 the need of furnishing health care for the
people was recognized by our government and in order to study
the necessity for, and the economic aspects of such care the Com-
mmittee on the Cost of Medical Care was organized. This Com-
nmittee, consisting of fifty members, was selected from different
groups interested in the problem, including representatives from
the American Dental Association.

It was while the Committee on the Cost of Medical Care was
making its studies that Dr. Ray Lyman Wilbur, its chairman, made
the suggestion to the American Dental Association that one or more
cooperative projects be undertaken. This request was responded
to by the Association in 1929 when they created the Committee on
the Study of Dental Practice. The following series of studies were
reported and published: The Practice of Dentistry and the In-
comes of Dentists (1929); The Cost of Equipping a Dental Office
(1932); Dental Clinics in the United States (1930 and '32); The
Cost of Dental Education, and A Study of Health Insurance Sys-
tems (1932).

The health insurance study was made in the European countries
and was financed by the American College of Dentists. This re-
port was published in a book entitled "The Way of Health Insur-
ance."

The facts as presented in these publications greatly assisted the
Committee on the Cost of Medical Care in formulating their final
report. Upon the publication of the Committee's report much dis-
cussion was aroused in the two professions with the result that the

2 Medical Care for the American People: Final Report of the Committee on the
Cost of Medical Care, Ray Lyman Wilbur, M.D., Chairman; University of Chicago
Press, 1932.

3 University of Chicago Press.

4 Simons, A. M., and Sinai, N.: The Way of Health Insurance; University of
Chicago Press, 1930.
American Medical Association enlarged its Bureau of Socio-economics. But it was not until 1934 that the Medical Association adopted their "Ten Principles" enumerating professional standards. At a later date the House of Delegates of the American Dental Association adopted "Twelve Principles" somewhat similar to those of the American Medical Association.

While the need for, and the possible methods of providing more health-care were being investigated by government agencies and discussed by the health professions our country was thrown into a major depression. The result of this caused great financial loss to the majority of our people in all walks of life and created a condition which local and state relief organizations were unable to meet. Many theories were advanced and plans suggested in an endeavor to provide a remedy, but it was not until 1935 that Congress, through legislation, enacted the Social Security Act. This was the first time that our legislative body had created a means whereby old-age federal aid might be assured to wage earners.

The Social Security Act as enacted in 1935 was an emergency plan achieved during the depression. In the course of the next four years the need for federal aid became greater and the necessity for extending the privileges of the act to more people was recognized. This was accomplished in 1939 by Congress passing certain amendments. These amendments granted the following authority:

"To provide for the general welfare by establishing a system of old age benefits, and by enabling the several States to make more adequate provision for aged persons, dependent and crippled children, maternal and child welfare, public health, and the administration of their unemployment laws; to establish a Social Security Board; to raise revenue; and for other purposes."

With the right granted the Social Security Board to extend service "for other purposes" a growing demand for disability and health benefits is constantly being made.

That the government has been and still is studying the major problems of human resources is evidenced in the report on the "Problems of a Changing Population." In the foreword of that
report the following statement is made:

“In our democratic system we must progressively make available to all groups what we assume to be American standards of life. The gains of the nation are essentially mass gains, and the birthright of the American citizen should not be lost by indifference or neglect. Foremost among all the gains of civilization are health and education, and in our land we cannot long continue to deny the opportunity for an American minimum of health and education to any of our fellow citizens. This is one of the first goals to which a national program for the use of our national resources must lead.”

In a pamphlet published in August, 1941, under sanction of the government and entitled, “After Defense, What?” we find the following:

“Plans to expand service activities are now called for. With full employment and a high national income, there will be a large increase in the demand for medical service, entertainment, education, travel, personal and household care, repairing and all other services which go with a higher standard of living. In some areas the demand will create supply in advance. In other areas planning and training will be required to avoid serious shortages. This is particularly true of: the training of doctors, nurses, engineers, teachers, public servants, and other professional people; the development of hospitals, schools, and community facilities for recreation, culture, and art; and the planning and organization of comprehensive youth programs.

“Plans to expand these activities must be made before peace comes, partly because we know we shall need them, and partly because we do not want our civilization to throw its emphasis too much on material matters, and too little on cultural and spiritual values.

“Plans for security are under way through the appropriate agencies of government. The Board’s Committee on Long-range and Relief Policies, including technicians from these agencies, is completing its report for early release. It will be followed by further materials pointed at the post-defense period to underpin security for all Americans. The old and the very young, mothers and the sick, the unemployable—all must have security as a matter of right. New forms of social security and programs of relief and relief work must be put in operation.”

Social Security is one of the major problems of our economic structure and there is strong evidence that in formulating plans for the post-war period the health of the nation will hold no small consideration.

7Report of the Committee on Population Problems to the National Resources Committee; May, 1938, U. S. Gov’t, Bureau of Publications, p. 5.
Needs for social changes throughout the civilized world are being high-lighted in the general literature of our times, and there has never been so much published or read on this subject. One has but to glance at the books, journals and magazines displayed for sale, or endeavor to obtain from a public library's long waiting list any of the material on these questions, to recognize the exceptional interest shown in present conditions and post-war rehabilitation.

In the declaration of the Atlantic Charter the President of our country and the Prime Minister of the United Kingdom included certain principles on which they based their hopes for a better future for the world. In their fifth declaration they desire "to bring about the fullest collaboration between all nations in the economic field with the object of securing, for all, improved labor standards, economic adjustment and social security." With twenty-eight nations proclaiming adherence to and fighting for the principles contained in the charter does it represent the framework of a future world?

This demand for social security is not new. Man has always hoped and struggled for a better future—a life free from want and fear. The progress of civilization has reduced the world to such small dimensions that new factors of vast consequence are presented to our profession. International affairs have become domestic problems, and the solution of health questions in one country eventually will call for decisions in another. For the health of a nation is the foundation upon which new security must be built. It is its greatest asset and controls its very existence.

That the British Medical Association was conscious of the necessity of formulating post-war plans is evidenced by the decision of their Executive Committee "that the time had come for the profession to give serious consideration to the problem of reconstruction and reorganization in the field of medicine in the post-war era and the committee had thereupon decided to appoint a 'British Medical Association Medical Planning Commission' to study wartime developments and their effect on the country's medical services both present and future."

*British Medical Journal: Jan. 4, 1941.*
From information published in the English medical and dental journals there is also evidence that the dentists are greatly concerned over the present and future status of their profession. With lack of sufficient men being graduated from their dental schools and the necessity of furnishing service not alone to the civilian population but to the present armed forces, a "Joint Committee on Post-War Reconstruction has been set up by the British Dental Association, the Incorporated Dental Society, the Public Dental Service Association and the Joint Planning Committee of Dental Students."

The terms of reference are: "To investigate and report upon the position of dentistry and the provision of dental service for the nation in post-war Britain."10

Coming closer to home I quote from the valedictory address by Dr. Gordon S. Fahrni, president of the Canadian Medical Association, at their annual meeting last June:

"At the annual meeting in Winnipeg, one year ago, we were told that the Department of Pensions and National Health was considering and studying health proposals for the Dominion. Last September your Executive Committee was invited to sit in with the Minister and his deputies at a meeting the following month and a full day was spent with them in Ottawa, considering and discussing health proposals. Since then a sub-committee of seven, chosen from the members of your Executive Committee, have met frequently."11

The facts I have mentioned are merely illustrative of a few of the past and present trends. We are living in the present but in order to understand the present a study of the mistakes and lessons of the past must be made. In speaking of the marked change in public health sentiments Dr. Marcus L. Ward, a past president of the American Dental Association, in a paper entitled, "Dentistry under a Social Security Program," made the following statements:

"The signal to begin a crusade through the literature seems to have been the passage of the Social Security Act in 1935, but its impetus was accelerated by the defeat or at least postponement of the Wagner health bill in 1939. This, in my opinion, was the most opportune time for dentistry to start something to take the place of the bad Wagner health bill, which dentistry and I, through the presidency of the American Dental Association, helped to defeat, or, at least, postpone.

10 British Dental Journal: 72, 9, 231; May 1, 1942.
11 Canadian Medical Association Journal: 47, 72-74; 1942, July.
“The important thing to remember in this discussion is that we helped to prevent action on the supposedly directive Wagner bill and have suggested nothing to take its place which would make the Social Security Act function.”

Should organized dentistry wait until some future date before applying the lessons the past has taught us?

Firm in the belief that eventually victory in this present war will be ours we are now focusing our efforts to win the conflict. When victory does come what will confront us as a profession? How are we planning for the post-war period and what are we doing to insure the future security of our profession? Engaged as we are in total war it means that many of our present methods have been entirely changed or modified to conform to new standards. Will we be forced to accept some of these changes in our planning for the reconstruction period? A real task faces us.

No issues of the past are of comparable seriousness to those which may be raised when post-war problems are to be considered. All should be made to feel that the need for protecting the profession is different than it was after the first World War. There is strong evidence that we will be required to assume a necessary place in a plan to furnish social security for the masses. It is imperative that we should have concrete knowledge and realistic proposals if we are to maintain and make secure our position as an organized profession.

It may seem easy to think of preconceived ideas and precedents that will slip into patterns which can be produced with a minimum of effort but obligations will be vastly different after the war. Things which now appear minor may turn out to be complex and major projects cannot be accomplished in a day.

If dentistry is to become an integral part of a national health program have we the information available to analyze intelligently the many problems which will arise? Have we made a thorough study as to what groups of our population will likely be included in this health service? Should there be a rapid increase in the number of patients to be cared for, what type of service must be considered—emergency, minimum or maximum? How will it be financed—by the government, industrialists, individuals or a com-

bination of the three? Will the basis of payment be fixed fee, per capita, or salary? How can service best be furnished—in the private office, in clinics, or in health centers? Will it be necessary to make provision for training more dentists and will hygienists and laboratory technicians be required? From what groups in our population is the demand for health service likely to come—the government, industry, labor or from them all? Are the possible answers to these questions in our possession?

Not long ago a questionnaire was received by the members of the dental profession from a director of the United States Department of Commerce asking that confidential data be furnished relating to incomes in their profession. The information requested pertained not alone to the financial returns acquired from their dental practice but also to their past history and number of dependents. One cannot but feel that the government has other knowledge affecting the profession.

In studying dental health problems professional standards and traditions must be considered. Can our standards be upheld and our traditions modified? Prominent dentists, industrialists and the government may suggest advanced training of dentists to supervise an operative personnel consisting of sub-standard operators assisted by hygienists and technicians. This method of furnishing dental service to the low-income group of our population, if introduced, will mean basic and far-reaching changes for the profession. Can we as a health profession consider a proposal for sub-standard service by sub-standard operators? Would this method of service be consistent with the “Twelve Principles” of professional standards adopted by the American Dental Association several years ago? The profession must face the question of economy and efficiency but its major consideration is that of service.

Up to the present time the profession has made no economic study relative to proposals of payment for services. Will a fixed fee, per capita or salary method, or an incorporation of all three aid in upholding high standards? This economic problem is of great importance, for its solution by others may jeopardize the future growth of our profession and the right to control its standards of service.
What type of legislation would best serve the interests of the people and at the same time be satisfactory to the profession? When should professional control end and government assistance begin in order that we may maintain the autonomy of our profession? When we take serious thought of the many problems dentistry may be called upon to face in the near future we must realize that now is the time for action and not deliberation.

In the several reports presented by the Committee of 1929 and published in 1932 much useful information was brought forward which would have furnished a foundation for constructive planning and could have been intelligently made use of in building for a constantly changing world. Since that time the demand for assistance from those of our low-income population has been ever increasing. In order to take care of this need many local lay and professional groups are striving to furnish the service through poorly organized and controlled methods.

Dentistry's two major problems today are the cause and prevention of caries and the furnishing of dental health care to those who are economically unable to receive it—one a biological problem and the other humanitarian. As long as the first remains unsolved we must endeavor to see that care is taken of the second.

