Journal

AMERICAN COLLEGE OF DENTISTS

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Published Quarterly for General Circulation by
THE AMERICAN COLLEGE OF DENTISTS

Journal AMERICAN COLLEGE OF DENTISTS

Presents the proceedings of the American College of Dentists and such additional papers and comment from responsible sources as may be useful for the promotion of oral health-service and the advancement of the dental profession. The Journal disclaims responsibility, however, for opinions expressed by authors.

Published Four Times a Year - March, June, September, December.

Entered as Second Class Matter July 13, 1940, at the Post Office at San Francisco under the Act of March 3, 1879

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THE RECORDER PRESS, SAN FRANCISCO, U. S. A.

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AMERICAN COLLEGE OF DENTISTS

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

Announcements

Next Meeting, Board of Regents: Chicago, Ill., Feb. 11, 1945.

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.]

NOTE

When binding Volume 11, replace pages 147-148 in the September, 1944, issue with the accompanying revised pages.



Mace of the American College of Dentists on which is engraved the names of seven "immortals in dentistry," one of whom is Dr. Horace Wells.

APPENDIX

HORACE WELLS' BIRTHPLACE

Here Horace Wells was born on January 21, 1815. This house was built in 1806 and has been occupied ever since. Throughout the years the house has been kept in good repair and modernized. On December 11, 1944, the Vermont Dental Society will unveil a bronze tablet mounted on this house, thus marking for all time the birthplace of one of mankind's greatest benefactors.

The present owner and occupant of this house writes:

- "(1) The first owner of this lot was William Arnold and it is supposed that he built the house in 1805, or rather local history says 'he bought the lot', built the house in 1806.
 - "(2) It is a story and a half house, of wood construction.
- "(3) Five rooms on the first floor, two small bedrooms, one opened from the kitchen. There was a large brick oven, also a large buttery, as they were called in those days. On the north side there was a little water room, a door from kitchen leading into that, thru which you passed to get to the 'out house' and the wash was done here. (This was standing when we bought, only a little of the flooring remained, if it ever had any, and Oh, such a cold place.)

"There were two small bedrooms on the second floor, low, very close to the roof. (We added the dormers on both sides.)

"(4) The subsequent owners of the house were Ziba Wood, Horace Wells, Joseph Emerson, Ira Wood, Ora Wood and Luther Pease.

"Our local history states that Mr. George Bugbee was married in 1848, and no doubt brought his bride to this home, where he lived 60 years (had two wives, two sons) and added the front of the house, with a very lovely winding stairway. Later he added the front porch, and on the south, across the kitchen, was a narrow piazza, what we term, as a 'cat walk.' I am sure that Mr. Bugbee also added the large woodshed, you see at the back, as he owned a large farm, and used wood as fuel. Nothing has been changed in the old section of house, as far as the rooms are concerned.

"Now we will go back, and take up the questions that are not connected with Horace Wells.

"I imagine he was born in the bedroom off the kitchen, as that would be where the most heat and the hot water would be. My late cousin Mr. Horace Pease was born in that room on Dec. 11, 1844, when his father Luther Pease was in Company with Ora Wood in a Tannery located on these grounds, vats and long lines occupied the field back of the house (east) and covered quite a bit or territory. In my cellar is the large gray marble slab that the hides were cleaned on, is a lovely thing, six feet and 3 in. long, by

Journal AMERICAN COLLEGE OF DENTISTS



AMERICAN COLLEGE OF DENTISTS

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American College of Dentists

FAUCHARD said, in re broader education for dentists: "To supply this want of instruction, it would have been of greater use if some able dentist—for example, the late Monsieur Carmeline, who in his day practised with general applause—had made us acquainted with his mode of operating and with the knowledge acquired through the successful treatment of a great number of important cases.

"In order to have a better understanding one cannot help improving themselves (himself) by reading the works of those authors, and if one cannot have the satisfaction of expressing his doubts, at least their ideas on paper enable one to quote the meaning of those writers who meditate and dwell upon them. They think as the others and often then give birth to new thoughts, and the success of those who have preceded us and whose teachings we have makes us desirous to attain their reputation and even to make future and new progress.

"What this celebrated surgeon-dentist has not done, I, today, dare to undertake; I shall at least afford an example of what he

might have done with greater erudition and better success.

"I give to the world the fruit of my labor and I hope that the same may become useful to those who will follow the profession of a dentist, and to such persons as will have a care to keep their mouth (mouths) in good condition it may be of great advantage."



PIERRE FAUCHARD

THE JOURNAL FORUM

Conducted by HARLAN H. HORNER, Pd.D., L.L.D.¹ Chicago

THE PROBLEM: THE DISTRIBUTION OF DENTAL STUDENTS

Table 6 in the Dental Students' Register for 1943, issued by the Council on Dental Education of the American Dental Association, shows the distribution of undergraduate students by states, territories and foreign countries in the dental schools of the United States as of October 15, 1943. A study of the table and of the accompanying outline map of the United States reveals a marked geographical imbalance in the recruiting of dental students. The following table, including the nine most heavily populated states, shows the number of residents of each of these states studying dentistry somewhere in the United States, the number of non-residents studying dentistry in these states as of October 15, 1943, and the estimated population of each state as of July 1, 1942. The population figures are taken from the Special Reports of the Bureau of Census, Series P-44, No. 11.

Re	esidents Stu	dying Dentist	Non-residents Studying		
State	In the State	Out of the State	TOTAL	Dentistry in the State	Estimated Population
New York	. 824	976	1800	77	12,970,294
Pennsylvania	. 383	49	432	804	9,728,544
Illinois		94	641	343	8,014,820
California		45	552	215	7,682,748
Ohio	. 307	79	386	115	6,949,817
Texas	. 288	71	359	72	6,702,931
Michigan	. 252	88	340	63	5,530,982
Massachusetts		127	322	165	4,348,712
New Jersey	. 0	370	370	0	4,279,998
Totals	. 3303	1899	5202	1854	66,208,846

It will appear upon examination that the 5202 residents of these nine states studying dentistry constituted 57.7 per cent of the entire undergraduate enrollment of 9014 in the thirty-nine dental schools and that the estimated population of 66,208,846 in these states constituted 40.9 per cent of the entire population of 133,770,500. Thus, 40.9 per cent of the total popula-

¹Secretary, Council on Dental Education.

tion in nine states furnish 57.7 per cent of the enrollment in all of the dental schools.

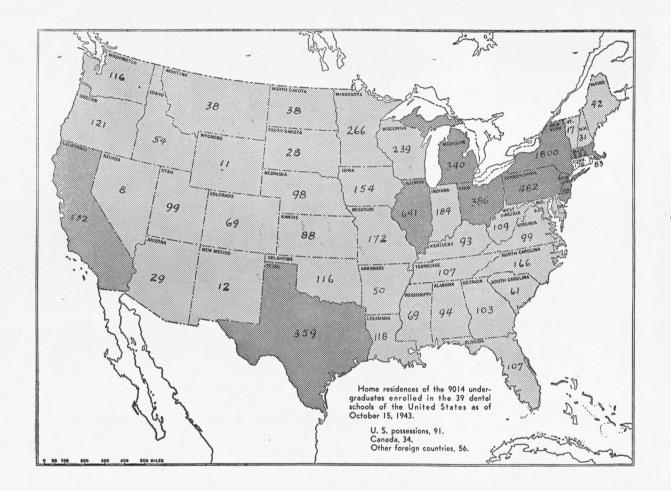
There are evidences also that the major portion of the students enrolled in the dental schools are recruited from the large cities and metropolitan areas as distinguished from rural and small town or city centers. An examination of the county of residence in Illinois of the 547 residents of Illinois studying dentistry in the three dental schools in the state as of October 15, 1943, shows that 432 or about 79 per cent were residents of Cook County, which includes Chicago and its environs, and 115 or about 21 per cent were residents of 55 of the 102 counties in the state. There were no dental students from 47 of the 102 counties.

If this proportion of residents of large cities enrolled in dental study may be assumed to hold in all of the nine states under consideration, then it would seem roughly that 79 per cent of the 5202 residents of these nine states or 4109 were recruited from the large cities and immediate territory surrounding them. If now it can be assumed that this proportion holds for the entire enrollment of 9014 undergraduate dental students, it will appear roughly that 7121 came from large city areas and 1893 from rural and small town or city centers.

This situation is illustrated by further reference to the Dental Students' Register. On October 15, 1943, there were 1800 residents of New York State studying dentistry of whom 824 were enrolled in the three dental schools within the state and 976 in 32 other dental schools in 20 other states. Practically all of the students in the two dental schools in New York City, residents of New York State, come from the metropolitan area as do nearly all of those residents of New York State studying dentistry in dental schools outside of the state.

A large percentage of the dental students resident in New York City and in Chicago and their environs are of foreign-born or near foreign-born parentage and are largely restricted to two racial groups. These students are greatly moved by the desire of their parents to see them established in "white-collar" work and they seek admission to dental study in numbers far exceeding the ratio the population of their racial groups bears to the total population.

The last report issued by the Council on Dental Education for the information of the deans of dental schools covering acceptances and rejections of applicants in 1943 shows that in addition to the students who were accepted and admitted to the dental schools in 1943, there were 1688 applicants who were refused admission, many of whom applied to several schools. These 1688 applicants were largely from the states of New York and New Jersey



in the metropolitan area of New York City. In other words, if all the qualified applicants in 1943 from New York and New Jersey had been admitted to the dental schools, in addition to those who were enrolled in 1943 and prior thereto, these two states with about 13 per cent of the population of the nation would have provided about 43 per cent of the enrollment in the dental schools.

