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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.

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American College of Dentists

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

Announcements

Next Meeting, Board of Regents: Chicago, Feb. 8, 1953.

Next Convocation: Cleveland, (date to be announced).

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

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AMERICAN COLLEGE OF DENTISTS

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"I believe the first test of a truly great man is his humility"

JOHN RUSKIN

EDITORIAL

THE REORGANIZATION OF THE COLLEGE

During his tenure of office, as President of the College, Doctor Fleming recommended a thorough and comprehensive study of the work of the College as carried on by various committees. This meant a serious study of our committee and administrative structure resulting in the appointment of a special committee, dubbed Committee on Committees. After several months of study, this committee recommended the dropping of some and the development of new committees for the next step in advancement. This committee spent hours in careful deliberation as to functions and finally personnel of all committees. These will be announced in the March Journal.

Probably the biggest venture or step taken pertained to the administrative side of our 32 years of life. Like many or perhaps most organizations, we had a birth, went through a time of spoon feeding, finally in 1933, coming to the use of a large or so-called table spoon. We have gone on in this way until the present. We have built a good foundation but we realize now that we must build a better building on our well-built foundation, for further requirements will be different and more exacting.

The College was organized in 1920-1921 by men with determination to carry out the needs of that time. Doctor Albert L. Midgley served as secretary until 1935 when the present secretary, Dr. Otto W. Brandhorst, took over. Both of these men served without pay or remuneration of any kind, save some payment on rent or secretarial expense.

Dues were set in the beginning at \$5.00 per year and so continued until 1935 when they were raised to \$10.00 per year.

We have continued on this level, volunteer administration, (also paying their own expenses) and \$10.00 dues, struggling in this way to maintain a balanced budget. This has been done. We are solvent, but lacking in funds to do what should be done. Therefore at the Convocation in Cleveland, the dues were raised to \$15.00 per year and the initiation fee was increased. This will allow funds for a bigger work and more than that, the employment of an executive-secretary. Inasmuch as Secretary Brandhorst had given so much time; had proved himself so capable; and is so widely known and

respected within the Fellowship of the College and the profession generally; and finally since he was retiring from the College of Dentistry, Washington University, it seemed providential that arrangements might be made, whereby he could take over this new position. He did, and now the College will be well off under his leadership and at the same time will be paying a debt long over due. We'll watch the years ahead with interest, and enthusiasm, but without anxiety.

Hail to you, Otto! And as for us we'll give our best that the influence of the College may obtain among us.

ERRATUM: COPYRIGHT

Under the copyright notice we have failed to change the year from 1952 to 1953. Volume No. 20 should read 1953.

A BALANCED EDUCATIONAL PROGRAM FOR THE PROFESSIONAL MAN¹

SHAILER PETERSON, PH.D.,² *Chicago*

Fellows and guests of the American College of Dentists, it is indeed an honor and a pleasure to be invited to address you. The subject of my comments is "A balanced educational program for the professional man." I am going to take this opportunity to direct your attention to the several reasons why it is important for the professional man to avail himself of a broader educational experience and I would like to suggest some methods and means by which such a balanced educational program can be provided both to the student who is preparing himself for his chosen profession and to the graduate dentist who has been in practice for many years.

There are a number of reasons why the professional man of today cannot overlook either his opportunity to serve a more useful function in his community or his obligation to serve a larger number of persons. The professional man comes in contact with those persons whom he serves through the medium of his professional skill. These persons however constitute only a small fraction of the large number who are seeking his services, waiting for his counseling and more important, the large number to whom he has an obligation, namely: his neighbors in the community.

A balanced educational program is important to the professional man first of all because he is an integral part of the community in which he lives. While everyone in a community has a function to perform, the professional man has a special niche to fill. The individuals in a community expect a great deal of their professional men, and much that they expect is beyond and outside of the special clinical skills and professional knowledge of the professional man.

Before one pursues too far the opportunities of any person to render a greater service to others, it is well to pause long enough to realize that the professional man cannot look upon the service that he can render as merely something that he can elect to give as he sees fit. The professional service that he renders as well as the counseling

¹ Address delivered at the Convocation of the American College of Dentists, September 27, 1953, Cleveland, Ohio.

² Secretary, Council on Dental Education, American Dental Association.

and guidance that he offers to the clubs of the community, to the city council, to the school board, and to the church are actually an obligation. One cannot sit beside the commotion and the activity of the community and flip coins to decide whether he should take the time for this or go to the bother of doing something else. The professional man lives in the world that he does, and has received the education that he has, as a result of many generations of people. All of them have strived for the development of the community and its resources and it rightfully can expect those who have accepted these advantages to repay in a measure this debt. The professional man has accepted the best that the community and its surroundings have had to offer both in the education that he has received from its schools, its teachers, and its churches; and his personality and his understanding of human values has come from his association with all of the others who collectively work to produce our society. There is no one who has more to offer the community than the professional man; and there is no one who owes a greater debt to society than the professional man. Therefore, it is important that he prepare himself so that he can meet these obligations.

The multiple role of a professional man in the health field as well as a community adviser has never been an easy role to fill competently. However, if it was difficult in the years gone by, it is much more difficult today and will become even more complicated in the future. It is becoming more difficult and more complex because 1) more health service is being demanded; 2) health care is becoming more complex and more specialized; and 3) community problems are also becoming more complex. The professional man is in demand by his community for his knowledge in regard to many matters, and for his skill in solving many types of problems. Obviously, if the professional man is to maintain the high esteem that he has earned in his community, and to continue to earn the respect for his suggestions and his solutions, he must consider ways and means of keeping abreast of the times both in regard to his profession and in regard to world and community affairs. This is an important problem for the practicing dentist and it is a problem that needs to be considered today in our plans to educate the dentist for tomorrow's public.

There are, of course, many ways by which a dentist may keep up to date with his profession as well as with his current affairs.

It may be well to consider first, how does one keep up with his own

profession in this age of research in the use of new drugs, new materials, and new technics.

We all remember the graduation speeches in which commencement was interpreted to mean the "commencement of education," the opportunity to start one's education. Many of us have remembered those speeches long enough to think that they meant self-education and education through self-training, and by trial. Others may have thought that this was an invitation to begin reading for improvement and they have been avid readers of our journals.

The dental schools, as well as the graduate schools of our leading universities, have important roles to play and they should continue to serve the dentist after his graduation. Last year about a thousand graduate dentists took advantage of formal graduate programs and formal hospital internships and residencies; but nearly five thousand took some postgraduate courses in our dental schools, and an untabulated number of others took advantage of refresher courses given through the medium of the telephone, or in local or state sponsored programs and clinics of a few hours' or a few days' duration. In addition to that, about 75,000 had access to the most recent written material in the American Dental Association's *Journal*. The *Journal* may not be read thoroughly by many although it is scanned by a very large number. The scanning of the *Journal* does provide a good index of the changes that have taken place in terminology, concepts, theories, and philosophies even in the last ten or fifteen years.

The dental schools recognize the opportunities that they have in serving the graduates as well as their group of undergraduates. The dental schools are now educating nearly thirteen thousand undergraduates and nearly another six thousand who are returning for more training, mostly in the specialty areas. The dental schools should have a program for serving the other seventy-five or eighty thousand dentists. However, it is obvious that everyone cannot go back to school each year or even every ten years.

A broader and more extensive program of postgraduate study would provide a direct benefit to the schools because it would provide them with the much needed contact with the men who are in practice. The schools rightly believe that they should provide guidance to their graduates, and the schools, as a group, believe that they have an important role to play in the continuing education program of all practicing dentists. It merely remains for the schools and their

graduates to work out a program of postgraduate dental education that will prove practical and effective.

It is possible to plan a program of advanced study or of postgraduate education that needs to be explored and this could be tried by at least some of the dental schools and their alumni. This suggested program is one whereby the dentist in his practice might receive all or nearly all of the advantages of a postgraduate program but through a means that would not disrupt his practice and hence would not deprive the public of his service.

All of the students in our schools today are impressed with two things: namely, the great amount of material that they are called upon to learn and to understand, and second, by the rapid advancement that is taking place in all of the health science fields. Some of these students are wondering how they are going to keep up with this rapid increase when they get out into practice. Similarly, all of the men in practice today wonder if there isn't a better and easier way for them to keep posted on the recent advances.

There is an easier and more effective way for a professional man to keep up with the advances and changes in his field than by reading his journals and hoping to find time to go to school. There is a way by which the dental schools themselves can assist in meeting this problem. Undoubtedly some would agree that in a way, the dental schools themselves have an obligation to their graduates to continue their offerings—their educational opportunities. The schools have contact with their students through the four years of education and there is really no reason why they should divorce themselves of this contact at the time of graduation. Actually, there is no divorce now from this contact, for there are active alumni organizations in all of the dental schools. These organizations might well be the media through which an active educational contact could be preserved in addition to maintaining a social contact.

It is conceivable that each department in the dental school might take upon itself the responsibility of developing literature of a refresher type that might well resemble a home study course, an extension course, or—resembling a high level type of correspondence type course. Some will say that this is no different than the type of articles and bulletins that many of the dental schools distribute today to their alumni. But this new plan as contemplated would be much different. Most of the educational material that is distributed today

resembles the articles that you find in journals and magazines. The "office study" course that is being suggested here would be a "course" in every sense of the word. It would include syllabi, laboratory manuals, clinical manuals, reading assignments, and assignments to be completed and returned to the school. As in every other course at an advanced level, it would be left to the individual how much work he wanted to do, or even if he wanted to follow the course of study. Quite obviously, the specialist might wish to follow the courses that pertained to his own specialty but he might wish only to scan over the material made available for the other courses.

Some will immediately be somewhat indignant over the idea and say that "correspondence school courses" are not for the professional man. They will say that his work is too complex for it to be taught by any such home-study medium. That would certainly be justifiable criticism for the undergraduate professional level and certainly such an "office study" course could never take the place of internship experience, residencies, and many of the other fine types of experience that are made available in our schools and institutions today.

However, most everyone will have to admit that there is much that can be learned through the medium of reading, through the medium of radio and television and movies. If this is so, then is it not a practical solution that the busy dentist be permitted to use these media for his own uses? Everyone who reads and studies an article on a technical matter immediately thinks of questions that he would like to ask. Everyone who tries out a technic that he has read about in a journal finds that there are questions that need to be asked and additional explanations that need to be given. Magazine articles and journal papers are not intended to supply all of the information for, first of all, journal space is limited, and secondly, there must be an opportunity for the reader-learner and the author-teacher to exchange information. Universities don't give certificates and degrees to their students who read the books and assignments that are included as part of the correspondence course. They expect the student to perform the exercises, show evidence of his work and then write reports, raise questions, and even write examinations. They know that learning takes place through this two-way exchange. It is to devise a method of making this two-way exchange of ideas available to the practicing dentist that this plan of "office study" is suggested.

It is true that this would be quite an undertaking for the dental

schools. They would have to develop new techniques of teaching for most of their instructors have not tried this medium of teaching by mail. They could, of course, make use of some visual aids that could be distributed and they could also make use of much of the material that they presently include in their own up-to-date work-books and syllabi.

It would be a big undertaking, but here again is a suggestion that might be of great benefit to the school as well as for the practicing graduate, the alumnus. The school would profit through its stronger and more active alumni. Its faculty would prosper by being able to keep its finger on the pulse of its former students and their practice. Dentistry and the public would both profit because an added device would be available to the modern professional man who would need to leave his office and his patients less often to attend long sessions at the dental school.

As one visualizes the idea and its scope, many mechanisms come to mind for expediting such a movement. There are, of course, many different ways by which such a plan could be conducted. It could be started on a small scale among a few schools to provide a pilot study, or the overall program and its responsibilities could be divided among several of the schools—or among all of them for that matter. Financing could be handled in a number of ways. In fact, it might first be started as a pilot study through grants so as to determine whether the activity could be absorbed by the institutions themselves, or on the other hand, there might be sufficient, tangible advantage to the alumni students to warrant charging a fee for the service. Methods of expediting such a plan will not be discussed here at this time.

With a method developed for the dental graduate to keep up with the advances in his profession, it is still necessary that we consider ways and means for enabling him to advance himself in those areas that are not directly associated with his clinical and technical skills and with his competence in diagnostic procedures.

At a recent conference, considerable attention was given to the fact that even in the field of clinical practice more is demanded of the professional man than knowledge of scientific principles and the ability to perform skillful operations. While the professional man is constantly called upon to analyze conditions, to apply principles, to discriminate between the important and the unimportant, to make deductions, to diagnose cases, and plan treatments; he is also called

upon to make judgments that involve much more than that. He must plan his work and decide upon the advice that he gives in terms of many factors. He must be a psychologist, a humanitarian, a scientist, and in all of this, he must demonstrate the ethics of a professional man. While training and experience do not guarantee that the student will, upon graduation, continue to follow the high ethical standards to which he has been exposed and with which he has been surrounded, the chances that he will continue to practice with the highest of standards, are increased by the proper types of experiences that he receives in his undergraduate dental school training.

The schools now do a splendid job in teaching the use of the scientific method. However, the schools today must provide more attention to showing the dental student how he should attack problems. Not only scientific problems, but problems that deal with ethics; problems that deal with human factors; and problems that will help the dental student and the dental graduate to formulate a philosophy of living of his own will cause him to be a professional man in every dimension. In fact, this factor alone may be considered as an additional dimension in the education of the professional man.

The professional man is multi-dimensional. Having found ways and means of keeping abreast of current happenings in his own field through the help of the schools and having attained those philosophies of life that permit him to follow his career with the ethics and the religion needed by a professional man, he must still find the means of living successfully and being an effective citizen in the world of his neighbors, his community.

Too many prospective students, and probably some of the professional men in practice, have the notion that to be successful and to be an asset to their profession and to their community, they must be scientists and think as scientists all of the time. Nothing could be more incorrect. The preprofessional students are now being advised by deans and admissions officers to fill their university and college programs with many courses in social science, political science, literature, psychology, art, and economics. There will be little enough time for them to take these courses later, and the professional man needs to understand the world around him in addition to understanding the world under his microscope.

The dental school programs are filled with theory and technic courses and with clinical experience. Some of the libraries seem to

have forgotten that there are other books than those written by professional men and scientists. The students need the scientific courses that are concentrated and crammed into the dental curriculum, but they need other things as well. They need to be constantly reminded through many of their courses and through the library, the conference periods, the seminars, and perhaps even in formal courses that their dental degree will not shut them off from the world about them that is filled with sociology and economics. Instead, it should be emphasized that their chosen profession will bring them closer to their communities, and make them an integral part of this complicated machine in which they are living.

