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The X-ray has been called the dentist's "third eye," and rightly so, for it enables him to see inside the teeth and gums and so bring to life any conditions he could not otherwise discover.

Tooth decay cannot easily be seen in the early stages without an X-ray examination. Unless checked, however, such decay may result in large cavities and lead to serious changes in certain body functions. Even in its later stages, decay — if it is hidden — may be seen only by the use of an X-ray examination.

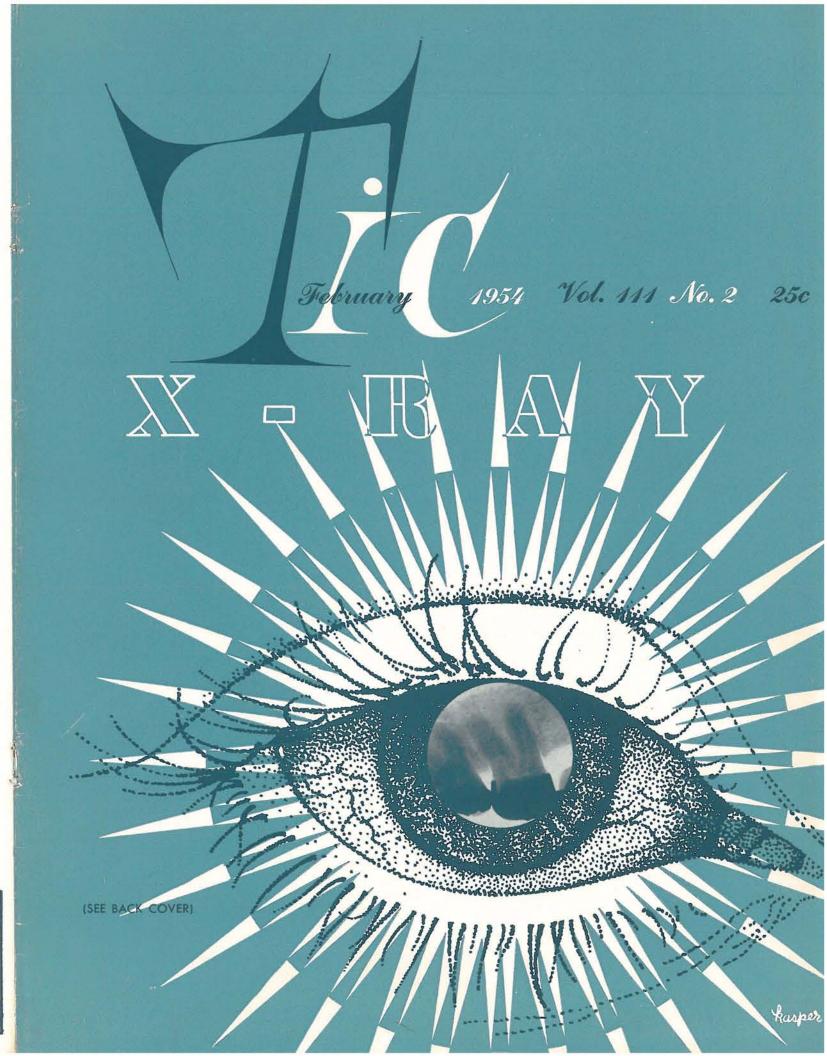
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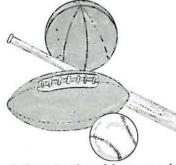
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TEC February 1954



When Junior chips a tooth during a touchdown plunge for one of the public schools in Hammond, Ind., he doesn't cause a raid on the family piggybank.

Three Hammond dentists are helping to make injuries suffered by school athletes less expensive to their parents. They are creating good "public relations" for the dental profession in a typical Midwestern city of 90,000 population. Their example could well be followed elsewhere.

These dentists, Doctors J. W. Powley, H. C. Hayden and F. C. Baker, have joined with thirteen Hammond physicians in giving their time, skills, and facilities, at nominal cost, to care for the needs of injured athletes. As a result, no dental damage suffered by any of the hundreds of athletes in the school system goes untreated.

Legally, schools in Indiana are not required to care for injured athletes. Morally, they are. But dental and medical bills usually mount up so quickly when growing youngsters clash in sports combat that they ordinarily cannot be paid by the schools. The usual course is to make parents responsible for the bills.