If the dental profession is to be truly representative of our citizenry as a whole, then it would seem that serious consideration should be given to the growing geographical and racial imbalance already marked in the enrollment in the dental schools. Moreover, the imbalance between city bred and reared students and rural bred and reared students gives concern in many quarters. How can this problem be met equitably and fairly in our American way?

I have merely stated some of the facts and trends and have asked Dean Willard C. Fleming of the College of Dentistry of the University of California, Dean William H. Crawford of the School of Dentistry of Indiana University and Dean Gerald D. Timmons of the School of Dentistry of Temple University to join this forum in a discussion of the implications of the facts and trends.

I. DISTRIBUTION OF DENTAL STUDENTS WILLARD C. FLEMING, D.D.S.¹ San Francisco

Secretary Horner sat in a corner Asking wherefore and why. This subject's a tangle; It's too hot to handle, So he will let someone else try.

The Council on Dental Education considers the racial and geographic distribution of dental students of sufficient importance to call it to the attention of the profession. The reason given for considering it important may be found in a statement appearing toward the end of the report: "If the dental profession is to be truly representative of our citizenry as a whole, then it would seem that serious consideration should be given to the growing geographical and racial imbalance already marked in the enrollment in the dental schools."

Before accepting this statement, let us first give "serious consideration" to these two items in relation to the distribution of dental students:

(1) To what extent is it necessary that the dental profession be "representative of the citizenry as a whole?"

¹Dean, College of Dentistry, University of California.

(2) Is it necessary to the welfare of the dental profession that a strict geographical and racial balance be maintained?

Geographic Distribution

Statistically, we have two facts before us. First, that for some reason the residents of certain states have been stimulated and found qualified to study dentistry in greater numbers per population than of other states. In New York, for example, one out of every 7000 citizens is studying dentistry; in California one out of 14,000; in Ohio one out of 18,000, etc. Other states show a ratio as low as I to 22,000, thus indicating an imbalance between states. The second fact that comes to light in our analysis is that for some reason, four out of every five students come from metropolitan areas, with only one out of five from rural districts. It will be agreed that these two facts do require consideration.

If an unusual number of residents of New York State have been stimulated and found qualified to study dentistry, we might well ask, "what does New York have that other states have not?" Applying this same thought to the matter of four out of five dental students coming from metropolitan areas, one wonders what there is about "city life" that stimulates the young people to think of dentistry as a career. This leads us into a land of speculation with one person's guess as good as another.

The answer to these two questions might be found in a study of the backgrounds and environment of the majority of dental students. One does not have to sit in on an Admissions Committee in a dental school very long to realize that the majority of applicants come from much the same social and economic environment. Rarely do we interview students from impoverished families, and even more rarely from families of wealth and social position. The fathers of our students are mechanics, teachers, salesmen, clerks, etc. One can visualize the family discussions revolving around problems of meeting payments on the car, life insurance, savings and the difficulty in general of "keeping up with the Joneses."

The professions offer both economic and social betterment to the children of these families. In dentistry the recent graduate is in a better position than graduates in other professions immediately to pay dividends on the cost of education. This is an important item in the case of families who have had to pinch and save, and even borrow, to launch their son or daughter on the road to attain the things denied the parents.

The differences between the various social and economic levels are more sharply defined in the cities than in the country. This may be the most important point in explaining a preponderance of applicants from the metropolitan areas.

Another item relating to the problem is the appeal of the professions to young people seeking a life free from regimentation, a boss and the time-clock. The desire to be the "captain of my ship" is great in many of us. The young man in a rural environment sees a number of such careers: the farm itself, the small store, the garage, offer opportunity. However, in the complicated social structure of the city, professions are about the last stand for the "rugged individualist."

Regardless of the reasons why the majority of students come from metropolitan areas, the fact still remains that they do. This, coupled with the results of other surveys showing a serious shortage of dentists in rural districts, leads one to believe that the dental profession should be "representative (geographically) of the citizenry as a whole" in order

(1) To assure sufficient numbers of applicants from which to select students, and

(2) To supply adequate dental service to all areas of the country.

It is the responsibility of the dental profession and dental educators to encourage young dentists to practice in these areas, and to stimulate interest in dentistry as a career among young people in the rural districts where the need for increased dental service is apparent.

Racial Distribution

It is stated in the Report that "A large percentage of the students resident in New York and Chicago and their environs are of foreign-born or near foreign-born parentage and are largely restricted to two racial² groups."

What has been mentioned before about the professions offering an opportunity to better one's social and economic status would certainly hold true with our foreign-born and children of foreign-born population. However, the matter of the unusual concentration of certain racial groups in the profession is not entirely accounted for with this explanation. One wonders if the groups mentioned are groups who have not been assimilated and find the doors closed, or at least difficult to open, to careers in other fields. In other words, their choice of fields is so limited that they concentrate on the few which are open to them. The writer will always remember a conversation with a Japanese student who had been notified of his dismissal because of scholastic deficiency. He said, "Denied this opportunity, the only thing left for me to do is to become a gardener."

No evidence has been revealed in this report, and the writer knows of none, which would allow one to assume that a direct ratio should be maintained between the racial groups within the citizenry and the profession, and

²If one of the groups referred to is the Jewish, the word "racial" is inaccurate. It would have been helpful if the "racial" groups had been identified.

it is not demonstrable that such a ratio would contribute to the welfare of either.

Regardless of our American tradition, racial discrimination is practiced, but it would seem that the very last place it should occur is in the field of science and the health profession. The only discrimination that can be allowed in the selection of students is that of their qualifications to study and practice dentistry, and this selection must be applied regardless of race or color.

If this racial imbalance in dentistry has resulted from a press of applications and the admission of students incapable of practicing the profession merely because of the need for dental students, then our educational system is in need of a vigorous overhauling. Furthermore, if dentistry is practiced by these groups more as a business than as a profession, and is attracting the business minded student rather than the professionally inclined student, then the profession is to be indicted.

In brief, the point is made to place the admission of students not on the basis of race or color but on the possession of intelligence, integrity, honesty, willingness to work, interest and digital skill—the qualities and abilities we need in our young students, if they are to be capable of developing as members of our profession. There is no evidence to lead one to believe these qualities are the sole property of one race or group. Lacking these qualities, Dr. Smith on Main Street is just as poor a dentist as Dr. Cohen on Broadway, or Dr. Milovsky, wherever-he-may-be.

2. THE DISTRIBUTION OF DENTAL STUDENTS

WILLIAM H. CRAWFORD, D.D.S.1

Indianapolis

The marked geographical imbalance in the recruiting of dental students, to which Dr. Horner calls our attention, should be analyzed carefully by the profession and dental educators. Just how serious this matter is, however, is possibly not accurately shown by Dr. Horner's figures. They indicate the hazards surrounding the selection of a sample and then assuming that the sample represents a true picture of the entire situation.

Let us look for a moment at the situation in Indiana, since one from Indiana has been invited to discuss this problem. In the report of October 15, 1943, which Dr. Horner used in his calculations, Indiana reported 174

¹Dean, College of Dentistry, University of Indiana.

students. While it is true that this does not represent a very high proportion of the entire student body enrolled in 1943, still it may be representative of some of the schools of the middle states.

In his presentation Dr. Horner divided the students into two groups, those from rural and small town or city centers in one, and those from large city areas in the other group. Counting all cities of 500,000 or over as large city areas, it will be found that only 6.9 per cent of our student body (University of Indiana, College of Dentistry) were residents of large city areas. If then we apply this figure to the total enrollment as Dr. Horner did, we would find that only 622 instead of 7121 came from large city areas. This assumption is obviously inaccurate for the overall picture but it is accurate for Indiana and indicates the importance of care in selecting samples. A further breakdown of our figures (Indiana) shows that 19.5 per cent of our student body came from rural communities and towns of less than 2500, and over 40 per cent from areas of population under 20,000.

We may expect a larger part of the student body will be recruited from city centers for purely financial reasons if for no other. Dentistry is an expensive course to pursue and was available until the present war only to those who have the necessary funds. Since there is recognized inequality of rural and urban incomes and since there is greater uncertainty and irregularity of rural incomes, we may expect the bulk of our student body to be recruited from urban centers. But the fact that students will be recruited from urban centers should not mean that they will be recruited from any particular group, especially a minority group. Cities are composed of all racial groups and should dentistry be equally appealing to all of these groups, the problem of this discussion would not exist.

The trouble lies in the fact that dentistry and dentists are not making the profession attractive. Too many dentists advise young men to pursue some other profession or go into business.

There is a dentist in a small city in Indiana who has sent a large number of bright young men to this school. He has made dentistry attractive to them. But he is the exception. I think a majority of the dentists do not concern themselves in the selection and encouragement of bright young men to enter this profession.

The profession certainly will never be any better than the men who compose it, and if we are anxious for improvement, it can be accomplished mainly by each dentist making it his own personal responsibility to see to it that he has fed into the profession through his own personal persuasion just one well qualified "A" or "B" student. The responsibility of recruiting a good, well proportioned student body is not one which rests alone with the

dental school. It is shared also by the members of the profession, who are not sufficiently aware or concerned with the quality or racial distribution of the students. The schools recognize this problem and are working intelligently with it, but the profession must also be informed and encouraged to assist in recruiting students of high scholastic attainment with proportional racial distribution.