The world is in a revolution. The future will not remain static. Are we as a profession prepared to meet the changes which may be forced upon us? Have we plans to present if our leaders are called to the conference table and have we irrefutable knowledge should adjustments have to be made? Now is the time for men to think. Every man in the dental profession must recognize that he is a part of the profession—that upon him rests responsibility within the limits of his ability just as much as upon the man at the top.

I ask you, therefore, as members of the American College of Dentists, new members and old, to give of your time and talents toward the solution of the problems confronting us, so that it may not be said “too little and too late” but rather “well done, faithful servants of the dental profession.”

Reference is made to the Committee on the Cost of Medical Care, Ray Lyman Wilbur, M.D., Chairman.
At a time when so much is being said about medico-dental relations, a word about two of the well-known specialized practices may be in order. Seldom in the world of professional service is there presented a more favorable opportunity for cooperation between the members of two specialties than when the orthodontist and pediatrician can work together for a child suffering from so-called "crooked teeth" or malocclusion. By malocclusion I mean any lack of normal arrangement of the teeth, or of the relation of the jaws, which impairs the function or pleasing appearance of the teeth. Malocclusions may be classified under three general headings:

(a) Neutrocclusion, in which the upper and lower molar teeth "bite" (i.e., mesh) in their normal relation, but the jaw structures are so arrested in their growth and development that the teeth are crowded, crooked, rotated or overlapped.

(b) Distocclusion, in which the mandible is underdeveloped and short-bites back of its normal position. The upper anterior teeth may either protrude (making normal closure of the lips impossible), or drop back to rest against the retruded lower teeth.

(c) Mesiocclusion, in which the growth of the maxillary bone is inadequate and that of the mandible often excessive, the lower teeth protruding beyond the upper teeth.

Both mesiocclusion and distooclusion are usually bilateral, but may occur on one side of the jaws only.

Malocclusion is progressive, the condition growing worse as time goes on. A pronounced disharmony in the relation of the deciduous teeth is almost certain to be followed by disturbance of the permanent teeth. There is but little dental development after a child reaches thirteen or fourteen years of age, hence the greatest benefits result from early recognition and prompt corrective treatment. There are some conditions that should be treated in early childhood.
Much of the etiology of malocclusion is obscure. Possibly this is due to the fact that many things that may interfere with the normal development of the teeth and jaws are acute and temporary; but, once the complicated process of dental development has been interfered with, complete recovery without orthodontic treatment is impossible. Growth events following the interference are disturbed. Thus the orthodontist or pediatrician, observing a child with a malocclusion, sees the results of causative factors that may no longer be operative but are now a part of the child’s physical history.

In this brief survey of the causes of malocclusion, they will be considered conveniently under three headings: (a) Mechanical, (b) nutritional, (c) constitutional.

(a) Mechanical. Normal development of the teeth and jaws is easily interfered with by the misapplication of mechanical pressures, as, for example, in mouth breathing, hand pillowing, or finger sucking. In normal respiration there is a partial vacuum in the mouth; the tissue of the tongue exactly fills the oral cavity so that there is an outward pressure upon the teeth; the lips and cheeks exert an exactly equal inward pressure upon the dental arches, with the result that the teeth are readily maintained in normal relation by the locking or interdigitation of the cusps. In mouth breathing or finger sucking the vacuum within the mouth is broken and, instead of the indicated balance of forces, the support of the tongue and lips is diminished and that of the cheeks increased. Superimposed on this imbalance of forces is the pressure of the fingers, or the abnormal position of the tongue, tending frequently to push the lower teeth backward, the upper anterior teeth forward and to press the sides of the dental arches inward. These forces are named as illustrations and do not operate with uniform results—one reason, probably, why the orthodontist and pediatrician do not always agree on such matters as habits and adenoids and tonsils.

It is unlikely that malocclusion ever results from the operation of a single etiological factor. If such were the case all children who suck their thumbs or fingers, or who have enlarged adenoids, would have crooked teeth, but we know that this is not the case. Sucking,
for example, is an entirely normal thing for a child to do at a certain stage of development. It is only when such a habit is carried to an extreme that it becomes abnormal, and often the indulgence can be considerably prolonged before any real harm results. At this point we may encounter one of the effects of our second group of causative factors, i.e., the nutritional. It should be obvious that teeth supported by bone of good quality can withstand much more adverse pressure than when the quality of the bone is not good. This is the very special field of the pediatrician; often I have been filled with astonishment by, and admiration of, the results when he has properly regulated a child’s nutrition.

The orthodontist and the pediatrician sometimes differ as to what should be done when they are confronted with a sucking habit. The proper course of action should be determined by a consideration of all the factors involved. Inquiry should be made into the child’s environment to ascertain, if possible, why he wants to indulge in the habit. The harm resulting from the indulgence should be weighed against the possible harm that might result from attempts to correct the habit. I do not like the term “break” in this connection because, when a habit is forcibly broken, there is often psychologic damage; and, in many cases, there is substituted another habit still more damaging and difficult of control—for example, lip sucking in place of finger sucking. Therefore, before a pediatrician advises the anxious mother to disregard sucking habits, he should acquaint himself with the harm that may be done to the anatomical structures, particularly the teeth and jaws. If the desire for the habit indulgence cannot be reduced by improvement of environmental factors, I prefer to suggest an attempt to hinder the indulgence and to substitute some other activity. Some orthodontists report considerable success in stopping thumb sucking by the use of an orthodontic appliance which takes the comfort out of the habit by hurting the thumb a little when it is placed in the mouth.

When a sucking habit is the only force interfering with the tooth

position there will be considerable, if not complete, improvement in the condition of the teeth when the habit is stopped. Because these factors seldom operate singly, however, the stopping of a thumb-sucking habit can result in but little benefit to the teeth if meanwhile the patient has ceased to be a nasal breather and the lower lip occupies the space between the upper and lower teeth. Orthodontic treatment is the only hope of establishing normal function in the mouth, and even these results will probably not be permanent if the postnasal space is blocked off by hypertrophied tissue or cut down to inadequate size.

It is well known that in some children there may be malocclusion without enlarged adenoids and tonsils, and vice versa. Equally well known to the orthodontist is the fact that frequently there is a very direct relation between these two conditions. It is my belief that the decision as to what to do, in treatment of a child's nose and throat, should be made by the pediatrician and the orthodontist in consultation, after consideration of all the known factors. It is agreed by all physiologists that disuse of any organ or part brings in its train a progressive loss of function and atrophy of the tissues. It is not proper to consider the mouth, teeth and jaws, and nose and throat separately in most cases where there is both malocclusion and abnormal relations of the pharynx. Attempts to treat malocclusion without attention to the nose and throat result, all too frequently, in "teeth that were straightened but went back again." So also removal of tonsils and adenoids, without attention to the teeth and breathing habits, results in "adenoids that grow back again." The well being of the whole child is the basic consideration. Tonsils and adenoids may not be markedly diseased but may be so enlarged that the resultant loss of function is an actual cause of malocclusion. Obviously the possibility of focal infection, or any systemic impairment—as a sequel of diseased tonsillar tissue—is the concern of the pediatrician, but there may exist a condition where the orthodontist would favor removal of the excess tissue for more or less mechanical reasons. As one pediatrician has aptly said: "The side-tracking

of the nasal passages and accessory sinuses in the phenomena of respiration must never be permitted."

There can be no doubt, I presume, that in years gone by there have been far too many children whose adenoids and tonsils have been removed without proper regard for their best interests. But too great a swing in the opposite direction should be avoided. A child who runs a low temperature, eats poorly, breathes badly, and fails to gain either in general or in the dental structures, should be referred to the pediatrician for a critical judgment as to the condition of his nose and throat. The careful orthodontist is never hasty in making a diagnosis or commencing treatment for such a child, but prefers a consultation with the pediatrician and possibly a period of observation—meanwhile keeping records, which usually are most revealing as to the operation of growth factors.

Another factor, having more or less of a mechanical relationship, is the frenum labium. I do not wish to say that there is no such a thing as an abnormal frenum, but I am certain they are not nearly so common as was formerly assumed. In twenty years I have seen but one or two that I thought warranted surgical removal, although in that time I have examined hundreds of children. The permanent upper central incisors usually erupt between six and seven years of age, and at the time of eruption there is nearly always a space between them—sometimes a wide space. The inner attachment of the frenum being high on the alveolar bone, the fibers simply hang in the space between the incisors. In normal development the space is closed as the second incisors and canines erupt into the dental arch and any excess of tissue is absorbed. An operation for removal of the frenum in cases of this kind is not indicated because it is not necessary, does no good, and may leave scar tissue that will prevent the normal movement of the teeth to close the space.

When there is considerable tissue between the teeth it is sometimes necessary to move the teeth together by orthodontic means. When this is done the excess of tissue between them is squeezed out like snow ahead of a snow shovel, but in a short time it is absorbed away. Neither the dentist nor the pediatrician should ad-
vise an operation of this character without consultation with an orthodontist. If an operation does become necessary, it should usually be done after the orthodontic treatment rather than before.

(b) Nutritional. Results of orthodontic treatment, from the viewpoints of both the readiness with which they are attained and their permanence, are in proportion to the favorable physical condition of the patient. This fact leads directly to mention of those cases in which the nutrition of the patient plays a part. Inherited patterns set the first limitation to growth and development. The environment, however, determines what the ultimate attainment shall be, and nutritional factors are just as important as those of a mechanical nature, examples of which were discussed above.

A balanced ration, containing all the essential vitamins, minerals, and other substances for the growth of bones and teeth, is basic but by no means the whole story. This material must be prepared for digestion, then assimilated, and metabolized into the desired structures. This again is the particular field of the pediatrician. He is the one to consider congenital nutritional agencies, the blood plasma and its calcium content, idiopathic bodily disorders, etc. The dietary requirements are fairly simple owing to the fact that an ordinary well-varied ration contains all of the essentials with the possible exception of vitamin D. But such a diet is not always easily available under the conditions of modern civilization—and in the climate of Minnesota—and certain allergic reactions are involved. There probably needs to be emphasis upon simplicity and avoidance of perverted taste. As a nation we cannot continue to consume a hundred pounds of sugar per person, per year, and hope to avoid the caries and malocclusion that now are so common. My observations over a quarter of a century suggest that while the pediatrician may now be successful to a degree in building a somewhat better quality of teeth for his patients by supervising their nutrition, his efforts relating to their supporting tissues have not been quite so successful. We must, of course, be careful not to place too much emphasis upon a single factor, for several operate simultaneously in the development of the child.
The group of children afflicted with unfavorable allergic reactions constitute a problem to try the understandings and skills of the best pediatrician and orthodontist in combination. The unfortunate effects are both mechanical and nutritional. The problems confronting the pediatrician and orthodontist are not like those of the stock breeder who can discard the individuals he regards as unsuited to his work. We are compelled to do the best we can regardless of mixed inheritance and varying nutritional factors.

A good approach for a discussion of these things, as they apply to orthodontics, is Von Liebig’s old *Law of the Minimum*: “Among the substances nutritionally essential for growth that one which is furnished to the organism in minimum amount (relative to the need for growth at the normal rate) will determine the rate of growth, the organism growing only to the extent that it can increase in size and at the same time conform to the normal composition of its kinds.” The truth of this law has been amply proved for proteins. That it is not applicable to minerals, however, was shown by Sherman. When laboratory animals were fed diets that varied only as to calcium, he found that increase in bodily weight was practically the same for all groups, but the rate of calcification of the skeletons (as shown by ashing) was markedly different. In other words, while the body will not grow to full size if deprived of certain proteins (lysine), it may grow up with calcium-poor bone or iron-poor blood if deprived of these minerals. A child with poor bony structure is not a good orthodontic risk. Tooth movement may be easy, but it is often difficult to maintain the teeth in their new positions. Below are quoted some related views of Todd:

“The mineralization problem of the orthodontist implies much more than the provision of an adequate mineral ration for the child. Stated baldly it means that the orthodontist must rely upon the minerals of the jaws securely fixing in their new alignment the teeth which he has rearranged. The

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4 Sherman, H. C.: Chemistry of Foods and Nutrition, p. 312; 5th Ed.
5 Todd, Wingate: The Mineralization Problem in Orthodontia. *Angle Orth.*, 7, 158; 1937 (June).
teeth are not sunk in posts of cement. They are more correctly likened to a team of horses whose efficient cooperation depends upon the bridle of occlusion. The harness must be strong enough to hold the teeth in position but it must also be resilient enough to ease off here and there as the strain of the work requires. One must realize that in mineralization one is not studying the construction parts of a permanent substance but rather the fabrication of a supporting framework, the pattern of which may indeed be permanent but the constituent parts of which are constantly undergoing change and reconstruction to meet the needs of the moment in alignment and activity. Our problem then divides itself into estimation of two factors, namely, adequacy of structure and adequacy of response.