The teachers in our professional schools are proud, and justly so, of the fact that they teach in a program that is real and tangible. They teach courses that enable the student and the teacher to collect facts and figures and to make use of these in arriving at conclusions. They call this the scientific method and speak in terms of inductive and deductive reasoning. There are many teachers who have sensed the challenge and have had real visions of the graduates' responsibilities. They have included in their courses, which are essentially courses of the laboratory, the microscope and the clinic, those factors that involve the individual and the community. They are trying to show the student how he may use the scientific "know-how", the scientific method, to solve the problems in his office and the problems of his community.

The problems of the world as well as the problem of living an effective life in one's home are sufficiently complicated to challenge the best scholars and the deepest thinkers. These problems can only be solved by those who are equipped, as the professional man, in the analysis of facts, and the selection of important from irrelevant data. The dental schools need to redouble their efforts to serve their dental students and their alumni, in helping them to keep up with the times, and in meeting the challenges of a complicated world.

The dental schools will find it difficult to give additional time to specific courses outside the field of dentistry, but they should be able to restudy their curriculums and include in many of the present courses some attention to some of the practical problems of everyday practice and to everyday living. The dental schools will find their young scientists, their students, eager to listen to practical applica-

tions, and to problems that will have a definite bearing on what they will expect to find when they begin living, as well as working.

What more receptive group could a teacher of world problems have today than the students whose success and effectiveness are entrusted to their ability to think effectively? It is little wonder that the communities today as well as the individual patients are willing to place their trust and their confidence in the men in whose hands they place their health problems.

The dental schools with their array of postgraduate and refresher courses must think of including seminars and round tables that will "refresh" and "recharge" the professional man in the problems that confront him as a counselor in his community as well as acquainting him with new scientific apparatus and with new clinic technics. Graduate students deserve to have orientation courses, and both the graduates and the undergraduates should have the opportunity to orient themselves in respect to their whole responsibility. The dental schools make use of faculty members in other schools and departments of their universities but the professional schools could make wider use of the corps of able men teaching in the field of the social sciences. These men could well be a part of the teacher-team that helps in the orientation of the dental student. All of the facilities of the campus are used for the courses that deal with the health problems, but more of the university facilities can be used in studying the problems of the patient as well as the problems that may confront the practitioner when he is outside of his office or clinic. The schools now serve the undergraduates and some of the postgraduates in an excellent, efficient manner. The schools have a wonderful opportunity to serve the undergraduate student and the postgraduate student more effectively and in new ways. This broad training for living can best be served by the dental schools and should not be deferred to the adult education courses in high schools and to the "ten foot" shelf of books. It may at first seem to be a difficult task to include these objectives and extra dimensions into the crowded curriculum of today. However, schools are demonstrating every day that it is possible to include and to add the extra scientific material by improved organization of their curricula and by improved methods of teaching. Duplication and aimless repetition are being eliminated; courses and topics are being combined, integrated and correlated to

make them more meaningful and with a resulting rise in standards. The schools of tomorrow will find it possible to integrate some of the "facts of life" into their curricula both for the student who is about to graduate and into the programs designed to refresh the practitioner and to further the education of the specialist.

Programs that provide additional educational opportunities are not limited to the professional man. Education is not only for youth but the adults should also be given opportunities for availing themselves of further education. "Adult education" programs are now sponsored for many groups of people, in many walks of life, and they are made possible by local, state, federal, and international groups. For example, the UNESCO is vitally interested in the expansion of programs for the education of adults so that they may adapt themselves better to the world about them and become more useful citizens. Many of the large foundations are spending huge sums of money each year in sponsoring programs of this type and in stimulating research in this field. In the last twenty-five years, the number of adults in the United States who are enrolled in some type of adult education program has increased more than one hundred per cent and it is estimated that there are now more than thirty million adults taking advantage of these educational experiences.

While some may think that the formal, sophisticated title of "adult education" is something new, the needs for programs that would give to the citizens an understanding of the world and society in which they live is not new. With the programs of formalized adult education progressing and growing so rapidly for the business man, laborer, and housewife, it is well that the professional man be cognizant of these movements and that he too take full advantage of them.

It is only natural that the professional man with his recognized leadership in the community take advantage of the existing movement in the field of "adult education" and that he devise other programs with the help of his professional society and the dental schools that will be of benefit to him in his life as a citizen and as a leader.

In conclusion, I would like to summarize the points that have been made. First, the professional man has a multiple role to play in his community life, for he must treat the health problems of the individuals, as well as act as a leader for his neighbors in attacking the problems of their society. Second, the professional man must recognize that his ability and his knowledge are not for him to give, but

rather, they are the property of the society of which he is a part, and hence, he should feel that it is his duty to be an active participant in his community's affairs. Third, the professional man must realize that a balanced educational program will permit him to serve his patients better and with more understanding, and it will also permit him to accomplish his goal of serving better his community, and his family. Fourth, the professional man cannot isolate himself in his laboratory, his clinic, or his office if he is to make the best and widest use of his talents. Fifth, the professional man integrates and correlates the knowledge and the skill that he acquires by using such things as his understanding of psychology, sociology, and economics both in his professional practice and in his work with the community and at home. Sixth, the education of a professional man must be planned to include attention to his training in the theory and principles, and the technics of his profession; in the ethical standards of his profession, and in the utilization of the scientific method in attacking and solving problems important to the community and to the nation. Seventh, the dentist must maintain his enviable position in the community by a planned program of education that will permit him as an undergraduate and as a graduate to obtain the objective of his professional career and the aims of his life in the community. Eighth, the dentist should utilize fully the unusual training that he has had and the unique ability that he has in attacking both the problems in his clinic, the problems of the community, and the problems dealing with his own philosophy of life and the contributions that he can make to society. Ninth, the prospective dental student as well as the dentist, should consider that there are three educational periods that are important to him in the planning of his professional career, namely, the preprofessional training with its possible accent on the social science areas and those areas that are not directly related to the scientific training, and the undergraduate and postgraduate training periods in which the cultural training and the social sciences may be effectively combined with the professional courses of study. Tenth, the dental schools have a conspicuous obligation to the complete training program of the dentist, by making it possible for him to receive not only the training of a scientist, but also by providing ways and means for him to attack problems that are important to him as a member of society. This is said with the full realization that the dental schools now offer the finest programs

in the world and their graduates are second to none. However, even though programs are good and even "best," one must continue to think of the future and of future demands. Eleventh, it is suggested that the postgraduate programs be expanded in their usefulness and that vehicles of communication be constructed to enable the practicing dentist to continue his education while he is still in his office.

Twelfth, and as a summary of the whole, dentistry and those who represent it will continue to achieve high recognition nationally and in their communities through the services that they are giving in the health field as well as the services that they are rendering to society and its way of life. This is made possible and will continue to progress through the efforts of the individual dentist and through the efforts of his profession acting through its Association.

PRINCIPLES OF LEXICOGRAPHY AND THEIR APPLICATION

DR. MITTFORD M. MATHEWS, *Chicago*¹

English dictionaries have been made for three hundred and fifty years. It is entirely possible and proper therefore in discussing the principles involved in dictionary making to cast a glance backward to see what the history of the craft has to contribute to an appreciation of the procedures that now prevail in the production of modern dictionaries.

The first English dictionary appeared in 1604, the year after the death of Queen Elizabeth, and a dozen years before the death of Shakespeare. At that time English was being unundated with such a host of terms taken in from other languages that it was not always easy for an intelligent Englishman to understand his own speech. Words from Italian, French, Latin, and Greek, were tumbling into the language at such a rate that only a scholar could keep his footing in the welter of terms with which the language had come to abound.

A school teacher was the first to bring forth a guide through the bewildering confusion into which the language had fallen, and his remedy was a dictionary. The first one to appear was a very modest little thing, containing some three thousand words, regarded by the compiler as being those with which his pupils most needed help. The idea of dealing in a dictionary with any words other than the hard ones evolved slowly. At first, and for a hundred years thereafter, attention was centered on those that were regarded as the most troublesome, the hardest ones in the language.

Nor was there, in the beginning, anything like a science of writing definitions. The procedure was to list the hard words and to write opposite each of them an easier equivalent. Sometimes it was not possible to find such an equivalent, and then the hard word was explained as briefly as possible. Nothing was done about etymologies, for in 1604 there was no such thing as a science of etymology. Faint traces of such an interest may be seen, however, even in this first

¹ Author, *Dictionary of Americanisms*, The University of Chicago Press.

Address delivered at the Conference on Dental Nomenclature sponsored by the Bureau of Library and Indexing Service of the American Dental Association at the Central Office, Chicago, June 10-11, 1953.

dictionary, for occasionally there was written just after the hard word a small *g* in parenthesis to inform the user that the word in question was of Greek origin. There was no attention at all given to pronunciation in this first dictionary.

In the three centuries and more that have elapsed since the appearance of Robert Cawdrey's *A Table Alphabeticall*, as he called it, the English language has so thoroughly absorbed many of the hard words in the first dictionary that today we find it impossible to see any difference in degree of difficulty between some of the entry words in *A Table Alphabeticall* and the easier words given to explain them. For example, *magistrate* is today as familiar to us as the once easier word, *governor*, given to explain it.

The "hard word" tradition, as it is called, prevailed in dictionary making throughout the seventeenth century. The works produced during that time are occasionally interesting and instructive even today. In an edition of one of them which appeared in 1642 we find that the words *abandon*, *abate*, and *blithe* were entered as being obsolete. But a large number of the words in these old dictionaries are no longer used. By the beginning of the eighteenth century the language situation had changed greatly from what it was in the days of Robert Cawdrey. Such words as he and his immediate successors had been concerned about had either become a permanent part of the language or they had fallen out of use altogether. By the beginning of the second quarter of the eighteenth century, the position of the English language was well established, and there was a respectable body of literature written in it. Englishmen now felt a justifiable pride in their language, and it was natural that all the words in it should be deemed worthy of a place in a dictionary.

One of the outstanding figures among the lexicographers of the early eighteenth century was Nathaniel Bailey who scored more "firsts" than it has ever fallen to the lot of any other lexicographer to achieve. He was the first to stress the importance of current usage in determining which words should appear in a dictionary. He was the first to lay stress upon the desirability of a dictionary's paying close attention to etymologies. For the first time he introduced in his dictionaries syllabification, and gave pronunciations.

To a much greater extent than any of his predecessors Bailey used illustrations, now a standard feature of dictionaries. In a work of his appearing in 1730 he claimed to have used five hundred. The use of

such an aid to understanding was in line with Bailey's feeling that a dictionary, in so far as it could, should be interesting. He placed no premium on dullness. It may have been this attitude that caused him to include proverbs. Under *little* in one of his dictionaries we have:

"A Little House well fill'd; A Little Land well rill'd (i. e. laid out in rows): And a Little Wife well will'd are without dispute three very good things, and so any thing that is good tho' little in quantity."

That Bailey succeeded in adding considerable interest to his dictionaries is shown by the fact that William Pitt, the First Earl of Chatham found Bailey's dictionary both entertaining and profitable reading.

The great lexicographer of the mid-eighteenth century was of course Samuel Johnson whose famous dictionary came out in 1755. It has now been conclusively shown that Johnson was not an innovator so much as he was a worker out of lexicographical principles that had earlier been employed. Johnson is best remembered perhaps for the extent to which he employed illustrative examples in connection with the senses of the words he gave in his dictionary, and the discrimination of senses he showed by the definitions he wrote.

The linguistic attitude responsible for the appearance of Johnson's dictionary should be carefully noted by those interested in lexicographical principles. The feeling was strong in the early part of the eighteenth century that a language should be controlled by lexicographic authority to prevent its deterioration. A language not so controlled, one that was permitted to go its way unrestrained, would fall into such a state of decay and corruption as to make it a reproach.

There were not lacking in Johnson's time those who thought they had abundant evidence to show that the English language, having reached the zenith of its perfection, was now falling away into decay and contemptibility. They felt that unless some concrete steps were taken in the proper direction, no man could view with other than grave apprehension the future state of the English language. What some of these anxious souls thought should be done was to set up an Academy, such as France and Italy already had, empowered to sit in judgment upon the language and safeguard it from corrupting in-

fluences. An authoritative dictionary prepared under the auspices of such an Academy would assure the perpetual retention of the language at the zenith of its perfection.

It soon became apparent to these viewers-with-alarm that an Academy such as they desired could not be made a practical thing, the English temperament not being such as to tolerate an institution of this kind. Since an Academy and a dictionary sponsored by it, in which only worthy words would be included and from which those judged unworthy banished, was not practicable, the feeling grew that the next best thing was to have a dictionary prepared by some outstanding literary figure who could, in the role of linguistic dictator, accomplish almost if not quite as much as an Academy. Some London booksellers settled on Samuel Johnson as the man to produce such a dictionary.

It was in this role of preserver of all that was best in the language that Johnson set to work in a neat two story house in Gough Square, just off Fleet Street in London. Before he completed his task Johnson realized that no man and no set of men could hold in check a living language. Regardless of what he thought, however, the rank and file of those who used his dictionary looked upon it as possessing unique "authority." In the case of a great many people it has not so far been possible for scholars to rescue them from this eighteenth century unjustifiable reverence for the dictionary. Many people still regard the dictionary as the final authority. Disputes are settled by it, and from its impressive verdict there is no appeal.

Johnson's dictionary had the undesirable effect of holding up improvement in lexicographic procedure for a long time. Dictionary editors for a century after his death were more inclined to revise his dictionary than to examine afresh the fundamentals of their craft and to see about improvements in the execution of new works. A century after the appearance of Johnson's dictionary, however, Richard Chenevix Trench, Dean of Westminster, presented to his fellow members of the Philological Society in London some extremely forward-looking views entitled "On Some Deficiencies in Our English Dictionaries." From an enumeration of what he regarded as some shortcomings in the dictionaries of his day, we can tell pretty well the views which Dean Trench had of the proper principles of lexicography. He enumerated the seven deficiencies that

formed the basis of his criticism of dictionaries as they existed in the autumn of 1857. His list, put somewhat more briefly than in his own words, is as follows:

1. Dictionaries were haphazard in their treatment of obsolete words, some being included and others not
2. Families of words were imperfectly dealt with, some members being included and others not
3. Earlier examples of the use of words could easily be found than dictionaries indicated existed
4. Important meanings and uses of words were missed
5. Too little attention was paid to synonymy
6. Passages found in literature showing extremely well something of the first introduction, etymology, and meanings of words, were not fully utilized.
7. Dictionaries had too many words in them, "all of them inserting some things, and some of them many things, which have properly no claim to treatment in their pages"

Before he proceeded to his list abbreviated above, Dean Trench sounded a clear call for the abandonment of the foolish notion, already mentioned, of the dictionary's being a standard of the language. He pointed out clearly that it is not the business of the dictionary-maker to select what he regards as the good words of a language. The moment he forgets that his task is merely that of making an inventory of the language, the moment he begins to pick and choose and reject on the basis of his personal likes and dislikes, that moment he is lost. It would not be necessary to mention this phase of Dean Trench's work were it not for the habit of thinking on the part of many people, and among them many teachers, that dictionaries are the repositories of good words, and that the presence of a word in a dictionary gives it prestige and standing in the language.

