Alumni Bulletin

INDIANA UNIVERSITY SCHOOL OF DENTISTRY

FALL ISSUE, 1964
INDIANAPOLIS, INDIANA

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Contents

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A free and non-profit bulletin issued by Indiana University School of Dentistry, Indianapolis Indiana, for the purpose of keeping its alumni informed of the activities and progress of the School.

Dental Succession

*Samuel E. Braden, Vice-President, Indiana University**

Right now, at a time when we celebrate the success of our graduating colleagues, it may seem slightly irrelevant, and certainly premature, to think about your successors in the dental profession. As a matter of fact, it would almost seem out of place, on this happy occasion, for you to spend any time at all listening to a speech when you have so many other important things to do, like getting ready for your State Board exams, for the Army, or for setting up a new office. But in their infinite wisdom, Dr. Muhler, Dr. Norman, and the other officers of Theta Theta Chapter of OKU several months ago decided to invite a speaker for this luncheon, and what now seems a long time ago, I accepted. As a result, I've got you where Dr. Johnston and Dr. Gilmore often have had me—stuck in a chair and at their mercy. I don't intend to exploit this advantage, however, and if you should go to sleep you won't get much rest, for in a very few minutes you will be awakened by the next meeting, which is to occupy this room at 1:30.

In the next few weeks, many of you graduates will stand at the threshold of a new career. Everything will be new: your licenses, your offices, your equipment, your dreams. The first patient you treat without supervision will be the start of a long series in which you will establish your professional reputation. The first dental society meeting you attend will be your opportunity to commit yourself to the ideals and best interests of an ancient and noble profession. That first announcement in the paper that Curtis V. Clark, D.D.S., has opened an office for the general practice of dentistry will mark your debt as an independent, contributing member of a community in which, heretofore, you have been a student, to some extent dependent upon others for your education and support. When that hood settles on your shoulders at Commencement, you will be an alumnus of Indiana University with a new relationship to an institution which will ever count you as one of her own, which will exult in your successes, commiserate in your frustrations, and always call for your loyalty and support in the process of professional succession.

Many occupations aspire to the status of a profession, for in so doing they demonstrate their having been accorded by society the right of occupational self-government. A profession its own requirements for entrance, fashions the ethical code which binds together its members, and exercises the discipline by which the weak are corrected or ejected. The right to professional status is not easily won, and the history of the dental profession is replate with stories of heroic leadership and of attack by quacks and demagogues. As long as entrance to dental practice was open to anyone who went through the "preceptor-apprentice relationship, who read the chapters pertaining to dentistry contained in the textbooks in surgery, or who attended infrequent lectures in some medical schools," little control of quality could be achieved. Dentistry's qualification for professional status was the product of the joint action of the early dental societies and the dental schools. It is of interest to me to note that the Indiana State Dental Association was founded just a little over a century ago under the leadership of Dr. John F. Johnston, a name (though not a relation) still pro-

* Dr. Braden was the speaker at the Omicron Kappa Upsilon luncheon during the state meeting of the Indiana State Dental Association, May, 1964. He kindly granted permission to publish his talk in this issue of the Bulletin.

minent among today's dental leaders. In this connection, I should like to commend to you the masterful summary of the early years of the dental profession in the book written by our own Dr. Jack Carr detailing the history of the Indiana Dental College, founded in 1879, which in 1925 became the Dental School of Indiana University. The quotation above is taken from Dr. Carr's book.

One of the responsibilities of a profession is that it recruit its own members, and an important responsibility of each member of the profession is that he help to attract his successors. The problem of succession is always acute and is especially troublesome in the health professions right now when there is so much glamour attached to scientific jobs in the space program. I don't mean to suggest that dentistry and medicine are the only groups who are sensitive to this competition. Law schools, graduate schools of business, high school science supervisors, departments of physical education for women, residence hall managers, and deans of college faculties are all actively promoting the choice of their professions by young people in position to decide on the direction of their future careers. I do intend to stress, however, that a profession which cannot provide its own succession will die or come under a different kind of management, and that whether the next generation of young people will choose dentistry in sufficient numbers depends largely on the kind of image projected by your generation.

What kind of an image of dentistry can you project to attract tomorrow's youngsters? However sophisticated you may be today, remember how impressionable you were in your high school years. You looked up to professional people as men who had recognized their calling, had survived a tough schedule of preparation, and were now in position to engage in lives of service. I believe you will attract your successors if you will so deport yourself as to convince young people.

1. That you are called to serve your fellowmen. Youngsters are idealistic. They don't object to your getting rich, but they want to think of that as incidental to your doing something constructive. They will want to know that you are available for emergency calls at any hour, flexible enough in your schedule to tighten their braces on Sunday morning before the family leaves for a vacation trip, understanding enough to work them into a busy schedule when football practice made it impossible for them to come after school for an appointment.

2. That you are an artist whose skill is firmly rooted in science. They may not know whether or not you are a good dentist, but they will notice whether you are precise in your diagnosis and confident in the way you go about solving their problem. They will be impressed, perhaps equally, by your chairside manner and your reputation for good dental work. You will have to give constant attention to the improvement of your artistry and your skill.

3. That you are a "pro," respected by your colleagues, active in your dental association, serious about your responsibilities, dedicated to your work. A dentist who is a true professional never stops studying, reading, attending seminars and professional meetings, and doing research and otherwise learning as much as he can about his work. And,

4. That in citizenship and community stature you are a man to be looked up to. Not every man can do everything, of course, but in each part of the spectrum of constructive community enterprises there should always be a good sprinkling of dentists. Each of you should pick one or more activity from such things as church, rospital, little league, boys club, Citizens Council on Crime and Delinquency, YMCA, Kiwanis or Rotary, PTA,

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Refresher Courses and Symposia, 1964-65

The Postgraduate Committee of Indiana University School of Dentistry announces the following short courses and symposia will be offered in 1964-65. All short courses will be held in the Dental School Building, and symposia in the Indiana State Board of Health Building.

SYMPOSIA: (No registration and no fee required.)

September 30, 1964: SYMPOSIUM ON DENTAL ADMINISTRATION. Discussion on appointed book control, audit and cost analysis, including potential of commercial computing services. Guest speaker Dr. Paul Jaffe of New York.

October 7, 1964: SYMPOSIUM ON NEWEST CONCEPTS IN ORAL CANCER, ETIOLOGY, DIAGNOSIS, AND TREATMENT. Presented in cooperation with American Cancer Society and Indiana State Dental Association. Guest lecturers Dr. Charles A. Waldron of Atlanta, Georgia and Dr. George W. Greene, Jr., Buffalo, New York.

October 21, 1964: SYMPOSIUM ON BIOLOGIC EFFECTS OF CAVITY PREPARATION. Guest speaker D. Harold Stanley, Bethesda, Maryland.

December 2, 1964: SYMPOSIUM ON DENTAL PRACTICE ADMINISTRATION. Case presentation, patient education and use of visual aids will be discussed. Speakers for this symposium will be announced later.

REFRESHER COURSES: (Enrollment limited.)

October 19-23, 1964: FIXED AND REMOVABLE PARTIAL PROSTHODONTICS. Guest lecturer Dr. James Harrison, St. Louis, Missouri. Fee, $75.

March 16, 17, 1965: DENTAL HYGIENE SEMINAR. Guest lecturer Dr. Mary E. Fuque, Lafayette, Indiana. Fee $20.

April 5-9, 1965: DENTAL CERAMICS. Presented by members of the Crown and Bridge and Partial Prosthodontics Department. Fee $75.

April 26, 27, 28, 1965: MAXILLOFACIAL PROSTHESIS. Guest lecturer Dr. Arthur H. Bulbulian of Mayo Clinic. Fee $100.

May 27, 28, 29, 1965: Three-day participation course in CLASS V GOLD FOIL RESTORATIONS. Guest lecturer Dr. Bruce B. Smith of Seattle, Washington. Fee $75.

June 14-19, 1965: SEGMENTED ARCH TECHNIQUE IN ORTHODONTICS. Fee $250.

June 28, 29, 30, 1965: Three-day course in FIXED AND REMOVABLE PARTIAL PROSTHODONTICS AND DENTAL CERAMICS. Guest lecturer on Tuesday, June 29, will be Dr. Robert Willey of Los Angeles. The Tuesday presentation will be conducted as a symposium open to the general dental public. Monday and Wednesday sessions will be limited to graduate and postgraduate alumni of the Department of Fixed and Removable Partial Prosthodontics. Fee $75.

More detailed information regarding these courses and symposia will be mailed nearer the course time. If you wish more information at this time, please write the Dean, Indiana University School of Dentistry, 1121 West Michigan Street, Indianapolis, Indiana 46202.

Faculty Publications-1963

Each year the Alumni Bulletin carries abstracts of papers published by the dental school faculty. Although not entirely complete, the following group contains a major share of the publications for 1963. *R.W.P.*

Muhler, J.C.: Current Evaluation of Fluoride Therapy., J.Amer. Phar. Ass'n., March, 1963, p. 133.

This article reviews the current status of the uses of fluorides in the prevention of dental decay. Included is a discussion of their use in commercial fluoridation, dietary supplements, topical applications, prophylaxis pastes and dentifrices.

Heyde, E.J. and Muhler, J.C.: Pigmentation of Teeth Treated with Stannous Fluoride and Its Association with Caries Incidence and Oral Hygiene., J.Can.Dent.Ass'n., 29:514 1963.

Pigmentation of teeth in a group of 105 children aged 9-19 years was investigated. Subjects lived in an area whose water supply contained 0.05 ppm fluoride and received one application of an 8 per cent solution of stannous fluoride each six months throughout a three year period. In addition, they had been using a stannous fluoride dentifrice.

Three shades of pigmentation were differentiated on the surfaces of the teeth of subjects. Light brown pigmentation accounted for more than one-half the total number of surfaces. The amount of pigmentation and the per cent with poorer oral hygiene status was greater in subjects with a high caries experience. Poor oral hygiene was also found to be related to increased pigmentation. Black pigmentation, in particular, was observed to be more evident in subjects with a poor oral hygiene rating.

The surfaces most repeatedly affected by pigmentation were the occlusal surfaces of the posterior teeth. The labial surfaces of the anterior teeth were the next most frequently pigmented.

Muhler, J.C.: Effect of Using Different Clinical Examination Techniques in the Diagnosis of Caries Prevalence., J.Dent. Child. 30:3 1963.

A total of 904 children between the ages of 6 and 16 years, who resided in either a fluoride or non-fluoride city, were given a series of four thorough dental examinations, each one varying from the other by the number of experimental variables used. These variables were good light, mouth mirror, dental explorers and x-rays. The results show that considerable differences in results, concerning the diagnosis of dental caries, may be obtained when various combinations of these techniques of examination are utilized. Most important, these differences can influence the estimate of benefit derived from water fluoridation. By every criterion used to evaluate the clinical results, the children residing in the fluoride city had markedly superior dentitions, although the less exacting the dental examination, the less pronounced the difference between the two communities.

Mericle, M.R. and Muhler, J.C.: Studies Concerning The Antisolubility of Different Stannous Fluoride Prophylaxis Paste Mixtures., J.D.Res., 42; 21 1963.

Various prophylaxis mixtures and abrasives with or without stannous fluoride or sodium fluoride were evaluated in vitro for anti-solubility effectiveness against enamel dissolution, while lava pumice does not. When silicone in mineral oil was added to silica powder, the effectiveness was slightly greater. Prophylaxis mixture with various sodium fluoride concentrations afforded less protection than when stannous fluoride was used. In vivo data showed that aqueous stannous fluoride

mixed with the prophylaxis abrasive was more effective than when solid stannous fluoride was added to the non-aqueous abrasive containing system. The greatest antisolubility effectiveness resulted when a SnF_2 containing phophylaxis paste, a SnF_2 topical application and a SnF_2 containing dentifrice were used in combination.

Stookey, G.K., Crane, D.B. and Muhler, J.C.: Role of Skeleton and Kidney in Fluoride Absorption in Rat., Proc.Soc. Exp.Biol.Med. 113:366 1963.

Two studies were conducted in an attempt to learn more concerning the effect of bilateral nephrectomy and previous exposure to fluoride upon the rate of fluoride absorption in the rat. The first study was conducted in weakling animals having no previous exposure to fluoride and indicated that bilateral nephrectomy significantly decreased the rate of fluoride absorption by 42 per cent during the first six hours after fluoride administration. In the second study, this effect was substantiated using animals exposed to two different levels of fluoride. Previous exposure to 125 mg. of fluoride decreased the rate of fluoride absorption by 22 per cent and when the animals were also nephrectomized a further decrease of 14 per cent was noted. After exposure to 250 mg. of fluoride, the rate of fluoride absorption was decreased by a similar value of 22 per cent. Nephrectomy further decreased the rate of absorption and the combination of previous exposure plus nephrectomy decreased the rate by 65 per cent. These data suggest that when kidney function becomes impaired the body responds by decreasing the rate of fluoride absorption.

Stookey, G.K. and Muhler, J.C.: Relationship Between Fluoride Deposition and Metastatic Calcification in Soft Tissues of Rat and Guinea Pig. Proc. Soc.Exp.Biol.Med. 113:720 1963.

Study designed to investigate the relationship between the deposition of fluoride in various soft tissues of rats and guinea pigs and the levels of calcium and phosphorus in the tissues. The results suggest that when rats receive a stock corn diet there is a tendency toward an increase in the calcium, phosphorus and fluoride content of livers, hearts and kidneys "in the presence of supplemental fluoride." In the guinea pig, these relationships are not true in all of the tissues studied. When calcification inducing diets were used, in both types of experimental animals a marked increase in tissue calcium was accompanied by a marked increase in fluoride content in all soft tissues studied while changes in the phosphorus content were less pronounced.

Muhler, J.C., Shafer, W.G. and Clark, P.G.: Comparison of Effects of Thyropathic Drugs on Experimental Dental Caries and Salivary Gland Function. J.Den.Res. 42:768, 1963.

Studies were designed to investigate the effect of potassium thiocyanate on experimental dental caries and its effect on the salivary and thyroid glands in comparison with the known effects of propylthiouracil. The results suggested that potassium thiocyanate administered at a high dosage had no adverse effect on dental caries, in comparison with the cariogenic effect observed for propylthiouracil, even though the effect on the structure of the thyroid gland was similar to that induced by propylthiouracil. Furthermore, potassium thiocyanate did not induce an effect on the microscopic structure of the salivary glands similar to that of propylthiouracil. At a lower dosage level, potassium thiocyanate significantly increased dental caries. There was no decreased salivary gland function noted in the animals receiving potassium thiocyanate, although those animals receiving propylthiouracil had a reduction in salivary flow and an increase in salivary viscosity. These collective

studies indicate that some mechanism other than the general induction of hypothyroidism by chemical goitrogens is responsible for this alteration in caries incidence and salivary function as found in propylthiouracil-treated animals.

Guttuso, J.: Histopathologic Study of Rat Connective Tissue Responses to Endodontic Materials, Oral Surgery, Oral Medicine, and Oral Pathology, Vol. 16, No. 6, June 1963.

An investigation of the connective tissue responses to ten commonly used or recently advocated endodontic materials was conducted. A controlled amount of the test material was surgically placed into the subcutaneous connective tissue in three areas of adult make Wistar rats. The materials studied included three root canal filling materials (AH-26, N_2, and Riebler resin), four root canal sealers (Diaket, Kerr's antiseptic pulp canal sealer, Proco-Sol root canal cement, and Tubli-Seal root canal sealer), and three intracanal drugs (Micro-Cide A absorbent points and solution, N_2 Medical, and PBSC). Untreated sterile paper points were used as a control for the Micro-Cide A absorbent points. Following the test periods of 2, 16, and 32 days, histopathologic sections were prepared and studied.

Healey, H.J.: A Critical Analysis of Various Methods and Materials Used in The Restoration of the Treated Pulpless Tooth, Procs. 3rd Intl. Conf. On Endo., 1963, University of Penn. Press.