DISTRIBUTION OF DENTAL STUDENTS G. D. TIMMONS, Ph.G., D.D.S., D.Sc.¹ Philadel phia

The statement by Doctor Horner has brought into focus a situation which has been known by the administrators of dental schools for some period of time. Sporadic discussions of this situation have entered into the activities of everybody interested in dental education, and the actions taken have been just as sporadic as the discussions. An examination of the enrollment statistics over a period of years will indicate the growth of the trend, but, with the exception of individual efforts by some schools, there has been no concerted effort to alter that which was known to exist.

It would appear that what is needed is a program which will, in an intelligent and consistent fashion, bring the advantages of dentistry to those persons who might be considered likely prospects for the profession; but, before the attention of the "likely prospect" can be obtained, the advantages must be brought to the attention of those persons responsible for guidance when the prospect is in that stage where he is floundering around in an attempt to determine the path his life is to follow. Epitomized, this is a program of education of vocational guidance directors, as well as education of the likely prospect.

There are two agencies to point the way in such a program. These are the Council on Dental Education of the American Dental Association, and the American Association of Dental Schools. Both of these bodies are vitally interested in the question, and, certainly, sufficient knowledge of the problem is held by the membership of both bodies. There is, however, the ever-present problem of these bodies being deficient in the "technique of getting the story across," and, for this reason, outside assistance should be obtained. The results to be desired are of such importance to the future welfare of the profession that there should be no hesitancy in seeking and using this outside assistance.

It would seem that a logical program should embody three points: first, stimulate an interest in the profession; second, devise means whereby the

¹Dean, College of Dentistry, Temple University.

capacity of the prospect to study dentistry may be determined; and, third, provide financial assistance whereby those persons who have been determined to have the capacity to study dentistry may do so even though their personal finances are limited.

The first point has been attempted on several different occasions, both by some schools in independent action, and, more recently, by the Council on Dental Education in the brochure, *Dentistry as a Professional Career*. It is in these instances that the need of outside assistance is evidenced. Whether we like to use the term or not, the real meat in the problem is that we have a job of selling to do, and it is not entirely probable that the authors of the many pieces of "sales literature" are very well versed in sales psychology.

The available literature intended to attract desirable candidates contains all of the pertinent facts, but, as a usual thing, it is prepared in a pedantic form which, in no way, would tend to sway a person who had not already partially decided to study dentistry. In other words, our messages need to be dressed up, and made more attractive. They need to be made more readable, keeping in mind the age level of those whom we might hope to attract.

This would indicate that different types of "sales literature" should be prepared to be presented to different levels. For instance, the same material prepared for high school students would not serve for students in the college level, and, certainly, the material prepared for vocational guidance officers could not be the same as that prepared for the two fore-mentioned groups.

It would appear that such a project as the preparation of this material could well come within the scope of the American Association of Dental Schools. Through a committee of that association, made up of persons representing institutions having outstanding departments with marketing experts, such material could be prepared and distributed.

Many state educational systems have divisions of vocational guidance, and it can be said with certainty that these departments would welcome such assistance.

The second point, that of determining the capacity of a prospect to study dentistry, has already been too long delayed.

While it is true that there is no common agreement on the absolute validity of aptitude tests, experience which has been had by those institutions wherein aptitude tests have been given over a period of years would seem to indicate that there is a definite correlation between the results of tests and the achievement record of the student.

The Council on Dental Education is presently working on this problem, and it is hoped that the Council will soon make available a uniform testing

program which can and will be given to those persons who evidence interest in the profession.

A similar program has been used by the medical schools for some period of years, but a dental test should go beyond that which is now given for entrance to medical schools. A dental test should, by all means, include a test of the manual dexterity of the candidate, since the ultimate success of a dentist is, in a large measure, dependent upon his ability to construct those restorations which his diagnosis has indicated.

The third point, that of financial assistance, can be of great importance. Too many times there have been most likely candidates who possess all of the necessary traits but who have been unable to attend dental school because of the high cost of professional education.

If funds were available, either in scholarships or loans, these persons could and would pursue their desires and would make valuable additions to the profession. It may well be that the benefits which are being made available to returning veterans will serve as an experiment to prove this point, because, without doubt, many men will, after the war, choose to take up dentistry which would have been impossible without governmental aid.

Again epitomized, the program would be resolved into the following: first, sell the advantages of the profession; second, select the suitable candidates; and third, assist in financing those desirable candidates who cannot finance themselves.

In the March issue
THE JOURNAL FORUM

will consider

What Constitutes Adequate Support of a Dental School

AMERICAN COLLEGE OF DENTISTS

PRESIDENT'S ADDRESS1

HENRY CLINE FIXOTT, D.M.D. Portland, Oregon

Again we have had to forego the inspiration of an annual convocation. Our original plans to hold a streamlined meeting for the presentation of reports, hearing messages of inspiration, and conferring fellowships had to be cancelled. Travel is difficult and conditions are not such as make it either proper or possible to attempt to secure a reasonably representative attendance. We are fully aware of the conditions that make it necessary to curtail our activities, and we are happy to comply with all government requests and regulations regarding meetings of large groups. We have endeavored to plan our annual meeting accordingly.

While I am keenly disappointed not to have the honor and privilege of conferring fellowships upon our newly-elected candidates in annual convocation assembled, I am sure that the organized Sections of the College will carry on this year in their usual efficient and effective manner.

I have been impressed with the interest taken in our annual sectional meetings for the conferring of fellowships, receiving annual reports and messages, renewing old friendships, and making new. I have received many enthusiastic reports of the inspiration received, and of renewed interest created in the College and its program.

I would like to see these annual sectional meetings continued, and I believe that added interest and enthusiasm would be created and greater inspiration received if all such meetings could be held on the same day.

I have a feeling that we have been marking time this past year. I am aware, however, that much has been accomplished under extremely trying conditions. Many of the younger and more active members of the dental profession have been called into the service

¹Presented at the Meeting of Regents and Section Representatives, Chicago, Ill., Oct. 18, 1944.

of their country and are giving an excellent account of themselves. We have every reason to be proud of their record. I am indeed happy to extend to them cordial greetings and sincere appreciation for all they are doing.

Because of the heavy drain on the members of the College, the remaining Fellows have taken upon themselves added responsibilities and duties, and have rendered remarkable service in spite of limited time and overtaxed energy. I want each one to know that his work is recognized and thoroughly appreciated.

I would not be true to my inner-most feelings if I did not make grateful acknowledgment of the support given me during the past year by the officers, the Board of Regents, and the chairmen and members of committees of the College; and to pay just tribute to the efficient work of our Secretary, Otto Brandhorst. The completeness of his service is noteworthy and merits commendation. To each of you my sincere thanks.

All committees have willingly undertaken the task set before them. Some committees have had to mark time because of conditions and lack of opportunities. Others have done exceedingly well.

It will not be my purpose, however, to review in detail the work and activities of the College during the past year. This will be given to you in the committee reports, and other information that will be brought to you in the pages of our JOURNAL during the next few months.

I am conscious of the potentialities of our organization, and of the far-reaching influence its members can and will exert for the advancement and welfare of our beloved profession, and I am indeed humble when I realize the inadequate contribution I have been able to make during the past year.

No one can carry the responsibilities and enjoy the high privileges of the office of president of the American College of Dentists without receiving some very definite impressions regarding the trend of its activities, and without making observations, and forming convictions as to its future course. He must also witness some of the

dangers which beset the path of an organization that has grown so steadily in usefulness and influence.

Not all men who have contributed unselfishly and largerly to the advancement of our profession have become Fellows of the College, but all Fellows have contributed much of their best in thought and action to that advancement, and to uphold those ideals for which the College stands.

Because it is proper and essential that the College should continue a healthy and normal growth and endeavor to extend its influence through the activities of its members, I am convinced that a carefully planned extension of membership is in order. It is not only in keeping with the spirit of the College, but it insures a better foundation for the promulgation of those principles for which our organization lives. But the day must never come when the American College of Dentists shall place its trust in mere numbers rather than in the quality of its membership.

I have been impressed during the year with the earnestness and enthusiasm of the Fellows of the College and with their willingness to accept the responsibilities laid upon them by its impelling idealism. This earnestness and enthusiasm is the soul which animates the activity of all, and this willingness to serve needs only to be directed into constructive channels at all times to make and keep the College incomparable in its capacity for service.

The American College of Dentists was not organized for entertainment, nor for the self-aggrandizement or glory of its members. Its success is not to be measured by splendor nor spectacular display, but rather by the genuineness of its good fellowship, by its breadth of vision, by the height of its inspiration, by the tolerance of its opinions, by the impetus it has given, through its membership, to a recognition of the value of the highest professional ideals and by its contribution to the upbuilding and welfare of the dental profession.

The College seeks to encourage constructive action by the development of those qualities of leadership evidenced by the past record of its Fellows. It expects, nay, commands its Fellows to carry into the profession through local, state, and national dental organizations the principles it teaches and advocates.

In order to do this each Fellow will study the Constitution and By-Laws of the College, particularly noting and memorizing the objects as stated in Article I of the Constitution, which reads, "This organization is 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."