The Dean pointed out that dictionaries should concern themselves with the historicity of their entries. They should take "care to mark the period of the rise of words, and where they have set, of their setting." This is a counsel of perfection that is of course out of the reach of any dictionary other than one constructed on historical principles. The meanings which words have had throughout the centuries of their use, should be arranged chronologically. This is an accepted principle now, though it is to be doubted whether many of

those who consult such a dictionary as the large Webster realize that the meanings of the words there spread out before them have been arranged, as far as possible, according to this plan.

Trench called attention to the desirability of a dictionary's giving particular attention to those words in the language that are synonyms, and here again is a feature that modern compilers of dictionaries have incorporated into their works. This feature of synonymy has been a part of our best dictionaries for a century or more, and as time has passed the attention devoted to that phase of the work has increased greatly.

Perhaps the most startling "deficiency" among those enumerated by Dean Trench was the accusation he levied against them of having too many words. This cult of "the bigger the better," has prospered greatly in this country, though it did not originate here. On the fulsome title page of his first dictionary, a small one which appeared in 1807, Noah Webster proudly announced that he had included "Five Thousand Words . . . more than "the number found in the Best English Compendis."

Trench pointed out clearly that it is not the number of words in a dictionary that justifies a claim to superiority, and that this misconception, even in the days of Johnson, accounts for the presence in his dictionary of words that should never have been included in a general dictionary at all. He says:

"What has an English Dictionary to do with grammatical terms such as 'zeugma,' 'polysyndeton;' with rhetorical, 'auxesis;' with medical, 'aegilops,' 'parotis,' 'ecphracticks,' 'meliceris,' 'steatomy,' 'striatura;' with zoological, 'lamellated,' 'striae;' with architectural, 'zocle,' 'pentastyle;' with botanical, 'poly-petalous,' 'quadriphyllous,' 'dorsiferous;' with 'acroteria,' 'alectryomancy,' 'orthodromics.'"

And then Trench went on to show how this evil which was so clearly noticeable on almost every page in Johnson had been greatly increased through the misguided labors of his later editors, and had been augmented with a vengeance by Webster:

"His Dictionary, while it is scantied of the barest necessities which such a work ought to possess, affords in about a page and a half the following choice additions to the English language:—'zeolitiform,'

'zinkiferous,' 'zinky,' 'zoophytological,' 'zumosimeter,' 'zygodactulous,' 'zygomatic,' with some twenty more."

It has been almost a century since Dean Trench, in summing up the deficiencies in the dictionaries of his time, set forth with admirable clarity his conceptions of the principles of lexicography. During this interval no new principles have been discovered to add to those Trench had in mind. Notable dictionaries have appeared during this century, but such progress as has been achieved in them has been made in the direction of the practical application of principles he enumerated.

With regard to this putting into practice of principles of recognized validity in the dictionaries of the past hundred years, there is much to be said,—so much in fact that brevity will be required in dealing with the subject.

At the outset, attention should be given to the fact that Dean Trench's ideals of what a dictionary should be have never been fully realized. It is to be questioned whether he thought all of them could be perfectly measured up to. But in some ways, the efforts made during the past century have resulted in achievements of such a solid, dependable character that anyone can be proud of them.

In the first place, the foolish eighteenth century notion that a lexicographer should decide what ought to be saved in the language, that he should sit in judgment upon words and meanings, that he should be a lord chief executioner, and hasten certain terms and meanings on their way, while consigning others to the gallows, has now disappeared from the minds of editors of dictionaries. They have opened their doors to words of all kinds and shapes, hoping, sometimes in vain, that nobody will be deceived into thinking that the presence of a word in a dictionary will imply that it has the editor's heartiest approval. We have already mentioned that many people do attach this kind of importance to the presence of a word in a dictionary, but we have stressed the fact that they should not do so, and that they are not reflecting the attitudes of the editors of the dictionaries upon which they so rely.

Dean Trench thought a dictionary should be based upon evidence culled from wide reading, and that as much of that evidence as possible should be reproduced in the dictionary to give the user an indication of the history of the terms dealt with. He should be able from

the quotations given to tell when a word came into the language, what meaning it had at that time, and what other meanings it acquired in the course of time. If any of its meanings had become obsolete, the approximate date of their having passed out of use might be obtained.

In this respect of course it is the *Oxford English Dictionary*, undertaken shortly after his paper was read to the Philological Society, that most completely meets the specifications laid down by Dean Trench. But it is now an accepted commonplace in lexicographical work that a dictionary should be based upon evidence culled from printed sources. The editor of a dictionary, if called upon to do so must be able to prove that his dictionary reflects usage. In the latest edition of Webster, for instance, the statement is made that the editors had at their disposal more than a million and a half examples of terms in use, to say nothing of the help they derived from the nearly two million illustrative quotations provided in the *OED*.

Today any dictionary editor who does not have at his disposal a vast file of collected material upon which to base his work has every right to feel uneasy lest when called upon to justify some of his entries or definitions he find himself in the unhappy position of the young man who attended a wedding but had on no wedding garment. The best such editors can do is to copy as intelligently as possible from works that are more soundly based, and hope that no king will come along and inquire into their improper garb.

Scholars are well aware of the fact that many words which at first blush seem not to have the faintest kinship are clearly related in most interesting ways. It is a distinct service, which should be much more widely known and appreciated than it now is, for the lexicographer to bring these related words to the attention of those who scan their pages. The dictionary which has performed this service in a most notably satisfactory manner is the Webster's Unabridged. In that work, the student who examines, for example, the simple word *sit*, finds enumerated for his information words that are related to this one. He finds in this list, along with many others, such terms as *assiduous*, *assize*, *cede*, *chair*, *nest*, *saddle*, *Sanhedrin*, *sedate*, *session*, *soot*.

In the matter of pronunciation, modern dictionaries cannot be complained about. True, they have not agreed on one good phonetic system. It is much to be desired that they do this, but there is no

present indication that they will come to that soon. And there is no great harm done by the modern procedure where every dictionary goes its own way in representing pronunciations. Once the user of the dictionary is aware of the forty-odd sounds which make up the language, it is not much of a task for him to interpret, with the aids afforded him, the pronunciation given in any modern dictionary.

Having spent some time examining dictionaries, I am of the opinion that it is in their definitions that there is the greatest room for improvement. In the matter of accuracy there is, and of course always will be, opportunity for advances. Like all other products of men's hands, dictionaries are not pieces of perfection. Error is always possible and often gets in despite the most conscientious efforts to bar it out. But it is not to this undesirable but inevitable element that I here refer.

Within the past fifty years a great deal more has been found out about a great many terms than lexicographers are able to find room for in their works. An examination of a few of their entries will indicate something of what I have in mind.

Any intelligent user of a dictionary who is interested in the term *Big Belly* as applied to certain western Indians has a right to expect to find it in a modern dictionary. And it is to be found in some such works, but if the investigator wishes to go one step further and find out *why* certain Indians received this kind of name, he will not find enlightenment in his dictionary. One might naturally conclude that the Indians so named had especially large bellies, but such was not the case.

The Indians in question received this odd name because the French, the first Europeans who came among them, mis-interpreted the sign which in the sign language of the plains designated these Indians. The sign in question was a sweeping pass with both hands before the abdomen, and was intended to signify "always hungry," "beggars." The French, on the basis of what was at that time a limited acquaintance with these and other plains tribes, thought the sign must have something to do with the size of the belly, and hence rendered it "Gros Ventre" of which *Big Belly* is the translation.

In the best of the commercial dictionaries, Webster's, there is an entry *blue Peter*. The etymology explains that this term comes from the longer expression *blue repeater*, an explanation which we may hope is correct. Definitions of *blue Peter* are given, and among them

this one: "*Local, Southern U. S.* The coot (*Fulica americana*).” Any user of the dictionary, and especially a southerner, coming upon this definition, and responding to it intelligently, would like to know why on earth such a name was given the bird. If he tries to solace himself with the thought that the bird was formerly known as a *blue repeater*, as the etymology faintly suggests, then his perplexity remains, for obviously *blue repeater* as the name for a coot is as difficult to see any sense in as *blue Peter*. The fact of the matter is that the ivory-billed coot is called blue Peter all the way from Maine to Florida, so this colloquial name is not restricted entirely to the South. When this bird is in high plumage, the long feathers on its back are of a bluish color. As it treads on floating stalks and leaves of aquatic plants and splatters along on its take-off, it appears to be walking on water. Hence in allusion to Peter’s experience told about in Matthew xiv. 28-9, the colloquial name, *blue Peter*.

We are familiar now-a-days with the expression “the bends” as the term for injuries sustained sometimes by aviators and divers. If we turn to this term in even our largest dictionaries we learn only that it is the name often given colloquially to caisson disease. Under *caisson disease* nothing more is said of bends, so the alert reader is left puzzled as to why the ailment was ever called *bends* in the first place.

At the beginning of the nineteenth century there was an affected manner of walking adopted by women of fashion in which the body was bent sharply at the hips, the upper part being carried well forward of the lower portion from the hips down. This stilted way of walking was in vogue for a long time, and was called “the Grecian bend” in allusion to its supposed gracefulness.

When the first railway bridge was being built across the Mississippi River at St. Louis in 1869-72, and it became necessary for the workmen to be subjected to abnormally high air pressure in the caissons for that structure, a peculiar and crippling ailment was observed to affect those who came out of the caissons into the upper air where the pressure was normal. At that time nobody appreciated the seriousness of this condition. At first, many of those afflicted appeared to recover after a little. Those who had the disease walked with an affected, stooping posture somewhat suggestive of the gait of women who had adopted the Grecian bend style of walking.

So at first those workmen who saw their fellows walk away from

work in this pained and unnatural manner jocularly referred to them as having the Grecian bend. When the St. Louis bridge was completed some of the workmen went elsewhere taking this term with them. Some of them worked on the Brooklyn bridge which was completed in 1883 and in the construction of which this same disease afflicted the caisson workers. In time "the Grecian bend" was shortened in referring to the malady and became simply the *bends*. At a later time, when airplanes had become so powerful that they could fly with tremendous speed out of the normal air pressure of the earth's surface into the thin upper air where the pressure is markedly lower, aviators began to suffer in the same manner the caisson workers had. And for the same reason; they had passed too suddenly from a region of relatively high pressure to one of relatively low pressure. So *bends* received an extension in meaning to take care of the condition of aviators as well as that sometimes suffered by those in the high pressure of caissons and those who follow the profession of divers. So to define *bends* as meaning the same as *caisson disease* is no longer quite accurate.

The number of words for which there is now additional light of the kind touched upon above is very great. It is of course not suggested for a moment that dictionaries could possibly utilize all of it in enriching the contents of their definitions. But it might be possible for them to use enough of it to make their works more intelligible than they are at present. And the interest of such works would be greater. There might be more people among us like William Pitt who would find pleasure and entertainment in reading dictionaries.

The inclusion, even briefly, of such information as has been suggested above would greatly increase the size of existing dictionaries. And it will surely be agreed by all that dictionaries are now large enough in all conscience. Faint grumblings are already being heard to the effect that they are too big, that they have too many words in them, just as Dean Trench said a century ago. At least one writer on the subject of lexicography has hinted somewhat darkly at the possibility that the day of the huge dictionary is over.

There is of course only one way in which dictionaries can be made smaller. The number of words in them can be greatly curtailed. Anyone who bears in mind Dean Trench's protest at the number of inappropriate words in Johnson and in the Webster of his day, will have no trouble in turning to our large modern dictionaries and mak-

ing out a list of those he thinks might be dispensed with. Our largest unabridged dictionaries claim to have upwards of half a million terms in them.

And this half million terms is of course not all the words that were at the disposal of the editors as they plowed through dictionaries of music, of architecture, of sports, of medicine, of classical antiquity, of geology, of birds, of flowers, of mechanics, of electrical terms, etc., etc. It is only an unsophisticated person who imagines for a moment that dictionaries have in them all the words in the language. Such words as *niog*, *niyog*, *nizamate*, *nonylene*, *nul tort*, *oikofugic*, *ionochoös*, *oki*, *omegoid*, *baccivorous*, *Balmung*, *beccafico*, *begohm*, *bez antler*, *bolide*, *falciform*, *faradic*, *yterbia*, *zoisite*, *zoosporangium*, *zygapophysis*, may be extremely valuable and frequent in the vocabularies of particular groups, but it is hard to believe there are many people who would deplore the lack of such words in a dictionary intended for household use. They might well be relegated to the particular arts and sciences to which most of them, rightfully belong.

It is well to bear in mind that in this great democratic country of ours dictionaries are made for the purpose of being sold. Those who produce them have to derive a living from their labors. We Americans have been conditioned into the belief that the bigger anything is the better it is. The palm of adulation, so far as we are concerned, goes to the biggest hotel, the highest skyscraper, the biggest ship, the largest air-liner.

Dictionary publishers are not stupid. They minister to public taste. They may not approve it, but they know that anything large is usually regarded as more valuable than another of the same kind that is small. Marketing experience has convinced them that if they can claim for their product a larger number of entries than is to be found in any competing work, they have a head-start on their rivals. They might never impress a corporal's guard with any blazoning forth of claims, legitimate or otherwise, of superior treatment of words in their dictionary. They do not care to risk financial disaster by inviting prospective customers to examine the contents of their book and compare what they find there with what is offered in others.

There is every indication that it will be a long time before purchasers of dictionaries protest that these works present too little information about the words they include. And yet I am constrained to think that it would be an intelligent step for purchasers to demand

of dictionary publishers that they give them more information about words which everybody uses rather than a little information about an avalanche of words that nobody uses.

If there should come about such a remarkable demand other good things might result from it. Dictionaries might be glad to find room for words that are all about us, used by millions, and yet have not been given deserved space in dictionaries. Among these, combinative expressions loom large, such as *dean's list*, *banker's mile*, *deep South*, *dog town*, *Dorothy Perkins* (rose), *downy woodpecker*, *breakfast set*, *vanilla wafer*, *Dow-Jones Averages*, *admitting desk*, *information desk*, *petrified forest*, *occupational therapy*, (and even *therapist*), *bargain counter*, *barnyard golf*, *bathing beauty*, *sweater girl*, *BB gun*, *batter's box*, *bean shooter*, *road map*.