However, in Hammond-thanks to the staff of volunteer dentists and physicians - the public schools are able to reduce dental and medical costs.

But let Clyde Lyle, athletic director of Hammond Public Schools, tell the story:

"Before these dentists and physicians volunteered their help last year, our dental and medical expenses were high. Our bills ran to about \$2,300 a year. Now, they have been cut considerably, while protection has increased and become more readily available.

"We pay all costs for athletic injuries except where the family of the boy is covered by private health and accident insurance.

"We've been able to continue to meet the bills in the face of rising costs only through the co-operation of the staff of volunteer dentists and physicians."

The Hammond public schools pay even if the boy prefers to consult his family dentist or physician instead of a member of the volunteer staff. An athlete is not restricted in any way as to his choice of dentist and physician.

# **How Dentists** Win Friends

by Jim Skufakiss

"In this regard," says Mr. Lyle, "we recently settled a great number of dental and medical bills when local dentists and physicians not on the volunteer staff very generously agreed to downward adjustments. Their fairness allowed us to settle our last big outstanding debt."

As expected, most of the injuries occur in football. To protect the players, Mr. Lyle assigns Doctor F. A. Musacchio, city health officer and school physician, to all football games played on the two city fields. If there are games at both fields, the home team provides a physician at the game not assigned to Doctor Musacchio.

At basketball tournaments, a physician and a nurse are available. For regular season basketball games and for other athletic events in which few injuries occur, the schools depend upon the volunteer staff.

Injuries have become a rarity in football during the last few years, Mr. Lyle advises, crediting, in part, the prompt treatment given by the volunteer dentists and physicians.

Doctor Henry W. Eggers, a member of the Hammond School Board, organized the volunteer staff because it was apparent that the schools needed help. "We could see that athletic costs were rising and gate receipts were falling," the physician explains, "and we felt that we should do our part to protect the boys playing the game."

The three dentists report that they are treating tooth damage, especially among grade schoolers, that ordinarily would not even be brought to their attention. In the past, many so-called minor injuries that were not examined often led to complications.

"We've been told that we're doing a good job," the three dentists say, "and that our efforts are saving the schools money. We're certainly glad to hear that."

Perhaps Hammond's successful plan can show the way to a volunteer staff of dentists in your community, doctor. The public always remembers those who give service to their community, especially when public funds are saved in the process.

**T**ĨC

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stand."

givitis," he said.

# **Don't Talk Over Their Heads**

# by Rolland B. Moore, D.D.S.

A short time ago I was in the dental office of a friend and heard him talking to a young lady patient he had in his dental chair. She was nice looking, well-dressed, and apparently knew her way around. She was private secretary to the president of an insurance company.

Doctor W talked to her for almost five minutes without ever giving her a chance to get in a word. He used a lot of scientific terms and, for good measure, threw in a little Latin. When he finally stopped, the young lady, as though she was talking to herself, said: "Words, words, words! Nothing but words, and they don't mean a thing to me!" She stopped. Looking up at Doctor W, she said, "Now, doctor, since you have run down and got all of that off your chest, just tell me, in plain English, what is the matter with my gums? You don't need to use words of one syllable-just tell me in standard English-I'll under-

Doctor W looked foolish. He had to laugh. "You have gin-

"Why didn't you say that before, instead of feeding me all that hooey?" his patient wanted to know. "My time is valuable, the same as yours is. Now - what can you do for me?"

Doctor W didn't try to "show off" any more. He told her simply and clearly and that was that.

I wanted to yell "hooray" for the young lady who had the courage to assert herself and the intelligence to want to know what her dental problem really was. There are too many of us who are like Doctor W. For one thing, it is positively impolite to talk over the heads of patients, trying to impress them with our professional knowledge. The simpler we make our explanations, the better it will be for all concerned, including us.

Then we have a group of dentists who talk too much to their patients in trying to "sell" their services. I have actually heard dentists talk themselves out of dental work their patients should have had done. Thus too much talk did a disservice not only to the dentist but to the patients also. When a patient agrees to



a piece of work, that is the time to start it. Nothing more needs to be said.