“Several minerals enter into construction of bone but since bone contains about ninety-nine per cent of the calcium of the body, calcium is considered the chief of minerals. Children of impoverished constitutions, whether from prolonged toxemia, protracted ill-health or inability to utilize minerals, show pronounced reduction of the labile minerals with encroachments even on the trabeculae themselves which become thinner or fragmented. Demineralized bones of this type are not defective in their potentiality for repair. They fracture easily but they form callus though of a demineralized type. Bones such as these are simply inadequate— not perverted in functional character. It is the demineralized bone which so impedes the work of the orthodontist. There is no efficient response which the orthodontist can call to his aid in fixing the realignment of the teeth brought about by the expenditure of his time and the patient’s patience.”

Nutrition in relation to orthodontic treatment is but one of the many factors that must be considered. The best possible regulation of the nutrition of the patient, before or during orthodontic treatment, is in no sense a substitute for skill and judgment on the part of the orthodontist but should be regarded rather as a condition favoring his success.

(c) Constitutional. Many patients, despite every attention to the mechanical and nutritional conditions previously mentioned, develop malocclusions of varying severity. These are manifestations of the so-called constitutional factors, contemplation of which causes the other factors, however complicated they may be, to appear simple and straightforward. Constitutional dyscrasia, as a cause of early pathological conditions of the teeth, irregularities of
placement, malocclusion, or even absence of tooth buds, are often obscure indeed. They might be considered under four general divisions: (a) hereditary ectodermal dysplasia: there may be lack of tooth development, missing teeth, or irregularities of arrangement. (b) mongolism: teeth may be tardy, structurally defective, or abnormally placed. (c) syphilis: the extreme may be represented as to development. There may be a mild infection difficult to diagnose without complete tests. Hutchinson’s teeth may be a sign. (d) hypothyroidism: the extreme is represented by the cretin, in whom there may be almost any type of tooth anomaly.

Often the family history of a child having dental defects conveys the suggestion of constitutional defect. Inquiry shows that a majority of parents of such children suffer from similar defects. In support of the importance of heredity in these conditions, Kerley states that “many such children have blood with a normal calcium content. No trustworthy evidence has been presented to show that any benefit results from the administration of calcium and phosphorus. We can only conclude that heredity plays the leading rôle in such conditions. The further study of the defective genes should be most enlightening.”

It is a rare orthodontic problem indeed that cannot be greatly improved by complete cooperation between the pediatrician and the orthodontist, no matter how obscure the etiological factors may be. It is greatly to be regretted that economic factors often intervene to prevent this cooperation; certainly nothing else should ever do so.


AN ACCOUNT OF THE FIRST USE OF SULPHURIC ETHER BY INHALATION AS AN ANÆSTHETIC IN SURGICAL OPERATIONS. BY C. W. LONG, M.D., OF JEFFERSON, JACKSON CO., GEORGIA.

For nearly three years, the various medical journals have contained numerous articles on the employment of Sulphuric Ether by Inhalation, for the purpose of rendering patients insensible to pain during surgical operations.

The first notice I saw of the use of ether, or rather of Dr. Morton's "Letheon," as an anaesthetic, was in the editorial of the Medical Examiner for December, 1846, in which the editor gives the following extract from a paper by Dr. H. J. Bigelow, contained in the Boston Journal:—“The preparation (letheon) is inhaled from a small two-necked glass globe, and smells of ether, and is, we have little doubt, an ethereal solution of some narcotic substance.”

Having on several occasions used ether, since March, 1842, to prevent pain in surgical operations, immediately after reading this notice of "letheon," I commenced a communication to the editor of the Medical Examiner, for publication in that Journal, to notify the medical profession that sulphuric ether, when inhaled, would of itself render surgical operations painless, and that it had then been used by me for that purpose for more than four years. I was interrupted when I had written but a few lines, and was prevented, by a very laborious country practice, from resuming my communication, until the Medical Examiner for January, 1847, was received, which reached me in a few days after reading the
December number. It contained several articles, giving accounts of different experiments in etherization, in which surgical operations were performed without pain. On reading these articles, I determined to wait a few months, before publishing an account of my discovery, and see whether any surgeon would present a claim to having used ether by inhalation in surgical operations prior to the time it was used by me.

A controversy soon ensued between Messrs. Jackson, Morton and Wells, in regard to who was entitled to the honor of being the discoverer of the anæsthetic powers of ether, and a considerable time elapsed before I was able to ascertain the exact period when their first operations were performed. Ascertaining this fact, through negligence I have now permitted a much longer time to elapse than I designed, or than my professional friends with whom I consulted advised; but as no account has been published, (so far as I have been able to ascertain,) of the inhalation of ether being used to prevent pain in surgical operations as early as March, 1842, my friends think I would be doing myself an injustice, not to notify my brethren of the medical profession of my priority of the use of ether by inhalation in surgical practice.

I know that my interests have suffered from not making an earlier publication, and I would not be persuaded at this late stage of the ether controversy to present my claim to being the first to use ether as an anæsthetic in surgical operations, if I were not fully satisfied of my ability to establish its justness.

In the month of December, 1841, or January, 1842, the subject of the inhalation of nitrous oxide gas was introduced in a company of young men assembled at night in this village, (Jefferson,) and several persons present desired me to prepare some for their use. I informed them that I had no apparatus for preparing or preserving the gas, but that I had a medicine (sulphuric ether) which would produce equally exhilarating effects; that I had inhaled it myself, and considered it as safe as the nitrous oxide gas. One of the company stated, that he had inhaled ether while at school, and was then willing to inhale it. The company were all
anxious to witness its effects. The ether was introduced: I gave it first to the gentleman who had previously inhaled it, then inhaled it myself, and afterwards gave it to all persons present. They were so much pleased with the exhilerating effects of ether, that they afterwards inhaled it frequently, and induced others to do so, and its inhalation soon became quite fashionable in this county, and in fact extended from this place through several counties in this part of Georgia.

On numerous occasions I have inhaled ether for its exhilerating properties, and would frequently, at some short time subsequent to its inhalation, discover bruised or painful spots on my person, which I had no recollection of causing, and which I felt satisfied were received under the influence of ether. I noticed, my friends, while etherized, received falls and blows, which I believed were sufficient to produce pain on a person not in a state of anesthesia, and on questioning them, they uniformly assured me that they did not feel the least pain from these accidents. These facts are mentioned, that the reasons may be apparent why I was induced to make an experiment in etherization.

The first patient to whom I administered ether in a surgical operation, was Mr. James M. Venable, who then resided within two miles of Jefferson, and at present lives in Cobb county, Ga. Mr. Venable consulted me on several occasions in regard to the propriety of removing two small tumours situated on the back part of his neck, but would postpone from time to time having the operations performed, from dread of pain. At length I mentioned to him the fact of my receiving bruises while under the influence of the vapour of ether, without suffering, and as I knew him to be fond of, and accustomed to inhale ether, I suggested to him the probability that the operations might be performed without pain, and proposed operating on him while under its influence. He consented to have one tumour removed, and the operation was performed the same evening. The ether was given to Mr. Venable on a towel; and when fully under its influence I extirpated the tumour. It was encysted, and about half an inch in diameter. The patient
continued to inhale ether during the time of the operation; and when informed it was over, seemed incredulous, until the tumour was shown him. He gave no evidence of suffering during the operation, and assured me, after it was over, that he did not experience the slightest degree of pain from its performance. This operation was performed on the 30th March, 1842.

The second operation I performed upon a patient etherized was on the 6th June, 1842, and was on the same person, for the removal of another small tumour. This operation required more time than the first, from the cyst of the tumour having formed adhesions to the surrounding parts. The patient was insensible to pain during the operation, until the last attachment of the cyst was separated, when he exhibited signs of slight suffering, but asserted, after the operation was over, that the sensation of pain was so slight as scarcely to be perceived. In this operation, the inhalation of ether ceased before the first incision was made: since that time I have invariably desired patients, when practicable, to continue its inhalation during the time of the operation.

Having so long neglected presenting my claim to the discovery of the anaesthetic powers of ether; for the purpose of satisfying the minds of all, of its justness, I have procured, I conceive, a sufficient number of certificates to establish the claim indisputably. I present, first, the certificate of James M. Venable, the patient on whom the first experiments in etherization were made, and no comments on it, I conceive, are necessary.

[Note.—A few months ago, Dr. Long informed us of his early attempts at etherization, in Surgery. He was then informed that any claim set up at this late day to priority of discovery, would be severely criticised, if not violently resisted; and that he had best, therefore, do all he could to fortify his position. He has accordingly sent us a number of certificates, properly attested; but as it is unusual for medical journals to admit these, and as besides, in our profession, the word of a gentleman is sufficient on all points of controversy, these are of course omitted here. We state, however, they may be seen by any one curious in the matter, and their character may be judged of by the two following, bearing most pointedly on the subject under discussion.
We have only to add, that the writer of this communication is a highly worthy member of the medical profession, exceedingly modest in his pretensions and entitled to full credit for all he advances.]—Edt.

(Certificates.)

I, James M. Venable, of the county of Cobb, and State of Georgia, on oath, depose and say, that in the year 1842, I resided at my mother's, in Jackson county, about two miles from the village of Jefferson, and attended the village academy that year. In the early part of the year the young men of Jefferson, and the country adjoining, were in the habit of inhaling ether, for its exhilarating powers, and I inhaled it myself frequently for that purpose, and was very fond of its use.

While attending the academy, I was frequently in the office of Dr. C. W. Long, and having two tumours on the side and rather back of my neck, I several times spoke to him about the propriety of cutting them out, but postponed the operation from time to time. On one occasion, we had some conversation about the probability that the tumours might be cut out while I was under the influence of S. ether, without my experiencing pain, and he proposed operating on me while under its influence. I agreed to have one tumour cut out, and had the operation performed that evening after school was dismissed. This was in the early part of the spring of 1842.

I commenced inhaling the ether before the operation was commenced, and continued it until the operation was over. I did not feel the slightest pain from the operation, and could not believe the tumour was removed until it was shown to me.

A month or two after this time, Dr. C. W. Long cut out the other tumour, situated on the same side of my neck. In this operation I did not feel the least pain until the last cut was made, when I felt a little pain. In this operation, I stopped inhaling the ether before the operation was finished.

I inhaled the ether, in both cases, from a towel, which was the common method of taking it.
First Use of Ether as an Anæsthetic

GEORGIA, Cobb county,
July 23d, 1849.

James M. Venable
Sworn to before me.
Alfred Manes, J.P.

I certify that I was a pupil in the Academy in Jefferson, Jackson county, Ga., in the year 1842. Some time during the spring of that year I was present, and witnessed Dr. C. W. Long cut out a small tumour from the neck of James M. Venable. I am well acquainted with the smell of sulphuric ether, and know that Mr. Venable inhaled it, before and during the time of the operation. He made no sign of suffering pain during the operation; and after the tumour was cut out, he asserted that he did not feel any pain from the cutting out of the tumour.

A few months after this operation, Mr. Venable informed me that Dr. Long had cut out another tumour from his neck, while he was under the effects of ether, and that he did not feel any pain from the operation. Mr. Venable was a pupil in the Academy during the year 1842, and I was intimate with and heard him speak of the operations frequently, and he always asserted that they were performed without pain. I know the operations were performed in the year 1842: my brother, Wm. H. Thurmond, had charge of the academy that year, and it was the only time I was a pupil in the academy.