Also it is a regrettable, but easily understandable, fact that American-made reference works, such as dictionaries, have an Old World orientation. In them one finds disproportionate treatment of Old World phenomena, and, with irritating frequency, an entire disregard of American phenomena that is much more significant, at least to Americans. For instance, I go to the large dictionary on my desk to see if Petrified Forest is in it. The big dictionary leaves it out. However, in looking for it I find this entry: "Petrified City. A locality near Ishmonie in Upper Egypt, where many statues, popularly thought to be petrified bodies, are found."

This is all very well, but the Petrified Forest out in Arizona, being the largest deposit of petrified wood known in the world today, is just as much entitled to equally courteous treatment. If such a natural wonder existed in Europe, we may be assured it would be in every American dictionary. I can find from any large American dictionary all I wish to know about a *daric*, a gold coin of ancient Persia that has played no role in the affairs of men for two thousand years, but I can't find *buffalo nickel*, or *Indian head penny*, or *Lincoln penny* in the best of them. My dictionary has an excellent definition of the Amphictyonic League in ancient Greece, but it does not mention *Ivy League*.

This re-orientation of our works of reference will of course come about in time. The date of its arrival could be greatly hastened by an intelligent appreciation of the need for it.

It is fitting that in conclusion, bearing in mind the particular interests of this immediate group, we devote some attention to that

type of dictionary of which the present day is seeing more and more examples, the specialists' dictionary.

It is the lot of those who work in a particular field to be hampered by confusion in the nomenclature of their specialization. This is the case in a field such as that of dentistry where for a long time there has been great activity, where improvements are constantly being made, where all kinds of inventions are having their particular bearings on techniques, and where practitioners are doing things undreamed of a few years ago. Under such conditions new terms are frequently appearing, and many old ones are either dropping out or taking on new meanings.

As I examine the excellent paper, "Past Efforts to Improve Dental Nomenclature," prepared by Dr. George B. Denton and printed in the *Journal of the American Dental Association*, Vol. 42, pp. 345-350 for March, 1951, I am impressed by the normal manner in which the nomenclature problem has been approached in the field of dental science. I find that the Robert Cawdrey of dentistry was Chapin A. Harris, who came forward as early as 1849 with his dictionary.

A short time afterwards, in 1857, in a convention of dentists held in Boston, the suggestion was made that a committee be appointed to "take into consideration the subject of Dental Nomenclature." Nothing came of this suggestion, but the fact that it was made shows the direction in which some of those concerned were thinking. Twenty years later a similar effort succeeded, and a committee was appointed, though as Dr. Denton points out, its efforts came to naught. After these early attempts there came others of a similar kind which have persisted to this day. Dr. Denton in his paper to which I am here referring, as he reviewed the efforts made to improve dental nomenclature over the past century, regarded the results as not having been altogether satisfactory. He summed up his suggestions as to the causes of such lack of success as had attended previous efforts. The six causes he enumerates are all pertinent, but it is only upon the first one that I shall here comment. Dr. Denton said: "Perhaps the most potent cause is the inherent difficulty of the problem." Expressing it in the slang of our times, he might well have said that again. The problem of improving nomenclature is one of immense difficulty, and it is by no means certain that dictionaries contribute much to its solution. Did Johnson's dictionary "improve" the English language, as those who so enthusiastically hailed its

appearance thought it would? Has any English dictionary ever had any effect upon the language with which it deals? These are hard questions, and I do not have the answer to them. I have listened to smarter men than I discuss them, and they did not appear to have the answer either.

The difficulty of course is that we have no way of knowing what the English language would have been had Johnson never made a dictionary. We cannot imagine what the language used in this country would have been had Webster never lived. Of course Webster caused us to write *honor*, not *honour*, *theater*, not *theatre*, and to use many other spellings not now current in British use. But the language has not been changed when the spelling of a small number of words has been modified. The real words undergo no changes when the spelling of them does.

But, as I have pointed out, there is and has been a widespread feeling that dictionaries by including words impart dignity and prestige to them; that a word placed in the dictionary acquires standing. I am not able to see how this view of the matter can be substantiated. Dictionaries abound in words that are dead and gone. Their retention in dictionaries does not give them life. *Ain't* has been in dictionaries a long time, and if it has advanced in dignity and respectability, I have not observed it. Cultured people still avoid it. *Electrocute* was frowned upon by the first dictionaries to include it, and even in the latest large Webster the word is entered with something of an apology, but everybody uses *electrocute* without the slightest embarrassment.

I am keeping both my eyes open for more light on this subject, but at present I am inclined to think that dictionaries play a very minor role in establishing and improving terminology. It is not their function to establish anything or to improve anything, or to make a special plea for any word or expression. Dean Trench was quite right when he said that a dictionary should be an inventory of the language.

In all cases it is usage which establishes and improves terminology. Any group, therefore, such as the one which you represent, does well to pay close attention to usage. The best way to do this it seems to me is the way you are going about it. You are directing attention to new terms that are becoming current in the field, and pointing out changes which old terms are undergoing. You are also indicating the

principles that should be followed in scientific nomenclature. Some of you no doubt from time to time inveigh against certain terms and praise others, and in doing so you are well within your rights.

It seems to me that you are preparing the way admirably for the appearance sometime in the future of a dental dictionary that will be soundly based upon the usage which terms have in the profession. This dictionary when it appears will not be the work of an individual, but many hands and many heads will have had a part in producing it.

When the material upon which such a dictionary is secured and placed in proper order, I am sure that from the ranks of the profession there will come a competent editor who will be able to decide wisely upon the thousand and one things such an editor has to reach conclusions about. The problems of the size of the work, of the appropriate format, of illustrations, of pronunciations, of etymologies, of definitions that minister to intelligent curiosity,—all these matters and many others can, and I am sure will, be disposed of to the satisfaction of all concerned.

This story by Towner and Bierman is of three-fold significance to Journal readers. In the first place the American College of Dentists has given no little aid as a "starter" in dental research, hence this will show progress being made on a medical-dental campus. The College made no direct contribution to this particular work, but through its efforts indirectly medico-dental relations in this phase of study and of education has been strengthened, and the respect which one group has for the other is clearly indicated. In second place, appropriations have been made to research departments of dental schools and in this certain conclusions may be drawn. One of these is that of differences in curricula and differences in emphases on certain phases of instruction. And in the third place the value of evolutionary changes in the dental curriculum is manifest and it is evident that medico-dental relations can best be established through undergraduate teaching as students of common problems grow up together with an intimacy that comes only in that way.

Finally one conclusion that may be drawn, in fact, appears to be clearly indicated, is the increasing need of a better co-relation between scientific knowledge and technical training in the dental curriculum.—(Ed.)

SOME COMPARISONS BETWEEN MEDICAL AND DENTAL STUDENTS' KNOWLEDGE OF CANCER¹

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INTRODUCTION

The physician is generally considered solely responsible for the diagnosis and treatment of cancer of all body areas with the exception of that region conceded to be the domain of the dentist. Although it is agreed that each profession has primary concern for certain areas, a "no-man's land" exists where the common boundary of the two disciplines becomes indistinct. Each profession believes that the other has the major responsibility for this region of overlap. To insure against gaps in the cancer control program and in under-

¹ This study was carried out by the Cancer Teaching Project, Cancer Research Institute, University of California School of Medicine; which has been supported since 1949 by Grant CS-1020 from the National Cancer Institute of the National Institutes of Health, United States Public Health Service.

graduate training for both professions, it is imperative to know the relative amount of knowledge possessed by medical and dental students about these aspects of cancer with which both groups should be familiar.

In the Spring of 1950, 1951, and 1952, dental and medical students throughout the United States were systematically examined on their knowledge of the subject matter of cancer through standardized multiple-choice examinations. The medical students were tested with a 150-item examination, while the dental students received a 90-item test. Practically all of the medical and dental students in the country were tested at one time or another during this period. In 1952 alone, the number of students tested represented over three-fourths of the total enrollment in medical and dental schools in the country.

TABLE I. *Number of Students Taking Medical or Dental Versions of Cancer Knowledge Examination*

YEAR	NUMBER TAKING EXAMINATION							
	Dental Students				Medical Students			
	Fr.	So.	Jr.	Sr.	Fr.	So.	Jr.	Sr.
1950	925	905	890	867	3471	3258	3049	2582
1951	2089	2003	1986	1901	4821	4539	4256	3734
1952	2467	2349	2244	2183	4789	4665	4385	3574

This large scale program for measuring knowledge of cancer provided an excellent opportunity to compare dental and medical students on those aspects of cancer in which the two disciplines overlapped. The extensive sampling of topics in the editions of the medical and dental forms of the examination permitted the inclusion of material common to the two fields. Thus, each year the dental examination contained certain questions which were also employed in identical form in the medical version. In 1950 ten identical pairs of items appeared in the two tests. In both 1951 and 1952 eight such pairs of identical items were used. These twenty-six pairs of identical questions provided information concerning the relative standing of the two groups of students.

PROCEDURE

The percent of dental and medical students correctly answering each item was determined and the difference between the respective percentages was calculated. Because of the large number of students,

a difference of one percent was accepted as significant with a high degree of confidence ($P = .01$).

The pairs of common items covered eighteen separate cancer topics. None of these topics appeared to be exclusively the concern of one discipline or the other; however, professional opinion gathered during the annual testing period suggested that dental and medical students could be expected to do equally well on four areas. Dental students could be expected to surpass the medical in five topics, while the medical students could be expected to do better on nine. The performance of the dental and medical students on each of these eighteen topics was determined for each of the years.

RESULTS

When the performances of the two groups of students on individual test items were compared, the median percent of medical students answering correctly was higher in every instance.

TABLE II. *Median Percent of Dental and Medical Students Passing Identical Items in the Cancer Knowledge Examination*

	EDITION OF TESTS						ALL THREE EDITIONS COMBINED	
	1950		1951		1952			
	Med.	Dent.	Med.	Dent.	Med.	Dent.	Med.	Dent.
Fresh.	33.0	32.0	32.0	23.0	31.5	29.0	32.5	27.0
Soph.	60.0	50.0	59.0	42.0	53.5	37.0	59.0	44.0
Junior	68.5	62.5	70.5	52.5	68.5	54.0	68.5	58.5
Senior	71.5	69.0	74.5	62.5	69.0	64.5	73.0	67.5

The dental students, however, did at least as well as the medical students in one-fourth to one-half the common items.

TABLE III. *Number of Identical Items in the Cancer Knowledge Examination on Which Dental Students Equalled or Surpassed the Performance of Medical Students*

YEAR	TOTAL NO. ITEMS	NUMBER OF ITEMS							
		where dental surpass medical				where dental equal medical			
		Fr.	So.	Jr.	Sr.	Fr.	So.	Jr.	Sr.
1950	10	3	1	2	3	1	1	3	0
1951	8	0	1	1	2	1	0	0	0
1952	8	4	3	4	3	2	1	0	1
Totals	26	7	5	7	8	4	2	3	1

The greatest difference between dental and medical students occurred in the Sophomore class. Apparently, the Sophomore medical students picked up more cancer information than the Sophomore dental students on these overlapping topics. By the end of the Senior year, however, the median differences had decreased considerably. These findings corroborate those from earlier investigations of medical and dental students' learning (1-6) where medical students typically demonstrated a large increase in score on the examination during the Sophomore year followed by a marked leveling off in the Junior and Senior years. Dental students, however, showed a moderate increase in score in both the Sophomore and Junior years followed by a tapering off only at the Senior level. Thus, the advantage possessed by the average medical student at the end of the Sophomore year was almost wholly overcome by the average dental student during the Junior and Senior years.

The greatest differences between medical and dental students occurred in 1951 and the smallest differences in 1950—the year that the dental students had their first experience with the examination. This was just the reverse of what one would expect if test-taking experience were the explanation for the medical students' superiority.

The two topics on which the dental students were most superior were (1) the proper treatment of carcinoma of the lip without invasion or metastases, where seventy-five percent of dental seniors and fifty-six percent of medical seniors answered correctly; (2) the proper method of taking a biopsy of a *non-pigmented* skin lesion, where sixty-two percent of dental seniors and fifty percent of medical seniors answered correctly. On the other hand, the medical students far surpassed the dental students on the proper method of taking a biopsy of a small *pigmented* skin lesion where ninety-two percent of medical seniors and forty percent of dental seniors answered correctly. The hypothesis might be entertained that dental students were familiar with the general procedure of biopsy but not with the proper technic to use in melanoma. On the other hand, it is a rare undergraduate medical student who has an opportunity to wield the scalpel.

It is surprising that the dental students scored higher on questions dealing with the proper treatment of carcinoma of the lip and the proper treatment of metastatic nodes from carcinoma of the tongue while the medical students were better able to diagnose a sub-

TABLE IV. *Comparison between Dental and Medical Students' Performance on Eighteen Topics Appearing in Both Dental and Medical Forms of the Cancer Knowledge Examination*

GROUP EXPECTED TO BE HIGHER	TOPIC	PERFORMANCE*											
		Class											
		Freshman			Sophomore			Junior			Senior		
		'50	'51	'52	'50	'51	'52	'50	'51	'52	'50	'51	'52
Medical	Identification of basal cell carcinoma of skin from a photograph	—	m	d	—	M	M	—	M	M	—	M	M
	Proper method of taking biopsy of small pigmented skin lesion	—	—	d	—	—	M	—	—	M	—	—	M
	Proper method of taking biopsy of non-pigmented skin lesion	—	m	m	—	d	e	—	D	d	—	D	D
Dental	Diagnosis of osteogenic sarcoma of mandible from an X-ray	m	—	—	m	—	—	e	—	—	d	—	—
Dental	Diagnosis of submaxillary salivary stone from an X-ray	m	—	—	e	—	—	m	—	—	m	—	—
Medical	Use of biopsy in diagnosing a lip lesion	M	—	—	m	—	—	e	—	—	m	—	—
	Metastatic characteristic of squamous cell epithelioma	d	—	—	M	—	—	M	—	—	M	—	—
Medical	Probable sites for metastases from carcinoma of lip	—	e	d	—	m	d	—	m	d	—	m	e
Medical	Probable sites for metastases from carcinoma of tip of tongue	—	m	e	—	m	m	—	m	m	—	m	m
	Type of rays emitted by radium which are effective in cancer therapy	—	—	d	—	—	d	—	—	d	—	—	d
	Relative incidence of precancerous lesions	—	—	e	—	—	M	—	—	M	—	—	M
Dental	Sex ratio for incidence of oral cancer	m	—	—	M	—	—	m	—	—	m	—	—
Medical	Etiologic factors in human cancer	m	M	—	M	M	—	M	m	—	M	m	—
Medical	Earliest symptoms of carcinoma of endolarynx	—	M	—	—	M	—	—	M	—	—	M	—
Dental	Proper treatment of small fibroma of tongue without invasion or metastases	d	M	—	m	M	—	m	m	—	m	m	—
Medical	Proper treatment of carcinoma of lip without invasion or metastases	D	—	—	D	—	—	D	—	—	D	—	—
Medical	Proper treatment of metastatic nodes from carcinoma of tongue	m	m	m	m	m	d	e	m	d	d	d	d
Dental	Proper treatment of fibroma of palatine mucosa	e	—	—	m	—	—	d	—	—	d	—	—

* — = items not used that year.

m = medical up to 10% higher than dental.

d = dental up to 10% higher than medical.