He will seek to keep step with the progress of his profession by reading and studying the best in dental scientific and professional thought and research such as is presented in the pages of the Journal of the American College of Dentists, the Journal of Dental Research and the Journal of the American Dental Association. In addition to these he will have on his desk the proceedings of the A. D. A. and the publications of his state and local dental societies so that he may be well informed on national and local dental problems, and thereby prepared to talk and act intelligently on such matters when action is necessary.

The present position of dentistry, particularly with respect to the observance of professional independence and financial strength in some of our state and local societies is not as strong as it should be.

A dental society is not justified in soliciting funds from commercial firms to support its annual meetings—nor for advertising or exhibiting items of doubtful quality—or not marketed in accordance with professional standards.

Funds for the support of the dental society activities should be obtained in such a manner that the dental society is not placed under direct or implied obligation to individuals or groups which do not share its professional ideals.

Instances of the infiltration of commercial practices, even into universities, might be cited. In order that such practices should not develop into conditions that might affect the professional standards

of dentistry or the integrity of scientific reports emanating from institutions of higher learning, such situations should be checked.

It is increasingly evident that organized dentistry must make it perfectly clear that its primary interest is the protection of the welfare of the public. In order that this may be accomplished, it follows that organized dentistry must be controlled by professional interests.

Not long ago I asked several eminent members of the dental and other professions these two questions. "What differentiates a professional man from a tradesman?" and "Why should dentistry be considered a profession rather than a trade?"

I received some very interesting and informative replies. All the answers are combined into the following brief statement: A professional man may be differentiated from a tradesman by the attitude he takes towards those persons whom he serves. If his primary motive is service and the protection of the welfare of his clients, he is in fact a professional man; if his primary motive is the accumulation of wealth, he is a tradesman.

Likewise, if a dental society has as its primary objective the advancement of its members in the professional sense, it preserves its status as a professional organization. Special privileges and recognition are given by the public to dental and other professional groups because of the unselfishness and sense of responsibility which characterize the professional man.

Fellows of the American College of Dentists command more than usual attention. We have espoused lofty ideals, we have entered the field of action and taken our stand. The eyes of the dental profession are upon us. We are on trial before those who are interested in the welfare of dentistry. Therefore, I feel that I am not presuming when I speak of what appear to be dangers besetting the pathway of true progress in our activities.

The first is the danger of self-sufficiency and complacency:

We must never become satisfied with the mere "pointing with pride" to the high purposes of the College. Our strength lies in our sincerity of purpose and in our actions. Then there is the danger of super-idealism. Let us strive to eliminate all thought of doing something great, to keep attuned to the times and to grasp every opportunity to do unselfish little things well.

And now, as we draw to the close of this year of stress and doubt, and hope and fear, and sincere endeavor to hold fast the worth while structure we have built; let us ask ourselves these three questions.

- 1. Do I consider my practice to be a service to society, rather than merely a means of livelihood for myself?
- 2. Am I working actively in my dental organizations to secure the adoption and enforcement of professional standards in all their activities and by all members?
- 3. Would I like to have dentistry, as a profession, judged by my personal professional practices?

As we answer these questions in the affirmative, let us enter whole-heartedly into the spirit of the College, and take advantage of the exceptional opportunities presented to broaden our vision, increase our activities, and enrich our lives with the lasting fellowship of many interesting, cultured professional men working toward a common goal—the advancement and welfare of the dental profession. Let us rededicate ourselves to active participation in the program that confronts us.

I will not attempt, further, to suggest ways and means—that is in the hands of our able and efficient incoming President, Board of Regents, and committees. I am sure every Fellow of the College joins me in pledging enthusiastic, willing support.

AMERICAN COLLEGE OF DENTISTS

INAUGURAL ADDRESS¹
R. P. THOMAS, D.D.S.

Louisville, Ky.

I have accepted the office to which you have elected me and it is now my pleasure to express my thanks for that honor. The faith entrusted in me, I must admit, is in itself very beautiful, however undeserved it may be.

Advice is very seldom greatly valued, but in my case it is a wish that this be the exception rather than the rule. Not only do I need your advice, I shall seek it from all, and in return promise to be diligent. By diligence, I mean, among other things, honest in all our inquiries.

My predecessors in this office have set and maintained high standards and, naturally, it is my desire to see them nourished that they may grow in usefulness and influence. A President is merely a co-ordinator, and the success or failure of his administration rests entirely upon the willingness and enthusiasm of those associated with him. No man, alone, can accomplish the best results. I pray that when you are called upon to assist, you will respond to the very best of your ability. That is all I can, or do request.

I have long felt that a fuller use of the counsel of the membership at large should be secured. It could possibly afford a broader scope in our inquiries and final findings. Could the various local Sections, as a whole, in some manner, be designated as sub-committees to assist the main committee? Could certain assignments be made direct to a local Section? This plan would give the local Sections a definite goal toward which to strive and would stimulate interest and attendance at their meetings. In the end this would reflect to the credit of the College.

Year after year, findings of inestimable value are reported at the

¹Presented at the Regents' meeting, Chicago, Ill., Oct. 19, 1944.

annual meeting of this organization. A fuller use of these findings should be made with due credit being given to the College.

The College has been and can continue to be a powerful influence for the advancement of dentistry; however, in so doing we should not lose sight of the fact that the American Dental Association is the parent of organized dentistry.

The trend of the future, with its many ramifications, is unpredictable, especially is that true in times of strife and war, yet that should not deter us from exerting our energy and talents in planning for that future. Time and time alone will tell us whether predictions have been right or whether they have been wrong.

May I close with this quotation and ask that we all follow it throughout the year:

"It ain't the individual,
Or the army as a whole,
But the everlasting teamwork
Of every blooming soul."

THE PART PLAYED BY HORACE WELLS IN THE SEARCH FOR ANESTHESIA

ARTHUR H. MERRITT, M.S., D.D.S., Sc.D.1

I

Throughout recorded history attempts have been made to find some means for the alleviation of pain in surgery. As long ago as 1200 B.C. Esculapius is reported as having used a potion brewed from an herb called nepenth, hence the term, nepenthe, meaning "to drown pain." Hippocrates is said to have produced narcosis by having the patient inhale the vapor of bangue. Opium, Indian hemp, coca leaves, mesmerism, and mandrake, have all been pressed into service in an attempt to assuage the pain of surgical operations. Of these, mandrake was the most popular, holding its own up to the 16th century.

II

The first suggestion, however, that gave a hint of modern anesthesia was that of Sir Humphrey Davy, a chemist, who in experimenting with nitrous oxide in 1799-1800 discovered that when inhaled it would relieve pain. Based on this observation he remarked casually, that since it appeared "capable of destroying physical pain it may probably be used with advantage during surgical operations in which no great effusion of blood takes place." The idea, however, does not seem to have made much impression on Davy or anyone else at the time. So far as is known, Davy's observations played no part in the subsequent use of nitrous oxide in surgery.

A little later, Michael Faraday discovered that inhaling ether would put a person to sleep but again no one had the vision to explore its potentialities further.

Twenty-four years later, a young English physician named Henry H. Hickman, found in experiments with "Carbonic Acid Gas" on animals, he could bring about a condition which he called

¹Paper presented to the Ninth District Dental Society, New York.

"suspended animation." So impressed was he with its possibilities in relieving surgical pain, he reported his experiments to the Royal Society of England. Notwithstanding the fact that Sir Humphrey Davy was at that time president of the Royal Society, Hickman failed in his attempt to arouse interest in his experiments—proof, it would seem, that Davy had only the haziest idea of the possibilities of anesthesia. Failing in his attempt to interest the Royal Society and the medical profession of England, Hickman next sent a memorial to King Charles X of France in an effort to arouse interest in his experiments, but the King, like the Royal Society of England. was indifferent—proving that "where there is no vision the people perish." Discouraged by his failure, Hickman returned to England in 1828 where he died two years later at the age of 29. He seems to have come nearer visualizing the possibilities of anesthesia than any one who had gone before. In his untimely death, the discovery of anesthesia once more failed of realization.

III

Another who failed in making known the possibilities of anesthesia from lack of vision, was Crawford W. Long. Long was born in Danielsville, Ga., in 1815 and at the age of 24 was graduated in medicine at the University of Pennsylvania and immediately began practice in his native state. He also was the town druggist.²

In those days so-called "ether frolics" seem to have taken the place of present day cocktail parties. These frolics consisted of the inhalation of ether to the point of partial insensibility. In this way a degree of exhilaration was induced. Among those indulging in this form of amusement was a man named James M. Venable who, according to Dr. Long, was "fond of and accustomed to inhaling ether." Knowing this, and having occasion to remove a tumor from the neck of Venable, Dr. Long suggested that he inhale ether in

²Raper, Howard R.: Unearned Honor on a Postage Stamp. Oral Hygiene; 1940, Feb.

⁸Archer, W. Harry: Chronological History of Horace Wells, Discoverer of Anesthesia. Reprint. Abstracted J. Den. Res., 18; 1939, June.

preparation for the operation. This he did in March, 1842, and the tumor was removed.

It was not unusual in those days to prepare patients for surgical operations by giving them alcohol in some form. Had Venable been "fond of and accustomed to the use" of whiskey Dr. Long might have suggested its use instead of ether. Between 1842 and 1846 Long used ether in surgical operations four times without reporting his observations. The knowledge of his experiments did not extend beyond the confines of his own locality.