In the initial evaluation of a pulp involved tooth for endodontic therapy, one of the factors which should be considered is the possibility for the adequate restoration of the crown of the tooth subsequent to therapy. Nothing is gained if a textbook result is obtained in returning the tooth to a state of health by endodontic therapy if conditions are such that the tooth cannot be returned to useful function by restorative procedures. This paper presented a general discussion of the necessary restorative considerations incident to the returning of the treated pulpless tooth to function. It also carefully delineated the advantages and disadvantages of the various materials used for this restorative purpose.

Patterson, S.S.: *In Vivo* and *In Vitro* Studies of the Effect of the Disodium Salt of Ethylenediamine Tetra-Acetate on Human Dentine and Its Endodontic Implications, Oral Surgery, Oral Medicine, And Oral Pathology, Vol. 16, No. 1, January, 1963.

This publication was a report of an investigation conducted to determine the effectiveness of the use of disodium ethylenediamine tetra-acetate (EDTA) in various dilutions in facilitating the instrumental cleansing of the root canals of teeth as a result of its decalcifying action on the dentinal walls of the canals.

Solutions of 10, 3, 1, 0.3, 0.1, and 0.03 per cent EDTA were used in the study. Incidental limited microbiologic testing showed inhibition of growth to bacteria by the EDTA, and it was evident that the material caused an alteration of frictional resistance to the abrasive action of root canal instruments.

Injection and implants placed in rats were studied as to the tissue responses to different dilutions of EDTA—only minimal irritation resulted from each solution.

A clinical study of 200 cases indicated EDTA to be an effective drug for the instrumental preparation of root canals.

Starkey, P.E. and Doehring, G.: Evaluation of an Automated Method for Technic Instruction of Dental Students. J.Dent.Ed. 27; No. 4 1963.

In this study an attempt has been made to determine whether an automated presentation of instruction for a laboratory exercise in pedodontics is as effective as the more conventional methods of instruction. Members of the 1962-63 Junior

Class of the Indiana University School of Dentistry participated in this study. The class was divided into three groups equated with respect to class standing. Groups I and II consisted of 27 students each, and Group III contained 25 students. Each group was given a different type of instruction before they constructed a band and loop space maintainer. Group I received automated instruction through the use of a LaBelle Maestro Projector which incorporates a tape recorder and an automatic slide projecter. Spoken material was recorded on one channel of the tape, and the inaudible signals imposed on another channel activated the slide-changing mechanism of the projector. Thus, at any time during the spoken commentary, an illustrative slide could be projected. Group II received a "live" lecture illustrated with slides from an instructor. Group III received instruction from three demonstrators in a laboratory situation, which consisted of a detailed, step-by-step actual demonstration of the technic procedure. The laboratory exercise was completed in two three-hour periods, and the three groups worked in separate laboratory areas. Each student in each group was given a 4 page mimeographed outline of the step-by-step procedure for fabricating the band and loop space maintainers. As an additional aid, each group was provided with identical sets of demonstration models, to which specific reference was made in the laboratory outline. At the end of the second period, as at the end of the first, each piece of technic, regardless of its stage of completion, was placed in a box marked only with the student's class roster number and the work collected. Each appliance was graded by a member of the department of pedodontics who had not participated in the study and who had no knowledge of the instructional conditions under which a given appliance had been fabricated.

The highest average grade was obtained by the students in Group I. The students in Group III obtained the lowest average grade. An analysis of variance was computed for statistical evaluation of the differences among the groups. The resulting F ratio of 1.448 demonstrated that the differences among the group averages were not significant statistically. Essentially, then the method of automated instruction was at least as effective as the more conventional methods in preparing the students for the laboratory exercises and a number of possible advantages can be cited.

Starkey, P.E. and Shafer, W.G.: Eruption Sequestra in Children, J. Dent. Child. 30:84, 1963.

The eruption sequestrum is a tiny fragment of non-viable bone overlying an erupting permanent molar, visible clinically and roetgenographically, apparently formed by isolation and separation of the central area of bone over the occlusal surface from surrounding bone as the tooth erupts. It is of little clinical significance.

Sprague, W.G. and Shafer, W.G.: Presence of Actinomyces in Dentigerous Cyst. J. Oral Surg., Anesth. and Hosp. D. Serv. 21:61, 1963.

Two cases have been reported on the presence of actinomyces within the lumen of a dentigerous cyst with no evidence of an external communication with the oral cavity.

Swenson, H.M.: Success or Failure in Periodontal Surgery. J.A.D.A.: 67: 195, August 1963.

A gingivectomy in itself does not assure success in the treatment of a patient with advanced periodontal disease. The patient must be evaluated carefully. All the etiological factors must be identified, reduced or eliminated. Bone may have to be recontoured and soft tissue defects corrected. Postoperatively the patient must

be taught to care for his mouth and be recalled for periodic check-ups. Observance of these steps will reduce the number of failures in periodontal treatment.

Swenson, H.M. Homecare Procedures in Oral Hygiene." The American Dental Hygienist Association, Volume 37, No. 2 Second Quarter 1963.

Of equal importance to the efficient scaling and polishing of the teeth by the dental hygienist is the instruction to the patient with regards to procedures which are to be followed at home. The various toothbrushes used in homecare procedures are discussed and the proper methods of motivating the patient is emphasized. The importance of auxiliary aids such as stimudents and other forms of interdental stimulation are discussed. No matter how well the therapy has been performed the results are in the hands of the patient. Cooperation can be achieved if homecare procedures are presented to the patient with enthusiasm, understanding, and patience.

Higgason, J.D., Swenson, H.M. and Muhler, J.C. The Effects on Gingival Tissue of Albino Rats of Concentrated Solutions of Topically Applied Sodium of Stannous Fluoride. Journal of Periodontology, 34, July, 1963.

The topical effects of concentrated solutions of sodium or stannous fluoride on the gingival tissues of the albino rat have been studied. Concentrations of sodium fluoride used were 2.0% and 4.0%, while the concentration of stannous fluoride varied from 0.4% to 50.0%. Single, as well as multiple applications were made and representative animals were sacrificed at intervals of 1, 7, 14, 28, and 35 days. Microscopic examination of hematoxylin and eosin sections of gingivae revealed no response after the application of the sodium fluoride solution, while stannous fluoride resulted in a darker staining phenomenon in the superficial layer epithelium. Concentration of the fluoride solution had only minimal influence on the intensity and/or duration of this response. Multiple applications showed but little, if any, influence on the reaction. In no case was the normal cellular morphology altered.

Van Huysen, G.: Histology of the Periodontium Following Tooth Movement. Zaki, A.F.: I.D.R. 42: 1963.

Twenty four albino rat's first and second maxillary molars were separated on one side only by placing a piece of stretched 2 mm wide rubber dam between them. Six rats were sacrificed after each of the following periods: 6, 12, 24 and 72 hours. Serial histologic sections were cut through the affected quadrants as follows: in three animals the sections were cut in a mesiodistal; in two animals they were cut in a horizontal; and in one rat in a buccolingual direction. All sections were stained with hematoxylin and eosin. The application of this type force produced a tipping movement. There was a non-inflammatory type injury (hyalinization) of the periodontal ligament in the pressure areas. This was associated with undermining bone resorption. When the periodontal ligament was not deprived of its normal level of vitality resorption was confined to the periodontal ligament surface of the alveolar bone. This was followed by alveolar bone absorption, repair and tooth movement. Mesenchymal type tissue with capillary proliferation were the predominating features associated with bone and root surface resorption. There was compensating bone apposition of the alveolar bone on the tension side.

Swartz, M.L., Phillips, R.W., Norman, R.D. and Oldham, D.F.: Strength, Hardness and Abrasion Characteristics of Dental Cements. J.A.D.A. 67 1963.

A series of experiments were conducted in order to compare various types of dental cements on the basis of their strength, hardness and ability to resist abrasion. The effect of employment of

additives, such as amalgam alloy filings, glass fibers and cotton fibers were included. Silicate cements proved to be superior to zinc phosphate cements and to zinc oxide-eugenol cements with regard to all three properties. Some differences were noted between commercial brands of all three types of materials. The use of additives with zinc oxide eugenol cements tended to increase compressive strength. Although addition of alloy filings to zinc phosphate cement had a negligible effect on strength and hardness, some increase in abrasion resistance was noted. Although there was a tendency for stronger and harder materials to be more resistant to abrasion, there were a number of exceptions.

Norman, R.D., Swartz, M.L. and Phillips, R.W.: Studies on Film Thickness, Solubility and Marginal Leakage of Dental Cements. J.D.Res. 42, 1963.

The film thickness, solubility and sealing characteristics of commercial brands of zinc phosphate, silicate and zinc oxide eugenol cements were investigated. Tests were also conducted on some of the materials when modified by the addition of amalgam alloy particles, cotton fibers and glass fibers. The solubility of the zinc phosphate cements was generally greater in dilute acetic acid than either silicate or zinc oxide-eugenol cements. Silicates, however, were more soluble in citric acid. Zinc oxide-eugenol materials displayed the lowest solubility in water. There was less penetration of the margins of zinc oxide-eugenol restorations by a radioactive isotope than of the margins of either zinc phosphate or silicate restorations. Generally, silicate displayed better sealing ability than did zinc phosphate cement. The film thickness of all materials fell within an acceptable range. Film thickness was somewhat affected by the additives.

Phillips, R.W.: Dental Cements: A Comparison of Properties. J.A.D.A. 66: 1963.

The various types of cements which are employed for cementation have been analyzed from the standpoint of minimizing patient discomfort. Such an analysis must also take into consideration the physical properties of the cement and certain biological considerations. Desensitization cannot be isolated from pulpal reactions, marginal leakage and other inherent characteristics associated with the cement.

Zinc oxide and eugenol is decidedly superior to other cements in its palliative effect on the pulp and in patient comfort. Whereas solubility is low and initial adaptation to the cavity walls unusually good, its low strength and lack of resistance to abrasion confine its use to restorations not involving high stress or attrition. Properly formulated, it is the cement of choice probably for selected restorations.

Although a silicate or silico-phosphate cement is superior to zinc phosphate in terms of strength, solubility and the anticariogenic effect from the fluoride present, greater acidity and inferior handling characteristics limit their use.

Although ideal from a manipulative standpoint, zinc phosphate cement is irritating, particularly in the deep cavity or wherever caries or instrumentation have been extensive. In those cases a cavity varnish, used in conjunction with this type material, may well be a valuable asset in minimizing subsequent pulpal injury and discomfort.

Schnell, R.J., Mumford, G. and Phillips, R.W.: An Evaluation of Phosphate Bonded Investments Used with a High Fusing Gold Alloy. J.Pros.Den. 13:1963.

Three phosphate bonded investments, Ceramvest, Ceramigold and H.F.G., were evaluated for their suitability for use with Ceramco I alloy. Six different dies were employed and 300 castings were made including those made with three conventional gold alloys and two gypsum bonded

investments which served as controls. Reproducibility was not as good with the phosphate bonded investments as with gypsum bonded investments. Each of the phosphate bonded investments had certain advantages and disadvantages. The expansion of all three was adequate for use with the Ceramco I alloy and conventional dental casting preparations. There was greater range in expansion with Ceramvest and Ceramigold than with H.F.G. Working time was shorter with the phosphate bonded materials than with gypsum bonded ones although adequate for completion of the investing procedure. Some difficulty was encountered with Ceramigold in that dilution of the special liquid to secure a reduction in expansion resulted in a rough casting. However, if the liquid was not diluted excessive expansion occurred. Surface roughness was less of a problem with Ceramvest while H. F. G. produced gold surfaces comparable to those obtained with a gypsum investment. It was possible to adjust the expansion of any of the three investments to meet the requirements of the majority of castings which would be made in a dental office.

Phillips, R.W.: Report of The Committee on Scientific Investigation of the American Academy of Restorative Dentistry. J.Pros.Den. 13, 1963.

This report is a comprehensive review of pertinent research conducted during the preceding year in areas of dental materials, periodontology, caries, instrumentation and pulp pathology and occlusion. As is true in all sciences, a certain segment of the literature in dental research is a recirculation of data and some represents research done for the sake of doing research. However, it was felt that there was a general upgrading in the quality of the work done during the year of 1962. It was particularly notable for the increased integration of basic disciplines into the framework of applied dental research with continuing stress on correlation of clinical investigation with laboratory findings.

Kafalias, M.C., Swartz, M.L. and Phillips, R.W.: Physical Properties of Selected Dental Resins, Part I. J.Pros.Den. 13, 1963.

Four commercial resin veneering materials were evaluated on the basis of hardness, resistance to abrasion, staining susceptibility, color stability and tissue reaction. The materials included were a conventional methyl methacrylate resin, an epoxy resin, a vinyl-acrylic copolymer and the fourth was a methyl methacrylate with a filler which is cured under vacuum. No one material was superior to the others in all of the properties measured. The epoxy demonstrated the highest hardness and greatest resistance to tooth brush abrasion while the acrylic materials were somewhat more susceptible to abrasion than the vinylacrylic copolymer. The epoxy showed the greatest color change when subjected to ultra violet light. The epoxy material was more readily stained by lipstick than were the other resins while the methyl methacrylate with a filler was more heavily stained by cobalt sulfide and the methyl methacrylate by methylene blue. Tissue tolerance to all materials was comparable.

FitzRoy, D.C., Swartz, M.L. and Phillips, R.W.: Physical Properties of Selected Dental Resins, Part II. J.Pros.Den. 13, 1963.

A second phase in the evaluation of various types of resin veneering materials dealt with the adaptation and bond strength of the resin to the gold, water sorption and solubility. The epoxy resins gave evidence of good bonding to the metal both by a tensile test and by isotope penetration test. When placed under tensile load the epoxy resin fractured before failure of the bond between the resin and gold. The methyl methacrylate material cured in water demonstrated a rel-

atively good bond by both test procedures. Vacuum processing of neither the plain methyl methacrylate nor of the filled methyl methacrylate improved adaptation. Actually the isotope infiltration at the resin-gold interface of these specimens could be described as gross. The vinyl-acrylic copolymer could be separated from the gold by a relatively low tensile force although the isotope test indicated good adaptation. The vinyl-acrylic copolymer exhibited the lowest water sorption both in 24-hour and 200 day tests. The eopxy resin gained water more slowly than the acrylics but after 200 days the water sorption of the two materials was comparable. Solubility of all of the materials was quite comparable and none exceeded the limits for denture materials set by the American Dental Association.

Regan, J.E. and Mitchell, D.F.: Roentgenographic and Dissection Measurements of Alveolar Crest Height, J.Am. Dent.A. 66:, March, 1963.

To test the accuracy of roentgenographic interpretation of alveolar crest height, 115 gross and roentgenographic measurements were made from 28 quadrants of jaws from cadavers. The amount of error was least in the lower posterior region (averaging 0.42mm.). Roentgenographic measurements, as compared with gross measurements of alveolar crest height, were second most accurate in the upper anterior region, followed by the lower anterior and upper posterior quadrants. The largest error was 1.6 mm., and only 11 of the 115 values were more than 1.0 mm. An accurate idea of alveolar crest height seems to have been obtained from bisection-of-the angle roentgenograms.

Regan, J.E. and Mitchell, D.F.: Evaluation of Periapical Radiolucencies Found in Cadavers, J.A.D.A. 66:, April, 1963.

A roentgenographic survey was made of mandibles and maxillas of 57 human cadavers to locate bone pathoses. Although 289 teeth were found, only 18 apical radiolucencies were detached. These were dissected. A comparison was made between the roentgenographic findings and the morphology of the bone destruction. The buccal or labial cortical plate over the radiolucency usually was perforated, although this could not be detected by the roentgenogram alone. If this plate was not perforated, it was thinner because of the resorption of its inner surface and the junctional trabeculae were destroyed. The size of the radiolucency did not necessarily indicate the presence or absence of cortical bone. The amount of bone destruction could not be determined accurately from the roentgenograms. No differences were noted between the lesions found in the maxilla or mandible.