Unfortunately there are dentists—hopefully in a negligible minority—who will criticize another dentist's work, to the patient. No dentist should ever do it. It serves no good purpose, for it helps no one —certainly not the critic.

On the other hand, a generous compliment about some other dentist's work, if merited, puts the patient in a good frame of mind. It will help you. Here is a story that illustrates this. In a town forty miles from where I practice, there are two dentists. One of them, retired, is in his eighties. Last summer a lady and her husband from that town came to my town to visit. While here, she broke a replaceable facing on her upper anterior bridge and came to me to have a new facing put on. I

Ι

Which tooth it was he filled for her -

A patient thinks it very strange,

And yet, despite the printed card

Seldom where you'll find her.

11

Comes the hour, his office is -

A dentist can't remember,

Was it last September?

To act as a reminder,

appreciated what an excellent bridge it was, and told her so. I also remarked about the beautiful gold inlays in her posterior teeth. She was pleased with my comments and told me that the retired aged dentist had done the work. After his retirement she went to the other dentist in town. When he saw the inlays and the bridge, he joked about the inlays and told her they were the "poorest work" he had ever seen and thought they must have been "cast by an iron moulder." He said they were worthless and wanted her to let him take them out and cast others for her. She refused.

"Why did that dentist make fun of the work done by the old dentist?" she asked me. I told her I didn't know. She then said that whenever she had dental work to be done she would drive to my office, even though it was a long drive. She kept her word about it, too, and I have had all of that family's work since. That other dentist could just as well have had it, but for his unkind criticism of a colleague.

It is remarkable how loudly some dentists can "toot their own horn" when they have a patient in the chair. I was in the office of one such dentist recently and heard him bragging about his work and the compliments he receives. The patient listened awhile, but soon got irked. He drawled, "You don't seem to hate yourself any, doc." The dentist folded. He went on with his work instead.

Here is another thing dentists should avoid politics, religion and other similar subjects. If a patient does not share your beliefs, you will get into trouble. Leave religion to the clergy and politics to the politicians. Don't talk over the heads of your patients — and don't talk over your own head, either.

# – THOUGHTS ON PATIENTS —

Enter, oh, so nonchalant, When they're half hour late!

## III

Folks who pay their bills when due, My hat is off to you! Since, woe is me, they're all too few, What can a dentist do?

# IV

What to do with the patient who says, "This isn't a regular visit?" Someone pays for the time you lose, If it isn't he – who is it?

- Ethel Willis Hewitt -

are less likely to be a factor contributing to caries, says Doctor Schuyler.

The larger half-round wire is used for the longer clasp necessary when clasping a molar tooth. In special cases, when greater rigidity is desired, the gauge of the wire may be increased, or the cast clasp may be used.

The Roach clasp gives favorable retention (tripping action) but does not distribute lateral stresses as favorably as the circumferential clasp. It is, however, very useful in securing retention where teeth have unfavorable buccal or lingual inclinations, and may be advantageously used in clasping anterior teeth with little show of metal.

The lighter guage round wire clasps, adds Doctor Schuyler, are used to the greatest advantage with deep-seated occlusal rests, which support the appliance against lateral movement or rotation. They are most easily adapted and adjusted, but are also easily distorted in handling by the patient, and, unless they are used with deep-seated rests in inlays or fillings, they do not sufficiently distribute lateral stresses.

The continuous clasp as advised by Doctor Edward Kennedy is often found serviceable as a means of distributing these stresses or of strengthening a weak tooth and permitting regeneration of its supporting tissues. To avoid the wedging of teeth, however, it should always be used in conjunction with definite lug seats in the abutment teeth.

Clasps must be tapered from the fixed base to the free end. This not only adds to their life, but, owing to the added flexibility, it enables them to be placed further over the maximum tooth contour in a more favorable position for retention and esthetics.

A careful study of tooth contour will reveal, with rare exceptions, favorable areas for clasp retention. These are found more often on the mesial and distal surfaces than on the lingual and buccal, and necessitate the inclusion of most of the tooth's circumference.

# Cast Clasps

Doctor G. P. Smith offers some interesting data on cast clasps. He maintains that with a one-piece casting it is possible to design and construct a case so that all contact with the lingual and proximal portions of the remaining teeth will be stabilizing, and retentive points will be placed on only the buccal or labial aspects of the supporting teeth.