Long's contribution to the discovery and introduction of anesthesia has been admirably summed up by William H. Welch, M.D., in the statement that "we cannot assign to him (Long) any influence upon the historical development of our knowledge of surgical anesthesia or any share in its introduction to the world at large."

To Long is usually given the credit for priority in the use of ether as an anesthetic in surgical operations. This, however, is open to question. It is reliably reported that a student of medicine in the Berkshire Medical College who was familiar with "ether frolics," administered ether to a young woman in January, 1842, to have a tooth extracted, the operation being done by a dentist in Rochester, N. Y., by the name of Elijah Pope. This would appear to be the first use of ether anesthesia in surgery and antedates Long's use of it for surgical purposes by more than two months.⁵

IV

Finally, however, there appeared a man who was to succeed where others had failed. That which separates Horace Wells from all who preceded him, was his power to visualize what it would mean, to be able to induce temporary but complete insensibility to pain in surgery. It was this gift of vision—this sixth sense so to speak—that gave to Horace Wells the power to see clearly and act promptly where others

⁴Garrison, F. H.: History of Medicine. W. B. Saunders Co., 1914, p. 45. ⁵Keys, Thomas E.: The Development of Anesthesia. Jour. Am. Soc. of Anesthesis; 1941, Sep. Quoted by H. R. Raper. Bulletin History of Medicine; 1943, Mar.

stumbled and fell. It might be called imagination in action. Coupled with this was another great gift—that of perseverance. Wells did not, as did Davy, Faraday and Long-all of whom stood on the very threshold of a great discovery—turn back after taking the first step. He did not hide his discovery nor did he seek to control its use. On the contrary he proclaimed it to the world, saying he wished it to be "as free as the air we breathe." And lastly, Wells had courage. He went forward in the face of opposition and ridicule. This is another point at which Long failed. When his neighbors became suspicious of him and his practice dropped off because of his use of ether, he forthwith abandoned its use. No one benefited from his experiments except the few patients upon whom he had operated. He failed because he lacked those qualities of heart and mind which were preeminent in Wells-vision, perseverance and courage. This is not intended as a criticism of Long. He acted as many another might have done-even as you and I. When his neighbors and friends became suspicious of him for using some strange drug for putting people to sleep and his practice dropped off in consequence. it was not strange that he should abandon its use. Few of this generation realize how bitter was the opposition to anesthesia on the part of many. As late as 1872 William H. Atkinson, M.D., of this city, a practitioner of dentistry, denounced it by saying: "Anesthesia is of the devil. I cannot give my sanction to any satanic influence which deprives a man of the capacity to recognize law, I wish there was no such thing as anesthesia."

V

Horace Wells was born in Hartford, Vt., January 21, 1815, the eldest of three children. He was educated in private schools and academies in New Hampshire and Massachusetts. From 1834 to 1836 he studied dentistry in Boston under the preceptorship of leading dentists.³ Immediately thereafter he began practice in Hartford, Conn. Dental practice at that time consisted mainly in the relief of pain by extracting teeth and replacing them by artificial substitutes. Thus the dentist of a century ago was largely engaged in the unpleas-

ant task of extracting teeth with no effective means for controlling the pain of such operations. As early as 1840, Wells is reported to have been impressed with the necessity of discovering some means by which surgical operations might be performed painlessly. He was already experimenting with such agents as laudanum, alcohol and the galvanic current. It is not surprising, therefore, that when Wells witnessed the exhibition of "laughing gas" on December 10, 1844, that its possibilities as an obtundant of pain should occur to him. The seed so carelessly sown by that itinerant lecturer at last fell on good ground. Thousands before Horace Wells had witnessed these exhibitions by Colton. Others had experimented with nitrous oxide and knew something of its nature, but no one had had the vision to see its possibilities in surgery or had the courage to put them to the test. It is the possession of these qualities that places Horace Wells in a class by himself. He had the mind and daring of the explorer.

It was the custom in giving these exhibitions of laughing gas to invite some one in the audience to take the gas, after which the volunteer was allowed to walk about the hall to the amusement of the audience.

The following notice which appeared in the New York *Tribune* on April 23, 1844, less than a year before the epoch-making exhibition in Hartford, will give some idea of these exhibitions: "This evening Mr. Colton gives his third exhibition of nitrous oxide gas in Niblo's Saloon. Those who would see the wonderful effect which a slight change in the elements of the air would produce should not fail to attend. Those who love thrilling excitement will be sure to be there."

On the evening at which Wells was present, a person by the name of Cooley took the gas. Almost at once he became greatly excited, and began chasing an imaginary foe about the hall. The audience laughed uproariously. Finally coming to himself, Cooley slunk into an empty seat a little embarrassed at the laughter he had provoked. Beside him sat a young man, not yet 30 years of age, who had not

taken part in the laughter. He noticed the bleeding caused by the accident to Cooley's leg and called his attention to it. Cooley expressed surprise that he had felt no pain. It was Wells who was now excited. "No pain," he exclaimed, "are you sure you felt no pain?" "None whatever" was the reply. Then and there was born a great idea—one that was to completely transform the art of surgery and make possible the saving of countless millions of human lives.

VI

Wells at once went to Colton and begged him to come to his office the next morning and bring with him a bag of gas. Having obtained his consent to do this, he next went to his colleague, John M. Riggs, who at one time had been a student in Wells' office, and told him of his plan to take the gas himself and when under its influence, to test its efficacy by having a tooth extracted. It was agreed between them, that the administration of the gas was to be pushed to the point of complete insensibility. This had never been done before. What would happen if it were tried? No one knew the answer a hundred years ago. Yet Horace Wells, obsessed by his vision of painless surgery, was willing to face the unknown if in doing so, he might, perchance, bring relief to suffering humanity. "Greater love hath no man than this, that he lay down his life" if need be, in the service of others. And this Wells was willing to do.

Riggs, who extracted Wells' tooth, in writing of the event in 1872 says: "no one but Wells and myself knew to what point the inhalation was to be carried. . . . Our agreement the night previous was to push the administration to a point hitherto unknown. We knew not whether death or success confronted us. It was a terra incognito we were bound to explore, . . . the result was painfully problematical, but the great law of nature hitherto unknown, was kind to us and a great discovery was born into the world." Following the experiment on himself, Wells at once proclaimed his discovery to the scientific world. He seems to have been first among the pioneers in this field to recognize the far-reaching possibilities of

anesthesia and to promote its adoption in surgery. In a letter dated December 7, 1846, Wells says, referring to what immediately followed his experiment: "I was so elated with this discovery I started immediately for Boston resolved to give it into the hands of proper persons without expecting to receive any pecuniary benefit therefrom. I called on Drs. Warren and Hayward and made known to them the results of the experiments I had made. . . . I was invited by Dr. Warren to address the Medical Class upon the subject at the close of his lecture. I accordingly embraced the opportunity. . . . I was then invited to administer the gas to one of their patients who was expected to have a limb amputated. The patient, (however) decided not to have the operation performed at the time. It was then proposed that I should administer it to an individual for the purpose of extracting a tooth. Accordingly a large number of students with several physicians met to see the operation performed, ... Unfortunately for the experiment, the gas bag was, by mistake, withdrawn much too soon and he was but partially under its influence when the tooth was extracted. He testified he experienced some pain but not as much as usually attends the operation. As there was no other patient present—and as several expressed the opinion it was a humbug affair (which in fact was all the thanks I got for this gratuitous service) I accordingly left the next day for home. . . . While in Boston I conversed with Drs. Jackson and Morton, both of whom admitted it to be entirely new to them. . . . Dr. Jackson expressed much surprise that severe operations could be performed without pain." Note that both Jackson and Morton admitted that the use of anesthesia "was entirely new to them." Nevertheless both of them less than two years later, laid claim to the discovery of anesthesia. Remember also that Morton had been a pupil in Wells' office and was familiar with the many experiments made by Wells including the use of ether, which Wells had been advised by one of his medical friends to discontinue because of its greater danger to the patient. From whom then, did these men obtain their knowledge of anesthesia if not from Wells?

VII

In December, 1846, Wells sailed for Europe to make his discovery known abroad, presenting his claim for recognition to the "Academie de Sciences," the "Academie de Medicine" and the "Parisian Medical Society." The latter elected Wells an honorary member, and the Academy of Science conferred upon him the honorary degree of Doctor of Medicine.

On his return in March, 1847, he published a "History of the Discovery of the Application of Nitrous Oxide Gas, Ether and other Vapors to Surgical Operations." He also continued his use of nitrous oxide in his practice and from time to time acted as anesthetist in major operations.

Meanwhile he continued experimenting on himself with various anesthetic agents including ether and chloroform. Early in 1848 he went to New York, where he advertised himself as giving "gratuitous advice respecting the use of chloroform, nitrous oxide and letheon (ether) as applied to the extraction of teeth." At the age of 33 "while mentally deranged due to the effects of constant self experimentation" he committed suicide by cutting the femoral artery in his left leg—a tragic end to a tragic life.

VIII

Wells' right to be called the Discoverer of Anesthesia has been allowed by the Connecticut State Legislature, the Hartford County Medical Society, the New York State Medical Society, the American Dental Association, the American Medical Association, the dental and medical professions of England, and many others. Monuments to the memory of Wells have been erected in Hartford and Paris; a portrait bust has been placed in the Army Medical Library in Washington; a memorial plaque, the gift of the Odontological Society of Madrid, has been presented to the City of Hartford, and a beautiful stained glass window in his memory adorns the church in which he worshipped.