These findings may prompt more use of the aspiration technic to determine preoperatively the contents of such lesions, if liquid, and thus aid in establishing a diagnosis.

El-Kafrawy, A.H. and Mitchell, D.F.: Pulp Reactions to Open Cavities Later Restored with Silicate Cement, J.D.Res. 42:, May-June, 1963.

Class V cavities of varying depths were prepared in 83 teeth of 4 monkeys approximately 38 months of age, with mixed dentitions. The cavities on the right side were left exposed to the oral fluids for 3 months and then restored for either 1 or 2 weeks with silicate cement. The teeth on the left were prepared and restored immediately with the same cement and were removed after 1 or 2 weeks. Serial paraffin sections of 57 deciduous and 26 permanent teeth were prepared and studied microscopically.

The following conclusions were drawn from this study:

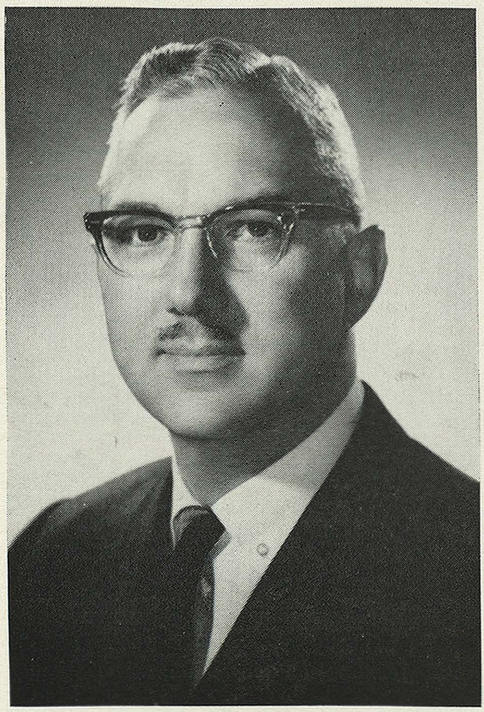
The deeper the cavity, the greater was the amount of secondary dentin.

(Continued on page 49)

Dean Hine reports that...

Doubtless all alumni now have heard that Dr. Charles L. Howell assumed the responsibilities of the deanship of Temple University School of Dentistry on July 1 of this year. Dr. Howell served the State of Indiana well for many years as Director of the Dental Division of the State Board of Health and for the last three years as Assistant Dean of our Dental School. While we all regret the loss of Dr. Howell's services, we are gratified that he has been given such an excellent opportunity to serve dentistry. Dr. Howell was an excellent choice to succeed Dr. "Jerry" Timmons, who was graduated from Indiana University School of Dentistry in 1925.

The increasing complexity of the activities of the Dental School faculty has made it desirable to add to the administrative personnel of the school. As has been reported previously, graduate education in Indiana has developed very rapidly; in the fall of 1964, 41 new graduate students will be admitted to full time courses of study in twelve different departments. Consequently, Dr. Ralph E. McDonald has been appointed as Assistant Dean in charge of Graduate and Postgraduate Education. He will continue to serve as Chairman of the Department of Pedodontics.



Dr. Ralph E. McDonald, Assistant Dean in charge of Graduate and Postgraduate Education.

Dr. McDonald holds B.S., D.D.S. and M.S. degrees from Indiana University and has been a full time member of the faculty since 1946. He is a well-known leader in pedodontics, having served as President of the American Society of Dentistry for Children, and is currently Vice President of the American Academy of Pedodontics. He is a diplomate of the American Board of Pedodontics and served for seven years as a member of the examining board. He is also a Past President of the Indianapolis District Dental Society. Dr. McDonald is author of a textbook on pedodontics and co-editor of other books.

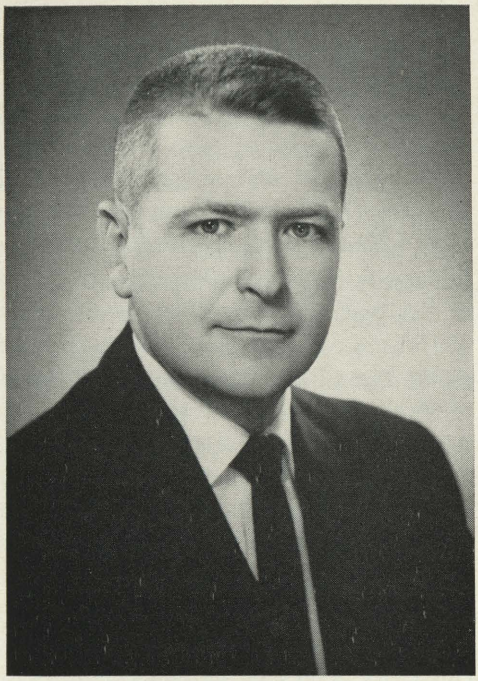
Dr. Robert L. Bogan, Assistant Professor of Crown and Bridge-Partial Denture, has accepted an appointment as Assistant to the Dean in charge of Student Affairs and in general will carry on the same activities formerly assigned to Dr. Howell. Dr. Bogan was granted a B.S. degree in Zoology from Butler University and the D.D.S. degree from Indiana University. He is currently completing his work for a Master of Science Degree in Dentistry. Dr. Bogan conducted a private practice in the Hume Mansur Building for seven years while serving as a part time faculty member in the Prosthetics Department

and later in the Crown and Bridge Department. In 1961 he joined the faculty on a full time basis to assume the responsibility for the supervision of the Removable Partial Denture Clinic.

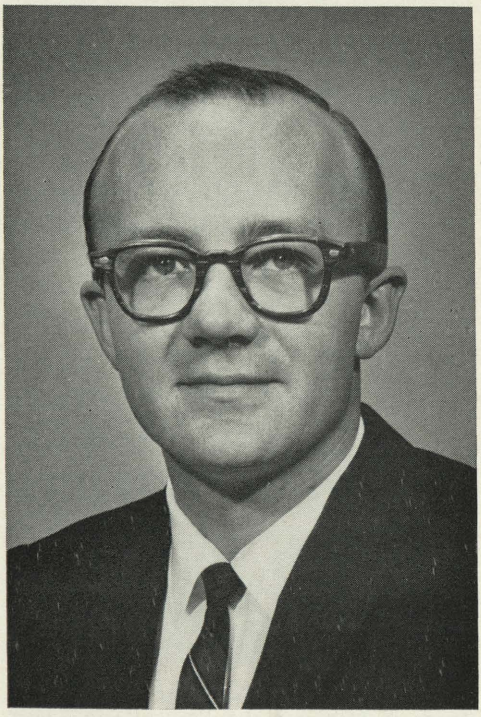
The Dental School has also been assigned a Business Manager, Mr. Michael R. Curtis. Mr. Curtis is a native of Martinsville, Indiana, and was graduated from Indiana University School of Business with a B.S. degree in Business Administration in 1958. Following a tour of duty in the United States Army, he joined the Medical Center staff and has been Assistant Manager of Patient Accounts in the Accounting Department for several years. The fact that the budget of the Dental School has increased remarkably in the past decade proves the need for a Business Manager.

* * * * * *

The Admissions Committee for the Dental School reports that they have selected another capacity class to be enrolled in September. There were at least a score of applicants whose records would have justified an acceptance in 1960 who could not be admitted this year because of better qualified applicants. The average freshman this year will have completed about 110 hours and have a cumulative average of somewhat above 2.7 (3=B). Since the other classes are also larger than in the past, several new faculty members internes and residents have been appointed. These include Dr. Travis Bauer (Class of 1964) in the Operative Department; Drs. Curtis Clark (1964) and John Lund (1964) in Crown and Bridge-Partial Denture; Drs. Lloyd A. Delman (1957), Philip Giltner, III (1948), Carl Edds (1957) and Karl Glander (1956) in Orthodontics; Drs. Erick Erickson (1946), Maurice Keller (1956), Bernard Kerkhove, Jr. (1962) Herbert R. Klein, (1962), David L. Morgan (1964), and Robert J. Musselman (1964) in Pedodontics; Dr. Raymond Price (Class of



Dr. Robert L. Bogan, Assistant Professor of Crown and Bridge-Partial Denture.



Mr. Charles R. Curtis, Business Manager

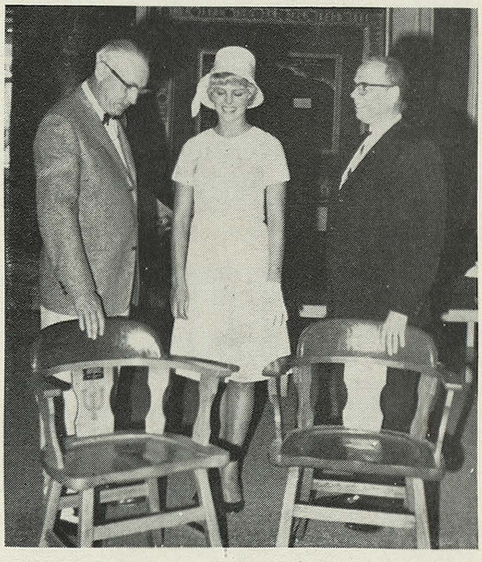
1951) in Basic Sciences; Drs. Thomas Mullaney (D.D.S. Loyola 1961) and Joseph A. Rocco (D.D.S. Western Reserve 1963) in Endodontics; Professor George Stookey (M.S.D. Indiana University 1962) in Preventive Dentistry; Bernard Weinberg (M.A. Indiana University 1963) in Oral Rehabilitation; Dr. John Challman (Class of 1964) in Oral Surgery, and Mrs. Constance Hamilton (Dental Hygiene Certificate, I.U., 1963) in Dental Hygiene.

Alumni may be interested to know that much of the work of the dental faculty is carried on by committees. Particularly active this past year has been the Committee on Teaching (Dr. Paul Starkey, Chairman, Drs. Burstone, Dykema, Gilmore, House and Standish). This committee has had several meetings and arranged for two general faculty meetings to discuss teaching methods and techniques. They arranged to have exhibits of "teaching machines" and teaching aids of various types. Another active committee this year was the Curriculum Committee (Dr. Ralph McDonald, Chairman, Drs. Bailey, Healey, Hine, Howell, Johnston, Muhler, Shafer and Swenson), which is studying the feasibility of adopting the quarter system for the Dental School and seeking methods of improving the Dental School curriculum. The Student Loan Committee (Prof. Ralph Phillips, Chairman, Drs. Hohlt, Hine and Mitchell) has been very active in the last few months since there has been an increase in the availability of funds for this purpose. There has always been a great demand for student loans. The Refresher Course and Symposia Committee (Dr. John F. Johnston, Chairman, Drs. Bailey, Bogan, Gregory, Howell, McDonald, Mitchell), has arranged another series of refresher courses and symposia for this next year which Prof. Phillips reports will be published elsewhere in this issue.

We are pleased to announce that over fifty of the Memorial chairs have been purchased by alumni in recent weeks. Most of these have been placed in our Dental Library and various offices throughout the Dental School. The money from the sale of these chairs has been spent to good advantage to buy equipment for the Dental School. Alumni who have not yet purchased a chair should get in touch with Dr. George Myers, Logansport, or Mr. Frank Jones, Bloomington, immediately.

The President of the 1964 graduating class made a most welcome announcement at the Honors Day program on June 5. He reported that the senior students had voluntarily signed a pledge for $150 each to the Student Loan Fund. This voluntary action will be appreciated by students in many future classes and the Senior Class is to be commended for taking this action.

Other classes should follow the fine example set by the Class of 1964!



Dr. George Myers and Dr. Emory Bryan with Miss Marsha Pinkstaff, Miss Indiana, 1963, at state dental association meeting. Alumni exhibit included memorial chairs.

Honor Day Awards

The Honor Program for the dental seniors and the dental hygiene graduates was held in the Student Union Building on Sunday, June 7. The program was conducted by Dean Maynard K. Hine and a list of the awards and the recipients follows:

American Academy of Dental Medicine: John Legier

American Academy of Gold Foil: Maurice Lord

American Society of Dentistry for Children: Joseph E. Ellis

American Academy of Periodontology: Charles Crawford

American Society of Periodontists: John A. Lund

Midwest Society of Periodontology: Gary T. Barksdale

Lactona Award in Periodontics: Stephen L. Wilson

American Association of Oral Roentgenology: James B. Crossen

Radiology Interpretation Awards: 1st place, Curtis Clark, 2nd place, Arthur Kennicker, 3rd place, Chester Buckner

American College of Dentists Essay Award: Michael O'Halloran

American College of Dentists Award for improvement: James C. Springer

International College of Dentists Award: David A. Bleeke

Indiana Society of Oral Surgeons: Maurice Lord

Anatomy Department: Melvin C. Moll, Jr.

Indiana Society of Pedodontics: Erick Erickson

Prosthodontics Award: A. M. Grasso

Robert G. Botkin Award in Partial Prosthodontics: Kenton Hartman

John W. Geller Award in Research: Curtis Clark

Dental Laboratories of Indiana: (Partial Denture) Lael Long, (Crown and Bridge) Nicholas Narcowich, (Complete Denture) Travis Bauer

Ert J. Rogers Award in Crown and Bridge: Tom Van Osdol

Alpha Omega National Chapter: Scott Polizotto

Extra-curricular Activities Award: Joseph Fox

C. V. Mosby Awards: (Oral Pathology) Kenton Hartman, (Endodontics) Curtis Clark, (Prosthetics) R. L. Lawrence, (Dental Hygiene) Ruth Webster, (Operative Dentistry) Scott Polizotto

Special Essay Award (Block Drug Co.): Jeffrey Landrum

Senior Essay Awards: 1st place, Curtis Clark, 2nd place, John Legier, 3rd Place, Kenton Hartman

Omicron Kappa Upsilon certificate to sophomore student: Lawrence Ansbaugh

Rossya Kaufman Award: Kathleen Heath

Central Indiana Dental Hygiene Association: Sharla Klahr

Indiana State Dental Hygienists Association: Sara Draves

Dental Hygiene Honorary Sorority: Sandra Stamper

Interfraternity Council plaque for scholarship: 1st place, Delta Sigma Delta, 2nd place, Psi Omega

Omicron Kappa Upsilon certificates: Curtis Clark, Kenton Hartman, Gordon Kelley, Lael Long, Maurice Lord, Nicholas Narcowich, Scott Polizotto, Roger Sullivan, Thomas Van Osdol, Jon A. Walker

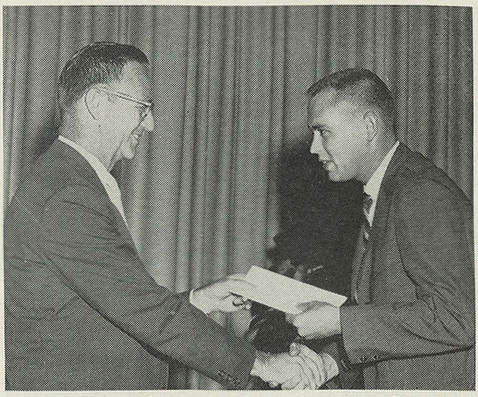
Fourrageres to students with High Honors: Kenton Hartman, Scott Polizotto

With Honors: Curtis Clark, Gordon Kelley, Lael Long, Maurice Lord, Nicholas Narcowich, Roger Sullivan, Thomas Van Osdol, Jon A. Walker

Dental Hygienists with Honors: Kathleen Heath, Sandra Stamper

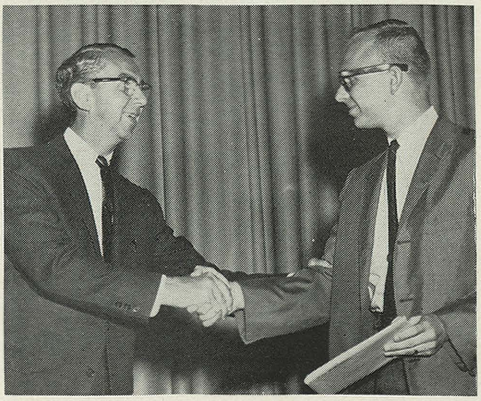
Graduating class of dental hygienists, 1964

Dr. Healey and Curtis Clark



Dr. Swenson and Gary Barksdale

Dr. Oldham and Tom Van Osdol



Dr. Bailey and Ross Lawrence

Dr. Mellion Honored

Dr. Gilbert LeVine Mellion, Class of 1943, of Rocky Hill was awarded an honorary membership in the Connecticut Pharmaceutical Association at the 88th annual mid-winter meeting of the association at Waverly Inn, Cheshire, on February 26, 1964. This is only the second time such an award has been presented in the history of the Connecticut Pharmaceutical Association.