M = medical more than 10% higher than dental.

D = dental more than 10% higher than medical.

e = medical and dental equal.

maxillary salivary stone from an X-ray and were more familiar with the sex-ratio for the incidence of oral cancer and the proper treatment of a small fibroma of the tongue. The reasons for such differences were not immediately obvious inasmuch as the reverse had been expected.

SUMMARY

This study revealed that in general, medical students knew somewhat more than dental students about those aspects of cancer common to both fields. There were, however, some areas in which dental students consistently surpassed medical students. These differences in knowledge probably reflected variances in the relative emphasis given to certain aspects of cancer in the two professional schools, and probably resulted more from type and amount of training than from the ability to profit from training. The question of whether or not these differences in knowledge reflect a condition that *should* exist was considered outside the province of this investigation. Nevertheless, the evidence presented here suggests that the comparative standings of the two professional groups on certain topics was contrary to expectation. This study points up the need for a careful scrutiny of the objectives of the two curricula with respect to these areas of cancer knowledge for which the medical and dental professions are mutually responsible.

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In the belief that members of the profession who have distinguished themselves in other fields should be recognized by the profession, this story and pictures of one of dentistry's most renowned sculptors is presented to our readers.

It is said that the Bust of the Christ, by Kingsley has not been surpassed by any and that Kingsley is well recognized as a sculptor of merit. Doctor Kingsley may also be said to have laid the foundation of the practice of orthodontics, as well as having made other contributions to dental service and practice. He was born in New York State October 26, 1829 in which City and State he lived until Feb. 20, 1913.—(Ed.)

NORMAN W. KINGSLEY: DENTIST-SCULPTOR

FREDERICK H. BROPHY, D.D.S., *New York*

No one could have been more ignorant of the life of this great man and his accomplishments than was the writer, despite the fact that he was the first dean of the New York College of Dentistry, my Alma Mater. He was a great dentist and a noted sculptor.

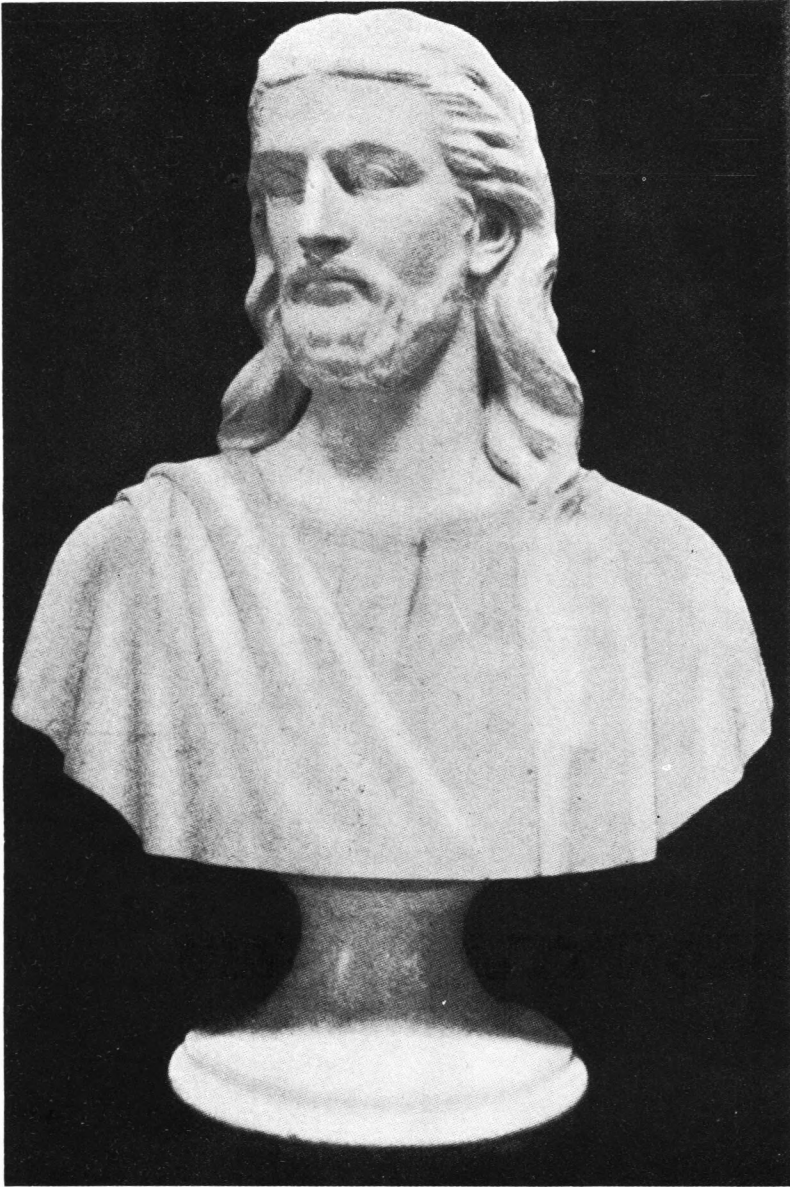
Perhaps you will bear with me as I recount the steps which led finally to the "Bust of Christ" itself, for I had only the haziest idea when I started, as to where it might be found. It was my belief that the bust was in one of the museums of art in New York City. With this thought in mind I consulted Miss Helen Hlavac, Librarian of the New York University College of Dentistry, who was most helpful and cooperative in turning up a wealth of information about the sculptor, Dr. Kingsley, which provided me with a background of Dr. Kingsley's accomplishments and added zest to the search.

About that time I began to feel a sympathetic kinship with Sir Galahad and his frustrations in the search for the Holy Grail. The clue was finally provided by the editor of the Journal, who informed me that the Bust was in the possession of the Thomas W. Evans' Dental School and Museum, at the University of Pennsylvania, Philadelphia.

Correspondence with the librarian, Miss Margaret G. Palmer, confirmed the fact that the Bust was in the library of the dental school and an invitation was extended me to visit the library and view it at my convenience. This invitation was accepted and resulted in one of the most pleasant, interesting and instructive afternoons it has been my privilege to enjoy. I would like to pause



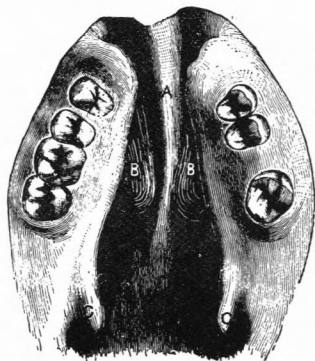
in this recital for a moment to pay tribute to two efficient, capable and charming ladies, Miss Helen Hlavac, whom I previously mentioned as the librarian of the New York University College of Dentistry Library and Miss Margaret G. Palmer, Librarian of the Thomas W. Evans' Dental School Library. I am deeply indebted to



them for their interest and assistance, without which this article could not have been written.

As you enter the library of the Thomas W. Evans' Dental School at the University of Pennsylvania, the Bust of Christ, in white

marble stands to the right and opposite the entrance, in a niche in the wall, under an oil portrait of the late Dr. John Riemold,¹ Secretary of the Thomas W. Evans' Dental Institute, who was in the service of the University of Pennsylvania for 44 years, 42 years of which were devoted to the dental school. An oil painting of Dr. Norman Wm. Kingsley, the sculptor, which is thought to be a self made portrait, also hangs in a position of prominence in the library on the left of the doorway through which you enter.

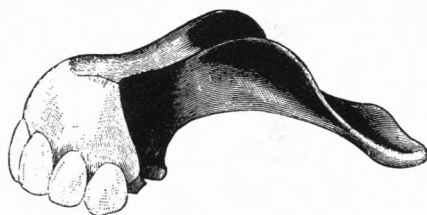


The statue stands on a pedestal approximately 4 feet from the floor to the platform on which it rests. The pedestal is of dark wood covered in part, on the panels, with a plush material. The bust is on a revolving turn table and is of considerable weight, as was testified to by Miss Margaret Palmer, Librarian, who described its transfer for a time to a different environment as part of an exhibit marking the 50th Anniversary of the dental school in May 1933.

The bust itself is approximately 3½ feet from the marble base on which it rests to the top of the head. The face is finely sculptured with straight sharply defined lines of cameo like detail. There is a small moustache, which leaves the upper lip exposed and which turns around the outside corners of the mouth, there falling into the beard which descends from in front of and below the lower part of the ear, beginning at about the height of the lobe. The lower border of the beard is a broken line with slightly greater length at both outside borders, where the moustache comes down to join the beard and continues on down through its substance. The hair is long and

¹ Deceased June 16, 1924.

falls over the neck and shoulders slightly more on the left than on the right side. It is parted in the middle and drawn back on the sides exposing a fine intelligent brow. The ears are both clearly evident and the head is turned slightly to the right from the median line. The garment is the conventional type of robe of the period of Jesus' life, with an exposure of the neck and with a hem at the top. Vertical folds or plaits indicate a fulness of the garment. The cloth drapes over the right shoulder in a graceful line crossing to the middle of the body line. The head and bust are approximately one third larger than life size.



A newspaper article dated March 6th 1917, in the files of the library, indicates that the bust was a gift to the University of Pennsylvania, from Dr. Rodriguez Ottolengui.

May I for the benefit of those who are unfamiliar with the creator of the "Bust of Christ" give you a bit of the background of this unusual and I am tempted to say fabulous person, Dr. Norman W. Kingsley.

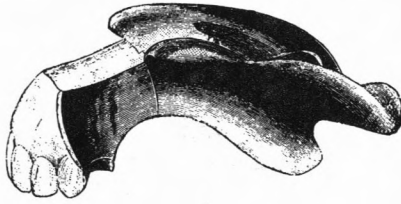
Born in upstate New York in the year 1829, he had the usual upbringing of the youth of that period. His parents were apparently people of limited means and at an early age he went to work clerking in a general merchandise store. At the age of nineteen he went into the office of his uncle a Dr. A. W. Kingsley of Elizabeth, New York, to learn the art of dentistry and three years later in 1852 he went to New York City to practice.

He showed remarkable ability in carving and baking porcelain teeth and won several recognitions at World's Fairs, both in the United States and abroad. In 1859 he developed an obturator with artificial velum of soft vulcanized rubber for cleft palate closure, which was received with great acclaim by both the dental and medical professions.

His early recognition of the value of orthodontia, resulted in his

to the course Dr. Kingsley conducted as follows; "A certain degree of knowledge of the highest and noblest of the manual arts of sculpture, of architecture, and of painting will be inculcated, that their refining influence may be made contributory to the advancement of the pupil, so that he may not only become master of the well known laws of mechanics but that he may become an artist, capable of inventing, originating and creating new combinations of art and mechanics."

Doctor Kingsley was a prolific writer and the volumes of the Index to Dental Periodical Literature, lists his authorship of over 100 articles. This does not include repeats and condensations of any given title in more than one journal. His most extensive writings were on the subject of tooth irregularities and cleft palate prosthetic correction.

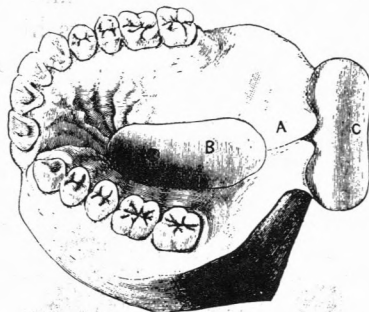


The sculpture of Christ created by Dr. Kingsley, is referred to by Dr. Burton Lee Thorpe in Koch's History of Dental Surgery, Volume 3, as follows. "Of all Dr. Kingsley's many attainments, the artistic side of his career is the most interesting. His bust of Christ modeled in 1868 is probably his best effort. Art critics pronounce it the best piece of work of its kind ever done. Its inception and production was apparently inspirational. It is said that Dannecker attempted with moderate success, to portray Christ, as the mediator between God and man. Thorwaldsen's Christ is a more powerful conception, yet sacrificing the manliness of the Messiah in trying to properly bring out his loveliness of face and its character. Kingsley's bust combined both the manliness and gentleness that beautifies the life and character of the Master. It is a composite face of Greek, Roman and Jew intermingling the gentleness of woman, the manliness of man and the sacredness of a saint."

It is recorded that Dr. Kingsley had worked in other media before he made his bust of Christ. He had engraved on copper and wood, painted in oils, embroidered on silk and hammered brass and

other metals into bas reliefs and shields. He had created busts and plaques in plaster of paris and in all of these efforts demonstrated a natural ability and a skill to produce objects of outstanding artistic merit.

A bust of Christ created by a distinguished sculptor of this period, which he was permitted to observe during its modeling and which failed to interpret the Messiah, as he visualized Him, was the spark which touched off his creative genius.



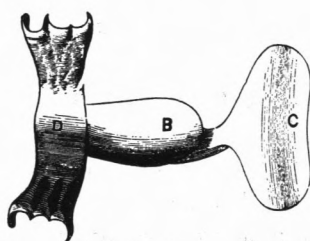
It was while teaching a class in the New York College of Dentistry and trying to convey a sense of the artistic to the group, that his ideas of the face of the Christ he wished to create began to take form and crystallize in his mind, so he felt that at last he could transfer his impressions into a tangible and concrete expression in substance.

Inspired by the thought that at last he was somewhat prepared to proceed with the project, by which he had been haunted for several years, he modeled in clay his impressions and as the mass took form, working a few hours each evening, after the arduous duties of the deanship of the dental college, he finally had produced a Christ portrait of such wondrous beauty and perfection that all those to whom it was shown were at a loss for words to express their admiration for it.

Unfortunately Dr. Kingsley did not understand the necessity of arranging proper support within the substance of the clay to prevent its sagging and the morning after exhibiting it to a group of his colleagues, he came down to his studio only to find that the bust had collapsed, fallen to the floor and was ruined.

An individual of lesser moral fiber would have been crushed by this tragedy, but undaunted Dr. Kingsley immediately started to

recreate his ideal. Unfortunately despite his belief that the original face was indelibly imprinted on his mind, his efforts failed to produce a duplicate. Finally he decided to abandon the attempt to bring the spiritual, inspired face, which had rewarded his first effort into being again and to produce instead a perfect man with a face developed along scientific lines with perfection of physical and intellectual form combined with tenderness, compassion, understanding and all of those most desirable human attributes which are associated always in our thinking with the Son of God.