August 21st, 1849.

Andrew J. Thurmond.

In addition to Mr. Venable’s, I present the certificates of E. S. Rawls and Wm. H. Thurmond, who were present, and witnessed one or both operations.

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My third experiment in etherization was made on the 3rd July, 1842, and was on a negro boy, the property of Mrs. S. Hemphill, who resides nine miles from Jefferson. The boy had a disease of a toe, which rendered its amputation necessary, and the operation was performed without the boy evincing the least sign of pain.

I present Mrs. Hemphill’s statement of the report the boy gave.

*The asterisks, here as in the original, indicate omissions of certificates.—[Ed.]
her of the operation on his return home, which I conceive is sufficient on this point.

* * * * * * * * * * * *

These were all the surgical operations performed by me during the year 1842, upon patients etherized; no other case occurring in which I believed the inhalation of ether applicable. Since '42, I have performed one or more surgical operations annually, on patients in a state of etherization.

The question will no doubt occur, why did I not publish the results of my experiments in etherization soon after they were made? I was anxious, before making my publication, to try etherization in a sufficient number of cases to fully satisfy my mind that anaesthesia was produced by the ether, and was not the effect of the imagination, or owing to any peculiar insusceptibility to pain in the persons experimented on.

At the time I was experimenting with ether, there were physicians "high in authority," and of justly distinguished character, who were the advocates of mesmerism, and recommended the induction of the mesmeric state as adequate to prevent pain in surgical operations. Notwithstanding thus sanctioned, I was an unbeliever in the science, and of the opinion, that if the mesmeric state could be produced at all, it was only on "those of strong imagination and weak minds," and was to be ascribed solely to the workings of the patient’s imaginations. Entertaining this opinion, I was the more particular in my experiments in etherization.

Surgical operations are not of frequent occurrence in a country practice, and especially in the practice of a young physician; yet I was fortunate enough to meet with two cases in which I could satisfactorily test the anaesthetic power of ether. From one of these patients I removed three tumours the same day; the inhalation of ether was used only in the second operation, and was effectual in preventing pain, while the patient suffered severely from the extirpation of the other tumours. In the other case, I amputated two fingers of a negro boy: the boy was etherized during one amputa-

*The asterisks, here as in the original, indicate omissions of certificates.—[Ep.]
tion, and not during the other; he suffered from one operation, and was insensible during the other.

I have procured the certificates of the lady from whom the tumours were removed and of her husband, who was present and witnessed the operations; and also that of the owner of the boy, establishing the fact of the insensibility of the patients to pain during these operations. These certificates were procured in preference to those establishing other operations, because they not only show that the experiments were continued from year to year, but also show that they were conducted so as to test the power of etherization.

After fully satisfying myself of the power of ether to produce anesthesia, I was desirous of administering it in a severer surgical operation than any I had performed. In my practice, prior to the published account of the use of ether as an anæsthetic, I had no opportunity of experimenting with it in a capital operation, my cases being confined, with one exception, to the extirpation of small tumours, and the amputation of fingers and toes.

I have stated that ether was frequently inhaled in this and some of the adjoining counties, for its exhilarating effects; and although I am conscious that I do not deserve any credit for introducing its use for that purpose, yet as others, through their friends, have claimed to be the first to shew its safety, most of the certificates I have obtained establish the fact of its frequent inhalation for its exhilarating effects. I met with R. H. Goodman, who was present the night ether was first inhaled in Jefferson, and who removed to Athens, and introduced its inhalation in that place, and present his certificate. All the young gentlemen who were present the night I first administered ether, with one exception, are living, and their certificates can be procured, if necessary.

I have now, in a very concise manner, presented a “plain, un-

5The asterisks, here as in the original, indicate omissions of certificates.—[En.]

*Our friend, Dr. Long, can lay no claim to the introduction of sulphuric ether as an exhilarating agent when its vapour is inhaled.—Edt. [1849.]
varnished" account of some of my experiments in etherization, and have said nothing of the comparative methods of ether, and the other anaesthetics, because that was foreign to my present subject. Had I been engaged in the practice of my profession in a city, where surgical operations are performed daily, the discovery would, no doubt, have been confided to others, who would have assisted in the experiments; but occupying a different position, I acted differently, whether justifiable or not. The result of my second experiment in etherization, was such as led me to believe that the anaesthetic state was of such short duration that ether would only be applicable in cases in which its effects could be kept up, by constant inhalation, during the time of the performance of the operations. Under this impression, up to January, 1847, I had not used ether, in but one case, in extracting teeth, and thus deprived myself of experimenting in the only class of cases which are of frequent occurrence in a country practice.

While cautiously experimenting with ether, as cases occurred, with the view of fully testing its anaesthetic powers, and its applicability to severe, as well as minor, surgical operations, others, more favorably situated, engaged in similar experiments; and consequently the publication of etherization did not "bide my time." This being the case, I leave it with an enlightened medical profession, to say, whether or not my claim to the discovery of etherization is forfeited, by not being presented earlier, and with the decision which may be made, I shall be content.
For the past fourteen years the Commission on Journalism, later the Committee on Journalism, has been endeavoring to assist in placing dental periodicals upon a creditable professional basis. In this work the American Association of Dental Editors has been a valuable ally. From an original organization of twenty-two editors it now has a membership of over three hundred who are interested in journalistic problems. With standing committees actively engaged in developing methods which will aid in raising the standards of professional literature, much of the responsibility of the Committee on Journalism is now in their hands. The advancement being made is reassuring to the Committee and to the College, both of which stand ready at any time to give further aid.

We are now in a World War. Many obstacles will have to be overcome if we are to continue to uphold present gains and build for the future. Some of the hazards we are facing can be recognized in the professional publications of other countries. There the publication of scientific thought and research findings are curtailed through the lack of available material and the necessity for con-

\textsuperscript{3}Due to postponement of the Convocation of the College on account of the war situation, the Board of Regents and Committee Chairmen met in St. Louis, Mo., Aug. 27-28. All reports were made at that meeting.

\textsuperscript{2}The other members of this Committee are (1941-42): J. M. Donovan, Walter Hyde, B. E. Lischer, E. B. Spalding, R. C. Willett.
servation. Distribution has been restricted and at times impossible, and the failure to receive some of these periodicals is creating a serious gap in the files of private and scientific libraries. However, we are able to report that, through perseverance and determination, greater numbers of foreign journals are now coming into this country.

A grave question is presented by the postponement, for the duration of the war, of the scientific section meetings of our many professional organizations. This will necessitate adjustment of publications from a peace-time policy to a war-time emergency. Sound judgment and wise leadership are essential. In this undertaking responsibility should not rest with one group alone—every member of all organizations has a duty to perform.

The profession has not given the financial support to our literature which its importance demands, and the editorial task remains one of personal sacrifice to the chosen editors. Apparently the profession is more content with the number of periodicals published than with their scientific value. With the lack of suitable material will these publications be able to survive the present crisis? The Association of Dental Editors has for some time been studying the possible value of regional journals. From the information already obtained may be found a solution to some of the problems they will have to meet. Well-edited regional journals would greatly aid in advancing educational concepts and might create renewed interest in professional literature.

In the work of planning for the future we must constantly strive to preserve the gains we have made. Since the publication of the first professional journal, commercial interests have attempted to influence the profession under the guise of so-called professional literature. Years of effort were required to break the foundations they had built, but today only a few commercial magazines remain. These are struggling to obtain a financial return through the aid of some members of the profession. When a survey is made of such magazines it is noticeable that the majority of the articles published are not written by members professionally prominent.
Commercial interests have been watching and analyzing trends. The proprietary publications, which were of great aid to them in exploiting their products to the profession, are now of a little value. A new era is here. Dentistry is asserting its rights of ownership and control of its periodicals. Those of the trade who wish to avail themselves of the prestige of professional endorsement are aware of the changes taking place and at times resort to insidious methods in order to accomplish their purposes.

The Committee on Journalism of the College, in classifying dental periodicals, insists that such publications to be rated as professional must be under the control of an accredited professional dental organization and that there be no commercial entanglements.

In order to ascertain the present basis upon which professional publications were being controlled by their societies the Committee sent a questionnaire last year to all editors requesting this information. From the returns received a classification of dental periodicals, exclusive of "house organs," was prepared and published.\(^3\)

Since the publication of its last classification of dental periodicals the Committee on Journalism has become aware of a deviation in the method of controlling the policies of one of our outstanding professional journals. Your Committee refers to the Journal of Dental Research, the official publication of the International Association for Dental Research. In 1937 this journal, from its very beginning in 1919 an exemplar of high journalistic ideals and professional ethics, was presented to the International Association for Dental Research, itself a representative of the same high ideals of scientific endeavor and fidelity. This union promised continued devotion to the common ideals and merited the well-earned respect of the dental profession.

In classifying this publication due recognition was taken of its high professional policy, together with the answers received from its present editor on the questionnaire, from which we quote:

"Question 1. To what extent does the International Association for Dental Research control the policies of this publication?"

Dental Research *exercise and maintain* professional control of (responsibility for) the Journal of Dental Research?

"Ans. Entire control.

"Question 2. What practical means are used by the International Association for Dental Research to *exercise and maintain* the professional control of (responsibility for) the Journal of Dental Research?

"Ans. The Board of Editors is elected by the individual sections; the Editor, Business Manager and Circulation Manager (constituting the Publication Committee), by the general membership. The printer (Waverly Press) is only the printer and in no way a publisher of the *J. D. Res.* The Publication Committee and the Board of Editors are required to make periodic reports to the Council and the Association. Any broad change in policy would be presented to the Board of Editors by the Publication Committee before being adopted."

Date—June 20, 1941. Signed—Hamilton Robinson.

Since the answer to this questionnaire indisputable facts have been presented to the profession showing that the International Association for Dental Research plan of management, to keep the *Journal of Dental Research* free from commercial entanglements, has proved inadequate when the *Journal of Dental Research* recently became an advertising accessory for the producer of an unacceptable dentifrice.⁴

In April of this year some 50,000 free copies of the December, 1941, issue of the *Journal of Dental Research*, with subscription blanks enclosed, were mailed to members of the dental profession. This particular issue contained two articles on "abrasion of the teeth."⁵ One was a project by Dr. Paul C. Kitchin, carried out under the auspices of the Ohio State University Research Foundation with funds supplied by Procter and Gamble Company (pp. 565-581); the other by Dr. Richard S. Manly of the chemical division of Procter and Gamble Company (pp. 583-595). These articles were received for publication, one on June 16, 1941, and revised by the author October 9, 1941; the other on May 4, 1941, and revised by the author October 10, 1941.

⁵*J. D. Res.;* 20, 565-595; 1941, Dec.
A letter dated April 20, 1942, was sent from the executive office of Procter and Gamble Company to the recipients of the free copies of the *Journal of Dental Research* extolling the merits of Teel as a non-abrasive dentifrice, and calling attention to the supporting articles by Kitchin and Manly which appeared in the said free copies of the December, 1941, issue of the same journal.

Facts which recently came to light regarding the sale of these extra issues of the December, 1941, number of the *Journal of Dental Research* cannot be left unrecorded. Dr. R. S. Manly, a member of the International Association for Dental Research, wrote to the business manager of the *Journal of Dental Research* concerning the purchase of 50,000 copies of the December, 1941, number of the journal to be mailed to the members of the American Dental Association. He asked that a page be inserted in each of these copies extolling the merits of the journal and also calling attention to the articles by Kitchin and Manly.

Dr. Manly was informed that the Publication Committee would sell him the 50,000 copies but would not add a descriptive page to each number calling attention to the two articles as he requested. It was further stated that the said free copies must be mailed direct to the members of the dental profession by the Waverly Press.

The sale was finally consummated through the efforts of Dr. Manly, a member of the International Association for Dental Research and a paid employee of the Procter and Gamble Company. This company also financed the transaction. As to the amount of money involved in the bargain your Committee has no knowledge, but members of the Research Association have been informed that there will be a surplus of about $2,550 accruing presumably to the International Association for Dental Research.