Well known in dental and pharmaceutical circles for many years, Dr. Mellion was voted this award for his outstanding service and dedication to the mutual interests of both professions in the performance of the highest level of health service to the citizens of Connecticut.

Dr. Mellion has served as chairman of the Joint Dental-Pharmaceutical Committee since its founding in 1958. He has represented the Connecticut State Dental Association on the Connecticut Nutrition Council for over 10 years and was Chairman of the Council, 1956-1961. He also represents the dental profession of Connecticut on the Advisory Nutrition Committee of the Connecticut State Medical Society.

Dr. Mellion is a past president of the Hartford Chapter of the University of Connecticut Alumni Association and served two years as president of the National University of Connecticut Alumni Association. He graduated from Indiana University School of Dentistry in 1943 and is presently in private dental practice in Rocky Hill, Conn. Dr. Mellion is the author of a number of articles published in the dental literature.

The award was presented by Sydney Leventhal of New Haven, President of the Connecticut Pharmaceutical Association.

Dr. Sidney Leventhal, President of the Connecticut Pharmaceutical Association, presents award to Dr. Mellion.

I.S.D.A. Loan Program

The Indiana State Dental Association has established a Student Loan Program.

This program was created by action of the Association's House of Delegates in May 1963. A special $15 assessment of each active member payable over a three-year period provides the basic funds. The program has been set up on a guaranteed-loan basis with an Indianapolis bank.

Loan funds for dental school expenses at a low rate of interest are available to deserving undergraduate dental students who are residents of Indiana and enrolled in an accredited dental school in the United States.

Tentative arrangements provide for a student to borrow up to $1,000 per year for three years at a simple interest rate of 5% on the interim note. Payment on the loan is not required until twelve months after graduation, and the charge on the payout note will be 3½% add-on interest.

Dr. Hala Henderson Visits IUSD

Dr. Hala Zawawi Henderson received her MSD degree (Pedodontics) from Indiana University in 1958. Upon the completion of her graduate program, she returned to Bombay, India, where she joined the staff of the dental school and taught for nine months. During this time she organized a Department of Pedodontics.

For the past four and a half years Dr. Henderson has been in Kuwait, Arabia, and presently is in charge of the school dental health program there. She and seven other dentists have in their care the dental health of approximately 70,000 school-age children. Two years ago Dr. Henderson conducted a mass survey of the clinical problems in school children, covering about 30,000 boys and girls aged six to sixteen years and found that about 80 per cent needed dental treatment. With the small staff available, she could not hope to treat adequately such a large group of children, so she appealed to the Health Ministry for additional help and was promised five dentists.

Ten or fifteen years ago there was no great problem of caries in the teeth of the inhabitants of Kuwait. Two major factors were responsible: (1) At that time most of the water supply came to Kuwait in ships or dhows from Iraq. This water had a high natural fluoride content. In some areas water was taken from wells which had an even higher fluoride content, as evidenced by fluorosis often found in the teeth of older people from these areas. (Now no one uses well-water, so the children do not have this ailment—instead they have dental caries.) (2) At that time the people's diet contained little or no refined sugars.

At present, the water supply comes from a large sea-water distillery plant. This water does not contain fluoride naturally. Also, candies, soft drinks, and other foods containing refined sugar are available and frequently consumed by children. These two factors: the change in water supply and change in diet, have caused the high incidence of dental caries in children in Kuwait.

For the past four years Dr. Henderson has been trying to persuade the Health Ministry to add fluoride to the water in the distilling process. Recently, this request was granted and now there is needed only the approval of the National Assembly (Government of Kuwait) and the installation of the equipment. A great deal will have been accomplished if fluoride is added to the water as it should help compensate for the lack of staff to take care of all the children needing dental treatment.

To combat the problem of the changed diet including refined sugars and to encourage better dental health in general, Dr. Henderson and her staff members present a dental health program every two or three months under the auspices of a weekly medical television program.

Hala and her husband, Walter, indicated that they enjoyed very much their visit to the Dental School and hope to come back again in two years.

Dr. David Mitchell chats with Dr. Henderson.

Alumni Association News

Dr. Emory W. Bryan, President

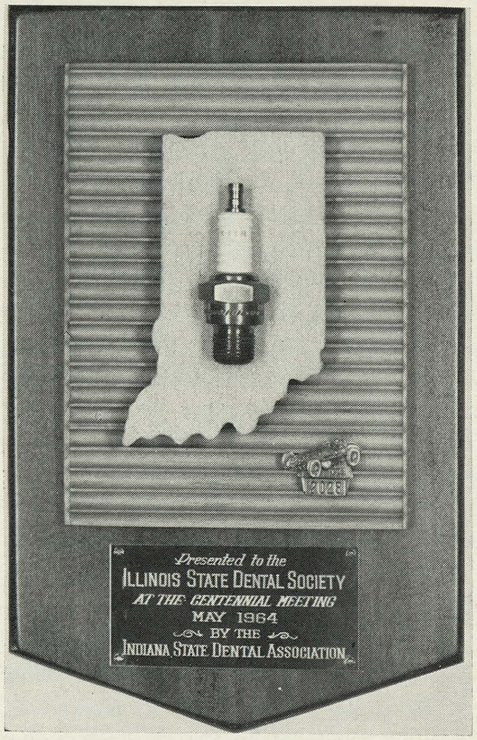
This year, as your president, has been a real honor and a privilege for me to serve you. The assistance and cooperation of all the officers, board members, and all the other interested people has been gratifying. Without their help along with that of the alumni office in Bloomington this job for me would not have been possible. My sincere thanks go to all of you who have helped in any way to support our association.

By now it is general knowledge that Gerry Timmons has retired as dean of Temple Dental School. With his retirement goes our congratulations to Gerry for his success there and best wishes for a long and happy retirement—he has earned it. His successor is our own Chuck Howell who we here in Indiana will miss very much. Gerry's shoes will be hard to fill, but if any one can fill them Chuck can. Congratulations and best wishes to him. I would like to repeat that which he has said many times—if you are ever in Philadelphia go out to the school to see him.

Our major projects for the year seem to be progressing well. There had been some speculation that the drive for funds for special equipment for the dental school would affect the Varsity Club drive. This I would question since these are two separate interests. If you don't feel inclined to support both projects please back your Association and your dental school by responding to one of these causes.

The membership of our organization reached a record high last year and I'm hoping that this trend will continue. Let me encourage those alumni who do not belong to join. We have strength in numbers and I'm sure that Dean Hine and the dental school can use all the strength we can give.

Since I am a member of the class of 1940 I feel an urge to advise all the other members that next year will mark our 25th anniversary—as if they could forget it. Start planning now for a big reunion.



This plaque was presented to the Illinois State Dental Society on May 12, 1964 by Dr. Maynard K. Hine, Dean of Indiana University School of Dentistry and Trustee of the 7th District of the American Dental Association, at the request of Dr. Rollie Bennett, President of the Indiana State Dental Association.

The plaque, which was prepared by Dr. Hine, consists of a spark plug from the car driven by Mr. Parnelli Jones which won the 500 mile race in 1963 mounted on a map of Indiana made from Indiana limestone on a section of an instrument tray from a dental cabinet used for half a century by a Hoosier dentist, Dr. C. L. Hine (father of Dr. Maynard K. Hine) who practiced in Tuscola, Illinois. In the lower right hand corner is a badge used by officials for admission to the Memorial 500-Mile Race. The base of the plaque is Indiana birch.

Dental Hygiene

A. Rebekah Fisk, Director

Graduation day 1964 dawned as usual, clear but hot. During the program the medical students set off the balloons and something new—pigeons—both of which ascended quickly into the wide blue yonder. President Stahr commented that he hoped that the careers of all the graduates would ascend as rapidly.

Twenty-nine graduates received the Dental Hygiene Certificate and twelve graduates of previous classes received the degree—Bachelor of Science in Public Health Dental Hygiene.

Those who received certificates have accepted positions in offices of the following dentists:

Bloomington
- Karen S. Michener—Dr. D. C. Tyte

Evansville
- Carolyn H. Humphreys—Drs. E. E. Brinker, R. E. Wulff and T. L. Sherman

Fort Wayne
- Sara L. Draves—Dr. Robert Stoetzel
- Marcia L. Garringer—Dr. Irving Weinraub

Frankfort
- Kathryn R. Goldman—Drs. C. W. Bollman and T. L. Smith

Hammond
- Barbara J. Murzyn—Dr. James Merlo

Indianapolis Area
- Joann C. Campbell—Dr. Leon W. Berger
- Virginia S. Cox—Dr. John E. Matthews
- Kathleen Joy Heath—State Board of Health
- Alice E. Hall—Drs. James Hall and William Koss
- Suzanne E. Ireland—Drs. William and Betty Koss
- Nancy Ann McClain—Dr. Marvin G. Schmidt
- Madolyn Sue Myers—Dr. John D. Brannan
- Diane Clinton Laxen—Dr. R. W. Barnett
- Leslie C. Smith—Dr. W. W. Peet
- Vivian K. Walton—Dr. Benjamin Fisher
- Ruth M. Webster—Dr. Thomas Esmond

Kokomo
- Bonnie L. Moore—Dr. Richard Michener

Lafayette
- Sandra M. Stamper—Drs. Lawrence K. Hodge and Y. B. Hall

Marion
- Karen G. E. Tade—Dr. E. H. Tade

Rushville
- Sue Ellen Starkey—Dr. Thomas X. Shaver

Terre Haute
- Cheryl F. Laser—Dr. Robert H. Slinkard

Dr. and Mrs. Joseph (Anne Cooper) will be stationed at Ft. Lee, Virginia.

Dr. and Mrs. Jeffrey Landrum (Dina E.) will be living in Cleveland Ohio. Dr. Landrum will assume a residency in oral surgery and Dina will be associated in practice with Dr. George Newman in Seven Hills, Ohio.

Linda Olson Monroe will join her husband, who is stationed in Germany.

Sara Ann Howard will spend the summer in Europe.

Gay Gossard is attending summer school and will enroll in the degree program in the Fall.

Sandra Jean Henderson and Marilou Monfort are working this summer and

(Continued on page 48)

Library

Mrs. Mabel Walker, Librarian

The following is a selected list of book additions to the Library since December, 1963. All of these are available for loan to alumni.

Abbatt, John D., Lakey, J.R.A., and Mathias, D. J.	Protection against radiation. Springfield, Ill., Thomas, 1961.
Adriani, John, ed.	Appraisal of current concepts in anesthesiology. v.2. St. Louis, Mosby, 1964.
Advances in oral biology. v.1,	1964. New York, Academic Press.
American Dental Association	Guide to dental materials. 2d ed. Chicago, 1964.
American dental directory. 1964	ed. Chicago, American Dental Assn, 1964.
American medical directory. 22nd	ed. Chicago, American Medical Association, 1963.
Anderson, Declan John, ed.	Sensory mechanisms in dentine. New York, Pergamon Press, 1963.
Annual review of microbiology,	v.17, 1963. Stanford, Annual Reviews, 1963.
Attie, Joseph N. and Khafif, Rene A.	Melanotic tumors. Springfield, Ill., C. C. Thomas, 1964.
Bailey, Frederick R.	Textbook of histology. 15th ed. Baltimore, Williams & Wilkins, 1964.
Barnett, S. A.	The rat, a study in behaviour. Chicago, Aldine Pub. Co., 1963.
Bevelander, Gerrit	Outline of histology. 5th ed. Saint Louis, Mosby, 1963.
Blackman, Sydney and Poyton, Herbert G.	A manual of dental and oral radiography. Bristol, J. Wright, 1963.
Blake, G. C. and Trott, J. R.	Periodontology. London, Butterworths, 1962.
Blass, Jacob Lewis	Dentistry as personal service. Philadelphia, Lippincott, 1963.
Blunt, Harry Earle	An American dentist's unique experiences in foreign lands. New York, Vantage Press, 1963.
Boucher, Carl O., ed.	Current clinical dental terminology, a glossary of accepted terms in all disciplines of dentistry. Saint Louis, Mosby, 1963.
Bourne, Geoffrey H. and Golarz, M. N., eds.	Muscular Dystrophy in man and animals. New York, Hafner Pub. Co., 1963.
Boyer, Paul D.; Lardy, Henry and Myrback, Karl, eds.	The Enzymes, v. 2, 1960. 2d ed. New York, Academic Press, 1960.
Brachet, Jean and Mirsky, Alfred E., eds.	The cell: biochemistry, physiology, morphology. New York, Academic Press, 1959-61.
Brain, Edward B. and Ten Cate, A.R.	Techniques in photomicrography. Princeton, N.J., Van Nostrand, 1963.
Brothwell, Don R., ed.	Dental anthropology. New York, Symposium Publications Division, Pergamon Press, 1963.
Bulletin of the Atomic Scientists	The atomic age. New York, Basic Books, 1963.
Busch, Harris	An introduction to the biochemistry of the cancer cell. New York, Academic Press, 1962.
Campbell, Irene R.	The role of fluoride in public health; the soundness of fluoridation of communal water supplies. Cincinnati, The Kettering Laboratory, University of Cincinnati, 1963.
Canadian Dental Association	Directory, 1963. Toronto, Canada, Canadian Dental Association, 1963.

Cantarow, Abraham and Schepartz, Bernard. Biochemistry. 3d ed. Philadelphia, Saunders, 1962.

Cattoni, Martin. Manual of periodontics. Houston, Texas, University of Texas Dental Branch, n. d.

Clark, George Lindenberg, ed. The encyclopedia of X-rays and gamma rays. New York Reinhold Pub. Corp., 1963.

Coelho, David H. and Rieser, Julian M. A complete fixed bridge procedure. 3rd ed. New York, New York University Press, 1963.

Comar, C. L. and Bronner, Felix, eds. Mineral metabolism. V. I, pts. A & B (Principles, processes, and systems). V. II, pts. A & B (The elements). New York, Academic Press, 1960-1964.

Consolazio, C. Frank; Johnson, Robert E. and Pecora, Louis J. Physiological measurements of metabolic functions in man. New York, Blakiston Division, McGraw-Hill, 1963.

Costello, Lawrence F. and Gordon, George N. Teach with television. New York, Hastings, House, 1961.

Daves, Marvin L. and Loechel, William E. The interpretation of tomograms of the head. Springfield, Ill., C. C. Thomas, 1962.

Dewing, Stephen B. Modern radiology in historical perspective. Springfield, Ill., Thomas, 1962.

Dille, James Madison. Drug therapy for dentists. Chicago, Year Book Medical Publishers, 1963.

Dobzhansky, Theodosius G. Mankind evolving. New Haven, Yale University Press, 1962.

Dreyfus, Jean Claude and Schapira, Georges. Biochemistry of hereditary myopathies. Springfield, Ill., Thomas, 1962.

Ehrensvard, Gosta Carl Henrik. Life: origin and development. Chicago, University of Chicago Press, 1962.

The Enzymes, edited by Paul D. Boyer, Henry Lardy and Karl Myrback. 2nd ed. v.4, 1960. New York, Academic Press, 1960.