Regarding the circumferential clasp, often sufficient length of clasp arm to permit adequate flexion cannot be obtained; tipped and rotated teeth present problems in placement of the clasps; and at times, undercuts are so severe that the arms must

Patients prone to pace the floor, When they have to wait, February 1954

be placed near the occlusal or incisal margin, making them conspicuous and unsightly.

In contrast, contends Doctor Smith, the Roach bar clasp overcomes many of these objections, since it permits greater length of clasp arm, spanning of excessive undercuts, and placing of clasp contacts in less conspicuous places.

The Roach design for cast clasps also lends itself to free sluicing of mouth fluids and minimal contact with tooth structure, so necessary for the prevention of enamel decalcification, caries and stagnation of mouth fluids.

The cast clasp satisfies the requirements of stabilization and retention, and it is versatile in design, and adaptable. In many cases it can be extended under the lips, so that only its terminal end is visible. Properly designed and finished cast clasps can be cleaned easily and maintained in a hygienic condition.

Economically, cast clasps, particularly one-piece castings, are advantageous to the patient; the technique is well controlled, and results are assured when the work is done by a person of average ability.

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EDITOR'S NOTE: This bibliography will cover all three articles on Partial Denture Clasping.

# **tic** February 1954

of clasp design, is the circumferential clasp, which envelopes a major portion of the tooth circumference and rests on tooth structure in its entirety.

It is to be distinguished from the bar clasp originated and popularized by Doctor F. E. Roach. This type of retainer resembles some letter of the alphabet approximating the shape of the bar, and contacts only a minor portion of the tooth circumference. The points of contact are connected to the partial denture by means of bars that rest on the gingival tissues.

The circumferential clasp may be divided into two parts, a body and an arm. The former is rigid, while the latter is divided into three functional sections: the rigid third (the part joining the body); the flexible third (the terminal flexible portion); and the semirigid third (the part with an intermediate degree of resiliency, lying between the rigid and flexible thirds).



The body is that segment of the clasp which contacts the proximal surface nearest to the prosthesis. The arm is the portion which touches the buccal or lingual surface.

To determine the correct positioning of these clasp sections on an abutment tooth and to

facilitate the study of clasp functions, the contour analysis by Doctor F. C. Elliott is of great help:

If a tooth is held in a vertical position, and a marking device, parallel to the long axis of the tooth is carried around its circumference, the marker will circumscribe a line or zone of maximum contour, named the neutral zone.

All tooth surfaces occlusal or incisal to this line are of lesser contour, and converge to a point somewhere above the occlusal or incisal surface.

This region is called the occlusal or incisal convergence zone. Here lie the nonundercut areas of the tooth, thereby giving such areas the name "nonundercut."

Conversely, all tooth surfaces gingival to the neutral zone have less contour, and converge to a point somewhere gingival to the crown. In this region lie the undercuts, thereby deriving the name "undercut" for that portion of the tooth.

It may be of interest to note that Doctor R. L. Girardot identifies the space below the survey line as the infra-bulge, and, that above it as the suprabulge. And, according to Doctor J. F. Fuller, the supra-bulge retainer is represented by the circumferential clasp, while the Roach retainer is of the infra-bulge type.

# **Two Basic Functions**

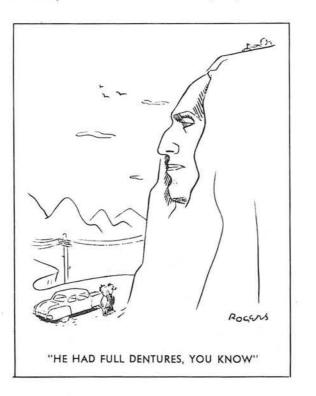
In partial dentures constructed with shallow rests, two basic functions are performed by clasps, says Doctor Louis Blatterfein:

- 1. Primary retention: Muscle action during speech, mastication, and deglutition, sticky foods and gravity produce vertical dislodging forces.
- 2. Transmission of lateral forces from a partial denture to abutment teeth: During mastication, lateral forces on the partial denture will subject the remaining natural teeth and the edentulous areas to pressure exceeding their physiologic tolerance point. The clasps limit this lateral movement and prevent an overloading of these toothless areas, thereby minimizing alveolar resorption.