In the sale and distribution of the copies of the *Journal of Dental Research* for the Procter and Gamble Company other factors must be considered. Why did Procter and Gamble Company

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10Ibid.
desire to purchase and pay for the distribution of 50,000 copies of
the Journal to members of the profession?

Teel, a liquid dentifrice, manufactured and extensively adver-
tised by the Procter and Gamble Company, had been under investi-
gation by the Council on Dental Therapeutics for some time. In
reporting on their findings published in the October, 1941, issue
of the Journal of the American Dental Association they declared the
product unacceptable.8

The articles by Kitchin and Manly were published in the Decem-
ber, 1941, number of the Journal of Dental Research and, as stated
in a footnote, the work was financed by the Procter and Gamble
Company, Manly’s work was done in their own laboratory. Was
the Journal of Dental Research used in an endeavor by Procter and
Gamble Company to nullify the findings of the Council on Dental
Therapeutics? The price per copy, as stated in the Journal, is one
dollar. Did the Publication Committee abet financially in an effort
to discredit the Council’s findings by the sale of 50,000 copies of an
issue of the Journal to the commercial company at a reduced rate?

In all their transactions with the Procter and Gamble Company’s
representative, Dr. Manly, the Publication Committee, despite the
new policy involved, did not consult the Board of Editors; neither
did they mention that a change was in progress of execution in their
report to the International Association for Dental Research in
March, 1942, but chose rather to ask the private advice of a few
members of the association.9

From these facts it is evident that the Journal of Dental Re-
search has digressed from its former policy of remaining free from
commercial involvements, and further, in the sale and aid in dis-
tribution of 50,000 copies of the periodical for commercial purposes,
the Publication Committee has jeopardized the scientific value of
the Journal and rendered defenseless the continued effort being
made to secure further contributions to the Journal of Dental Re-
search Endowment Fund.

8See Footnote No. 4.
9See Footnote No. 6.
The loss of control by the International Association for Dental Research over its official publication is one of serious concern not alone to their own organization but to professional journalism in general and to the dental profession in particular. For twenty-two years the *Journal of Dental Research* has been accepted as a scientific publication free from the taint of commercial influence.

The decision which the International Association for Dental Research will be required to make to regain control is of vital importance to all ethical scientific workers and organizations interested in undefiled research. This decision should be resolute, yielding none of the integral and traditional rights of the association. American dentistry looks to the International Association for Dental Research to continue to keep alive true professional ideals free from commercial interference and domination.
EDITORIALS

WHAT IS THE DIFFERENCE?

This might sound a little like the voice of one "crying in the wilderness," who either had lost his way, had never found his way, or having had faint visions of a way, had become confused and knew not which way to go.

Time was in the centuries gone by when a whole people lost their way, cried in the wilderness, and died there too. Another cried in the wilderness, but he knew where he was heading and men sought him to find the way.

That is the answer to the question, "What is the difference?" The difference lies in knowing the way, in proceeding right along in the direction ahead, toward the goal envisioned.

Men may ask this question and they may be defeated. Leaders of men have no right to ask it, save only as it may help to emphasize to them and to those whom they may lead, the goal to be attained.

So one may ask:

What difference does it make whether we meet in conventions or not?

What difference does it make whether only officers and delegates meet, rather than the whole membership?

What difference does it make whether we have an editors association or not?

What difference does it make whether we have honor societies like the American College of Dentists or not?

What difference does it make whether we collect our literature and index it or not?

What difference does it make whether we pay any attention to scientific nomenclature or not?

What difference does it make whether we are "showmen rather than historians"?

What difference does it make whether we seek the truth or let it go as half-truth?
And so one might go on *ad infinitum*, but this is enough. To all of these and any others, if there be value sufficient to ask the question, "What is the difference?"—then there is a difference and that difference should be cause for reflection.

*American Dental Association*

In St. Louis, August 24 to 26, the House of Delegates met in annual session to attend to the business of the American Dental Association. The convention, called for Boston, had to be postponed, as had been announced, so here we met minus all the varied attractions that go with our regular annual sessions.

Two facts stand out preeminently in this, namely, we missed the crowd and the usual pleasantries connected therewith; but further, without these and the obligations imposed by them, we had time to attend to business and men were free from strain. It was really a pleasant as well as profitable three days. Matters requiring action by the House of Delegates were presented, discussed and acted upon, so that the way is now clear for the conduct of our business by those so empowered.

It is scarcely possible to mark one accomplishment as of greater importance than another, neither is it possible in a discussion such as this to enumerate all, but among actions taken some do stand out. The report of the President and the evaluation of his individual activities during the year must stand out, especially in these days of rapid action. Dr. Oliver did give of himself unstintingly and withal, wisely and well. This sentiment was freely spoken by those who had been in close association with him during the year. An expression of gratitude was shown by way of a complimentary dinner to him on Tuesday evening of that week. His acts were reported and approved by the House of Delegates. The Educational Council was provided funds for a survey of schools, which in these changing times is a matter of great importance to dentistry. The Council on Therapeutics has gone along about its work uninterruptedly for several years but within recent times several vacancies have occurred for one reason or another, including the resignation of Dr. Hansen, the secretary. These were filled and Dr. Wallace, the chemist, was
made the acting secretary. Announcement was made relative to a mission being sent to the Near East, under the sponsorship of the A.D.A., to look into dental needs of the allied forces. Brigadier General Mills, who was recently advanced to that high office and who has made many necessary adjustments and corrections, was introduced. As some one stated, he has done well, why couldn’t some things have been done before? The Relief Fund reported a substantial increase in income over last year, and a small increase in benefits paid. The Research Commission reported a good year’s work completed, but again breaks in personnel hamper the work. The war has taken one, while another has found a place in the manufacturing world. The Committee on Library and Indexing Service had the way prepared for advance in its reorganized work. The next volume of the index will go to press shortly. A new Council on Dental Health was created by amalgamation of the Public Health and Education and National Health Program Committees. The new Council will presently develop a caries control program which, it is hoped, will be a definite start in an effort to control if not prevent this most prevalent disease. Our membership shows an increase over that of last year and now the biggest in the history of the Association. The new building is in process of reconstruction and will probably be ready for occupancy about January 1.

Does it make a difference? Dental progress is due in large part to this great body of dentists, through their dues and their cooperative endeavor. The officers and the House of Delegates can meet and attend to the business but there is also needed the impetus which comes from the larger meeting, including the corresponding influential effects on the individual members. This must and will be only “for the duration.”

American Association of Dental Editors

Here is a small group of men and women who meet annually to discuss questions pertaining to dental literature. They were organized in Memphis, Tennessee, in 1931, and each year has seen a growth in members, in interest, and in appreciation of their task. It is their function to study ways and means of improving dental
literature both in quantity and quality. The quantity of professionally owned literature has increased and in quality, well, it speaks for itself. Compare the last ten years with the previous decade.

*American College of Dentists*

Why the American College of Dentists? Honor societies have long been recognized within educational circles as appropriate if not essential to the general welfare. There is no better example than Phi Beta Kappa, membership in which is a great honor to one who has done sufficiently meritorious work to warrant an invitation. But on the other hand, this same group of men and women, both individually and collectively, make real contributions to the advancement of society. If this group did no more than publish "The American Scholar," it would accomplish a most useful purpose. As this magazine is read by members and non-members, a cultural influence of no mean value obtains. This group has no authority other than to do things of this nature but it does mould public opinion, indirectly and directly, in addition to supplying much information. So with the American College of Dentists—this group lays no claim to the function of the American Dental Association—nor is there any conflict or overlapping. The College has developed its treasury and has spent much money not otherwise available in study of health, social and economics conditions; the College has fostered, promoted and financed research in dentistry; the College has among all of its activities, provided for the full use of the energies and abilities of men, which would, in large part, have been lost to dentistry; the College publishes a journal, read by members and non-members, the chief function of which is to develop professional and ethical relationships. It is not an organization like that of the A.D.A. to which men ought automatically, to belong, yet it is not one whose doors are closed. It is true that Fellowship is by invitation and constantly there is search for those who are willing to give of themselves, that others may be benefited. Each year new Fellows are added to the list and each year more work is carried on through the Regents, Committees, and Board of Editors. In work accomplished,
including research, which we have promoted, during the past several years many thousands of dollars have been distributed. Where else could this have been secured and in what better way or ways could men's energies have been used?

Dental history is being made rapidly. It is essential that we collect all that actually pertains to our history and that provision be made, at least, for a record of all literature. It is equally imperative that it be catalogued and indexed, that none may be lost either in fact or due to lack of proper records. We need this that our course may be the more easily followed.

Speaking of history and truth—a book, "Triumph over Pain," was recently published in which Wells, whom we recognize as the one who gave us nitrous oxide anesthesia, was pushed aside. Although the author has agreed to accept corrections, yet in the sale of rights for movie production, the makers of films are not so particular. Their reply was "We are showmen, not historians." These are instances in which we must be on our guard, that facts and truths may be made known.¹

Do all or any of these make any difference? Write your own answer. There are those who feel that there is a difference. Perhaps there are those who on the one hand may feel all of this too idealistic and yet others who may feel it only a waste of time to think them through. But for all there may be a thought in this nonsense rhyme:

"I wish that my room had a floor,
I don't so much care for a door.
But this walking around,
Without touching the ground,
Is getting to be quite a bore."²

ANESTHESIA CENTENARY

When was anesthesia first used to prevent pain during a surgical operation? When was anesthesia made a working surgical procedure

¹See editorial, Anesthesia Centenary, this issue, pp. 329-331.
for universal human beneficence? To whom should these extraordinary achievements be accredited? The years 1842, 1844, 1846, were pivotal in these historic events. Two of these years registered main stages in the developments that brought inhalation anesthesia into general use. Long, Wells and Morton are the respective personalities of greatest interest. During the past century there has been continuing uncertainty and controversy regarding some of the personal phases of the development of general inhalation anesthesia as a surgical procedure. To promote clearer understanding of the issues involved—as we approach the projected centennial celebration in 1844—reprints of data bearing directly on the claims for personal accreditation in this field will be presented occasionally in this Journal.

There is general acceptance of the claim that Crawford W. Long, a physician, was the first person to use general inhalation anesthesia to prevent pain in a surgical operation, and that this notable event occurred on March 30, 1842. On pages 309-317 of this issue we present a reprint of Long’s first public announcement relative thereto, in December, 1849, nearly eight years after his discovery; five years after the independent discovery by Wells; and three years after Morton’s public demonstration—based in part on the findings by Wells—brought inhalation anesthesia into general use.

Among the crucial questions for which readers of Long’s paper will expect to find conclusive answers are the following three (a-c):

(a) Did Long promptly make known to his local medical colleagues, and to the medical profession in general, his discovery that anesthesia produced by inhalation of ether rendered patients insensible to pain during surgical operations?

(b) Did Long comprehend the profound humanitarian possibilities of his discovery, and the urgency of the broadest possible test of these possibilities?

(c) Did Long’s discovery have any influence—in any way or to any degree—on the later independent development, and the ensuing acceptance, of general inhalation anesthesia as a surgical procedure?
Long’s paper answers a decisive no to each of these three crucial questions. It is strictly true—and not at all facetious—to say that, so far as general usefulness was concerned, Long’s discovery was “unimportant, irrelevant, and immaterial.” It had no effect whatever on the subsequent basic findings and proposals of others. Long made one of the greatest discoveries in human history, but was so little aware of and impressed by its value to humanity that he regarded it as a casual utility, to be used only by himself in a minor way. He was awakened to the general significance of his discovery by the acclaim accorded the greater analogous achievements of others. It was then too late to claim more than that he had made a great discovery which, despite its extraordinary importance, had no influence on the development of anesthesia as a surgical procedure.—W. J. G.