This effort went forward and finally resulted in producing a bust of Christ which in his own words he describes as follows, "Neither Jew, nor Gentile, but rather my idea of a perfect man, going back to the original idea that prompted me in the college. I planned my Christ of heroic size in the model, because bulk, where the lines are graceful, is impressive and contributes to the idea of majesty. I gave Him the head of the Caucasian, because I believed that the most pleasing and will be the dominant type of a homogeneous race. I gave Him the feature of a woman because I saw in women the best expression of heavenly attributes, mercy, loving kindness, gentleness and purity. I gave to Him the face of an angel, as I conceived the face of an angel might be its benignity, and lastly I gave Him a brain development along recognized phrenological lines which, while avoiding a monstrosity, would be within the possibilities of human existence. I gave to Him the soft beard of a man of thirty, the uncut hair of the Nazarene and the conventional draping of his locality and time. Thus was my Christ built, occupying daily hours of study and labor, from mid-winter until the first of May 1868. It was afterwards reproduced in marble, and the result is before the world, but it never has fulfilled my ideal."

Thus in his own words did Dr. Kingsley describe and evaluate his

own work. That there was disappointment associated with his inability and failure to repeat his original creation is understandable, nevertheless that he did create a masterpiece, worthy of the skill of any of the old masters, is acknowledged by art critics of his period and up to and including those of to-day.

Dr. Kingsley's Bust of Christ has been photographed and used by an eminent author, Dr. Howard Crosby, as a frontispiece to his book, "The Life of Christ", after an extended search for the finest artistic effort extant. This in itself is a genuine tribute to Dr. Kingsley's effort and ability as a creator, sculptor and artist.

Dentistry has been fortunate in that a number of its pioneers have been men of substance, ability and character. They have left behind an illustrious record of accomplishment and their deeds will ever surround the pages of the early history of dentistry with a brilliant and lustrous halo. Recorded in golden letters in this Hall of Fame, the name Norman William Kingsley, will always stand out prominently as dental educator, sculptor, artist, inventor, author and humanitarian.

Author's Note

The writer begs to inform the reader that he has borrowed freely from the printed words of others and claims little originality for the thoughts herein expressed. However, in concluding this article, may I express the sincere desire that if any credit is forthcoming it be extended to those early chroniclers of the deeds of Dr. Norman W. Kingsley. It is an honor to have been granted the privilege to recount them in part for your information and enlightenment.—(F. H. B.)

THE AMERICAN BOARD OF PEDODONTICS—ITS OBJECTIVES AND ACTIVITIES

RALPH L. IRELAND, D.D.S., M.S.,¹ *Lincoln*

A BRIEF HISTORY OF THE BOARD

The American Board of Pedodontics was organized by the American Society of Dentistry for children in 1940. Articles of Incorporation were signed in 1942, forming a non-profit corporation under the provisions of Act 327 of the Public Acts of 1931, known as the Michigan General Corporation Act.

From December 1942 until after the second world war the activities of the Board were dormant. The first meeting of the Board following the war was held in Chicago February 9, 1947. Another meeting of the Board was held in Boston August 6, 1947 at the time of the American Dental Association meeting. Both of these meetings were concerned with formulating rules and regulations governing the Board's program for certification and with receiving approval of the Council on Dental Education of the American Dental Association.

The Council on Dental Education gave formal recognition and approval to the American Board of Pedodontics at the close of the Fourth Congress on Dental Education and Licensure, February, 1948.

The purposes of the American Board of Pedodontics are: To encourage the study, improve the practice, elevate the standards and advance the art of Pedodontics; and thereby to serve the cause of public health.

To fulfill these aims, the Board is empowered to issue to dentists duly licensed by law, certificates, or recognition of special knowledge in pedodontics, or dentistry for children, and to suspend and revoke the same. These certificates do not confer legal qualification or license to practice dentistry, nor are they issued under any government authority.

The Board receives and acts upon applications from dentists for certificates and receives payment of fees, the amounts of which are

¹ Secretary-Treasurer, American Board of Pedodontics. Professor, Pedodontics, University of Nebraska.

fixed by the American Society of Dentistry for Children. It maintains and amends rules and standards for granting and revocation of certificates.

The Board determines by examination the competence of dentists who apply for certificates in the practice of dentistry for children.

THE BOARD'S EXAMINATION

The examination given by the American Board of Pedodontics covers four areas: (1) written, (2) oral, (3) clinical and (4) case histories. To date four examinations have been given.

The Board has constantly endeavored to institute measures and methods which would: (1) standardize the examination; (2) provide for a better evaluation of the candidates knowledge on the subject and (3) rule out, as far as is humanly possible, the personality factor. Committees supervise each area of the Board's examination. Each committee is responsible for developing the particular area assigned to it in terms of the three factors mentioned above. The activities of these committees have resulted in many improvements in the Board's examination.

After considerable deliberation and study, the committee assigned to supervise the written area of the examination, recommended to the Board that questions for the written examination be of the objective type and that subjects be rotated among Board members. The committee also recommended that the multiple-choice type of examination question be employed. The following procedure is now followed in formulating the questions for the Board's written examination. After the Board member has compiled the test questions for his assigned subject they are sent to the chairman of the committee for editing. In the event that the supervising chairman considers any question or questions ambiguous or incorrect in form, the set of questions is returned to the Board member for correction. When all the questions have been edited and receive final approval, the chairman uses a standard format in reproducing each set of questions.

The committee assigned to supervise the clinical area of the examination has developed standards for evaluating cavity preparation, manipulation of restorative materials, cavity sterilization, management and handling of patients and other procedures pertaining to the clinical examination.

The committee which supervises the case histories has formulated a letter in which specific suggestions and instructions are given to help the candidate assemble and present his or her case histories.

Much thought, time and effort have been expended by the committee responsible for developing the oral area of the Board's examination. The committee designed this portion of the examination to test thoroughly the candidate's "overall" knowledge of pedodontics, and in particular his or her ability to recognize, diagnose and plan treatment for the more common as well as the bizarre conditions which may present to the children's dentist.

Recently each Board member was asked to study the matter of establishing minimum qualifications for Board membership and to submit a list of qualifications and experiences which a member of the American Board of Pedodontics should possess. This action was taken because the Board, on the basis of its past experiences, recognized that certain abilities and skills beyond the skills and knowledge required of a diplomate need to be held by the examining Board member.

RECOMMENDATIONS FOR DEVELOPING A SPECIALIST IN PEDODONTICS

The American Board of Pedodontics recently formulated a set of Recommendations for Developing a Specialist in Pedodontics. These recommendations were formulated for two reasons: (1) To serve as a guide for those dental schools, desirous of developing graduate or postgraduate programs in pedodontics, and (2) to enable those schools offering graduate courses in pedodontics to re-evaluate their programs in terms of training which the Board thought a dentist should secure in order to practice pedodontics as a specialty. Copies of these recommendations were sent to the deans of all Dental schools in the United States and to the directors of the Eastman Dental Dispensary, the Guggenheim Dental Clinic and the Forsyth Infirmary.

The following are the objectives which the Board formulated for the course of instruction in dentistry for children:

1. Ability to manage or direct the child patient's behavior in a dental chair and the child-parent relationship during the appointment
2. Mastery of the operative and prosthodontic procedures indicated for the primary and immature, permanent dentition

3. A thorough knowledge of properties of the materials employed, and skill in the manipulation of these materials
4. Skillful removal of teeth for the age groups being treated, and management of minor oral surgery problems that arise in a children's practice
5. Practice of modern root surgery and therapy for pulp-involved teeth and management of any condition involving teeth traumatized during accidents
6. Ability to diagnose and treat any growth developmental and health problem of childhood which is legitimately within the province of the children's dentist
7. Ample knowledge with which to direct the child and parent in an adequate dental health program, and to institute proved preventive measures

The Board also formulated details of experience, instruction, and practice, involved in the attainment of these objectives. However, because of space limitation they will not be enumerated in this article.

The Board believes that a children's dental specialist, like the children's medical specialist, should be equipped to treat any oral health condition which arises in the mouth of human beings within the age group that he serves. Exceptions are orthodontic treatment and major surgery which should be referred to practitioners in these two areas.

Any hospital or endowed clinic through its internship, dental school graduate, or post-graduate curriculum or combination of such resources which attempts to train the children's specialist may reasonably be expected to provide the technical experience and formal study necessary to meet the above objectives.

AMERICAN COLLEGE OF DENTISTS

SECTION ACTIVITIES¹

THE CAROLINAS (NORTH AND SOUTH)

FRANK O. ALFORD, D.D.S., *Charlotte*

The Fellows of the American College of Dentists in North and South Carolina met for the first time to promote the interest of the College, and the dental profession, on May 29, 1949. This meeting was for the purpose of organizing and making petition for a charter for the Carolinas Section, which was granted during that year. In the year 1950, two meetings were held, for the purpose of developing the Section into an active organization. Committees were appointed to conform to those of the parent organization. These committees were asked to study the problems of dentistry relating to each committee, on a local level.

The activities of the Carolinas Section of the American College of Dentists may be divided into three major projects:

- I. To endorse and sponsor the Fund-Raising Campaign for the Dental Foundation of North Carolina, Incorporated, which was of primary interest to dentists of North Carolina.
- II. To Inaugurate a Dental Hygiene Student Recruitment Program, which is now in progress.
- III. To sponsor the organization of Dental Study Clubs.

The Dental Foundation, Incorporated, was inspired by the late Dr. Henry O. Lineberger, immediate Past-President of the American College of Dentists. It is a non-profit, charitable and educational organization, without capital stock. The management is vested in a Board of Directors, with a President, Vice-President, Secretary, Treasurer and Executive Committee.

Among the objectives of this organization are:

1. To aid and promote, by financial assistance and otherwise, all types of education, service and research in the fields of preventive and curative dentistry.

¹ Reports of sections delivered at the Convocation of the College, St. Louis, Sept. 7, 1952. See also *J. Am. Col. Den.*; 19, 368-84; 1952 (Dec.) *Ibid*; 20, 45-54; 1953, (Mar.).

2. To establish student loan funds, in keeping with the policies of the student loans at the University of North Carolina.
3. To establish scholarships for special study, by students who are willing to give their time and services to research and other fields of public health.
4. To establish scholarships for the training of dental teachers.
5. To establish a visual education library at the University of North Carolina School of Dentistry.
6. To establish a fund for other dental college aids, which is not provided for in the appropriations made by the Legislature.

In its inception, it was thought wise to seek integration of the Dental Foundation with other such foundations, at the Division of Health Affairs of the University of North Carolina. However, it became evident, as developments unfolded, that a Dental Foundation, autonomous in nature and in organizational function, would be more desirable for dental health service to the people. To this end, the Dental Foundation of North Carolina, Incorporated, was organized and chartered, under the laws of the State of North Carolina, as a health service organization, dedicated to the health of the people of the state, through dental channels.

The Carolinas Section of the American College of Dentists launched its first major activity by voting to *endorse* and *sponsor* a fund raising campaign for the Dental Foundation of North Carolina, Incorporated. Each Fellow of the Section agreed to assist and pledged full cooperation in activating the campaign among the dentists.

This campaign was to be conducted by the Public Relations Committee of the North Carolina Dental Society, under the direction of its Chairman, Dr. A. C. Current, who states:

"The Dental Foundation of North Carolina, Inc., is probably one of the most outstanding accomplishments of the dental profession in the state of North Carolina. The development of the Foundation may be divided into two specific phases. The first year of this Foundation's existence, the development was handled through the Public Relations Committee. The Committee made addresses before the District meetings of the North Carolina Dental Society, in an attempt to give further impetus to the Foundation among dentists at large throughout the state. During this year, no effort was made to contact contributors, other than licensed dentists of

the state. The Dental Foundation funds grew to approximately \$17,000 in cash and \$25,000 to \$30,000 in pledged payments the first year.

"At the beginning of the second year, it was decided by the Executive Committee of the Foundation, to separate the activities of the Foundation from the North Carolina Dental Society, and to appoint a Development Committee within the Foundation. This committee, still sponsored by the Carolinas Section of the American College of Dentists, would be charged with the responsibility of furthering the development of the Foundation, through dental channels. Dr. Amos Bumgardner, Chairman of the Committee, divided the 100 counties of the state into nine divisions, with nine divisional chairmen. These divisions were further divided into twenty-two districts, with twenty-two district chairmen. Each district was comprised of several counties, with a county chairman in each county. There were 131 workers actively engaged in the campaign. Through this organizational effort, every dentist in the State of North Carolina was given an opportunity to contribute to the Foundations development."

The goal was \$100,000.00, to be raised in five weeks. It was estimated that about 885 dentists could be depended on to contribute. On that basis, an average of \$125.00 per dentist was set for the individual contribution. Work towards an objective motivates interest in any undertaking. It was more desirable to have ten men give \$125.00 each, than to have one man give \$1250.00. The gifts ranged from \$5.00 to \$2,000.00.

This was a dynamic campaign, ending in five weeks, with a total of more than \$100,000.00 pledged by the dentists alone. Dr. A. C. Current, Dr. Amos Bumgardner and Dean Brauer of the School of Dentistry, University of North Carolina, as well as various chairman and others, gave unselfishly of their time, and provided leadership.

But, as it was said: "It was the dentists of North Carolina, with one goal and solidarity of purpose, which made possible the success of the campaign. No group of dentists any place can boast of greater unity of purpose, or achievement.

"The Foundation has several plans through which it hopes to develop its resources:

1. To encourage dentists, and other interested people, to send checks in lieu of flowers, on the occasion of the passing of a friend.

2. The fiscal agent for the Foundation is the American Trust Company of Charlotte. It is one of the oldest and largest Trust Companies in the State. From time to time they have estates to settle, through wills and grants, and are often in position to direct certain monies, which are left without direction, to some worthy cause. In these instances, the Foundation stands in readiness to receive assistance from such sources.

3. The Ladies Auxiliary of the North Carolina Dental Society, working in collaboration with the Foundation, plans to publicize the need for a Dental Foundation through the various activities.

4. The constant education of the public to the purposes and the objectives of the Foundation, through such means as may be available, without high pressure, without coercion to encourage contributions."

The second project of the Carolinas Section, a Dental Hygiene Student Recruitment program, grew out of a pressing demand for dental hygienists in the two Carolinas.

Many high schools have Diversified Education programs, which permit students to work in dental offices as substitutes for electives. Practically all high schools also have Vocational Guidance programs. Through the Diversified Education plan and Guidance classes girls may become interested in entering training for dental hygienists, before they decide on other careers.

It is hoped that, through the members of the Carolinas Section, with assistance from the State Dental Societies and Civic Clubs, each high school class in the two states may be reached, to explain the advantages offered in dental hygiene, as a professional career for women.