Doctor C. H. Schuyler points out that each type of clasp has its place in partial denture construction. The cast, round or half-round wire, or the Roach bar clasp will not serve all purposes with equal efficiency, but none of them should be condemned.

The 12- or 14-gauge half-round wire clasp is preferred in the large majority of cases.

The wrought wire clasp is more difficult to construct and assemble than the one-piece, all cast appliance. It requires a greater degree of technical skill and a greater expenditure of time. Wrought wire clasps, however, have greater retentive life, are less readily distorted, are more easily adjusted, and



# MAJOR OPERATION

## by Mabel C. Stewart

Mrs. Benton, fair, fat, and forty, fidgeted on the edge of one of the stiff chairs in Doctor Pratt's office. She was uncomfortable. Her feet hurt, although they looked trim in the new 51/2 triple A's, which should have been 6 double. Also there was an uneasy feeling in the pit of her stomach. Surely that couldn't be the lemon chiffon pie she had for lunch. There was really nothing to lemon chiffon, just fluff. Lemon was thinning, anyway. She looked at her watch. Two o'clock! Her appointment had been for one-thirty. That snippy new nurse was probably responsible. She hadn't liked her voice over the telephone.

"Mrs. Benton, the doctor is ready for you now." The nurse looked pleasant enough as she spoke, but you never could tell about looks.

"Is there anything new, Mrs. Benton?" asked Doctor Pratt, a little tensely. He was due at the hospital at two-thirty.

"Well, doctor, I am so stiff in my joints. And that queer feeling in my stomach keeps up. It isn't exactly a pain, but a sort of gnawing. I can't exactly explain."

"Yes, that's similar to what you had before. How about the diet? Have you been following it faithfully?"

"Well, doctor, you know how it is! I do try, but sometimes, if there is something special, it's pretty hard not to. You know how it is!"

"Yes, I know, Mrs. Benton. But I know, too, you are overweight, and you should watch your diet more carefully. About that joint stiffness – have you had your teeth X-rayed recently?"

She looked startled. "My teeth, doctor," she asked. "You don't mean my teeth will have to come out?"

"I hope not," he replied, "but if there should be any abscesses, it might mean some extractions would be necessary."

"Oh, I couldn't have that," she asserted emphatically. "I'd rather die than have false teeth."

"Plenty of people have them, and they get along. Don't worry. I'll call up Doctor McCormack, the dentist. Better go over there now, since you are in town, and maybe he can take care of you today. And continue the diet I suggested." Doctor Pratt looked at his watch and rose with finality.

Well, wasn't that a note! Teeth! She had a notion not to go a step toward Doctor McCormack's office. But, of course, if there were abscesses – and since Doctor Pratt said she should get an X-ray, she supposed she must. . .  $\,$ 

A very stiff-capped nurse looked up as Mrs. Benton entered the dentist's office.

"Doctor Pratt sent me to have my teeth X-rayed," Mrs. Benton said.

"Yes, we just had a ring from him. Do you want it done today, Mrs. Benton? Doctor McCormack can take care of you in half an hour."

"I suppose so," said Mrs. Benton. She might as well have it over with. "I'll wait."

If only she dared slip off her shoes! But she'd never get them on again if she did. That woman coming out of the consulting room looked all in. Perhaps she had had her teeth out. Every one said it was a terrible experience. How could she ever stand it? Her nerves were so sensitive! And if she did have false teeth they'd probably rattle, or perhaps pop out — or do both.

"Ready for you now, Mrs. Benton," the nurse announced.

Doctor McCormack's spectacled eyes were keen. "You want all your teeth X-rayed, Mrs. Benton?" he asked.

Mrs. Benton was a little peeved. "I don't want it. It's Doctor Pratt," she answered.

"Yes, yes, I understand. Please take off your hat, and sit here. Now, we'll put this away back," began Doctor McCormick, "and you hold it with your thumb, this way. Right."

Mrs. Benton nearly choked, but could say nothing. This was horrible.



# TEC February 1954

"Now, this one," continued Doctor McCormack. "Hold it with your first finger."