Moisture Spoils Amalgam

Those who think that research on amalgam, the single most important therapeutic agent in dentistry, is at a standstill, will be greatly surprised and edified by the current research findings in this field. During the last two years, several investigators have corroborated each other in the discovery that amalgam, if contaminated with perspiration, undergoes an enormous expansion in a few days. At first it was thought that the agent causing this delayed but phenomenally great expansion was the sodium chloride (common salt) in perspiration. But this theory is only a part of the true picture. Dr. I. C. Schoonover and his associates, at the National Bureau of Standards—in direct experiments—added dry salt to alloy particles. Precautions were taken with this alloy to see that moisture did not come in during the mixing and packing of the test specimens. These salt-contaminated moisture-free alloys showed normal expansions; but when moist salt was added, great expansion invariably followed. Later, Schoonover and his associates showed that moisture from any source—perspiration, saliva, washing solutions, condensation from “chilled mortar and pestle,” etc.—if incorporated into the amalgam mix, caused high expansion. Moisture therefore is essential for this type of expansion. Moisture spoils amalgam.
What is the mechanism of this expansion? According to Schoonover and his associates, amalgams containing zinc furnish components for a host of corrosion cells. The moisture present is dissociated into hydrogen by the action of the currents generated by these cells. The liberated and trapped hydrogen gas swells the amalgam, with consequent bulging. When salt is present, the reaction is considerably accelerated. However, neither salt nor zinc causes the expansion unless moisture is present. *Moisture spoils amalgam.*

How then do these findings affect everyday practice? They show that amalgam must never be “palmed,” regardless of the apparent absence of visible perspiration; and that amalgam must be placed in a dry cavity, and there kept dry until the restoration has been completed. *Moisture spoils amalgam.*—G. C. P.

ERRATUM

On page 137, footnote 2, of the June issue of the *Journal*, a misstatement of the personnel of the Socio-Economics Committee occurred. The personnel of the committee for 1940-41 should include the name of Dr. W. R. Davis whose term expired at the end of 1941. Dr. K. C. Pruden was appointed beginning with 1942.

ANNOUNCEMENT

DENTAL SUBSECTION—A.A.A.S.

The Dental Subsection of the American Association for the Advancement of Science will meet in New York on December 28, 1942. The committee in charge of the meeting is Dr. A. H. Merritt, Dr. W. J. Gies and Dr. Paul C. Kitchin. Arrangements are being made for a symposium on the “Dental Aspects of the Focal Infection Theory.” Dentists and physicians, whether A.A.A.S. members or not, are welcome to this meeting. For further information, kindly address the undersigned.

Paul C. Kitchen, D.D.S., Secretary,
Dental Subsection, A.A.A.S.
CORRESPONDENCE AND COMMENT

Was John Harris "The Founder of American Dental Education?"

The following significant historical data, in recent discussions, should be made conveniently available to the readers of the "J. A. C. D." In Robinson's examination of "the claim of Bainbridge, Ohio, to priority in dental education"—through the alleged preceptorial efforts there of Dr. John Harris—the following statement is included: ¹

"We [Robinson] have found no valid evidence that points to any dental educational ideals that might have been inspired in Chapin Harris or James Taylor or transmitted to them by the teaching, the wisdom or the foresight of John Harris. John Harris lived during the trying period from 1839 to 1849 when dentistry was experiencing the gigantic task of establishing firmly its periodic literature, its system of institutional education and its permanent organization; this was his opportunity to exercise those unusual qualities of leadership and that well-defined professional instinct claimed for him by his friends. But through this trying period he demonstrated no initiative and made no effort in support of these fundamental movements. If John Harris could not distinguish himself in his own right, he certainly could not operate through others in effecting such marked achievements as are claimed for his influence."

In a review of Robinson's related earlier publication, on "the foundations of professional dentistry" (Proc. Den. Cent. Celebration, p. 973, 1940), Weinberger wrote in part as follows: ²

[Robinson] . . . "tries to dismiss in one paragraph, by the use of a footnote, the influence on and contributions to dentistry by John Harris [designated by Weinberger] 'the founder of American dental education.' 'A careful study of the evidence leads to the conclusion [wrote Robinson] there is nothing in dental history to show that John Harris exercised any influence on the progress of either the science or the art of dentistry.' . . . What about the latest evidence. . . . [Robinson] has uncovered that leads


333
him to his final conclusion? [Robinson says] ‘The Registrar of Transylvania University reports that John Harris was enrolled there in 1835-36 as an undergraduate medical student.’ . . . Therefore the University would hardly be likely to have him lecture there, etc. Had the author himself [Robinson] visited the medical libraries in Baltimore [Weinberger continues] he [Robinson] might have found in the ‘Catalogue of the Officers and Students of Transylvania University’ for 1836 the name of one, John M. Harris of Richmond, Kentucky, whose preceptor was a Charles J. Walker, M.D. John Harris, without the middle initial ‘M’ practiced in Louisville, Kentucky, from 1834 to 1840, and therefore could not have matriculated from Richmond. In no single advertisement, articles in journals, obituary, Masonic records, and as the first man to be elected to membership in the American Society of Dental Surgeons, does the middle initial ‘M’ ever appear. The author’s [Robinson’s] latest evidence and then deduction must therefore be discarded along with the others he produced at intervals.”

To the foregoing comment by Weinberger, the reply by Robinson in a succeeding article in the same issue, includes the following: 3

“This involved statement . . . [quoted directly above from Weinberger’s comment] is meant to convey the thought that Weinberger has discovered new evidence which contradicts my conclusion that John Harris was a student at Transylvania in 1835-36—at the time when Weinberger would like to have us believe that Harris taught dentistry there. He intimates that I have confused two characters, John M. Harris, the physician, and John Harris, the dentist. He is more specific in another article: ‘Can he [John M. Harris] and John Harris be the same individual or is it a case of mistaken identity?’ Though he doesn’t present proof of confusion, he promptly comes to the absurd conclusion that he has presented ‘new evidence.’ It is another instance, among many, in which he asks a confusing question, offers no answer, and then defines his own silence as ‘new evidence.’

“When I read Weinberger’s unsupported claim of ‘latest evidence’ in the A. D. A. Journal I at once suggested to a former student, Dr. A. C. Eskin, who has taken great interest in the Harrises, that he investigate further to ascertain if we had confused John Harris, the dentist, with John M. Harris, the physician. Dr. Eskin wrote a letter to the Librarian at Transylvania

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under date of July 9, 1941, to which he received the following astonishing reply:

[August 11, 1941]

"My dear Dr. Eskin:

"I have not been in residence during the summer and your letter of July 9 concerning Dr. John Harris has been held until my return.

"In 1929 I had an extended correspondence with Dr. B. W. Weinberger about Dr. John Harris, dentist. It had been thought that he might have given lectures on dentistry in the Transylvania Medical School, as it is known that he was in Lexington in 1835-36.

"Various issues of the Lexington paper carried Dr. Harris' professional card as practicing dentistry. Also The Frankfort Commonwealth gave prominent announcement of the fact that he would practice in Frankfort during the session of the Legislature. There were one or two scientific articles of some length in the Commonwealth. I found no record of his having delivered lectures at Transylvania. All of this I wrote Dr. Weinberger.

"It did not occur to me then, I believe, to look for Dr. Harris' name in the matriculation lists of students. There his name appears John Harris, M.D. 1835-36, Chillicothe, Ohio. . . .

"The John M. Harris, M.D. 1836 of Richmond, Kentucky, could not have been the dentist. Both Dr. John M. and his preceptor, Dr. Charles J. Walker, were well known Madison County men.

"More than once we have had these records assembled for some local dentist to examine but none has come. Please do not hesitate to ask any further questions. We are as eager as you to get the John Harris record in Kentucky established.

"Regretting sincerely the delay of this reply,

"Cordially yours,

"Mrs. Chas. F. Norton, Librarian"

"This is a typical illustration of how far Weinberger can be trusted to deal with the truth. I have stated that John Harris, the dentist, matriculated as a medical student at Transylvania in 1835-36; Weinberger insists that it is a case of 'mistaken identity.'—Mrs. Norton's letter supports my statement. Weinberger has insisted that John Harris taught dentistry at Transylvania in 1835-36; I have contended there is no proof of this.—Mrs. Norton's letter confirms my contention. Weinberger attacked my conclusions on the grounds that I have confused John Harris, the dentist, with
John M. Harris, the physician. He assumed a case of 'mistaken identity' and dignified his assumption by calling it proof that I was in error. Mrs. Norton's letter reveals that there was no mistaken identity, and that John Harris was enrolled as a student in 1835-36. Weinberger, according to Mrs. Norton's statement, had explored this source of information. Did he fail to explore the source thoroughly, as he insists should be done in the interest of accuracy; or, having explored the source thoroughly, did he withhold vital information which, if known, would have been fatal to his 'pet theory?' In either case his unreliability as a writer of dental history is clearly exposed.”—(7)\

Comment. The foregoing data throw new light on the dubious claim that John Harris was “the founder of American dental education.”—[C. Ed. (7)].

FURTHER COMMENT ON THE “PROPOSED DEGRADATION OF DENTISTS IN A MEDICO-DENTAL SOCIETY”

Your issue for June, 1942, contains, on pages 275-79, a statement about the “proposed degradation of dentists in a medico-dental society”—the International Anesthesia Research Society—through the adoption of constitutional amendments that would directly disfranchise the dental members. The said statement contains the assertion that this disfranchisement plan was “proposed by medical members,” of whom in the United States there are approximately 2200—and only 1000 dental members. An editorial, on pages 1501-03 of the issue of the Journal of the American Dental Association for August, contains this comment: “The apparent reason . . . for discrimination against the dental members is that they are dentists and not physicians.” What is some of the actual evidence on which these allegations are based?—(8).

Comment. The official report of the meeting of the International Anesthesia Research Society at which disfranchisement of the dental members was projected—through proposed constitutional amendments that were subsequently submitted to the membership

*The terminal numerals in parenthesis are inserted for purposes of identification in the records of this Journal.—[Ed.]
for a vote—include these related statements during the discussion of the said amendments (italic not in original):

"Dr. C. . . .: This is not anything personal against my dental friends; but we are starting this organization over. . . . Are we in the future going ahead as a joint medical and dental organization? As far as I know, there is no other organization of any size in the country which is both medical and dental. It is either dental with associate medical members, or medical with associate dental members. . .

"I agree . . . that graduates of the dental schools should be in a special associate [disfranchised] group. I can't see where we, as medical specialists in anesthesiology, could improve this thing by having graduates of dental schools [continue] on a par with our membership" [physicians].

"Dr. T. . . .: I agree with that. I come in contact with quite a number of dentists, and I am sorry to say that when we talk about blood pressure some of them don't have any idea as to what is a systolic or a diastolic pressure. I don't feel we should have them in the same class as the medical men.""

The action voted at the meeting—to seek to bring about disfranchisement of the dental members; to take from them membership rights now belonging to them—accorded with the comment quoted above. The following related statements in the editorial in the "J. A. D. A." may be appropriately added here:

"Shades of Wells, Morton, Jackson et al! Imagine the dental profession being excluded from anesthesia councils, the profession which gave to humanity and to the medical profession the discoverer of anesthesia, which developed the process to perfection and which practically forced the medical profession to use it!

"From the time of the discovery of anesthesia, the dentist has been closely identified with the procedure both in knowledge and in practice. He has, since Wells’ discovery, administered nitrous oxide in virtually millions of cases, and, since the higher development of the surgical procedures in dentistry, he has familiarized himself with the anesthesia phenomena produced with various agents. In his field, he is, we believe, as well qualified to administer the several forms of anesthetics as is the physician.

"No! We do not believe the sheep and goat classification, as it were, should be applied in this instance any more than in the numerous other instances wherein the physician has arrogated to himself superior knowledge in health service."—[C. Ed. (8)].

10"This vote [international] is now being taken, the poll remaining open from May 1 to August 1, 1942."—J. Am. Col. Den.; 9, 278; 1942, June.
HISTORY OF THE ARMY DENTAL CORPS

The following quotation is from page 2 of the Army Extension Courses, Special Text No. 51, Dental Administration, 1939 edition; for sale by the Superintendent of Documents, Washington, D. C., price 5 cents:

"2. Authorization.—Prior to 1901 there was no organized dental service for the Army. Emergency dental service was rendered by medical officers and enlisted men.