Evans, Frankis T. and Gray, Thomas Cecil, eds. Modern trends in anaesthesia, 2: Aspects of hydrogen ion regulation and biochemistry in anaesthesia. Washington, D.C., Butterworths, 1962.

Fairley, James L. and Kilgour, Gordon L. Essentials of biological chemistry. New York, Reinhold Pub. Corp., 1963.

Finn, James D. and Perrin, Donald G. Teaching machines and programed learning. Washington, National Education Association, 1962.

Fiore, Mariano S.H.di. An atlas of human histology. 2d ed. Philadelphia, Lea & Febiger, 1963.

Ford, Kenneth W. The world of elementary particles. New York, Blaisdell Pub. Co., 1963.

Frost, Harold M. Bone remodelling dynamics. Springfield, Ill., Thomas, 1963.

Geoffrion, Paul. Clinical application of the twin-wire mechanism. Paris, Julien Prelat, 1962.

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As in previous issues in conjunction with the Library column, listed below are abstracts of nine Master's theses written in the Graduate School, Indiana University School of Dentistry, 1963 and 1964.

THE OCCLUSION OF CHILDREN AS RELATED TO WATER FLUORIDE CONCENTRATION AND SOCIOECONOMIC STATUS

Walter Ray Davis, Jr.
1963

A study to determine the relationship between the occlusion of children and the fluoride content of the communal water supply was undertaken in 3 Indiana cities (Bloomington 0-0.1 ppm, Indianapolis 0.5-0.8 ppm, and Frankfort 0.7-1.1 ppm). The sample included 955 white school children, 7 to 9 and 11 to 13 years of age. Age, sex, and socioeconomic status (SES) were controlled in the study. Socioeconomic status was determined by Duncan's index. The clinical examination of the occlusion included measurements of the first permanent molar relationship, overjet, and overbite, and also observations regarding the Angle

classification and the prevalence of crossbite, anterior open-bite, and the premature loss of deciduous cuspids and molars. The chi-square test for significance was used.

The results of this study indicated that the differences recorded in the various measurements and observations of the occlusion in the 3 cities were apparently not related to the fluoride content of the water.

Analysis of the data after controlling for SES only, indicated a significant difference (P. .02) in the overjet distribution of the 3 socioeconomic levels and a positive association between overjet deviations and SES. The premature loss of 1 or more deciduous cuspids and/or molars was significantly different (P .02) when socioeconomic levels were compared, and a negative association was found between premature loss and SES. Other aspects of the occlusion were apparently not related to SES.

The method of assessment of the occlusion appeared valid, but refinements would permit a more critical appraisal of the occlusion.

A CLINICAL INVESTIGATION ON THE GENERAL DISINTEGRATION AND STRENGTH CHARACTERISTICS OF FOUR TEMPORARY FILLING MATERIALS

A. Eloui Bastawi
1963

The purpose of this study was to evaluate clinically, the general disintegration, gross fracture, marginal breakdown, and surface texture in Class I and Class II restorations of four temporary filling materials having widely varying physical properties. They were zinc oxide-euqenol (Temrex), zinc oxide-rosin eugenol (Caulk's), zinc phosphate cement (Tenacin), and silico-phosphate cement (Kryptex). Powder-liquid ratios and all manipulative procedures for each of the four materials were standardized. Compressive strength, solubility and abrasion resistance tests were carried out in the laboratory on the same standardized mixes used in the clinical part. A total of 137 standardized cavities were prepared in deciduous and permanent teeth of 37 children and restored with the four materials in an effort to equalize the distribution between the four quadrants. Rubber base impressions were taken as permanent records for evaluation at the one week, one month and three months' observation visits. Zinc oxide-rosin eugenol (Caulk) exhibited the least resistance to disintegration and the roughest surface while the zinc oxide eugenol (Temrex) exhibited considerably more resistance and the smoothest surface. Zinc phosphate showed the greatest resistance to disintegration. Silico-phosphate cement exhibited the same behavior in Class I restorations but showed higher failure in Class II restorations due to fractures. Zinc phosphate exhibited smoother surface than the silico-phosphate cement. There was no correlation between *in vitro* solubility and clinical disintegration. Compressive strength seemed to be related to the general durability of the materials.

COMPARISON OF EITHER ONE OR TWO APPLICATIONS OF STANNOUS FLUORIDE OR ONE APPLICATION OF SODIUM FLUORIDE IN DENTAL CARIES CONTROL

Victor H. Mercer, D.D.S.
1963

Previous clinical studies have shown that a single application of an 8 per cent solution of stannous fluoride significantly reduces the incidence of dental caries in the permanent teeth of children. However, present procedures using stannous fluoride are not completely effective, it was deemed important to learn if increased anticariogenic benefits could be obtained by giving a second application of stannous fluoride.

Approximately 800 school aged children were divided equally into 4 groups. Group I served as a control and children in this group received a prophylaxis. Group II reecived a single application of a 2 per cent aqueous solution of sodium fluoride. Group III received a single application of an 8 per cent aqueous solution of stannous fluoride. Group IV received two applications of 8 per cent stannous fluoride, spaced one day apart. All groups received an initial prophylaxis. Approximately 600 children completed the study.

After one year the single application of sodium fluoride had no significant effect on dental caries experience. The single application of stannous fluoride resulted in reduction in dental caries of 50 per cent using either the DMFT or DMFS index. Two applications of stannous fluoride resulted in a reduction of 53 per cent using either index.

It thus appears that a second application of stannous fluoride is not associated with a significant further reduction in dental caries as afforded by the single application, at least when the second application follows the first by one day.

A COMPARISON OF ALVEOLAR BONE LOSS AS SEEN IN RADIOGRAPHS AND AS MEASURED DURING PERIODONTAL SURGERY

Gerrit Charles Hagman
1963

Roentgenographic evidence of alveolar bone loss is one of the diagnostic aids to periodontal evaluation. Many investigators have felt this roentgenographic evidence of bone loss to be inaccurate. It was felt that verification by clinical examination alone gave true configuration of bone loss.

This study was designed to compare the accuracy of 3 roentgenographic techniques against clinical measurements. Periapical, bitewing and Panorex films were used to observe maxillary and mandibular molar-bicuspid regions. Measurements by means of a calibrated probe from cusp tips to crestal bone were made clinically, and compared to similar measurements made from roentgenograms. Measurements were made in series of 4 for each region to compare the accuracy of the measuring techniques.

A comparison of 15 quadrants revealed the bitewing and periapical roentgenographic accuracy to be within 0.2 millimeters of the clinical measurements on the average. The bitewing films demonstrated a slight advantage in accuracy over the periapical films. The distortion of the Panorex films averaged 2.2 millimeters.

It was concluded that the bitewing and periapical roentgenograms in this study were accurate and a very valuable aid to diagnosis. Due to the distortion, and difficulty in measuring the Panorex roentgenograms, it was felt that this technique is of little use for periodontal survey, but has some value as a survey instrument.

A STUDY OF THE EFFECT OF WATER FLUORIDE CONTENT AND SOCIO-ECONOMIC STATUS ON THE OCCURRENCE OF GINGIVITIS IN SCHOOL CHILDREN

Robert Murray Moore
1963

A total of 1,123 white school children, lifelong residents of Bloomington (0.1 ppm fluoride), Frankfort (0.7-1.1 ppm fluoride), or Indianapolis, Indiana (0.5-0.8 ppm fluoride), were examined to determine if the occurrence of gingivitis is related to either the water fluoride content or socioeconomic status. The sample consisted of 278 children from Bloomington, 278 children from Frankfort, and 567 children from Indianapolis, 7 to 13 years of age, and nearly equally divided according to sex.

The P-M-A Index was used to determine the prevalence and severity of gingivitis. Duncan's Occupational Socioeconomic Index was used to determine the socioeconomic status of each child. Accumulated oral debris and toothbrushing habits were also measured.

The prevalence of gingivitis was slightly less in Bloomington (87 per cent) and in Frankfort (92 per cent) than in Indianapolis (96 per cent). No significant difference was found in the severity of gingivitis between the Bloomington sample (mean P-M-A score 6.8) and the Frankfort sample (mean P-M-A score 7.6). It was concluded that the fluoride content of the water supply did not influence the severity of gingivitis. The severity of gingivitis in Bloomington and Frankfort samples was significantly less than in the Indianapolis sample (mean P-M-A score 10.7). The amount of accumulated oral debris found on the teeth of the Bloomington and Frankfort children was also less than that found in the Indianapolis sample. It was suggested that the more favorable oral conditions of Bloomington and Frankfort resulted from a controlled oral hygiene program in effect in these two cities.

The results of this study indicated that severity of gingivitis and the accumulation of oral debris are inversely related to socioeconomic status, while toothbrushing habits appear to be directly related.

AN INVESTIGATION INTO THE CHANGES OCCURRING IN THE ORAL MUCOSA BENEATH FIXED BRIDGE PONTICS

Patrick Joseph Henry, B.D.Sc.
1963

The evidence suggesting that changes might occur in the oral mucosa beneath fixed bridge pontics is meager. If and when these alterations occur, their nature, significance and possible consequences are vague. Therefore, a reproducible method for studying the mucosa beneath bridge pontics was developed. Fourteen pontics, 5 of polished gold, 6 of glazed and 3 of unglazed porcelain were fabricated utilizing the Gilson Attachment instead of soldered joints. Thus, unfixation and removal, followed by replacement and refixation was made possible. In this manner, the mucosa was directly observed at time intervals up to six months, at which time biopsy specimens were removed from under the pontics. The three materials used in pontic construction were also implanted subcutaneously in rats to observe their relative tissue irritational qualities. The histologic changes occurring beneath the pontics were characterized by a thinning or absence of the stratum corneum, together with blanting of the pegs. The collagen of the connective tissue appeared to be separated as if by interstitial edema. A predominantly lymphocytic infiltrate with increased vascularity of the area was noted. Within six months of insertion there was no clinical or histologic evidence suggesting that glazed porcelain is superior in tissue tolerance to other materials. However, it was superior in terms of esthetics and ease of cleaning, and its use is, therefore, strongly advocated.

THE EFFECT OF SULFATED WHEAT DERIVATIVES ON WOUND HEALING

Theodore H. Simpson, Jr.
1964

The purpose of this study was to evaluate the effects of topically applied sulfated wheat derivatives on wound healing. Previous studies have indicated that wheat gluten could be sulfated and the resulting product seemed to promote wound healing. Structures formed by these sulfated derivatives were very similar to the sulfated and non-sulfated mucopolysaccharides of the amorphous ground substance found in the procollagen phase of healing.

Standardized skin incisions were prepared in 72 male Wistar rats. Measured amounts of glutenin sulfate and sulfated starch, equal parts, were placed in 48 experimental wounds. Twenty-four untreated wounds served as controls. Tensile strength measurements were made at 3, 5, 7, 9, 11, and 14 days.

All experimental wounds required more weight to tear apart healing incisions than the controls. Similar treated and non-treated wounds of the same animals were subjected to histologic evaluation; consistent differences were not noted between the two groups.

A STUDY OF THE EFFECT OF ULTRASONIC ENERGY ON THE ACTIVITY OF A SURFACE ACTIVE QUATERNARY AMMONIUM GERMICIDE (ALKYLDIMETHYLBENZYLAMMONIUM CHLORIDE)

Edwin "R" Black
1964

Standard bacteriologic plating procedures and electron microscopic studies were employed in an effort to determine if ultrasonic energy could enhance the action of a zephiran chloride solution. Measured aliquots of E. coli and S. aureus from 24 hr. cultures were individually subjected to ultrasonic radiation in zephiran solutions at 80 KC and 20 KC using 120 watt ultrasonic cleaning machines as the power sources.

More organisms were destroyed in the ultrasonic treated specimens than in the controls. 20 KC was slightly more lethal for E. coli, and 80 KC was slightly more destructive for S. aureus. A more concentrated inoculum produced a greater differential between the numbers of surviving organisms in the controls compared to those in the ultrasonic specimens.

Nuclei in the form of plastic powder or diatomaceous earth designed to increase ultrasonic destructive action, produced inconclusive results.

A MICROHARDNESS STUDY OF CEMENTUM IN THE PRESENCE AND ABSENCE OF PERIODONTAL DISEASE AND AFTER EXPOSURE TO CHEMICAL AND ENZYMATIC CALCULUS SOLVENTS

Elbert Allen Warren
1964

This research was designed: (1) To determine the hardness of cementum in the presence and absence of periodontal diseases; and (2) to study the changes that may occur in cementum after exposure to certain calculus solvents.

Fifty-one teeth from patients with periodontal disease, and 34 teeth from patients free of periodontal disease were used in this study. The teeth were sectioned, mounted in stone, and hardness tests were performed on a Tukon hardness tester, using a Knoop diamond indenter.

The calculus solvent studies were conducted by exposing cementum to Potassium Bitartrate, Solium Hexametaphosphate and Vickase. Changes in cementum were determined by micro-hardness measurements and historadiographs before and after exposure to the solvents.

The microhardness tests indicated that cementum of periodontally involved teeth has a tendancy to be softer; however, some cementum was as hard, or harder, than that of teeth free of periodontal disease.

A reduction in hardness and etching of cementum was noted after exposure to Potassium Bitartrate and Solium Hexametsphosphate. The historadiographs revealed radiolucency suggestive of decalcification. The enzyme, Viokase, had no effect on the cementum.

Alumni Notes

Mrs. Cleona Harvey

Another year has hurried by, with the usual problems and worries, and another class has successfully faced the barrage of final exams, Boards, etc., to be declared prepared and eligible to face the world and carry on an ethical practice of dentistry. Each student, we are sure, has gone forth with the resolution to maintain the present high standards of dentistry, and to do all in his power to seek possible methods of raising them. We congratulate them upon their perseverance the past four years and wish them the best of luck through the coming years. We have listed the names of the 1964 graduates, with the best addresses we have for them, at the end of this column.

There is never a dull minute for the Recorder as you may remember—we have already selected another class and are busily working on plans for their orientation and admission. It is a joy to have the privilege of working with and for the dental students, however!

I know that you are all anxious to have news for your classmates, and we are most pleased to bring you news of the

Class of 1906

Dr. Harry A. Kesley, 3439 Mono Drive, Riverside, California, wrote a most interesting letter to Dr. Hine recently which we shall not be able to quote in this column due to its length, but Dr. Hine has shown it to many people because of the interesting historical facts contained therein. Perhaps it can be published in detail later.

Class of 1908

Dr. G. O. Ruff, 130 South Central Avenue, Paris, Illinois, recently reported the death of Dr. Edmund Laughlin, in St. Petersburg, Florida, at the age of 81 .

Class of 1925

It has been reported to us that Dr. Gerald Timmons, 8656 East Vista Drive, Scottsdale, Arizona 85251, is to receive the 1964 Henry Spenadel Award of the First District Dental Society of New York, New York, for his important contributions to humanity in the field of dentistry. The award will be made on October 5, 1964.

Class of 1946

Dr. and Mrs. Joe Gordon White, 4340 North Arlington Avenue, Indianapolis, Indiana, announce the birth of a baby boy on June 15, 1964. We hasten to offer congratulations!

Class of 1950

Dr. and Mrs. James H. Dirlam, 127 Mount Ridge Drive, San Antonio 28, Texas, visited the Dental School recently, and we were most happy to have a brief visit with them.

We are sorry to inform you of the death of Lt. Col. Corliss J. Roll, who died suddenly in Fort Leonard Wood, Missouri.

Class of 1953

We received a letter from Dr. Thomas Garman, c/o USS Shangri-La CVA-38, c/o FPO, New York, New York, informing us that he has been selected for a year of postgraduate study in Operative Dentistry.

Class of 1957

Dr. Pedro G. Colon, Munoz Rivera #7, Naguabo, Puerto Rico, writes saying *"I*

have been very busy ever since I came to Puerto Rico. There are times I wish my patients will break their appointments so I could rest a bit. I have been thinking of taking a long vacation but at present I am bolted down here for the next two years to come, which will be when my son finishes at the Dental School down here."