On and on, one after another. Mrs. Benton squirmed. How long was this going to last?

"That's all," Doctor McCormack finally said. "I will send the report to Doctor Pratt."

"Will I have to have my teeth out?" she inquired.

"We can't tell yet, of course. We don't give the report to the patient; we send it to the doctor. If you want to come back in an hour's time we can have it ready for you to take to him, if you prefer."

"Yes, I'll do that," said Mrs. Benton. It would be easier to know the worst immediately.

The dentist was giving dictation in the inner office when she returned. "Your report will be ready shortly," said the nurse.

Mrs. Benton sat down. The sound of dictation filtered through the half-open door. "Radiograph ... upper teeth . . ." droned Doctor McCormack's voice. "Infection . . ." Mrs. Benton pricked up her ears. Could that be her report?

It was her report. Doctor McCormack was bringing it to her in a sealed envelope. "Well, there's nothing to be apprehensive about," he explained.

Yes, that was just what they had said when she had her tonsils out, and she nearly bled to death! She snatched the long envelope and hurried away to Doctor Pratt's office. Nothing to be apprehensive about, indeed! It was nothing, was it, to have infection in your jaws? It would just mean an upper and lower plate both, that was all! She shuddered.

Doctor Pratt was not in his office. "He will not be here till morning," the nurse said.

"But I can't wait till morning," said Mrs. Benton, who had already relinquished the long envelope.

"Doctor Pratt will call you the first thing in the morning," promised the nurse.

Mrs. Benton lifted herself wearily into the bus

to go home. Home was the place she could kick off those dratted shoes. George wouldn't have any sympathy for her. He never did. Perhaps he didn't love her any more. When had he last told her he loved her? And if she had to get all her teeth out, and look like an old hag for months before she got her plates, how could she possibly expect to keep the love of a husband who acted cold already? Probably he would fall in love with that new stenographer in his office. Men of his age often did act silly. Mrs. Benton was all in a dither when the bus finally stopped.

Just as she expected, George took her troubles lightly. "But Bertha," he said wearily, "how do you know your teeth will have to come out? You haven't heard the report yet."

"But I told you I heard Doctor McCormack. He said 'infection' twice. You never understand, George."

"Nonsense; I do understand. Now stop worrying. I've got troubles of my own. Such a day! That stupid new stenographer! Guess I'll go to bed."

Long after George's troubles were dissolved in sleep, Mrs. Benton lay tossing. "I just know my false teeth will be like Aunt Melissa's," she moaned. There was that teasing pain again. Perhaps she shouldn't have eaten Rosie's good chocolate cake for dinner. But chocolate was strengthening. Soldiers ate it. And mountain climbers. She would need strength if she had to have her teeth out.

In the morning the telephone rang. It was Doctor Pratt. "Here is Doctor McCormack's report, Mrs. Benton," he said. "I'll read it to you: 'Radiographs show no infection at roots of any of the upper teeth. No infection at roots of any of the lower teeth.' "

Mrs. Benton dropped the receiver. "Rosie!" she called faintly. "The aromatics!" One deep whiff brought recovery. "Isn't that the most inconsiderate thing you ever heard of!" she blazed. "Making me go through all that suffering for nothing!"

## LOVE SONG OF A DENTIST -My love has a silver tooth, I did all the work myself My love has a golden crown; And I'm very well known, near and far. My love has the very best bridge Her breath is as sweet as her smile-Of any young woman in town. (She uses the paste I endorse)-Oh, never let anyone say And she's been such a credit to me Her dentures are not up to par! I shall marry the girl, of course!

Adele De Leeuw

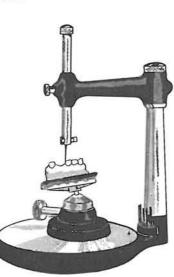
# The Removable Partial Denture

# **Partial Denture Clasping**

Editor's note: This is the first installment of a three-part series on Partial Denture Clasping

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Any system of scientific clasping which takes into account both mechanical and biologic factors, must start with an accurate reproduction of tooth form and position and a survey of the abutment teeth.



And the first problem in the designing of clasps, according to Doctor A. H. Schmidt, is to tilt the cast at the best angle for insertion and removal of the partial denture in one direction only-a path parallel to the vertical mandrel of the surveyor.