IX

Thus lived, suffered and died, one of the great benefactors of the human race. Though others going before him had glimpsed the possibilities of surgical anesthesia, and others coming after him and building on the foundation which he had laid, widened its sphere of usefulness, it was Horace Wells, alone and unaided by a knowledge of what had gone before, who gave anesthesia to the world. Where others saw "as through a glass darkly" Wells saw clearly. Where others stumbled and fell, he held his place:

"Held on through blame and faltered not at praise.
And when he fell in whirlwind, he went down
As when a lordly cedar, green with boughs,
Goes down with a great shout upon the hills,
And leaves a lonesome place against the sky."

AMERICAN COLLEGE OF DENTISTS

REPORTS OF COMMITTEES

I. JOURNALISM1

J. CANNON BLACK, D.D.S., Chairman² Chicago, Ill.

Because the intellectual and cultural growth of our profession has been subordinated to a struggle for world survival and sacrifices, once they are lost are not easily regained, a crisis continually confronts us. We must assist in winning the war and at the same time preserve our professional ideals and standards, ever keeping in mind the gains of the past, the requirements of the future and the exactions of the present. In fulfilling these obligations organized dentistry must accept professional responsibility for the publication of all dental periodical literature.

Ever since the first national organization of dentists and the founding of a dental college numerous prominent practitioners have constantly struggled to awaken the profession to the necessity of supporting its own journalism but it was not until eighty-eight years later that a commission was appointed by the American College of Dentists "to survey the present situation in dental journalism and report to the College within one year."

This study became so extensive that it was three years before their findings were presented, adopted and published. The report, entitled "The Status of Dental Journalism in the United States," included a bibliography of all the literature concerning dental journalism from 1839 to 1931 and was distributed to members of the College and placed in dental school libraries.

In reviewing present conditions your Committee realizes there are many in the College and the profession who are not familiar with

¹Submitted to the Meeting of Regents and Section Representatives, Chicago, Oct. 18, 1944.

²The other members of this Committee are (1943-44): William R. Davis, J. M. Donovan, Walter Hyde, and B. E. Lischer.

the report and it would seem fitting at this time to mention some of its findings.

There is an historical presentation of some of the early publications with mention of the constant conflict between professional control and commercial domination of our literature. In 1878 commercial control became so great that the *Canadian Journal of Dental Science* made the statement that their Journal was the only one on the continent not so dominated.³

From the time of the first dental publications there were periodic attempts by those believing in professionally controlled dental literature to end trade-house control but in spite of these efforts there were found to be, in 1929, sixty-two dental organizations whose official proceedings were published in trade-house or corporate journals. During the same period twelve of our dental schools were advertising in such periodicals.

A rapidly growing discontent with commercial interests as they affected our journalism was witnessed during the time the survey was being made, and resolutions were adopted by dental organizations that aroused many in the profession to a sense of their responsibility. One hundred thirty-two periodicals were discovered by this survey, 98 of which were non-proprietary, 32 proprietary and 2 unclassified. In classifying the journals 20 of them were found to be proprietary or over 80 per cent and 22 non-proprietary—less than 23 per cent.

These figures tell the story at the time the Commission published its report. Since then trade-house publications have become virtually non-existent, but there are still dental periodicals being published whose paramount interests are truly commercial. Of these proprietary journals three are distributed on a subscription basis while the others are commonly known as "throw-aways." Your Committee will discuss but three of these periodicals—two briefly and one at some length. Among the subscription journals is the American

³Canadian Journal of Dental Science, Vol. IV, No. 3, p. 93; 1878.

Journal of Orthodontics and Oral Surgery which was classified in the Commission's first report as being corporate controlled. This status has not been changed.

Since the creation of the Journal of Oral Surgery under the sponsorship of the American Dental Association there is a noticeable change in the number of literary contributions published in the Orthodontic section of the American Journal of Orthodontics and Oral Surgery. In a circularized report by the publishers of the Journal for the first six months of 1944 it is singular that in the Orthodontic section only 16 contributions were published while the Oral Surgery section contained 44. Does this imply that economic returns to the owners of the Journal are being jeopardized through competition of the Journal of Oral Surgery and that more effort is being made to feature the Oral Surgery section? There seems little justification for such a large specialty group as the Orthodontists to permit a commercial journal, over which they lack little if any control, to publish their official proceedings when the association is paying \$6,078 to the publishers for the privilege of furnishing its members with 716 volumes of the journal per year.

Of the three publications which are distributed to the profession by a recognized advertising procedure *Oral Hygiene* is the oldest. It was conceived in 1911 under trade-house guidance but was finally taken over by its former business manager and published by Oral Hygiene, Inc., which also publishes *Proofs—the Dental Trade Journal*. An interesting description of the editorial policy of *Oral Hygiene* may be found in the Commission's first report. Since that time there has been little change. The periodical still has the appearance of a tabloid publication with articles presented to catch the eye without furnishing much professional knowledge to the reader. Editorials by the editor, while they would appear to be devoted to the interests of dentistry in pointing out its shortcomings and endeavoring to suggest remedies, are but a chameleon cloak used in

⁴Status of Dental Journalism in the U. S., pp. 148-57; 1928-31.

a demagogical manner to change the commercial color of the journal.

The editor is an invited member of the Advertising Code Committee of the American Dental Editors' Association and has seemed to cooperate with the committee in setting up an advertising code but there is a continual disregard for the findings of the Council on Dental Therapeutics and products objectionable to them are still being advertised in his journal. Can ethical standards be upheld when the periodical is under complete commercial domination and when the interests of the advertiser must be the major consideration?

Dental Survey, although not the oldest of the "throw-away" journals, is more astute in its promotion tactics. In order to evaluate its present worth let us look at a few of the facts contained in the Commission's report, 1928-31, pp. 160-171.

In May 1925 Dr. John F. Patterson and Dr. Frank J. Fifield of the M. J. Patterson Company, Minneapolis, Minnesota, issued the first number of a dental journal created under their trade-house environment and known as the Popular Health Journal with Mr. Jacob G. Cohen as business manager. In December 1927 the owners disposed of the journal presumably to Mr. Jacob G. Cohen, who changed its name to Dental Survey and continued as business manager with all earlier relations to the Patterson Company eliminated. Dr. Elmer S. Best was asked to assume a financial interest in the periodical and become its editor—a position which he still holds. Dental Survey had passed from trade-house control to a publication incorporated for profit, with an estimated average yearly gross income in 1928-1929 of \$112,355. In 1930 Mr. H. B. Whiting, a man with sixteen years experience in trade-house journalism, obtained an interest in the publication becoming its vice-president and business manager and these new owners greatly increased the financial status of the journal.

Again the economic phase was introduced into professional journalism. The amount of money a "throw-away" acquires is directly in proportion to the number of its professional contributions plus

paid advertisements. Careful consideration should therefore be given this by both the profession, which is contributing articles, and manufacturers and distributors of dental products when placing their advertising matter. It is organized dentistry which produces the demand for the products of manufacturer and dealer—not so-called professional journals.

For some time Dental Survey was referred to by its publishers as "The Dental Journal of Distinction" but in November 1937 that claim was discarded and the periodical was publicized as "The Journal of the Pierre Fauchard Academy." However it was not until November 1939 that an editorial appeared in Dental Survey entitled, "A New Era in Dental Journalism," which announced the transfer of Dental Survey from the control of its Editorial Board to that of the newly organized Pierre Fauchard Academy, guaranteeing in an agreement with the Academy to submit the entire contents of each issue of the Journal to a committee appointed by the Academy before its appearance in Dental Survey, this committee to have complete control over such contents. Thirty days' written notice to either party could terminate the agreement between the Academy and the publishers.

A few quotations from a copy of the original Constitution and By-Laws of the Pierre Fauchard Academy are enlightening. Under objectives is the following: "to maintain the dignity of the dental profession as expressed through magazines published under the professional direction of the Academy." In order to maintain this objective the membership is told "each member of the Academy shall consider himself obligated to do everything within his power to further the objectives of the Academy." To be eligible for election to membership one of the qualifications is "he shall be in no wise directly or indirectly, either personally or in connection with a firm or institution, engaged in improper exploitation of dental services or the result of dental reasearch." For the privilege of belonging to the Academy and safeguarding its official organ "the annual dues shall be \$1.00 per member; but the Board of Trustees shall have

authority to remit the dues for any or all members as conditions, in judgment of the Board, may warrant."

For the first time in dental history we find a professional dental society organized through the efforts of a commercial institution. Evidence that Dental Survey values the services of this dental organization may be found in an advertisement in the December 15, 1943, issue of Standard Rate and Data Service from which we quote: "Manufacturers are busy today with orders for the armed forces, but they are all planning for a busy and profitable post war future. Altho many of them are unable to supply dentists in civilian practice, they have increased their advertising in Dental Survey, realizing the value of 65,000 dentists' recommendations to their 25,000,000 patients. Dental Survey is the official journal of the Pierre Fauchard Academy—Dental Survey Publications offer the only complete and effective coverage of the entire dental market through Dental Survey (all dentists); Dental News (all manufacturers, dealers and salesmen); and Dental Laboratory Review (all dental laboratories)."⁵

Since the conversion of the Editorial Board into a commercially organized Academy there has been a continual effort to impress its worth and influence, through propaganda and psychological methods, upon its members and the profession.