The third and last project of the Carolinas Section is the Organization of Dental Study Clubs. The Committee on Education has for its goal this year, the organization of a study club in each of the larger centers of the two Carolinas. The clubs will not function as just another dental meeting, but, as a workshop, to study particular phases of dentistry, and to develop local talent as clinicians. Such a club was organized in Asheville, North Carolina more than twenty years ago and it has filled a long wanted need in dentistry. We believe that a real and dynamic form of education can result from the proposed study groups.

To the accomplishment of these objectives, the members of the Carolinas Section of the American College of Dentists are dedicated.

NEW YORK

RALPH J. BOWMAN, D.D.S., *New York City*

For sometime our Section has felt that we should do more for our "Health Services". With this conviction, during the summer of the year that I was Chairman of the Section, I wrote for advice and guidance to ten or twelve of our older Fellows whom I call our "Elder Statesmen". Among the projects I had in mind were an all day scientific session, sponsoring a dental scholarship, or supporting a cleft palate speech and psychological clinic. The Fellows to whom I wrote were men with whom I am sure we are all well acquainted. At least three were Past-Presidents; namely, Drs. Merritt, Carr, and our beloved, departed, Fellow and friend, Dean Walter Wright, and Drs. Gies and Davenport.

Many worthy and diversified suggestions were received.

Knowing that there was a determined and foresighted nucleus, I called this group together at a dinner and round table discussion. The letters were read, and there were various thoughts on the subject submitted, namely;

- I. Student recruitment
- II. Cleft palate clinic—Dr. Wright was very much interested in the psychological and speech phase of cleft palate. (At N.Y.U. they had the surgical and restorative phases of the program under way)
- III. Contributions in work or money to the dental clinic of the Children's Aid Society
- IV. Donation to libraries of the Dental Schools in N. Y. State
- V. Annual award to a member of graduating class in one of the N. Y. Dental Schools for meritorious achievement in scholarship and research
- VI. Cooperation between dental schools and the College—Dr. Gies suggested that we annually invite, in a formal letter, each of the N. Y. State dental school faculties to suggest what the section might do in a special way to promote improvement in phases of the dental profession's responsibilities as seen by them
- VII. Teaching assignments—Dr. Davenport suggested a committee to serve as an advisory bureau for procuring professors and instructors

These are a few of the high lights. We devised a plan and the following questionnaire was sent to all Fellows in the Section.

Dear Fellow:

After conferring with several of the members of the New York Section, your executive committee, Ralph Bowman—Chairman, Adams Bailey—Vice Chairman, Wilbur Prezzano—Secretary-Treasurer, have formulated a plan which we believe will better enable our section to serve its members and the profession of dentistry in a more useful manner.

After considerable thought and discussion, the following plan was devised:

A committee of five should be formed, chosen from the members throughout the state to be known as the "Advisory Council for the New York Section". The functions of this committee would be as follows:

- I. To answer requests from Fellows on practice problems in connection with the administration of an office
- II. To bring about closer cooperation between the dental school faculties of New York State and the American College of Dentists
 - A. Advice as to teacher training
 - B. Recruitment of teaching personnel
- III. Recruitment of students
 - A. In the high school and prep school level
 - B. By contacts with directors of student guidance
- IV. Arrangements for associates
 - A. In the interests of senior associate
 - B. In the interests of junior associate
- V. Aid in location, purchase or disposal of practices.

In order to avoid calling a special meeting of the Section to vote on this plan, it was decided to carry this out through the mail. Please indicate your opinion by casting your vote on the attached ballot below and mailing it to the secretary, Dr. Wilbur J. Prezzano, Medical Centre, White Plains, New York.

Most sincerely,

Ralph J. Bowman, Chairman

_____ I am in favor of carrying out this plan.

_____ I am opposed to carrying out this plan.

Signed _____

(If you wish, you may omit your signature.)

The reception of this proposal by the Section was most heartening for the membership responded almost unanimously.

The Committee of five known as "Advisory Council of N. Y. Section" was appointed at our May meeting in Syracuse and has started to function.

Arthur Corby, New York, *Chairman*

James Ivory, Binghamton

Charles Pankow, Buffalo

Ellsworth Davenport, Jr., New York

Waldo Mork, New York

On this committee we have representatives from all parts of the state. We are happy to have Dr. William Gies serving in an advisory capacity.

I realize that the program is broad in scope, but since our group is rather small the problems of a particular nature would not be large in a numerical sense. A committee to function in this way would be of tremendous value.

A letter from the Secretary's office was sent to all Fellows with the names of the members of the "Advisory Council" for their files. For all problems related to the betterment of dentistry, our colleagues of the Council wish to be called whether or not they be included in this plan. We hope our Fellows will take advantage of and use the experience, ability and cooperation of the members of the council.

Now for a break-down of some of our plans. I would like to explain in a little more detail just what we are attempting to accomplish.

We all know there are many problems in connection with the administration of an office. For example, there are various types of bookkeeping, processing of charts, and establishment of fees, depending on overhead and locale. There are many other problems that will arise. We all realize that there are geographical and personal considerations for which one might like the advice of a Council.

Now we come to the point that so many of us feel is of utmost importance. For our dental health services and the American public as a whole, we should be doing more than we are for our teacher training to see that we get our dental students—our future dentists—properly instructed. We believe that with the cooperation faculties of the dental schools, a teacher training program should be of the integrated with the idea that in this teaching program we would have a nucleus from which we could draw.

Under recruitment of teaching personnel, there is a marvelous opportunity for many of us to observe men at the student level. We all realize that there are Doctors with varying years of experience who don't recognize that they have the ability of imparting their knowledge to others. For financial reasons, they couldn't devote their full time to instructing. In later years, some of these men would be glad to give of their time and knowledge. Many times a doctor who has practiced for several years and has perfected a technique could come in as a visiting professor and do a great service for men in dental school.

Recruitment of students could be accomplished by contacts, such as, the movie that was so ably produced under the auspices of the American College. This could be, and I'm sure has been shown at various assemblies in high schools and prep schools. In addition to this, one of the Fellows of the College who is a member of the community could be in attendance to explain and advise prospective pre-dental students. Members of our profession might give dental health talks at schools particularly during "Children's Dental Health Week".

The "Council" on request will attempt to find capable young associates for Fellows. Young men desiring an opportunity to associate with older men will also be helped—so that both parties will be benefitted.

In the larger cities particularly, the "Council" could be called on to attempt to find desirable locations and to arrange the purchase or disposal of practices.

This is a rudimentary plan on which the N. Y. State Section is working. We have great hopes for it! We feel that it has exceptional possibilities. If I have given you any ideas which you think might be good for your Section, we would be very happy to hear your opinions and to know your reactions to these methods of improving our Dental Health Services.

TRI STATE²

C. J. SPEAS, D.D.S., *Oak Ridge*

President Fleming, Members of the Board of Regents, Fellows of the American College of Dentists and friends of the College, it is my privilege today to report to you the Activities of the Tri-State

² See also, *J. Am. Col. Den.*; 20, 65-134; 1953 (June).

Section of the American College of Dentists. Some other person may have done this differently than I intend to do it, but it seemed fitting to me to do it in this way else you may miss the message which it is hoped will come to you along with this report. It is with awe that I stand before a group as distinguished in dentistry as this one. I am humbled by the veneration, dignity and integrity of the kind of men who are assembled here and yet I am at the same time inspired by you. Because of the diligent, unselfish effort of each of you to advance "not yourself" but the profession which you represent a Fellowship in this College has been conferred upon you. This is not a material bequest but is something which you must grasp with your heart. You cannot buy it, it cannot be coerced from others, you cannot steal it or beg it and when you get it, it cannot be transferred to another or sold, nor defaced in any way except that you *can* waste it. This is a *Fellowship*—a *something* that must be taken within you and cherished and cared for and fed and observed and appreciated in all of its' growth. This is what we feel, as I see it, in our Tri-State Section of the American College of Dentists. The man who fostered this Section of the College as far back as 1943, is a Tennessean and we are proud of him in Tennessee although we are no more proud of him than we are of any other member from Arkansas or Mississippi, which are the other two States included in the Tri-State Section. This man, (and I shan't, because of his quiet benevolence, embarrass him by mentioning his name) began in 1943 to talk personally with every Fellow in the College from Tennessee, about a local section of the American College of Dentists. This was a tremendous job. He did not, at first include Arkansas and Mississippi. As the interest grew in Tennessee however he suggested the addition of these two States. This met with unanimous approval. The Fellows of the College from these two States were contacted, most of them personally, and since there was such a great interest shown in a Tri-State Section, in May of 1947 a meeting was called and a petition for a Charter and a copy of the By-Laws was prepared and adopted and sent to the Secretary of the American College of Dentists. In January 1948 a Charter for the Tri-State Section was granted to the Section and was presented by Dr. L. R. Main. Dr. Otto Brandhorst was also present and with a note of encouragement reiterated the fundamentals of the American College of Dentists as they would apply to this new Section. From 1943 to 1948 there were innumer-

able luncheon meetings and conferences, and yes, there were many disagreements and arguments. The birth of this Section was *so American* and so much like the birth of this *great* country of ours that it has been fun to write about it and it's exhilarating to read it to you. Birth—whether it be animate or inanimate is always fraught with joy and tears and pain and sweat and work. The animate version of the birth *process* is even referred to by man as "Labor". The organization of this Section of the College *was* laborious, the continuation of the vitality of the Section also requires labor. To divide these labors among the Fellows we in the beginning postulated that:

1. If the organization of a Section is worthwhile, it is worth giving one day a year to its' activities. (We set the second Saturday of December for an annual meeting that would not conflict or interfere with other meetings.)
2. This day will be given over entirely to:
 - a. The promotion of the *ideals* of the American College of Dentists.
 - b. The promotion of the *interests* of the American College of Dentists.
3. The Tri-State Section should not be a side issue attached to some other meeting.
4. The Section should not promote itself as an organization but should act as a concrete liaison between the American College of Dentists and organized dentistry on a local level thus promoting the ideals of the College so as to have them reach the State and component societies on a man to man basis.

With these things in mind we were then divided into working-groups according to the dictates of our own individual interests. *No one* told *anyone* what group to join. The interests ran along these lines, with of course some deletions and some additions:

1. Student recruitment
2. History
3. Hospital
4. Journalism
5. Oral Surgery
6. Preventive Health Service
7. Prosthetics
8. Medico-Dental Relations
9. Research
10. Socio-Economics

These groups then became permanent committees, chose their own chairman and reported their objectives and pronounced the manner in which they intended to seek these objectives.

This was the first time perhaps that many of us could grasp that *something* spoken of a moment ago. It was the first opportunity to take it to our hearts and feel it and cherish it and care for it and feed it and watch it grow.

Although these committees are permanent, the chairmanship is rotated. As new members come into the College and thence into our Section of the College each is sent a list of the various committees and is asked to choose a committee to which he would like to be assigned. We still have room for more committees so long as their interests and activities do not digress from the four postulations read to you a few moments ago.

Surely you are wondering by now how all of these endeavors have worked out. Our annual meetings are conducted as follows:

The Chairman of each committee assigns to each individual of the committee certain specific objectives to be accomplished during the year. Each committeeman's progress is reported to the chairman far enough in advance of the annual meeting to sift the "wheat from the chaff so to speak", and compile an annual report.

On the day of the meeting reports and recommendations of the standing committees are read and either accepted as read, or altered and accepted, or are rejected with sufficient reason and explanation so as to encourage a Fellow to do better, or guide him into a path of righteousness if it is felt that a transgression of our ideals has occurred. In our small group, this is the time and the place for each man *to have no fear* of exposing the nakedness of his heart so that *all might* see and *all might* hear and *all might help* to make him a better man, a better dentist or a better American. These committee reports consume only the morning. They are brief, to the point, often curt and sometimes spicy. There is never a dull moment. The afternoon is given over to *papers* which do not include clinical subjects in dentistry. To list some of the papers, one was entitled "Dental Education Under the Regional Plan". This paper was of interest primarily to dentists from the Southern States and I know of no place where such a paper could have been read except before this Tri-State Section and have had a fully appreciative audience. A

Dentist from a Northern State wouldn't have understood it as we did since his local problems differ from ours.

Another paper, which was given by one of our local professors of history, who holds a Ph.D. Degree in History, dealt with "Dentistry and Democracy". Everyone was spell-bound by this man who knew so much more about us as a profession over the years than we know ourselves. Our influence as dentists upon mankind through the renaissance and into modern times is appalling. The part that we played in the thinking of man merely by our mechanical and artistic abilities is quite well proven in historical fact and yet as dentists most of us are not aware that we have ever done anything except extract teeth, make dentures, construct bridges or treat pyorrhea. A third paper dealt with "The demands which have brought about our modern public health movement". In this paper the author traced our education as a *people* concerning "the health of all of the people" and what this has meant with regard to the development of our modern public health regimentation.

These are not papers that any of us would hear except through the facilities of our Tri-State Section of this College. The insight into new fields of thought and the inspiration derived from our speakers such as the Historian I mentioned, cannot be measured by some kind of yard-stick but can only be appreciated by those who have labored and seen their labors bear fruit.

There is only one more example of our activities that we feel you should know about. The chairman of the Medico-Dental Relations Committee is an Oral Surgeon, who does a good deal of his surgery in the hospitals and therefore has had a personal relationship with the medical profession which most of us as dentists would consider impossible. His continued encouragement of the rest of us to cultivate a better medico-dental relation on a local level through personal friendships and an improved understanding of medicine and its' practice, inspired a general practitioner of dentistry to try some of the suggestions annually included in the reports of the Medico-Dental Relations Committee. The result was that in Jackson, Tennessee, a city of some 30,000, this general practitioner of dentistry was asked to invite his local dental society to cooperate with the local medical society in putting on a combined medico-dental program annually. The chairman of the medico-dental relations committee of the Tri-State Section was asked to give a paper that would be of interest to the physician and to the dentist and the med-

ical group engaged an out-of-town speaker in the field of Urology. It so happened that the Urologist and the Oral Surgeon were the best of friends and had given clinics together at previous meetings. The meeting was most successful and bridged a medico-dental gap in this town that nothing else could have done. It was inspired however by this Tri-State Section and we are proud of that and don't mind taking the credit for it.

Of course each committee has done an equally commendable job. For the sake of brevity in this report it is necessary for me to express my profound feeling of guilt for not mentioning each speaker and the activities of each committee which has done such a magnificent piece of work during the years that this Tri-State Section has been active. A complete report of our Tri-State Section will appear in the next issue of the Journal however.