**Doctors** Chester Perry and S. G. Applegate describe a survey-

ing instrument which enables the operator to consider the arch on which he is developing a restoration as a unit, rather than each tooth as a separate unrelated part; and permits determination of the most favorable path of insertion for that restoration.

The surveyor consists fundamentally of a moving spindle held perpendicular to a stationary base, and into which may be inserted various instruments used for location and measurement of undercuts, or for their elimination when undesirable.

A second part of most surveyors is a movable platform on which the cast to be studied is mounted. This base provides for tilting the cast, an operation which automatically changes the relation of the spindle to the plane of occlusion, or alters the path of insertion.

A surveying tool, mandrel or marker is placed



# Ninth in a Series

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## by Joseph Murray, D.D.S.

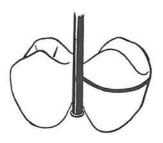
in the spindle chuck, and its verticle side is positioned against each tooth involved in the restoration. The tool is run around all surfaces of these teeth by moving the horizontal swinging arm or by adjusting the base or stage.

The greatest circumference of the tooth is located where the vertical side of the surveying instrument touches the tooth. If a carbon is used in the chuck, the line inscribed along the greatest circumference or maximum contour becomes the clasp guide or survey line-also known as the neutral zone.

Whenever light shows between marker and tooth, cervical to this clasp guide line, an undercut area is present. The location for the retentive bearing point of the clasp is selected somewhere in this region.

After the model is manipulated into the most favorable position, it is sealed firmly to the movable base. The spindle of the instrument is then positioned until three widely distributed points are found on the master cast, all in one horizontal line.

Now, the spindle is locked, and definite markings are made with a carbon of the location of these three points. Just before being duplicated, they



are marked with indelible pencil. These points will transfer to the duplication impression, and in turn will be transferred to the casting model so that the same orientation will again be possible.

This allows ready duplication of the master model survey on the

casting model. In addition, the model can be properly repositioned if dislodged.

# The Circumferential Clasp

According to Doctor Louis Blatterfein, the type of clasp most frequently encountered in partial denture construction, and the basis for all types



Major Secter inserting prothesis constructed under field conditions.

not in Federal service. The State mission of the Guard is to protect life and property and to preserve peace and order. It also serves in time of natural disasters, such as floods, tornadoes, hurricanes, blizzards, forest fires. Approximately three hundred thousand officers and men are in the Guard today, which includes infantry divisions, armored divisions, regimental combat teams, antiaircraft artillery groups, and such combat support units as field artillery, armored cavalry, engineers, quartermaster, signal corps, military police, and transportation units. The Air National Guard has more than five hundred units, grouped into twentyseven wings. The units include light bombardment and fighter squadrons, equipped with conventional jet-type aircraft, and such supporting units as communication outfits, photo reconnaissance squadrons, weather units, aviation engineer battalions, aircraft control and warning squadrons, and other technical organizations.

## Dentists Are Needed

"Many of these Guard units need dentists," Doctor Secter explains. "In a number of them the dental section requires professional personnel. They must grow in strength and experience. They must be ready to function under combat conditions and with a minimum of training. Here, surely, is an opportunity for the dentist to serve his community, alongside the physician, the banker, the minister, the school teacher, the merchant. A 'hitch' in the Guard for every qualified dentist would mean a tremendous lift to the Nation."

# A Commendation

How well Major Secter has done what he suggests other dentists might enjoy doing, is clear from the following commendation, one of several he has received:

Major Irving I. Secter originally joined this organization after the summer encampment in 1949 at the earnest request of the Commanding Officer of the 108th Medical Battalion. The dental service was in a very



Sergeant Morton Secter is attached to the Finance Section

poor state at that time. As a result of his efforts, the divisional dental section has attained a rating of excellent or superior on inspection since.

It is the general consensus of opinion among battalion personnel that Major Secter excels as a professional soldier. He has readily combined a superior knowledge of his own specialty with a ready grasp of the requisites of military leadership. He is a superb officer and individual and it is a pleasure to forward this commendation in recognition of his excellent services to the division and the medical battalion.