Class of 1958

Dr. Daniel Kleehammer, 602 North Roosevelt Road, Valparaiso, Indiana, wrote to Dr. McDonald regarding a questionnaire he had received, and informed us he is in the Army Dental Service at present. He expects to visit the Dental School some time this summer, and we shall be pleased to see him. In September he will begin a Residency in Oral Surgery at the University of Pennsylvania.

Dr. Misselhorn received an interesting letter from Dr. Keith McGavit, Box 1752, Palmer Alaska, We are pleased to know the earthquake in Alaska did not stop progress in his area. He is certainly enjoying life and has a plane to hunt game, yet! His description of wildlife in Alaska is wonderful. Write us some time, Keith, so we can tell everyone about your interesting life in Alaska.

We received a new address for Dr. Jack F. Krach, 2828 East State Blvd., Fort Wayne, Indiana. Do drop us a note letting us know your progress, Dr. Krach!

Class of 1959

We received a change of address for Dr. Robert N. Modlin, 1827 Northwestern Avenue, West Lafayette, Indiana.

Also a change of address for Dr. Kent E. Wilson, N. 4722 Oak, Spokane, Washington, 99208.

Class of 1960

Dr. Don Norwood sent us his new address at 3989 Meadows Drive, Indianapolis, Indiana.

Class of 1961

Dr. Clifford T. Maesaka announces the opening of his office at Valley National Bank Building, 3900 Sibley Memorial Highway, St. Paul, Minnesota 55111.

We have received a note from Dr. William C. Rubach, 6002 Santa Barbara, Avenue, Vandenberg A. F. B., California, in which he says, *"It has been a long time since I've been in contact with you and I do hope everything is going well at IUSD . . . No doubt you continue to struggle with each and every student, some more and some less.*

"The Air Force has treated me very kindly and my wife and I are more than happy here in California. The future is still relatively undecided.

"Best regards to all the the faculty."

We received change of address notices for the following: Dr. Alphonso Trottman, 437 Vernon Avenue, East Chicago, Indiana, and, Dr. Donald L. Tyler, 822nd Medical Group (SAC), Turner AFB, Georgia.

Dr. A. Merlin Wuebbenhorst, Delray Medical Arts Building, 1177 Northwest 8th Street, Delray Beach, Florida, writes, *"was elated to know Dr. Johnston received the Union Board award. It certainly inspired yours truly.*

"The practice is booming . . . You can't imagine just how well.

"We built a new house and are comfortably settled. The family is well. We speak of you often. I trust that things are well with you and that you have more help to graduate the class of 1964 than you did to graduate the class of '61.

"I attend many postgraduate courses. Last year I was out of the office 31 days. This year I have 5 days at courses. I think I'll not take as many this year and take a vacation instead. I'm planning to attend the California meeting. Hope to visit Jack Williams in Bend, Oregon, while I'm out that way."

(Incidentally, Dr. Wuebbenhorst was

awarded the "Boss of the Year" at the Palm Beach County Dental Assistants Society at their 8th annual banquet.—C.H.)

Class of 1962

Dr. Bernard A. Newbauer sent us a notice of the removal of his office to Kem-View Medical Center, 1281 Kem Road, Marion, Indiana.

Dr. J. Keith Roberts came in to visit us; he has finished his tour of duty with Uncle Sam and plans to locate here in Indianapolis. His new address is 3989 Meadows Drive, Indianapolis 5, Indiana.

Dr. Howell received a letter from Dr. John D. Rodkey, which he is sharing with us. Dr. Rodkey's address is 544 Laine Street, Monterey, California, and he writes as follows:

"I have been meaning to write this letter for long while now, so I'm quite proud that I am finally getting it started! Since I left the hallowed halls of IUSD and joined the U.S. Army, I've certainly traveled many miles and seen many things. I spent my first year in Korea, which was (now that I look back on it) a rewarding experience both professionally and intellectually. My wife, Annette, was able to join me for ten months and we lived with some missionaries a few miles from the post where I worked. Since Annette was not an authorized dependent, we had to live on our own, which was a little primitive, to say the least. We had no hot water, only running cold water which was not suitable for drinking. But we made many good friends both in the Army and among the local populace, and consider ourselves richer for having had the experience. We also spent a wonderful week touring Japan.

"Since last November we have been stationed here at beautiful Presidio of Monterey, California, which both of us are enjoying tremendously. This is certainly the place for year-round golfing. We live about one mile from the famous Pebble Beach golf links where Bing Crosby Pro-Am tournament is held each year. Our apartment is on a hill overlooking the Monterey Bay of the Pacific Ocean.

"I still have not decided where in Indiana I am going to practice as of yet. I will have completed my active duty tour in October of this year, and will be ready and anxious to get started in private practice. If you have any information as to cities that need a dentist, or any practices that are for sale, or any opportunities you think might be of interest, please let me know, I certainly would appreciate it.

"I must really be a Hoosier at heart, because even while here in sunny California, I miss seeing the change of seasons and that unexpected snow storm which sometimes caused the clinic to be closed a few minutes early.

"We are expecting our first child in August!"

We have received several interesting communications from Dr. and Mrs. Nelson Wolfe, and will start with the first: He informed us that he will be in the USPHS General Practice Dental Residency Program at the Outpatient Clinic in New York, beginning July 1. He fears life in New York City may be traumatic after spending two years at Barrow, Alaska! Then, shortly after receiving the above information, we received their last "newsletter" from Barrow, and it is so interesting we quote it in its entirety:

"Dear Folks:

"Our time in Barrow is drawing to a close and we wanted to write one last newsletter before leaving. We have been putting it off until we were sure of plans for next year, and we finally know where we will be going from here. It would be difficult to find a city more extremely opposite from Barrow than New York, and, believe it or not, that is where we plan to be as of the middle of July. Nelson

has been accepted for a General Practice Residency Dental Training Program in the U. S. Public Health Service Hospital on Staten Island. The program is apparently an excellent one, and we are thrilled, needless to say. (We will be living on Staten Island, but in lieu of an address until we are settled there, anyone may write us c/o the PHS Hospital.)

"When discussing the writing of this newsletter, we decided not to go into too many details, but mention only the highlights of the past year. As the experiences of this year haven't been as new to us as during our first year here, we haven't taken the time to write a newsletter to all of you this year.

"It seems as if Nelson has always had some hunting adventures of interest. Since last spring he has added a few new hunting experiences to his list. During July and August of 1963, he did some fishing (and caught a 35¼" lake trout) in Tesheqpuk Lake (Alaska's second largest lake) and shot a few caribou while there. He then made a trip to Umiat (about 200 miles south of here), hunted Dall sheep, and killed a moose, so we have enjoyed a variety of meat during this year. Just last week he went polar bear hunting and killed a 7-8 ft, bear with one shot. It's just the size we wanted for hanging (the skin) on the wall, and it is a very pretty bear.

"Speaking of polar bear, we were invited to a polar bear dinner a couple of weeks ago, and we were amazed at how good the meat tasted. It was a young bear and was boiled and then roasted, resulting in tender meat.

"I imagine many of you heard about the storm we had last October. The pack ice (old ocean ice) was hundreds of miles from shore, and high winds caused the ocean to do quite a lot of damage in the village. Waves lashed across the beach and the road into the lagoon behind our house so that the lagoon looked like the ocean. We watched barrels, boxes, and other articles fly by the house, and houses were torn up and floated past our windows. (There was a large iceberg, from a glacier, that broke up and helped buffer the storm a little. We used pieces of the ice, which came ashore, for drinking water.) The storm raged all day, and finally began letting up just as the water had begun eating away our foundation. Thousands of dollars worth of fuel oil, gasoline, lumber, and other essentials which had arrived via the North Star, were lost. Wien Alaska Airlines has certainly done the business since then, carrying construction materials and V.I.P.'s to Barrow. No one lacks for a job now.

("Speaking of V.I.P.'s—Dr. Stahr, Indiana University's President, was a visitor up here last fall, and this month the Surgeon General of the USPHS will be here for a visit.)

"The three of us took a short vacation in November, visiting friends in Cordova and Fairbanks, after attending a dental conference in Anchorage. We enjoyed not only visiting with friends, but seeing some different scenery. Barbara was fascinated with the trees, cars, and rows of buildings in town. (Even Mother and Daddy were impressed!)

"The winter didn't bring too many new adventures for us. We missed the sun more this year, and looked forward to its first appearance of the year. It doesn't set until 10:00 P.M. now, and we are enjoying all the sunshine, even though it hasn't brought very warm weather yet. The temperature still averages around —10° to 0°, but very soon now it should be coming above 0° to stay.

"The beauty of the northern lights was mentioned in our last newsletter. We saw a display this past Christmas Eve which surpassed any previous displays that we had witnessed. It was unusual in that it was colored, moving rapidly, covered the

whole sky, and lasted from about 11:45 to midnight. It was beauty which could only be experienced and not described—a sight which thrilled us and which we shall always remember. The Arctic has certainly furnished us with indescribable and unusual beauties of Nature.

"Barbara is quite a little Eskimo. She loves to go outside even when the thermometer registers a slow as —40°, and she can take the cold much better than Mommy. I imagine we will have trouble getting her inside even long enough to eat once we get home where the weather is warm.

"Barbara is a very active girl and talkative too. She jabbers freely and sometimes comes out with sentences we can understand. Judging from her size now, she is going to be tall and slender, and she is still blonde and blue-eyed. Although her hair is getting darker I imagine the summer sun will bleach it back to a golden color.

"Daddy and Barbara took the dog team out to Arctic Research Laboratory last Sunday to see the two small polar bear cubs and the large wolves. The cubs are very cute and are quite small. They are supposed to be sent to a zoo in the "lower 48" after they get used to people and captivity.

"That same day, April 26, the first snow bunting (sparrow) arrived—a sure sign of spring. It was —5°. A couple of times recently it has warmed up enough to almost thaw. As soon as we get a good west wind, the ducks should be returning thick and fast.

"The whales are going by now. There are several whaling crews camped out on the ocean ice approximately three miles from shore. Nelson visits them with the dog team. Sooner or later they should kill a whale, and then the work begins—butchering. Even a small 30-40 ft. whale makes about 10-20 tons of "grub" for the folks.

"Bud Wentz (dental school classmate who is now with the Army in Fairbanks) and family are scheduled to arrive next week for a visit. Bud and Nelson plan to camp out for a few days to see what they can find in the way of game animals.

"We hope this letter finds you all well, and we hope to see some of you soon. We plan to leave here June 1, and fly to Portland, Oregon. We plan to buy a car there and drive to Glacier National Park and through Idaho and Colorado before visiting our parents and relatives in Texas and Indiana. By the second week of July, we should be in Staten Island looking for a place to live.

"For several months now we have been anxious about plans for next year and a few times even thought that we knew what we were going to do. Even when the opportunity came for the General Practice Residency we weren't sure whether or not we would be able to take it, but it seems that the Lord has led in this direction and things have worked out miraculously. We feel sure that although it will be a very busy year of training it will be worthwhile.

"If you plan to visit the World's Fair, stop in and say hello to us!"

And last but not least, we have for you their new address: Dr and Mrs. Nelson L. Wolfe, 15 Huron Place, Staten Island, New York 10301.

Class of 1963

Dr. John T. Mayhall, PHS Alaska Native Health Center, Box 860, Juneau, Alaska, writes, *"Uncle Sam doesn't want me to stay anywhere for an extended time. He sent me a nice letter the last of January telling me that my time in the Pribilofs was drawing to a close. He suggested that I move to Juneau, Alaska for awhile. Mindy and I really hated moving from the islands as we had enjoyed the experience there thoroughly. When in Anchorage on our way to Juneau we were*

told that we might get our wish to move to Barrow to replace the Wolfes, but the prospects look dim at the present time.

"The Juneau clinic is a spacious two chair office that serves mainly the Tlinget (the first T sounds like a K) and Haida Indian populations in the surrounding area. I have patients from as far away as 200 miles that fly in for their care. At the present time I am giving fluoride topicals to the 400 school children in the Juneau area and teaching them some semblance of oral hygiene (something almost new to them). I have a list of 30 names that need dentures and they are waiting until summer when I hope that I can get to some of them. At present though the children are getting all my attention.

"The night of the earthquake I thought of the civil defense course that Dr. Howell taught. I was waiting for a plane to come from Fairbanks to pick up the physician and myself from the PHS as well as four other local physicians to take us to Anchorage but the weather was so foul (as usual) that it couldn't land. The quake was barely felt here and there was no damage locally except for a slight cracking of the runway at the airport about twelve miles from town."

Class of 1964

We have even heard from some of our this year's graduates already!

Dr. James B. Crossen, Dental Clinic, Queen's Hospital, Honolulu, Hawaii, says that the training at the hospital there is excellent, and the consultants are all specialists in different fields, the weather is excellent and working conditions very enjoyable. He is also enjoying social life there, we are convinced, since he tells us of having dinner with Dr. Sakurai.

Dr. Robert M. Krasny, 405 North Bedford Drive, Beverly Hills, California 90210, who received his M.S.D. degree in 1964, sent us an announcement of his association with Dr. Leo Grudin in Beverly Hills. He expressed appreciation for his attendance at I.U.S.D. and the friendships cultivated while here.

And now—we bring you the addresses of the rest of the Class of 1964, as they left them with us before they departed from our halls of learning for the last time!—

Dr. Gary Trent Barksdale
316 North Gospel Street
Paoli, Indiana

Dr. Travis Lane Bauer
1802 Georgetown Road
Indianapolis, Indiana 46224

Dr. James William Bayley
2618 Elmwood
Lafayette, Indiana

Dr. David A. Bleeke
1626 Cherokee Road
Fort Wayne, Indiana

Dr. James J. Bohlin
201 E. 10th Street
Michigan City, Indiana

Dr. Frederic S. Bryant
701 East Jefferson
Franklin, Indiana

Dr. Chester F. Buckner, Jr.
3201 Crawford Street
Terre Haute, Indiana

Dr. Charles A. Byer
645 32nd Street
West Palm Beach, Florida

Dr. Robert R. Carter
2019 East Spring Street
New Albany, Indiana

Dr. Philip Lee Catey
R. R.
Carlos, Indiana

Dr. John B. Challman
3507 Eisenhower Drive
Indianapolis, Indiana

Dr. Curtis Vaughn Clark
7607 Placing Road
Indianapolis, Indiana 46226

Dr. Charles E. Crawford
3232 West 9th Street
Indianapolis, Indiana

Dr. James Brent Crossen
Queen's Hospital
Dental Clinic
Honolulu, Hawaii

Dr. Nelson Marc Davisson
79 S. Whitcomb
Indianapolis, Indiana

Dr. Kenneth Harold Dilger
451 South Villa
Evansville, Indiana

Dr. James Edward Dumas
1330 West Blvd., Apt. #302
Cleveland 2, Ohio

Dr. Dodd Eldrid Edington
202 "R" Street
Bedford, Indiana

Dr. Joseph Ellsworth Ellis
R. R. #1
French Lick, Indiana

Dr. Erick D. M. Erickson
#205 Student Union Bldg.
Indianapolis, Indiana

Dr. John David Esakson
364 Garden Drive
Spencer, Indiana

Dr. Frank Roland Faunce
4045 Continental Court
Indianapolis, Indiana

Dr. David Randall Fink
R. R. #1, Box 70A
Danville, Indiana

Dr. Francis M. Fischer
58511 Locust Road
South Bend, Indiana

Dr. Richard Duane Ford
3923 Constant View
Decatur, Illinois

Dr. George S. Foster
406½ W. Walnut
Kokomo, Indiana

Dr. Joseph Lull Fox
1116 Brentwood Drive
Evansville, Indiana

Dr. Anthony M. Grasso
1325 West Michigan
Indianapolis, Indiana

Dr. James Alan Hammelman
Poseyville, Indiana

Dr. Kenton Shane Hartman
Box 303
Milan, Indiana

Dr. James Roy Hayslett
1947 Drew Street
Clearwater, Florida

Dr. Larry Ray Herron
5500 Harrison Street
Gary, Indiana

Dr. Charles Allan Hollar
Army

Dr. Gordon E. Kelley
578 Winona Village
Indianapolis, Indiana

Dr. Arthur Don Kenniker
2550 N. New Jersey
Indianapolis, Indiana

Dr. Harold Wayne King
1819 E. McKinley Avenue
South Bend, Indiana

Dr. Lee Ray Koertge
375 Good Avenue
Indianapolis, Indiana

Dr. Richard Max Kortokrax
3420 Plaza Drive
Fort Wayne, Indiana

Dr. Jeffry Erle Landrum
906 East 29th Street
Marion, Indiana

Dr. Ross LaVerne Lawrence
102 Lincoln Way
LaPorte, Indiana

Dr. John T. Legier
302 E. 7th Street
Bloomington, Indiana

Dr. Malcolm Keith Lewis
2357 North Capital Avenue
Indianapolis, Indiana

Dr. Charles Russell Ligon, Jr.
8100 Heather Court
Evergreen Acres
Evansville, Indiana