An exceedingly worth while piece of work has been done by the chairman of the prosthetic's committee and I am sure that in the future the use of this report and the help that will be afforded each dentist in the country will be felt as the result of the efforts of this prosthetic's committee of the Tri-State Section of the American College of Dentitists.

It is never possible among the new members of the Tri-State Section to tell whether the man is from Arkansas, Mississippi or Tennessee and we like that. This has become such a melting-pot for Fellows of the College in these three States that it is a thrill to go to a meeting and find men from these States who all feel at home regardless of the meeting place, just because it is a Tri-State Section Meeting.

The real meaning of the American College of Dentists is not known by its Fellows until they have felt it in their own hearts, in their own communities and in groups small enough so that they all know one another and can sense the close reality of an organization which is *so American* that even your speaker has goose flesh as he writes and reads this to you.

WASHINGTON, D. C.

JOSEPH L. BERNIER, D.D.S., M.S., *Washington*

This brief report is not intended as a historical resume of the Washington Section since "what is past is prologue." I do not believe it would be fair to attempt to convey the impression that the activities of this section, in comparison to other sections, are in any way unique. In view of the illustrious background of the college, it would

be almost impossible for any section to achieve such a position. I shall not, therefore, burden you with any detailed account of committee activities and reports and special projects which do not, I feel sure, differ fundamentally from those underway in other sections. To merely list these undertakings should, in my opinion, be sufficient.

There is one feature of the Washington group, however, which is not, so far as I am aware, paralleled in other sections and which I believe is worthy of some consideration. I refer to the composition of our membership. Many of you are aware that the Washington Section has a rather sizable representation from the federal establishments and, inherent in the career of these fellows is the pattern of regular and sometimes frequent assignment to new and often distant stations. The losses and gains in membership through such a program of reassignment creates a situation of fluidity which we believe adds zest to our general program. This may seem strange to some of you, however, when one considers that a frequently changing membership often reflects new thoughts and ideas and, what is more important, energetic support of the group activity. There is little opportunity for stagnation in the face of this changing panorama, however, it is obviously necessary that forceful direction be available to prevent a useless dissemination of these energies. In this latter connection we feel that a modicum of success has been achieved.

In order that you may visualize this situation more realistically, may I tell you that of the 84 fellows presently in the Washington Section, 40 serve within the federal establishment; 16 in the Navy; 14 in the Army; 6 in the United States Public Health Service, 2 in the Veterans Administration and 2 from the Air Force. The remaining 42 are civilians of which 8 are honorary fellows. This does not include those upon whom fellowship in the college will be conferred this afternoon.

To illustrate the matter of personnel shifts during the past year, the Section has lost its chairman through transfer and its vice-chairman through retirement. We shall complete the current year, therefore, with but one elected officer—the secretary—still serving. I realize that such a situation is not entirely unique, nor do I wish to infer that it is a matter of frequent occurrence in this Section, however, it is perhaps of general interest.

This section has attempted to base its general program on the

thoughts expressed by the various presidents of the college. It has accomplished this through the work of special committees charged with specific segments of the undertaking. These efforts have been reasonably productive largely because of the inspiration of our various section and committee chairmen.

In 1951, the then chairman of the section appointed the following committees from those suggested by the incumbent president: Education, Journalism, Preventive Service, Public relations, Research, Medico-dental relations, Dental student recruitment, By-laws, and Scientific presentation. These committees are still functioning having been reappointed by the present chairman.

Preliminary reports from these committees were received at a meeting on September 20, 1951. Each report was mimeographed and distributed to the fellows of the section for detailed study. On March 9, 1952, they were discussed in detail with each committee receiving additional instructions for the preparation of their final effort. These reports promise to contain a truly worth-while assessment of the problems in question.

Again I should like to refer to the composition of the membership of the Washington Section for therein lies the basis of an important point which I wish to make. While our section may be somewhat unique in this respect, I feel sure that others may have inherent features which can be exploited for great gain in the over-all college objective. It is important to state that what I am to suggest has not, as yet, been achieved in the Washington Section but it offers a challenge which I hope will be accepted and attacked with vigor. In analyzing the membership of our section, it is immediately obvious that within our group are an unusual number engaged in research both within the federal establishment and in private activities. Further, the great research programs of Army, Navy and United States Public Health Service are, in a large part, under the general supervision of individual fellows of our section. It therefore seems logical that a great opportunity exists to further the spark of research in dentistry through an organized program emanating from the section. Within our own geographic area there are institutions and individuals who offer a fertile field for the cultivation of such programs. In addition, the extra-mural contractual support and grants-in-aid programs of the Army, Navy, and United States Public Health Service extend to almost every dental school in the United States as well as to many

private and public hospitals and institutions. It would appear that the Washington Section can well act, through a local program, as an agency of philosophic organization in this program accomplishing, in part, an integration and unification of thoughts not easily brought about through the conventional methods of organization.

A reasonable amount of specificity of action can be achieved locally through the appearance of recognized authorities from our sections to speak of the need for research and research personnel in dentistry before local groups, both civilian and governmental. This, of course, must not be a publicized program of the college, but rather an organized activity discussed within, and emanating from, the section itself.

I cannot help but feel that such an undertaking would be an example of exploiting a peculiarity of a section for tremendous gain. Further, to ignore such an opportunity would not be discharging those duties incumbent upon every fellow of the college.

I realize well that this program will succeed only if vigorously pursued but it serves to suggest that perhaps other sections have peculiarities of composition, location, or even organization, which can be exploited to the best interests of the dental profession and the American College of Dentists.

It is not enough, in my opinion, to pattern a section activity after the program of the president however excellent it may be. This should be augmented by local thinking and action based on the high precepts of College and activated, perhaps through local peculiarities of a section which offers particular opportunities for furthering the advance of dentistry.

In closing I should like to mention the breakfast meeting held by the Washington Section last year on the Sunday preceding the annual meeting of the District of Columbia Dental Society. This served as the opening phase of the meeting and was attended by both fellows and their guests. Over 200 were present to hear Major General Lewis B. Hershey, Director of Selective Service, who was guest speaker. We feel that this latter activity is of the greatest importance in that it places our section of the College in a unique position with regard to the dental societies' major annual undertakings.

I hope that this brief report has served to acquaint you with the overall program of the Washington Section and that it may suggest a new facet of section activity for your consideration.

LETTER FROM PAKISTAN

The following correspondence was exchanged between the Editor and Dr. Shah; and Dr. Shah's letter is of such value that the correspondence seems worthy of publication in the Journal.—Ed.¹

January 15, 1953

Dr. Hasan R. Shah, President
Pakistan Dental Association
36 Mcleod Road
Lahore, Pakistan

Dear Dr. Shah:

In rummaging through old material I have just come across your letter dated June 28, 1950. I assume I have replied to this so that an immediate reason for a note to you is to send my greetings for the new year and to express the hope that everything is going well with you.

In addition to that, I wonder if you wouldn't like to prepare a little story concerning dental education in your community for the Journal. If you have anything new or that should appear pictorially, would you include it with your story concerning progress made in these past few years.

I hope I may have a favorable reply from you and that in the meantime you are well and happy.

Sincerely yours,

John E. Gurley

JG;jd

Pakistan, Lahore;
13th July, 1953.

Dear Dr. Gurley,

I promised to write a note about progress of Dentistry in Pakistan, some time ago, but I could not fulfil my promise earlier than this.

¹ See also J. Den. Educ., 13, 47; 1948 (Nov.).

Early this year I took charge of the Dental College as its Principal. As you would realize such jobs are extremely time absorbing, particularly for a novice like myself. However, I can write with pride that although the progress in the development of Dentistry in Pakistan is rather slow, it is not at a standstill. We are a small community of Dentists, and have several obstacles and shortcomings to overcome. Our financial position is not so satisfactory either. I attribute whatever progress is being made to the enthusiasm and self sacrificing efforts of my colleagues and my students.

de'Montmorency College of Dentistry, which was founded some 25 years ago, received a great setback at the time of the partition of India into Pakistan and Hindustan. Majority of the teachers and the students crossed the border. During the disturbed days in Lahore (Pakistan) the equipment was neglected and it deteriorated. The museum specimens were damaged, and many of the books of the library were lost. From 1947 onwards this institution has been progressing steadily. The Government authorities had many gigantic problems to tackle, but still Dentistry was not altogether ignored.

Our foremost problem, to put the institution on sound footing, was to procure a highly trained teaching staff, and up-to-date equipment. Four members of the teaching staff were sent abroad to the United States and to Britain for specialized training in various branches of Dentistry. Members of the teaching staff of the pre-partition days were re-engaged at attractive salaries. The Government also tried to get teachers from abroad. One foreign professor was employed on contract basis for five years, but unfortunately the gentleman broke his contract after one year and left the country.

At present there is a complete, highly trained, medical and dental staff. In order to fill future vacancies, the best graduates of the college are engaged as House Surgeons, and are trained for teaching.

The College consists of departments of Oral Surgery, Operative Dentistry including Periodontia, Prosthetics, Crown and Bridge Work, Orthodontia, Radiology and children's diseases.

A research department has recently been established. It is hoped that the Punjab Government will give special financial aid for research.

An enthusiastic scheme has been prepared involving a sum of nearly Rs. 4000000/- for a new building and equipment for the College.

In order to organize the profession at large, "Pakistan Dental Association" was founded some time ago. It is a registered body of the Pakistani Dentists.

The achievements of the Association so far are—

(a) A "Dental Health Week" is celebrated each year, to educate the people on maintaining oral hygiene. Propaganda is carried out through press, radio talks, publications and popular lectures.

(b) A Co-operative Dental Store has been established for the benefit of the members of the Association and the dental students. This Co-operative encourages and guides the local manufacturers.

(c) The Association, in order to keep the members in touch with each other, and with the activities of the Association, publishes a two-monthly bulletin.

(d) The Association organizes clinics, exhibitions and lectures.

(e) The departments of health of various provinces have recognized Dentistry as a true health service. Dental Clinics are being started at the district headquarters run by the state. The Association has taken up the matter of starting school dental health service, with the Education Department, and schemes for Mobile Dental Clinics, and Dental Hygienists are in preparation. A number of other schemes are also under consideration.

All is not so rosy as it may look from the above description. Dentistry had to start from scratch in 1947. There are but few workers. Possibilities for financial and other aids have to be explored, so that our schemes may not remain on paper only, but can be put into practice within the shortest possible time.

I think it won't be out of place if I seek the indulgence of your esteemed readers that gifts of books, periodicals and equipment would be gratefully received, and reciprocated in whatever small way we can on this side.

With profound regards.

Yours sincerely,

(H. R. Shah)

B.A., L.D.S., R.C.S., (Edin),
Principal, de'Montmorency College of
Dentistry, Lahore (Pakistan).

BOOK ANNOUNCEMENTS

YEAR BOOK OF DENTISTRY: Three copies of this book, 1950, 1951, and 1952, have just been received. The book is well known now within the profession, having been published as a review of dental literature for that particular year since 1937. It is edited by a well known group of men, each thoroughly qualified in his special field.

Although a condensation of articles appearing in various journals, it does carry sufficient text material to be easily helpful and is well illustrated, and indexed.

Published by The Year Book Publishers, 200 Illinois St., Chicago, Ill. Price on application.

GENERAL EDUCATION BOARD: This is the annual report for 1952, showing the distribution and use of funds for educational work, including a little toward medical education.

This Education Board, as is already well known, was founded by John D. Rockefeller in 1902, the Board being now concerned with the distribution of this large fund. It is published by the Board at 49 W. 49th Street, New York, copy of which may be had on application.

ANTIBIOTICS: This is the title of the second edition of a book by Robertson Pratt, Ph.D., Professor, Pharmacognosy and Plant Physiology, University of California, College of Pharmacy, and Jean Dufrenoy, D.Sci., Research Associate in Antibiotics, University of California, College of Pharmacy.

This is a book of 398 pages, including index, 2 appendixes and 87 illustrations with one plate in color. Each one of the Antibiotics is discussed in detail both as to origin and use.

Published by J. B. Lippincott Company, Philadelphia. Price \$7.50.

ANNUAL REPORT, KELLOGG FOUNDATION: This is the Annual Report of the W. K. Kellogg Foundation for 1951-52 in which the story is told of financial assistance granted to educational institutions, including general education, hospitals, nursing, dental, medical and public health schools. During the year 1952 the Foundation spent just under \$4,500,000 in carrying out its program of education, and during the twenty-two years of its existence in cash and property just under \$39,000,000 have been expended.

A copy of this report may be had for the asking by addressing The W. K. Kellogg Foundation, Battle Creek, Michigan.

GARRISON STATE, THE: This is the title of a sixty-four page, paper covered book issued by The University of Minnesota Social Science Research Center of the Graduate School. It carries Forewords by two different authors, explaining the oddity, (shall we say?), of the book. It is comprised of six different lectures on six different social phases of life, with particular emphasis on the question of Human Problems. It is "the fifth in a series of *Annual Public Lectures* on problems of current interest in the social sciences".

It is published under the auspices of the above mentioned Research Center, and may be had through the Center for the asking or at a very nominal cost. It is not lacking in its value to the dentist.

CHROMATE INDUSTRY, HEALTH OF WORKERS IN: This is the report of a survey of the health condition of workers in this field of industry. It consists of 131 pages with an appendix and a long list of references. Every phase of the physical condition of the worker appears to have been covered: long lists of tables and figures indicating statistical proof of findings are included.

The study was carried on under the direction of Seward E. Miller, M.D., medical director and Chief, Division of Occupational Health, Public Health Service. To any one interested in the matter of Occupational Hazards, the report should prove valuable.

It carries a considerable number of illustrations, some of which are in color. A little less than six pages are devoted to 'Dental Findings'. Workers may be divided into two groups;

	Chromate Workers	Non-Chromate Workers
Dental caries	Very little difference between the two groups—non-chromate workers appear to have given better attention to their teeth.	
Keratoses and inflammation	More	Less
Periodontal disease	More	Less

The discussion and summary including the references to literature are most important and on the whole very valuable from the total professional and health standpoints. Dental teachers will find it helpful.

It is known as Public Health Service Publication, No. 192 and

may be had from the Superintendent of Documents, U. S. Government Printing Office, Washington 25, D. C. Price quoted on request.

KEEPING OUR HOSPITALS OPERATING—A STUDY OF EQUIPMENT AND SUPPLY REQUIREMENTS: This study makes available, for the first time, detailed and accurate data concerning the supply and equipment needs of our nation's hospitals. Because of the relationship between medical care and national mobilization, this information has special current significance. In addition, the medical supply industry has shown considerable interest in the survey. Our studies on hospital equipment and supply needs are part of Public Health Service activities in the field of civilian health requirements. U. S. Department of Health, Education, and Welfare, Public Health Service. (In cooperation with American Hospital Association). Public Health Service Publication No. 272.

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