"The act of February 2, 1901, provided for the appointment of contract dental surgeons to serve the officers and enlisted men of the Army, in the proportion of and not to exceed one for every thousand of said Army, and not to exceed thirty in all.

"The act of March 3, 1911, provided for a Dental Corps consisting of dental surgeons and acting dental surgeons in the proportion of one to one thousand of the enlisted strength of the Army.

"The act of June 3, 1916, provided for the commissioning of members of the Dental Corps as first lieutenants, captains, and majors, their promotion to be based on length of service in grade.

"The act of October 6, 1917, provided that 'Hereafter the Dental Corps of the Army shall consist of commissioned officers . . . who shall have the rank, pay, promotion, and allowances of officers of the corresponding grades in the Medical Corps.'

"Subsequent acts and amendments provided that there should be 158 officers of the Dental Corps of the Regular Army, and the act of January 29, 1938, authorized a strength of 258 officers and an assistant to The Surgeon General with the rank of brigadier general to be appointed from the Dental Corps.

"The Dental Corps Reserve is organized as a part of the Army of the United States, and the authorized grades in which appointments may be made therein are from first lieutenant to colonel, inclusive."—(9).

Comment. The steps in the foregoing "authorization" show that there has been a gradual betterment of the dental service in the Army. The most effective developments occurred during the first World War period, and especially after "the act of October 6, 1917." The next step forward is the complete control of Army dental service by the Army Dental Corps. We hope it will be taken during the World War now in progress.—[C. Ed. (9)].
"ADMIRALcy IN THE NAVY DENTAL CORPS"

An officer in the national service has sent us the following data:

"Representative Carl Vinson of Georgia, Chairman of the House Naval Committee, yesterday instructed representatives of the American Dental Association to draft a bill to create the rank of admiral in the Medical Corps of the Navy, to be held by an officer of the Dental Corps. Representatives of the American Dental Association wished to attach such a rider to the Selection Law Suspension bill, but Mr. Vinson said that inasmuch as it would be general legislation, it should be separate. He said that he would sponsor the bill and that he would ask for recommendation from the Navy Department. A representative of the Dental Association told the Committee that the Navy Medical Corps approves of the proposed law" (italic not in original).—Army and Navy Register, 63, 16; 1942, June 13.

The foregoing is a reporter's version. The following is from a transcript of the "Hearing on H. R. 7160 to provide for the better administration of officer personnel of the Navy during the existing war, and for other purposes," before the House Committee on Naval Affairs; the Chairman, Hon. Carl Vinson, presiding. After nineteen pages of testimony, the following is recorded on pages 3288-9:

"The Chairman. It has been brought to my attention that in the generosity of the Congress and the Navy, during these war conditions when everybody wants to get something, as well as win the war, they want to make some demands for the Dental Corps. The American Dental Association has a representative here, and he is sitting in the committee room now, and he wants to present the reasons why we should have an admiral in the Dental Corps as well as in the Medical Corps.

"Mr. Magnuson. A dentist could be an admiral.

"The Chairman. No; the law prohibits a chaplain from becoming an admiral, and it prohibits a dentist from having any higher rank than that of captain. Now, they have asked if we have the rank of general in the Dental Corps in the Army, why should not dentistry be recognized with the rank of admiral in the Navy. What is your answer to that?

"Admiral Jacobs. The Dental Corps is a part of the Medical Department of the Navy. I have not consulted Admiral McIntyre, who is head of the Medical Department of the Navy, about that.

"The Chairman. Anyhow that does not fit into this bill."
"Admiral Jacobs. No, sir; that does not fit into this bill. That is general legislation.

"The Chairman. That would have to be covered under separate legislation, and then if you establish that rank in the Dental Corps that rank would have all of the benefits carried by that rank in other corps.

"Admiral Jacobs. That should be general legislation, and it should not be tied up with this special legislation.

"The Chairman. Now, let us take section 3 [reading]:

At the extreme end of the transcript (page 3301) appears the following:

"Statement of Dr. Sterling V. Mead, Representing the American Dental Association"

"The Chairman. Dr. Mead, you heard what Admiral Jacobs had to say about creating an admiral in the Dental Corps. I suggest that we will have to deal with that question in a special bill, because this bill does not establish any ranks or any grades. If you will have your organization prepare a bill establishing the rank of admiral in the Dental Corps, I will introduce it and refer it to the Department, and get the Bureau of Medicine and Surgery's and the Department's comment on it.

"Dr. Mead. The Bureau of Medicine and Surgery does approve of the amendment we offered.

"The Chairman. The bill we are now considering does not create any new positions in the Navy. Now, your bill would create the rank of admiral in the Dental Corps. That has got to be done by legislation, and it ought to be done in a separate bill.

"Dr. Mead. It cannot be done by an amendment to this bill?

"The Chairman. No. If you will fix up a bill for me I will introduce it and submit it to the Department for their viewpoint on creating the rank of admiral in the Dental Corps corresponding to the rank of general in the Medical Branch in the Army.

"(Thereupon the committee proceeded to the consideration of other business.)"

In accord with these suggestions, the following bill was introduced in the House of Representatives on June 17, 1942:

"H. R. 7234"

"Mr. Vinson of Georgia introduced the following bill; which was referred to the Committee on Naval Affairs."
“A Bill”

“To authorize the rank of rear admiral in the Dental Corps of the United States Navy.

“Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled That the rank and grade of rear admiral, dental surgeon, is hereby established in the Dental Corps of the United States Navy, and dental officers shall become eligible for selection and promotion to this rank and grade under the provisions governing the selection and promotion of other staff officers to the grade of rear admiral contained in the act of June 10, 1926, or in existing law. The pay, allowances, and retirement for rear admiral, Dental Corps, shall be the same as for other officers of equal rank and length of service.”—(m).

Comment. This bill is a short though definite step forward. Dental officers should be given equality, in rank and in autonomy, with the officers in other staff corps; e. g., those of physicians, accountants, supply specialists, civil engineers, attorneys, etc. Why not? Are the qualifications for a commission in the Dental Corps lower than those for the Medical Corps, the Supply Corps, or the Civil Engineer Corps, or the Judge Advocate General’s Office? They are not. In fact the professional qualifications, training, education and experience are as high or higher. Therefore the present discrimination is not based on difference in professional qualification. Is the personnel of the Dental Corps too limited to be given rear admiral rank? On July 1, 1941, the Supply Corps, with 593 officers, had three rear admirals; the Chaplain Corps, with 102 officers, had no rank higher than captain; the Civil Engineer Corps, with 133 officers, had one rear admiral; the Medical Corps, with 1014 officers, had three rear admirals; and the Dental Corps, with 324 officers, had none. The Dental Corps is now probably several times this size. The number of officers in the Dental Corps cannot be the basis for the discrimination. What then is the reason? Perhaps the Navy physicians, like the Army physicians, do not want dentists to have equal rank. If that is the only obstacle, it should be swept aside as inherently petty and unworthy.

The Navy Dental Corps should have rear admirals in a proportion to its officer strength equal to that of the other staff corps
(Supply Corps, Medical Corps, etc.). The foregoing naval bill is silent on this point. In the Army, the Brigadier General who heads the Dental Corps is a Brigadier General of the Medical Corps, whose appointment is recommended by the Surgeon General of the Army. He should be a Brigadier General in the Dental Corps and should be selected by a board of officers who use the yearly fitness reports as the basis of selection. But he isn’t. The proposed naval bill is sound in this respect, however, as it provides for selection in the regular manner.

Dentistry is an autonomous profession. It should insist upon parity in rank, and in professional and administrative authority, for its representatives everywhere in the national services—a parity that would be far from realization through the elevation of only one brigadier general, or only one rear admiral from the subordinated Dental Corps rank as the said bill proposes.—[C. Ed. (10)].

DENTISTRY: AN AUTONOMOUS PROFESSION

The following quotation, from the address by Chancellor Samuel P. Capen, of the University of Buffalo, at the annual meeting of the American Association of Dental Schools, in New York City, on March 16, 1942—published in the J. Amer. Den. Assoc. (29, 1065-70; 1942, June) and in the Proceedings of the American Association of Dental Schools (19, 29-36; 1942)—deserves a permanent place in the information and judgment of every dentist:

"I have once or twice stated publicly that dentistry is the only old and important profession in which the United States is preeminent. If we can claim equality with other nations in law and medicine and pharmacy and engineering, that is as much as we can claim. Many students are unwilling to concede that we have yet reached as high a level as several other countries in these professional callings. But about our superiority in dentistry there is no debate, in this country or abroad. This fact must be a source of deep pride not to the members of the dental profession alone, but to all thoughtful Americans.

"I have often wondered how American dentistry came to achieve this enviable position. You may be unwilling to accept the explanation which seems logical to me. Nevertheless I offer it for what it may be worth. I attribute the superiority of American dentistry to two facts. One is what
appears to be the peculiar aptitude of our people for mechanical operations. This aptitude can be in no sense racial, since we are of the most varied racial origins. It must be a product of our environment; of the interests which the problems of our environment have spread widely among our people, of the absence of specialized and hereditary classes, of the ideal of versatility which has always been a characteristically American ideal.

"The other fact which I believe has contributed to the outstanding position of American dentistry is its autonomous status. Although dentistry may be in essence a specialty inside the general field of medicine, it has not developed as such. Medicine repudiated it a century ago. That was a sorry decision for medicine, one for which it is still paying the penalty. But as it has turned out, it was a fortunate decision for dentistry. In other lands, dentistry has grown up under the auspices of medicine, to a large extent overshadowed by medicine. In the United States, the leaders of dentistry, thrown back upon their own resources, have been obliged to develop an independent profession, to fight for its recognition, and to devote themselves to its improvement. The profession has had to win distinction solely through the efforts of its own members. These circumstances have undoubtedly applied a stimulus which the profession would have lacked if it had remained as a subordinate branch of an older and more strongly established professional calling.

"In recent years, some persons have believed that it would be both possible and desirable to merge dentistry with medicine. A few leaders of the medical profession have thought so. Even a few leaders in dentistry have held the same opinion. From the point of view of logic, it is an attractive thesis. Dentistry is as much a specialty of medicine as urology or otolaryngology. The body is a single biologic unit and the mouth is a part of it. Why should there be two separate professions, each concerned with a fraction, large or small, of the total organism? So runs the logical argument.

"In spite of logic, however, I am persuaded that the two professions will not be merged in America within any period of time that we can now foresee, perhaps never. Dentistry is too firmly entrenched. The members of the profession are too numerous. It has won standing with the general public. It has too heavy an investment in schools for the preparation of future practitioners. It has imbued its members with so ardent a guild loyalty that the vast majority of them would tolerate no suggestion which would impair the complete independence of their calling.

"But if there is no prospect of the amalgamation of dentistry with medicine, there is every reason for a closer association between them. The growth of cooperation between the two professions during the last two decades has
been a most wholesome and welcome development. I believe that the move-
ment is just at its beginning and that it will gather momentum as the years
pass.” (Italic not in original.)—(11).

Comment. The foregoing quotation from Chancellor Capen’s
address is notable not only in its intrinsic quality, but also from an-
other standpoint: Chancellor Capen was a member of the Commis-
sion on Medical Education, which, in its final report (1932; 560
pages), expressed the following opinion without presenting any in-
dication of dissent by any member:

“It would seem logical that dentistry should be developed under medical
education. . . .” (Italic not in original.)—Page 217.

Of the seventeen members of the Medical Commission which ten
years ago expressed the quoted opinion, three were representatives
of Harvard University, where the subordination of dental education
to a status “under medical education,” in a School of Dental Medi-
cine within the Medical School to replace the Dental School, is now
projected as a means to convert dentistry into a specialty of medical
practice.—[C. Ed. (11)].
NOTES

GOD BLESS THEM!

"God bless those Surgeons and Dentists! May their good deeds be returned upon them a thousand fold. May they have the felicity in the next world to have successful operations performed upon them through all eternity."