Dr. Jon Robert Lindsay
1108 Bedford Road
Washington, Indiana

Dr. Lael Eugene Long
c/o Lael B. Long
5003 W. Wilden Avenue
Goshen, Indiana

Dr. Maurice Powers Lord
22 Wood View Court
Lafayette, Indiana

Dr. James Thomas Lowdermilk
R. R. #2
Sullivan, Indiana

Dr. John A. Lund
721 Clarendon Place
Indianapolis, Indiana

Dr. David Owen Marks
7111 Olcott Avenue
Hammond, Indiana

Dr. Ardis C. Melloh
4372 Central
Indianapolis, Indiana

Dr. Jorge H. Miyares
2398 Coral Way
Maimi, Florida 33145

Dr. David Leon Morgan
4954 West 12th Street
Speedway 24, Indiana

Dr. Robert Jay Musselman
5914 Maplewood Drive
Speedway, Indiana 46224

Dr. Nicholas B. Narcowich
4321 Coral Drive
South Bend, Indiana

Dr. Stanley R. Nevill, Jr.
2152 Vogel Road
Evansville, Indiana

Dr. Michael F. O'Halloran
Navy

Dr. John Irving Parsons
1041 4th Avenue
Huntington, West Virginia

Dr. Dr. Ronald M. Patterson
4431 N. Kenyon Avenue
Indianapolis, Indiana

Dr. Scott Howell Polizotto
725 Clarendon Place
Indianapolis, Indiana

Dr. Charles F. Puntillo
4243 Olcott Avenue
East Chicago, Indiana

Dr. Frederick E. Robbins
408 Davis Drive
Anderson, Indiana

Dr. Jon E. Schiff
5425 W. 7th
New Augusta, Indiana

Dr. Tom Shimer
11 Lorraine Avenue
Muncie, Indiana

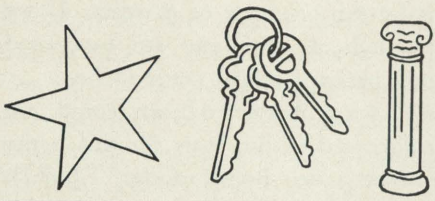
Dr. Burton L. Siegel
Capt. B. L. Siegel, USAF DC1
Base Hospital, James Connally AFB
Waco, Texas

Dr. Meldon Wayne Smith
483 West Maxwell Road
Indianapolis, Indiana

Dr. James C. Springer
R. R. #1
Sullivan, Indiana

Dr. Rodney W. Springer
312 N. Wayne
Angola, Indiana

(Continued on page 47)



Dr. Paul Starkey

Last April the Indiana Society of Dentistry for Children held its Sixth Annual Seminar at French Lick and had as their clinician, Dr. Charles W. Fain, Jr., of Daytona Beach, Florida. The theme of his discussion was to be closely related to practice management. Frankly, I breathed something of a sigh of relief when he informed us rather early in his discussion that he had not come to this session to tell us how to make more money. He did, however, have much to say about the the philosophy of dentistry that he practices and said that he wanted to be concerned with the "image of dentistry," even if the phrase seems to be currently overused.

He talked about such things as writing letters at Christmas time to everyone who had contributed to the success of his practice that year, including the trash collector. He thanked them in this manner and expressed his appreciation for their concern regarding his practice. (He mentioned that he thinks his trash can probably gets less dents than any others in the community, although this is not his motive). He offered many suggestions to *improve* the good name of "dentist."

What really impressed me, though, was that Charlie is not a fellow who just talks and practices an often used philosophy of, "Do what I say, not what I do." He practices what he preaches and somehow or another, I have the impression that if we, as dentists, all followed suit, the title "dentist" would be widely coveted.

As is our usual custom, a number of us get together for the last time at the seminar by having a nice leisurely lunch in that wonderful dining room at the French Lick Hotel. Charlie and about eight others of us had lunch together this particular noon and had to ask the headwaiter to put a couple of tables together for us. The headwaiter was not the most congenial of headwaiters—in fact, I thought him a little grouchy about the request—but he did it. After we had been seated and relaxed for about ten or fifteen minutes, Charlie called the headwaiter over and the conversation went something like this. Charlie: "Say, I was in here last night and you had a pretty fancy menu with a red felt-like covering, and in that menu I read a fine description of how to select a wine—one of the best I've ever read. I'm up here from Florida talking to a group of 40 or more *dentists* of the Indiana Society of Dentistry for Children and I'm going home in a little while and having enjoyed the fine food and service here in YOUR dining room, I wonder if it might be possible for me to take home one of those menus as a gift for my wife." The headwaiter, shaking his finger lightly and without a bit of hesitation: "I'll get you one." In a few moments the headwaiter was back. "Here you are, Doctor." Charlie: "Gee, thanks, this is great! Say, would you mind autographing this for me?" Well, here's where things began to pop! The headwaiter declared his obvious willingness to do so and cleared a table and made quite a production out of autographing that menu. And from there on in (which was honestly once again not the motive but the by-product) you've

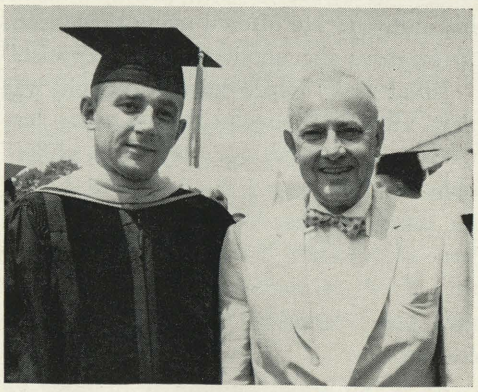
never seen such service. George Young was the only one who was going to pour coffee for our table, and most everyone left the table thanking "George" for the nice way in which we had been treated.

Well, this is not the end of the story, if I know Charlie Fain. I suspect that Charlie went home and wrote a letter to the management telling them that he had been a guest in their hotel, talking to a group of DENTISTS of the Indiana Society of Dentistry for Children, and then proceeded to compliment them on the food, service and their fine choice of headwaiter in the personage of George Young. I can then picture the management calling in George Young to compliment him. I can imagine the management pleased with the compliment, and also I can picture what can be done for the overworked "image of dentistry" if we were all to practice what Charlie preaches.

Dr. Fain also mentioned that he does not hold resentment towards those who constantly refer to doctors and dentists. Somehow or another, we as dentists have come to feel offended when our patients and others refer to "doctors and dentists." We are prone to inform everyone that we also are doctors and that a better of choice of words would be physicians and dentists. There is printed in the Journal of the Kentucky Dental Association, an article by Dr. Raymond E. Myers, Dean of the University of Louisville School of Dentistry on this particular phrase. It is the April, 1964 issue, and I urge you to read it. I endorse the view of Dr. Fain and Dr. Myers in that if we live dentistry properly the name of dentist will be more coveted than that of doctor. Many people can be called doctor (physician, veternarian, chiropractor, teacher, etc.) but only a well-trained skilled specialist can be called "denist." Doctor means teacher and is a respected title. I look forward to the day when "dentist" is more respected even than doctor, but this can only be brought about by the behavior of dentists. If we talk enough about it and are concerned enough, perhaps it will come to be.

And, what better subject could we have discussed in this issue for this is the time when we honor those I.U.S.D. Alumni fathers who have sons in this year's graduating class. They have so honored their profession that their sons have elected to devote their life's work to dentistry.

The recently graduated Dr. John I. Parsons told me, "As far as I can remember, my father has never discouraged my interest in dentistry, but he has also never encouraged me to the extent of even mentioning that I select dentistry as a profession. He has always been very subtle and proud of anything I decided upon, even to the extent that he did not try to discourage my flying with the Marine Corps, but maintained that if I was happy, he was pleased. Being stubborn like my father, I am sure that his happiness in dentistry, his happiness in all that his children have decided upon, and his reluctance to push dentistry, were the deciding factors which had the most influence upon my decision to enter the field of dentistry." Dr. and Mrs. Parsons intended to remain in Indianapolis until the newest member of their family arrives in July, and then in August, they will join his father. Dr. John Y. Parsons, native of West Virginia, received his

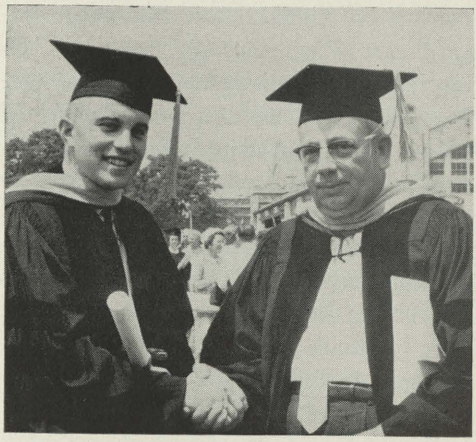


Dr. John I. Parsons and Dr. John Y. Parsons

Bachelor of Arts degree from Oberlin College in 1929 and his degree of Medical Dentistry from Harvard School of Dentistry in 1933. He is the President of the Huntington Dental Society, Huntington, W. Va., Past-President of the W. Va. Dental Society, Director of W. Va. Dental Service Corporation, recently organized by the W. Va. Dental Society and a Member of the Pierre Fauchard Academy. The smile on his face seen in the accompanying photograph indicates beyond doubt his pride in the fact that his son has elected to follow in his footsteps.

I am quite sure most of you will recognize the photograph of Dr. Frank O'Halloran and his son, Mike. Although Dr. Frank did not graduate from I.U.S.D., but rather from Creighton University, he is well known in this state as a result of his professional activities. He was President of the Indiana State Dental Association in 1950 and President of the American Society of Oral Surgeons in 1961. He is a Fellow of the American College of Dentists, a member of the Pierre Fauchard Academy, the Federation Dental International, the British Society of Oral Surgeons and is a Diplomate of the American Board of Oral Surgery. He also holds membership in O.K.U. Mike is a chip off of the ole' block, and as you can see in the photograph of them, they both appear quite pleased. Our congratulations to the Doctors O'Halloran!

Dr. Michael O'Halloran and Dr. Frank O'Halloran.



Dr. Harold W. King, Jr. and Dr. Paul E. King

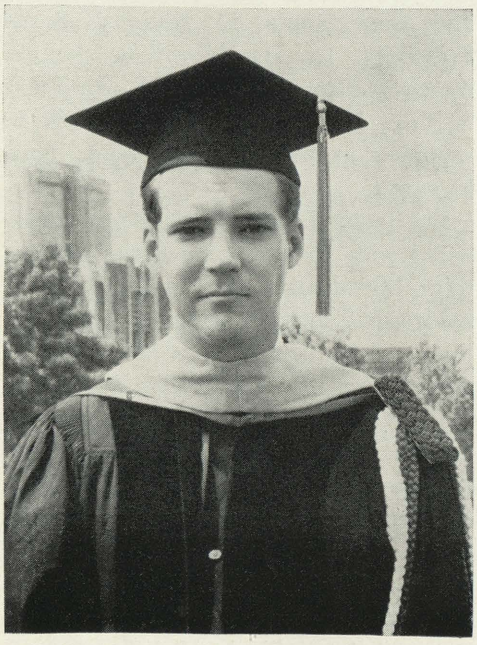
It is a pleasure, this issue, to include the photograph of Dr. Harold W. King, Jr., a graduate with the Class of 1964, and his uncle, Dr. Paul E. King. Dr. Paul graduated from I.U.S.D. in 1938. He is a member of the Xi Psi Phi Dental Fraternity and OKU Dental Honorary Fraternity. At present, Dr. King is Associate Professor on the Faculty of the I.U. School of Dentistry, and his practice and home are located at 3680 Watson Road, Indianapolis. His nephew is a member of Delta Sigma Delta Fraternity and Beta Theta Pi National Social Fraternity. Dr. Harold will be commissioned as Captain in the U.S. Air Force in July. He and his wife Sheri will be stationed at Glasgow, Air Force Base, Montana.

Dr. James J. Crossen whose son graduated with the Class in June, told me this. "Graduation day, June 8, 1964, holds significance for a father whose son joins the profession of dentistry. One realizes that the years have broadened the professional scope, and that the expanded curricula, newer approaches, equipment, technic and material, have enhanced the profession's prestige in the public image. Each generation aspires for his day and time. As my son joins the alumni and enters the profession by serving year's internship in Hawaii, my hope

has been fulfilled." Son Jim said, "Regarding any influence my father had on my choosing dentistry as my life's work, I would say that he did; however, instead of the word "influence" I think "guidance" is a better one. I am thankful to my father for guiding me so wisely." Congratulations to both Dr. Crossens!

Although Dr. Nicholas Narcowich's father was unable to be present at his son's graduation, we know that he must feel considerable pride for this handsome young fellow who achieved many honors in his class, as are described on other pages in this Journal. Our congratulations go to him. Dr. Nick said of his father, "He did not in any way attempt to influence my future for fear he would interfere with my life. However, once I had made the decision for dentistry he came to my aid, and to him I owe the attainment of my goal."

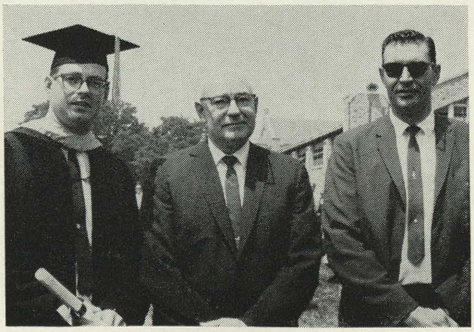
Dr. Edwin M. Ennis, a graduate of I.U.S.D. with the Class of 1925, had an effect on his step-son's choice of career. The recently graduated Dr. Wayne Smith said, "He stimulated my interest in dentistry while I was undecided about my future plans. While still in the U.S. Army I decided to enter a predental course." Congratulations to you both!



Dr. Nicholas Narcowich

Dr. Edwin M. Ennis and Dr. Wayne Smith

Dr. Albert W. Hammelman graduated with the Class of 1927 from I.U.S.D., and now has two sons who are dentists. Son Robert W., the fellow with the sunglasses in the photograph, is a graduate with the Class of 1954, and practices with his father in Poseyville, Indiana. Dr. James Hammelman, the second son to become a dentist, graduated with the Class of 1964. He is the fellow in the cap and gown standing to the right of his father. Dad began his practice in Poseyville, Indiana, and is still practicing there. He is active in church work, the Masonic Lodge and the Shrine Club. His hobbies include his orchard, gardening and fishing. Dr. Jim is a member of Delta Sigma Delta Fraternity and will enter the Air Force as Captain in July. He



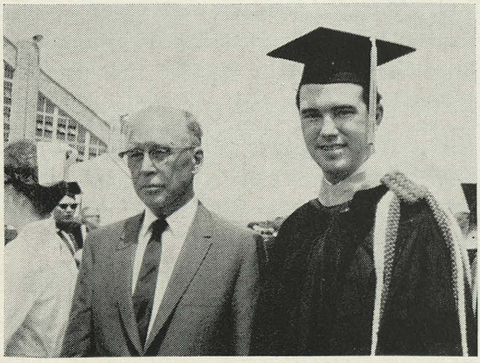
Dr. James Hammelman, Dr. Albert W. Hammelman and Dr. Robert W. Hammelman

and his wife Suzanne will be stationed at Lincoln, Nebraska. Dr. Jim states that while he was in high school he worked in his dad's office and lab after school and during the summer months. He said his father neither encouraged nor discouraged him in becoming a dentist, but he is glad that he made the decision to follow his dad's footsteps.