The question might be asked of what value is the Academy to the publishers of *Dental Survey* and why did they agree to give this organization complete control over the contents of the periodical. The answer is embodied in the first paragraph of the editorial "A New Era in Dental Journalism" from which we quote: "The trend of contemporary professional thought on the subject of dental journalism has been toward a general agreement that, ideally, dental journals can best fulfill their functions when control over their contents is vested in an organization of dentists." In the above statement we see the owners of a commercial publication, who have contended

⁵Standard Rate and Data Service. McGraw-Hill Pub. Co. Class 35, p. 113; Dec. 15, 1943.

⁶ Dental Survey. Editorial. 1939, Nov.

for years that their journal was a professional periodical, admitting the fallacy of that former claim and professing to have placed their publication under professional control.

In examining the monthly issues of *Dental Survey* through the years there is little evidence of any reform in publication policy. As the periodical is still a "throw-away" journal it must capitalize upon its literary contributions and other propaganda methods in order to obtain revenue from the advertisers, and the publicity necessary to build up the prestige of the journal in the minds of the profession and advertisers is being broadcast under the supervision of the "owners" of the Pierre Fauchard Academy.

Since the Academy became a "supported" member of the Dental Survey family much interest has been taken in the educational welfare of the undergraduate students. Each dental student in the senior classes of the dental schools throughout the country receives a copy of the current issues of the periodical. A special publication—"The Journal of the Pierre Fauchard Academy"—has also been created and is now being distributed to students. Your Committee questions whether the deans are all as cooperative as the following statement leads one to believe: "Special mention must be made of the highly cooperative attitude of all deans in arranging for distribution of the Journal which carries no advertising." The dental graduates of today will be the profession of tomorrow. Are they to be recruited for commercial purposes?

Having gained entrance to our professional institutions the next approach was made through the Pierre Fauchard Academy to the Trustees of the American Dental Association with the following results obtained and published in *Dental Survey*. "Your Committee on Post-war Activities presented a design for a bronze plaque to honor members of the American Dental Association who die in the service of their country in World War 2. This design has been submitted by Elmer S. Best, secretary-treasurer, to the Board of

Dental Survey, 20-6, 1048; 1944, June.

Trustees of the A.D.A. for approval at their regular meeting on February 20, 1944. By action of the Board this was accepted and a committee consisting of Dr. Henry Hicks and Carlos Schott was appointed by the Trustees to cooperate with the Academy in working out details."

The action taken by the Board of Trustees did not long go unchallenged. On June 15, 1944, the Executive Council of the Minneapolis District Dental Society went on record as disapproving the action of the Board of Trustees in accepting from the Academy a plaque upon which to place the names of members of the Association who had lost their lives in the present war. In recording their reasons for such action they questioned the authority of the Board in accepting the gift from an organization which was so closely connected with a commercial enterprise and called attention to some of the advertising in the official journal of the Academy which could not be accepted by those who wholeheartedly supported our Council on Dental Therapeutics. The Society further suggested that the acceptance of the gift be reconsidered and that the Trustees direct their efforts to establish a living memorial in honor of those who had made the supreme sacrifice. A letter was ordered sent to each member of the Board of Trustees setting forth the reasons for the attitude taken.

The "Bronze Plaque" also caused one of our leading journals to editorially criticize the decision the Board of Trustees had made in accepting "a plaque of any kind for any purpose from an organization such as the Pierre Fauchard Academy that sponsors a 'free circulation' journal which is purely a commercial enterprise and does not support the work of the Council." Further protest was voiced that the Board did not present the offer to the House of Delegates for consideration.

From a communication published in the same journal entitled "What Price Honor" we quote the following: "Are we honoring the dead with a piece of metal? Shall these dead by honored by an

^{*}Dental Survey, 20-6, 1047; 1944, June.

North-West Dentistry, 23-3, 138; 1944, July.

organization such as the Pierre Fauchard Academy which represents the 'faculty' of a dental trade journal, the *Dental Survey*?" 10

Realizing that the effort made to confuse, deceive and disillusion the profession was not being generally accepted without severe criticism the donors of the plaque decided to withdraw their offer and appealed to the Board of Trustees to rescind the action taken during their February meeting. This was officially done. However your Committee has been unable to learn of any statement being made by either the editor of *Dental Survey*, the Fauchard Academy or the Board of Trustees to notify the profession of the release granted.

As has been stated, so-called professional "throw-away" journals cannot exist without literary contributions, neither can they survive minus paid advertising. In this respect the owners of *Dental Survey* are fortunate in having an editor who is a member of the dental profession, while the business manager has had years of experience in financing such publications. The editor, through various means, must deliver the profession to the business manager in order that he may obtain profitable advertising. While one publicizes the value of the periodical to the profession the other heralds the commercial value of the profession to the advertiser.

Your Committee has in its possession a "book" published in 1941 by Dental Survey entitled "A Guide to the Dental Market—A Presentation by Dental Survey." This is not distributed to the profession but copies may be found in commercial advertising agencies and may be considered as a "push-over" assistant in the sale of advertising space in Dental Survey when such methods as directing attention to the quality of contributions contained in the periodical, likenesses of State Society Presidents, value of the Fauchard Academy's influence, a list of its membership and pictures clearly identifying those attending the anual presentation of the Fauchard Medal, fail to produce results.

However skillful the publishers of Dental Survey have been in

¹⁰North-West Dentistry, 23-3, 163; 1944, July.

publicizing the dentist, as to the Academy's professional value to the periodical, the fact remains that they are also making use of the Academy to obtain commercial gain through a brochure embracing thirty pages of assertions not printed for professional perusal—irrefutable proof that publicity as a business has no specific professional standards.

This "Guide to the Dental Market" pictures the average dentist as spending 21 per cent of his yearly gross income for dental supplies, thus aiding in creating a \$50,000,000 dental market. As a member of a technical profession he has difficulty keeping up to date, there being few facilities open to him for educational and technical development. What he really needs is a free journal which will tell him what to do and how to do it. The advertiser is advised that Dental Survey is the journal which acquaints the dentist with new ideas and technical improvements through research and literary contributions and has the sanction and professional requirements of the Academy which it classifies as one of four national organizations, the others being the American Dental Association, the American College of Dentists and the International College of Dentists. Of these, the Academy has the only professionally sponsored journal reaching the whole dental profession. However, consideration is not given to the total organized membership of the dental profession as compared with the circulation of the journal nor to the unopened issues of Dental Survey that are consigned to the waste baskets of those not reading the periodical. Such information must be contained in their private files for the publishers seem obsessed with the value of surveys conducted under the supervision of prominent men of the profession for the purpose of obtaining editorial material for the publication and on those made by the business manager to obtain information as to the selling ability of the journal for advertised products.

Amplifying the work the Academy is doing through the Journal, the "Guide" goes on to acquaint the advertiser with the policy of the Academy itself. "The Pierre Fauchard Academy bases *Dental*

Survey's editorial policy on the knowledge that the average dentist has few feasible opportunities to keep abreast of technical advances. It satisfies his needs by following a planned and balanced editorial program, based entirely upon the daily problems with which every dentist must tussle successfully if he is to continue in practice and acquire an ever-increasing clientele. The dentist finds in Dental Survey the quickest means of keeping in touch with progress in his profession."

Thus a "psychological liaison" is formed between the editorial and advertising sections of *Dental Survey* thereupon making it a medium between them. Subjects of editorial interest and related products of advertising are so portrayed as to transform reader interest into buying power, making it difficult to separate the two in the dentist's mind. He then becomes an excellent prospect for the advertiser as his recommendations of tooth paste and similar aids to patients are advertising messages reaching an estimated 24,000,000 consumers.

In analyzing a graph showing the number of advertising pages published yearly since the origin of the publication in 1925 to the present time it is interesting to note the increase from 100 pages to a high of 1100 pages in 1930. Then came the first report of the Commission on Journalism. From 1100 pages there is a drop to less than 800 in 1933—this fluctuated until 1939 when the Pierre Fauchard Academy was publicized and the result was a gradual rise to more than 1400 pages in 1943. Was the Pierre Fauchard Academy responsible for this increase in advertising pages and was it exploited to secure advertisements which were unacceptable to the Council on Dental Therapeutics of the American Dental Association? It might be well for the members of the Pierre Fauchard Academy to request a copy of this "guide" to their publication so they may learn the magnitude of their value as an asset in securing advertising for Dental Survey. The general practitioner should also read it in order to learn the appraisal which Dental Survey places on him as a technician rather than as a scientifically trained member of a health profession.

The facts your Committee has presented are but a few of the many problems constantly facing us if we are to uphold professional standards in our periodical literature. These examples could be multiplied many times with net results showing the same unprofessional efforts to place the profession under bondage to commercial interests. There are persons and organizations that still do not see that it is necessary to remove these dangers from our midst. Many are unaware of the methods used by some commercial companies to secure professional endorsements. A few still think it possible to take half way measures and for one reason or another do not wish to eliminate such practices.