This salutation has been attributed to Washington Irving, but the staff of the New York Public Library was unable to find it in his published works. Can any of your readers state who wrote it? What was the occasion for this notable tribute?—[C. Ed. (12)].

WHAT DOES F.A.C.D. MEAN?

In the following excerpt from a personal letter a non-dentist, who is an honorary member of the College, tells what that relationship means to him:

"This diploma from the American College of Dentists has always been appreciated though there has been a serious doubt about its having been deserved on . . ., or at any subsequent date. Dentists earn such honors by extra efforts and gifts of time and materials.

"My service and devotion to dentistry have been obligations of my own choosing, for which I have been paid promptly regardless of days away from the laboratory, on vacation or in the hospital.

"Regardless of whether the diploma was or still is premature, it has been a constant reminder that I must give my best to the dental profession. . . ."

The letter containing the foregoing quotation was sent in response to one congratulating the non-dentist for a service which he rendered the public through his work for dentistry.—[C. Ed. (13)].

NEW CHIEF OF THE ARMY DENTAL CORPS

On March 30, Brigadier General Robert H. Mills, a fellow of the American College of Dentists, became chief of the Army Dental Corps. Already some of the glaring defects in the administration of army dental service are being rectified. Army regulations have been altered so that commissions can be obtained by civilian dentists, who are subject to the draft, without first being inducted into the ser-
vice as privates. The War Department has granted authority to appoint, as second lieutenants in the Army Reserve, physically qualified male citizens of this country above the age of 18 years who are bona-fide accepted matriculants at approved dental schools within the United States. After satisfactory work as students they are eligible upon graduation for the commission of First Lieutenant, U. S. Army, Dental Corps, Reserve. *Question:* Why couldn’t these changes have been effected months ago?—[C. Ed. (14)].

**Where Is McFarland Now?**

In that unusually delightful and inspiring book, “The World Was My Garden” (Chas. Scribner’s Sons, New York, 1939), David Fairchild relates his world-wide experiences in searching for plants for introduction into this country. In April, 1900, he was in Siam collecting for a second time where, to use his words:

“We found Bangkok hot as ever, its temples beautiful as before, and its canals still animated with quaint craft. The European community welcomed us again with courtesy and hospitality, and we met many interesting people. Among them was Dr. McFarland, the American dentist, as interested in plants as in dentistry. I made arrangements with him to prepare grafted plants of the seedless pomelo, which was grown some distance from Bangkok” (p. 158).

Dr. McFarland was undoubtedly one of the pioneer American dentists who, by their practice throughout the world, established the continuing global reputation of “American dentistry.” It would be interesting to learn more of the history of this dentist, and of many others of his type who have been prominent in colonies of Americans and Europeans in foreign lands.—[C. Ed. (15)].

**Teeth: Those Isolated-Insulated Organs**

Often the medical editor puts his foot in his mouth when he puts teeth in his remarks. Consider the following comment from an editorial on “The bogey of malnutrition” (*Military Surgeon*, 90, 697; 1942, June): “*Teeth defects may well be charged to dietetic errors, which at the same time may have no effect upon general nutrition.*” (Italic not in original.)

It is difficult to conceive of a “dietetic error” which would be
specific for the teeth and yet have "no effect upon general nutrition." A direct analysis of the statement shows a very superficial acquaintance with matters dental. When the editor used the term "teeth defects," did he mean malformations of one sort or another? If so, the "dietetic errors" to which they are "charged" must necessarily have been made very early in life, as is indicated by our definite knowledge of the formation of teeth. Possibly the medical writer in this instance was thinking of dental caries. If that was the case, it may be said that a comprehensive review of the dental literature and knowledge on the subject of dental caries (Dental Caries: Findings on its causes and control; compiled for the Research Commission of the American Dental Association, second edition, New York, 1941) indicates that the causes of dental caries are too complicated to be dismissed by charging them merely to "dietetic errors."—[C. Ed. (16)].

Collective Views on the Commercial Exploitation of the Journal of Dental Research

1. Resolution by the American Association of Dental Editors

The following resolution, presented unanimously by the Board of Directors of the American Association of Dental Editors, at the Association's annual meeting in St. Louis on August 25, was adopted without dissent:

"Whereas, during the current year an apparent misuse of reprints has occurred, whereby one issue of the Journal of Dental Research was mailed to all members of the American Dental Association, under the auspices of a commercial concern; namely, the Procter and Gamble Company; and

"Whereas, the Procter and Gamble Company almost immediately thereafter mailed to all members of the American Dental Association a letter calling attention to two specific articles in the said copies of the Journal of Dental Research, with the result that many individuals felt that the Journal of Dental Research was in a sense recommending a commercial product;

"Therefore, we ask all dental editors to note that the unlimited use of reprints, or of entire copies of journals, is often abused to the detriment of dental journalism; therefore, also, be it

"Resolved, that the American Association of Dental Editors request all
dental editors and editorial boards to be wary in their dealings with commercial concerns, to prevent a repetition of what has occurred."

2. *Minute by the Board of Regents of the American College of Dentists*

At the annual meeting of the Board of Regents of the American College of Dentists, in St. Louis on August 28, the following minute was adopted by unanimous vote:

"The Board of Regents regrets the unfortunate situation which has developed from the free distribution, under the auspices of the Procter and Gamble Company, of a very large number of copies of the *Journal of Dental Research* containing articles favorable to the commercial interests of the Company.

"The Board of Regents hopes that the International Association for Dental Research will take effective action to prevent the recurrence of such an incident."

3. The annual report of the Committee on Journalism, of the American College of Dentists, on pages 324-330 of this issue, includes comment on the degradation of the *Journal of Dental Research* by the said transaction with the Procter and Gamble Company.—[C. Ed. (17)].
NEW BOOKS

BOOK ANNOUNCEMENTS

*General Education Board, Annual Report (1941)*: The Rockefeller Foundation, New York, N. Y.


*Flourine and Dental Health*: Dean, H. T., and Kitchin, P. C., Publication Committee; edited by Moulton, F. R.; published by American Association for the Advancement of Science, Smithsonian Institution, Washington, D. C. Price, members, $2.50, to non-members, $3.00.

*Accepted Dental Remedies*: The eighth edition of this handy little volume has just come from the press. It contains a new and up-to-date list of official drugs useful in dentistry. It is published by the Council on Dental Therapeutics of the American Dental Association and sells for $1.00 per copy. Every dentist should add this to the other volumes now in his library.

BOOK REVIEWS


In his *Textbook of Bacteriology*, Dr. Rice presents, first, a very brief résumé of the history of the science, together with a mention of the new lines of advance which may be expected to make large contributions to bacteriological theory and practice in the near future. Such new lines of advance include studies on microbial dissociation, filterable viruses, the chemical and physical nature of antigens and antibodies, etc. Another early chapter of the book is devoted to a discussion of the place of bacteriology in medical prog-
ress. Here the author indicates the importance of bacteriology in the fields of preventive medicine, surgery, diagnosis, prognosis, hygiene, etc.

The chapters dealing with the morphology of bacteria and cultural methods are nicely written. However, the entire subject, the *physiological activities of bacteria*, seems to have been bridged and we find only a very short chapter dealing with the *detection* of the biological activities of bacteria.

The discussion of physical and chemical means for the destruction of bacteria is followed by a chapter dealing with practical disinfection. The charts and illustrations used in this section of the text are excellent.

Two brief chapters concerning the manner in which bacteria cause disease and the way in which the body resists disease serve to introduce the part of the text dealing with the various groups of pathogenic organisms. The subjects of serology and immunology are omitted from this part of the text but appear at the end of the book. Here the subjects of bacterial virulence, antibodies, electrophoretic charge, local immunity, complement fixation reactions, and hypersensitiveness are brought up to date in a very easily understood manner.

The chapters dealing with the individual pathogens are well arranged, and the important facts relative to each organism are clearly presented. Especially useful are the charts comparing the lesions produced by the Staphylococci with those produced by the Streptococci, and the charts comparing the characteristics of the Staphylococci, Streptococci and Pneumococci. The importance of the new sulfonamide drugs in the treatment of coccal infections is conservatively mentioned.

The discussion of the subject of dental caries in the new third edition of the text should appeal to students and practitioners of dentistry. An accurate résumé of the etiology of dental caries and a discussion of the Lactobacillus acidophilus in relation to the newer research on bacteria as a cause of dental caries constitutes a really excellent addition to a general textbook of bacteriology.
The subject of the filterable viruses, which has so expanded the course of study in bacteriology through the last decade, is adequately presented.

A discussion of the pathogenic yeasts, molds and protozoa is crowded into the text in a brief way, just as such subjects must be "squeezed" into our courses in bacteriology.

Dr. Rice concludes his text with the inclusion of several appendices. Three of these supplements deserve special comment for their usefulness, namely, appendix B—Collection of samples; appendix C—Rules for Bacteriological Nomenclature, and appendix C-2, which consists of a table giving the common name, old scientific name, new scientific name, proper name and disease caused by each important pathogenic organism.

This text, supplemented by a good course of lectures and by well conducted laboratory procedures, should be quite adequate for the student in either a medical or dental course in bacteriology.

J. K. Y.


Maximow and Bloom's textbook of histology has long been recognized as a standard work and has established for itself a well deserved and enviable position. The appearance of a fourth revised edition is testimony to its continued popularity and the occasion of rewelcoming an old friend.

The present revision is somewhat more extensive than that of its antecedant. An important addition to the introduction is the inclusion of a short section illustrating the effects of various fixatives on the microscopic appearances of the cell, which serves to remind the student of the care necessary in the interpretation of histological material. The chapter on bone has been more fully developed by
Professor McLean and Professor Polyak has simplified the discussion on the central nervous system and special sense organs. The most notable alteration is the revision of the female generative system by Professor Bartelmez which, by the inclusion of a section on placentation and other material, improves very greatly the presentation of this important topic.

In the difficult task of maintaining reasonable proportions in a manual designed predominantly as a student text, excellent judgment by concentration on essentials and in the brief correlation of physiological aspects has ensured a well balanced presentation of an extensive subject. It is here naturally that the greatest differences of opinion will be found, depending upon the point of view of the instructor, his interests and the requirements of the student, but the provision of carefully selected references at the end of the appropriate sections gives adequate direction to those desirous of perusing a topic more extensively. Nonetheless the reviewer considers certain sections such as those on the joints and the endocrine glands, perhaps too abbreviated.

Student and teacher alike are indebted to Professor Bloom and his collaborators in maintaining the high standard of this text and the publishers are to be congratulated on the uniform excellence and beauty of reproduction of the illustrative matter and typography.

This is a work which the profession will find authoritative in its presentation of the fundamentals of histology.

J. B. de C. M. S.
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.
Invitation to Excellence

WILLIAMS XXX

DENTISTRY'S FINEST PARTIAL DENTURE CASTING GOLD

At your dealers...or write
WILLIAMS GOLD REFINING COMPANY
Buffalo, New York
Fort Erie, N., Ont.

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Oral Surgery—L. M. Fitzgerald (44), chairman; E. R. Bryant (42), M. W. Carr (46), W. I. Macfarlane (43), William Shearer (45).

Preventive Service—L. A. Cadarette (45), chairman; Hermann Becks (44), C. S. Foster (43), E. M. Jones (42), E. W. Swanson (46).

Prosthetic Service—W. H. Wright (43), chairman; W. H. Grant (46), C. A. Nelson (45), A. P. O'Hare (42), Jack Werner (44).

Relations—L. E. Kurth (46), chairman; J. O. Goodsell (43), H. F. Hoffman (45), 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), P. J. Brekhus (46), J. E. Gurley (42), P. J. Hanzlik (45), P. C. Kitchin (43), A. B. Luckhardt (46), L. R. Main (44), Irvine McQuarrie (45), L. M. S. Miner (46), L. W. Morrey (43), Fr. A. M. Schmitalla (44).


Announcements

Next Meeting, Board of Regents: Chicago, Feb. 21, 1943.
Next Convocation to be announced.

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.]

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