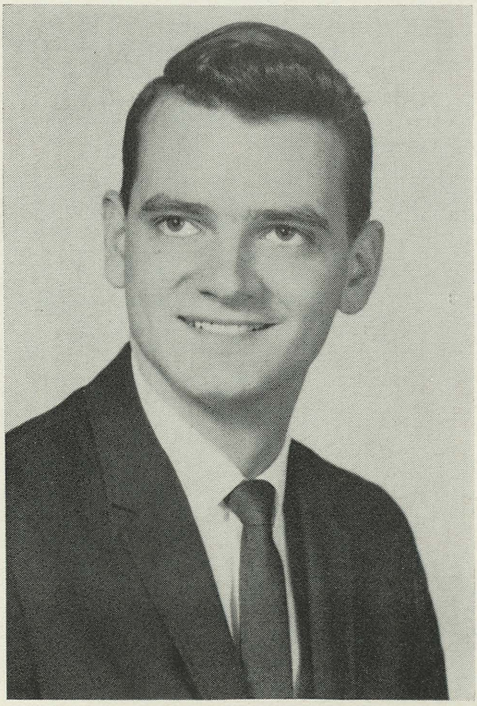
Dr. Maurice P. Lord, a graduate of the Class of 1926, has practiced concurrently in the Lafayette Life Building in Lafayette, Indiana, for the past 38 years. During these years he has been an active staff member of St. Elizabeths Hospital. In the year 1940 while President of West Central Dental Association, his son Maurice, now Dr. Maurice P. Lord, II, arrived. In addition to having the same profession, they are both members of Delta Sigma Delta and of the Elks Lodge. The senior Dr. Lord is still actively engaged in his practice but retains time to enjoy varied hobbies, including farming and saddle and running horses.

From Son Maurie: "I chose dentistry as a profession due to an indirect influence from my father through his dedication to his profession. My father did not direct my life toward dentistry; however, I feel I received the necessary encouragement due to the fact that from an early age I maintained an extreme interest in the field I have chosen for my profession. Also, I have derived some professional inspiration from my father's family inasmuch as in receiving my recent degree, there are at present six Dr. Lords." Dr. Maurice, II, established a fine reputation as a student which you may quickly verify as you read the report in this issue about the Honors Day Program—for this fellow carried off his share and more. We feel confident he will bring to the profession much honor and respect just as his father.

The President of this year's graduating class is the son of a dentist. Dr. C. D. Van Osdol, father of Dr. Thomas D. Van Osdol, passed away while his son was completing his last year of predental studies, but not until he had produced a profound influence on many around him, and particularly his own family. Young Tom has a sister 29 who is a Nun, a sister 27 who is a nurse, a brother 21 who is a student in medical school, another brother a student in law school at Notre Dame, a sister 15 in high school, and another sister 12 in high school. Tom's



Dr. Maurice P. Lord and Dr. Maurice P. Lord, II



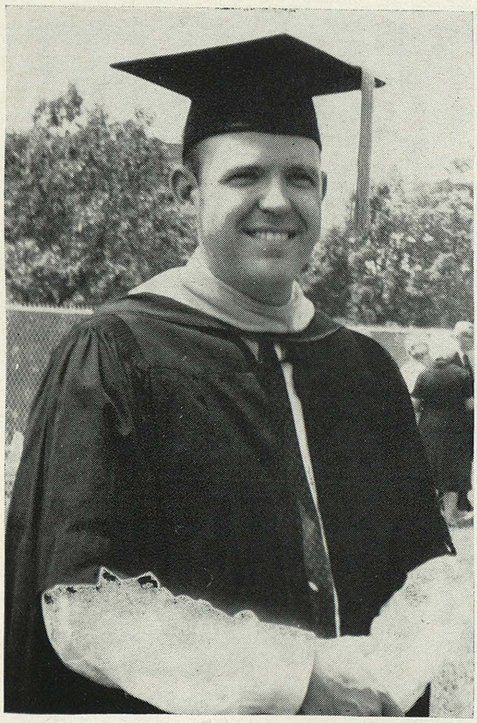
Dr. Thomas D. Van Osdol

father graduated from I.U.S.D. in the Class of 1934. He was a member of Xi Psi Phi Fraternity. Along with Dr. Fred Hohlt, a friend and classmate, he was a member of the first group to become members of Theta Theta Chapter of O.K.U. at Indiana. Dr. C. D. practiced in Warsaw, Indiana, and was elected "Father of the Year" in 1958.

Young Tom took his predental work at St. Joseph College and is also a member of O.K.U. at Xi Psi Phi Fraternity. He will be stationed in Louisiana for two years with the U.S. Army before returning to Warsaw to practice. He is married and has a son Michael age eight and one-half months.

Once again, I feel confident that all the readers of this column would want to, and do, prefer congratulations to both fathers and sons.

Dr. Donald F. Bowers, Jr., joins the ranks of I.U.S.D. Alumni by virtue of receiving a Master of Science degree this June. He received his D.D.S. Degree from



Dr. Donald F. Bowers, Jr.

Five new dentists and proud fathers.

Ohio State University College of Dentistry in June, 1959. After completing a year's internship at the Children's Hospital in Columbus, Ohio, he practiced pedodontics in Dayton until July, 1962, when he entered our graduate program in pedodontics. Don had joined the full-time faculty of Ohio State University and will teach pedodontics there. He is one of a number of dedicated people, who after practicing dentistry for a period of time, are coming back into graduate schools to prepare themselves for the practice of a specialty and/or a teaching career. Our profession can be grateful for the dedication of these people as much of the future of dentistry will be in their hands. Indiana can take pride in Her contribution to their education as well.

DENTAL SUCCESSION
(Continued from page 5)

I.U. Alumni Association, country club, reserve officers, and dozens of other such organizations. You should feel free to participate in politics and in local, state, and national movements to improve governmental practice. In your community, the dentist should stand straight and stand tall.

By achieving membership in Omicron Kappa Upsilon you have convinced your elders that you can succeed in your profession. I enjoin you to so conduct your lives that your juniors will think you have.

Class and Fraternity Notes

SENIOR CLASS

After spending a busy spring semester, most of the members of the class are working in the clinics this summer, enjoying their new status as "seniors."

A spring party at the Slovenian National Home was well-attended. The annual summer picnic is now being planned. This year we're having a family-type outing.

In March, several of the class attended the IADR meeting in Los Angeles, California. A paper presented by Bob Zager received the E. H. Patton Award for the best research paper presented by a novice researcher. For his winning paper, entitled "The Effect of Dilantin Sodium on Generating Connective Tissue," he received a cash prize of $1250. The class and the School of Dentistry can be proud of Bob and this accomplishment.

In May, several of the students attended the Founders' Day Program in Bloomington, where they were honored for outstanding scholastic records during the past year.

Senior class officers were elected at the close of the year. Ben Asdell was re-elected as president for the fourth year. The other officers are: John Sawin, vice president; Jack Hoerath, treasurer; and Sybil Sanders, Secretary. Student Council members are Don Richey and Bill Stedman.

Sybil Sanders

DELTA SIGMA DELTA

This has been another big year for Delta Sigma Delta. We were proud to start the 1963-64 school year with a new fraternity house at 3220 Fall Creek Parkway. The five bedroom house has very complete dental laboratory facilities, a large social hall, bar room and modern kitchen. The house is completely furnished and has become quite an asset to the men of Delta Sig. President Joseph Fox and the other officers did a fine job of getting the Xi Chapter organized and on its feet, as the first year in the house presented many new and unprecedented problems to the chapter.

Socially, the Xi Chapter has also maintained the Delta Sig spirit with Friday afternoon stag get-togethers and a monthly dance, each of a different theme. The last was the annual Hawaiian Luau, which was not only beautifully decorated and well attended, but offered the most outstanding food this side of the islands—thanks to Dr. Ray Maesaka, our own Hawaiian chef!

The rush program was another outstanding event. More than 200 people attended the buffet supper provided by the Delt Wives organization. We pledged thirty men from the freshman class.

Xi Chapter is proud of senior Curtis Clark who was announced the National Delta Sigma Delta Essay Contest winner. His essay was published in the winter issue of Desmos and was presented at the national meeting of Delta Sigma Delta in Atlantic City, New Jersey. A plaque has been placed in the house in his honor.

This has indeed been a great year for Delta Sig at Indiana University. The spirit is high and the men of Xi Chapter are confident that our new president, Larry Ansbaugh, and his team of officers will lead Delta Sig to another outstanding year at Indiana University.

ALUMNI NOTES

(Continued from page 40)

Dr. Paul John Stahl
120 W. Madison
Franklin, Indiana

Dr. John James Stropko, Jr.
Lincoln Air Force Base
Lincoln Nebraska

Dr. Roger Howard Sullivan
18182 St. Moritz Circle
Santa Ana, California

Dr. Donald Rhea Tharp
Fillmore, Indiana

Dr. David Hayden Thompson
R. R. #7, Box 182
Evansville 12, Indiana

Dr. Thomas Dean Van Osdol
3800 W. Michigan—#1903
Indianapolis, Indiana

Dr. Arden Dee Walgamuth
R. R.
Leesburg, Indiana

Dr. Jon Walker
7013 Haskell Avenue
Van Nuys, California

Dr. Richard Watson
South 5th Street
Farmersuburg, Indiana

Dr. Thomas H. Weinapfel
526 N. Lemcke Avenue
Evansville, Indiana

Dr. Stephen L. Wilson
Dr. Stephen L. Wilson
Sr. Asst. Dent. Surgeon
U.S.P.H.S. Hospital
Sells, Arizona

We are also pleased that the following alumns have found it possible to visit their Alma Mater in the past twelve months:

Class of 1907—Dr. Charles A. Eller

Class of 1926—Dr. Gorman F. McKean

Class of 1914—Dr. Hugh Davis and Dr. Willard G. Gates

Class of 1919—Dr. B. E. Talkington

Class of 1921—Dr. R. P. Murphy

Class of 1940—Dr. Oliver McClintock

Class of 1948—Dr. Philip M. Whisler

Class of 1949—Dr. Henry H. Leff

Class of 1950—Dr. James H. Dirlam

Class of 1952—Dr. Simon Kleeger

Class of 1953—Dr. Charles Bewick and Dr. Thomas McKean

Class of 1954—Dr. Emery E. Alling

Class of 1955—Dr. Virgil H. Eaton

Class of 1956—Dr. Don C. Marlin and Dr. Samuel Goldsman

Class of 1958—Dr. Russell Boyd

Class of 1959—Dr. Hala Zawawi Henderson

Class of 1960—Dr. Peter Reibel

Class of 1961—Dr. Gerrit Hagman and Dr. Kesler Truelove Jr.

Class of 1962—Dr. Harry Beratis, Dr. Michael Gross, Dr. John Neville, and Dr. Thomas Sherman

Class of 1963—Dr. Karl Glander

DENTAL HYGIENE
(Continued from page 23)

will also enroll in the degree program in the Fall. Other members of the class will continue practicing and take some of the senior courses.

Other news around school:

Miss M. Ann Ackerman will be on a leave of absence, for one year, starting in August 1964, to enroll in a graduate program at the University of Michigan. The program made possible by a grant from the W. K. Kellogg Foundation of Battle Creek, Michigan is intended to prepare dental hygienists for degrees in teaching. When she completes the graduate curriculum, Miss Ackerman will be awarded a Master of Science degree by the Horace H. Rackham School of Graduate Studies at the University of Michigan. A surprise Hawaiian Luau in her honor was held on June 30th by the faculty and dental hygiene alumnae.

Mrs. Constance Hamilton, D. H. '63, B.S. '64, has joined the Dental Hygiene staff.

There will be a Dental Hygiene Seminar, March 16 and 17, 1965. Dr. Mary Fuqua, Head of the Department of Food and Nutrition of Purdue University will talk on "Nutrients in the News." Other topics which we hope to include are Contemporary Anti-cariogenic Agents, Newer Methods of Oral Prophylaxis and Physiotherapy, Genetics of Oral Diseases and Recent Developments in Dental Materials. A block of rooms have been reserved at the Student Union. Make your reservations early.

FACULTY PUBLICATIONS
(Continued from page 14)

Leaving deep cavities unrestored for 3 months and then restoring them for 1 or 2 weeks did not result in pulpal inflammation even when the original floor thickness was less than 100*r*—without pulp exposure. The second dentin effectively protected the pulp against irritation by the subsequently placed cement.

A layer of primary dentin thicker than 150*r* also afforded adequate pulp protection against silicate cement after 1- and 2-week periods.

The pulp responded to silicate cement with a severe inflammatory reaction after 1 or 2 weeks when the restoration was less than 100*r* from the pulp or in direct contact with it.

The average amount of secondary dentin deposited in 3 months (plus 1 or 2 weeks) was calculated to be approximately 300*r* beneath deep cavities and 160*r* beneath shallow cavities in both deciduous and permanent teeth.

Rubach, W.C.: "Atypical facial neuralgia" Due to Pulpitis, Oral. Surg., Oral Med., Oral Path., 16:, Sept. 1963.

The entire right side of the face of a young woman was involved with extreme pain. She had suffered intermittent discomfort in this region for more than one year. She had visited four physicians and two dentists without obtaining relief. Vitamin B_{12} therapy, sinus studies, electroencephalograms, and electrocardiograms had not helped. More recently tranquilizers had been prescribed and psychotherapy suggested. Routine full-mouth roentgenograms revealed a suspect tooth with deep occlusal caries undetectable clinically. Excavation revealed a pulp exposure and removal of the tooth gave relief.

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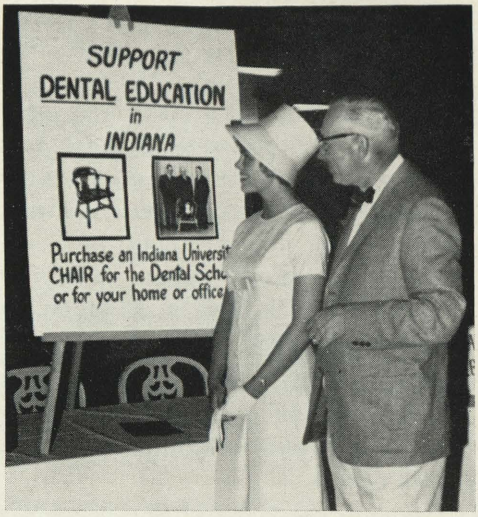

Pictures taken during the May meeting of the Indiana State Dental Association. —Courtesy of Dr. Jack Carr.

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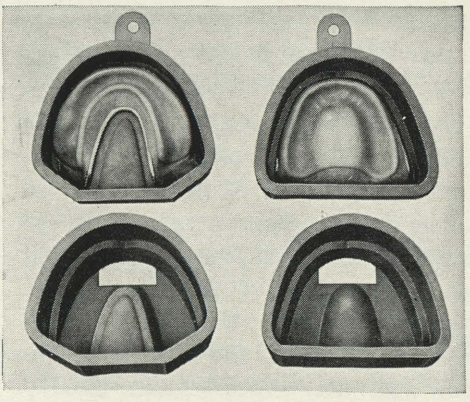

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