It is with surprise and a feeling of sincere regret to your Committee that the latter belief is upheld in the report of the Survey Committee of the American Association of Dental Editors, published in their 1943 Transactions, a portion of which we quote: "Above all things, let us strive for balance in our deliberations and in our literature. Let us be generous, let us be charitable, let us be consistent, but do not let us pursue the foolish policy of advocating a lot of measures that are wholly impracticable just because we have become obsessed with an itch for criticism based on ignorance of the real essence of the situation (the baneful influence on the profession of so-called 'trade journalism') or the real needs of the profession. . . . The crusade against dental publications termed 'Proprietary' has outlived its usefulness, and for the benefit of dental journalism in general and the broadening of the services of this 'democratic organization,' the words proprietary and non-proprietary should be erased in its Charter and By-Laws."11

The committee making this report speaks of it as being idealistic while in fact it implies a lack of factual knowledge of past accomplishments and present conditions regarding dental journalism and

¹¹Transactions—American Association of Dental Editors. Oct. 12, 1943, p. 18.

disregards the original purpose of the American Association of Dental Editors "to promote, in a broad constructive way, the cause of non-proprietary dental journalism, and to facilitate cooperation among the editors of these journals for the advancement of the professional ideals of dentistry." This report was received but not accepted.

The struggle to maintain our periodical literature on a truly professional basis would not be difficult if our organized bodies accepted the responsibility which is rightfully theirs. Because they have not accepted it the rank and file of the profession have stepped in and at last evidence is at hand that they will no longer continue to tolerate the interference of strictly commercial interests with professional ideals. They have now spoken in no uncertain tones against the insidious methods made use of to commercialize the dental profession. When this voice was heard both the commercial interests and the official Board of our Association listened—then acted. The rank and file now see it is necessary to pluck from our own profession all those elements latently or actually pertaining to the practices of commercialism.

To the far-sighted the future is not divorced from the present. Every constructive step the profession takes is a gain for the present and a real dividend for the future.

¹²Status of Dental Journalism in the U. S., 1928-31, p. 200.

EDITORIALS

CHICAGO 1944

Once more we had to be content with abbreviated and streamlined meetings. It seems true that "Men must fight and women must work," and so the things we'd like to do must give way to the things we must do. Instead of living and doing constructively, we must be destructive in the ultimate, unless it be possible to find construction even in destruction. Parenthetically, it is true that progress does come out of war, bad as war is. For everything worthwhile, a heavy cost is demanded. For every new life brought into the world, much discomfort and severe pain must be endured. So, we must plod along hoping for the best, realizing some, and still hoping.

The Chicago meeting of the Regents and Sectional Representatives was in many respects the best we have yet had. We realize that this type of meeting is only a substitute for the annual convocation, yet it in no way replaces it. It was a fine meeting, because of the fine spirit which obtained; the large attendance, for the room was filled; the committee reports, which were well received, some of which coming almost to completion of their labors, due to the assumption of that work by the American Dental Association; and finally, the fact that sections were so well represented. Fellows present participated heartily in the discussions and while we all look forward to the time when all restrictions can be raised and we can resume the old order, yet this meeting was helpful and instructive.

The Regents sat in session all day the next day, reports from which, and the committees, will appear later. Repeating the statement that these are days when we have to do as we can and not wholly as we want, and with the further statement that we have to undergo experimental procedures without the opportunity of fuller discussion, yet it does seem as though progress is being made.

The question of admitting to Fellowship is an omnipresent one. A committee recently, under the Chairmanship of Dean Crawford of Indiana made certain recommendations which have been tried

out and which will be tried out again. It is to be hoped that a method of procedure may be developed which will prove satisfactory. And yet, what is "satisfactory"? There is considerable diversity of opinion as to what the College is or what it stands for. It is an honorary organization, not designed from its own standpoint, to be built up into a large and powerful body. It is one which holds up before men a goal of better professional living, and to which they might ultimately hope for invitation to Fellowship. One would feel happy indeed to receive an invitation to membership in Phi Beta Kappa, for example, so why not similarly with regard to the College? There are many honorary organizations, both graduate and undergraduate. There are many within the field of dentistry and outside the field of dentistry. The American College of Dentists as represented by the officers and committeemen is desirous and anxious to extend Fellowship to dentists everywhere. There are three facts which should be recognized; the work of the College is not analogous to that of the American Dental Association, it is more particularly along ethical and cultural lines, but without authority; the officers and committeemen have, within the years, been completely changed, with but very few exceptions and most of these have been put into different positions; and finally the College is one of those organizations in which Fellowship is by invitation and not by solicitation. It must be the hope that more and more men may qualify to receive that invitation.

Other matters might be discussed and will be as time goes on. But for the present let's hope for an early termination of the war and return to regular activities.

A CENTURY OF ANESTHESIA

A century ago two New England dentists used and demonstrated anesthesia in such a way as to convince the world that it could be accomplished. Horace Wells of Hartford, and William T. G. Morton of Boston, once dental partners, were the men responsible for giving us a century of anesthesia.

On December 11, 1844, Horace Wells let his colleague John

Riggs pull a tooth while under the influence of nitrous oxide administered by J. Q. Coulton. The three men were all significant contributors to dentistry: Wells for anesthesia, Riggs for the disease known by his name, and Coulton for devising practical dental nitrous oxide anesthesia and syndicating it.

After dissolving partnership with Wells in Boston, Morton entered Harvard Medical School, and while a student, witnessed Wells' attempt to demonstrate to the surgeons at the Massachusetts General Hospital that anesthesia with nitrous oxide could be obtained. The attempt, though a failure, stimulated Morton. At the suggestion of the chemist Charles T. Jackson, he studied ether. Finally on October 16, 1846, he successfully showed the surgeons of the Massachusetts General Hospital that a patient could be carried through a surgical operation without feeling pain.

Anesthesia then paralleled the development of modern chemistry and pharmacology in the last century. It has become a highly complex field of scientific investigation and of practical application. Thousands of chemical agents have been studied for pain relief. All sorts of methods of producing anesthesia have been proposed and utilized. In order to apply successfully the great amount of knowledge available on anesthesia, it is necessary to have a full appreciation of the pertinent physiological principles, the biochemical considerations concerned, possible modifications due to pathology and anatomical skill, an understanding of the work of the surgeon, and even a keen insight to psychological and neuropsychiatric factors which so often appear. For modern successful anesthesia it is essential indeed that the anesthetist be a highly trained medical specialist.

And still anesthesia remains primarily an empirical undertaking. We claim relief from pain by means of anesthesia, and yet we do not know what pain is.

If we are able to make as much advance in the next century with regard to relief from pain as we have in the past one hundred years, we may be able to do much to reduce the continued suffering of human beings. Perhaps we may even be as successful in relieving EDITORIALS 371

mental pain and anguish as we have been in relieving physical pain. Perhaps we may even do better in this vast problem by learning how to prevent the appearance of pain. It is a worthy goal to attempt to achieve.

C. D. L.

ERRATA

In Wells' biography, the June issue of the JOURNAL, please note errors: Page 136—reference should be (21), not (19); page 89, line 1, should be 1836, not 1936.

BOOK ANNOUNCEMENTS

"ACCEPTED DENTAL REMEDIES." This is the tenth edition of this most valuable publication of the Council on Dental Therapeutics of the American Dental Association, and published by the American Dental Association.

Send one dollar and get your copy.

GENERAL EDUCATION BOARD—ANNUAL REPORT: This is the annual report for the year, 1943, of the General Education Board, founded by Mr. John D. Rockefeller in 1902. It contains a list of Contributions, Aids, Grants-in-aid, Fellowships, etc., for the year. Published by the Foundation at 49 West 49th St., New York.

Manual of Organized Dentistry in the United States—1944-1945: This is the first publication of this kind attempted by the American Dental Association in an effort to be helpful to a greater degree in our organized work and no doubt to place before us a picture graphically illustrating its magnitude. Published at 222 East Superior St., Chicago, Ill.

YEAR BOOK OF DENTISTRY: The 1944 Year Book of Dentistry, edited by a number of dentists and one physician, for the Year Book Publishing Co., is just off the press; nearly 700 pages, including a subject and an author index. In this volume current literature is reviewed and brought to the reader in condensed form, so that it should be of no small value to the busy practitioner. It is clinical in character, though embracing all branches of dental practice. It is published as above indicated, at 304 So. Dearborn St., Chicago, Ill. The price is \$3.00, postpaid.

MEDICAL USES OF SOAP: This is the title of the book just off the press edited by Morris Fishbein, M.D., Editor of the Journal of the Medical Association. It is a solution of article and research on the use of soap. Some of these have been read before meetings and all together they will give the reader a new comprehension of the value of soap. Soap is not only a cleaning agent, but in addition some soaps have disinfection properties, and all may promote health and vigor of the skin, or surface. Publisher, J. B. Lippincott Company, Philadelphia, Pa. Price \$3.00.

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Special abbreviations; besides those of self-evident import.—A.A.A.S.: American Association for the Advancement of Science. A.A.D.E.: American Association of Dental Editors. A.A.D.S.: American Association of Dental Schools. A.C.D.: American College of Dentists. A.D.A.: American Dental Association. A.M.A.: American Medical Association. A.P.H.A.: American Public Health Association. D. or d.: dental or dentistry. I.A.D.R.: International Association for Dental Research. I.A.R.S.: International Anesthesia Research Society. J.A.C.D.: Journal of the American College of Dentists. J.D.R.: Journal of Dental Research.

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