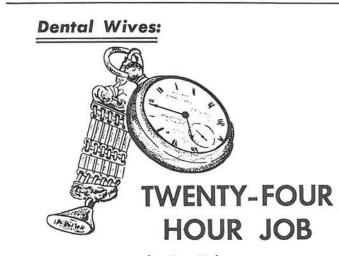
In his early forties, married a quarter-century, and the father of two children, Morton, twentytwo and Benne Susan, twelve, Irving Sector has been practicing dentistry ever since he obtained his D.D.S. degree from the Chicago College of Dental Surgery, Loyola University, in 1929.

# Instructor in Hypnodontia

He left the Guard recently with great reluctance, and only after a qualified and experienced man became available to replace him as chief dental officer in his division, the 33rd Infantry Division. As the dental adviser and an instructor for the Institute of Medical and Dental Hypnosis-"dedicated to the advancement of the professional knowledge and use of hypnosis in anticipation of its inclusion in medical and dental curricula"-his duties multiplied as the activities of the Institute increased. Then, too, he had become secretary of the Chicago Academy of Hypnodontia, an associate member of the British Society of Medical Hypnotists, and a member of the Society of Clinical and Experimental Hypnosis. His writings and lectures on hypnodontia added to the demands on his time. He realized that he would have to leave the Secter family's Guard obligations to Sergeant Morton Arnold Secter.

Irving Secter will probably succeed as magnificently in the field of hypnodontia as he has in the field of military service, for he combines in a single formula for happiness and success the following wonderful creed:

Do all the good you can by all the means you can.



# by Kay Lipke

The clock struck six. Dinner was on the table, hot and appetizing. The dentist and his wife, who was also his trained nurse assistant, sank into their chairs and began to eat, grateful that for once they were able to have dinner together in peace and quiet at a regular dinner hour.

Then the doorbell rang.

The dentist hastily swallowed his first mouthful of food since breakfast, rose wearily to his feet, and went through the doorway into the living room which did double duty as a reception room and opened the door.

– A VALENTINE THOUGHT — The young lady dentist examined his teeth, "You have acute gingivitus," said she. An eyelid he fluttered, a wink to bequeath, "Oh, I think you're cute, too," said he.

A man in working clothes stood on the

doorstep, his face twisted in pain. "I'm sorry to disturb you, doc, but I have a terrible toothache."

"Come in," said the dentist, leading the way to his operating room.

Through a half-open door, his wife watched the two of them disappear. With a sigh, she put the dinner back in the oven, washed her hands, slipped back into her uniform and hurried to assist her husband.

Before the two of them were able to sit down again to a dried and unappetizing warmed-up dinner, they had taken care of two more patients. By then it was nine o'clock.

These two busy, alert people have an almost twenty-four hour job in a small city in one of the western mining states, where the population has suddenly leaped from one thousand to three thousand people, through the building of a large smelter nearby. Until recently he was the only dentist, and the day did not have enough hours for the patients who needed attention.

February 1954

Their small home office is almost in the center of the town, on the edge of a small park. It is a convenient place in which to work, but entirely too convenient for privacy, and the few hours of freedom which every family covets.

Fortunately both of them have a grand sense of humor; and the dentist is blessed with a wife who, in addition to being a trained nurse, has a warm, attractive personality.

She laughed as she told us about her life. "If we entertain company, which is rarely, the doorbell is sure to ring, and we find an emergency on our doorstep. It never fails. Why, we hardly dare to turn on the light in the evening. Frequently we grope about in the dark, just to have a little peace and quiet.

"If we happen to be awake in the middle of the night, we don't even dare switch on the light to see what time it is. Sure as fate, the doorbell will ring and someone will say, apologetically, 'I'm sorry, doc, but I saw your light and thought as long as you were awake, you wouldn't mind doing something about this toothache. I've been walking the floor for hours.' Or perhaps, a man gets

by Barbara Becker

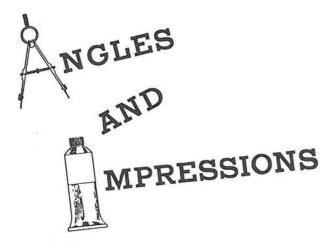
into a fight in one of the bars, and has his front teeth knocked out. It is then we wish our home office was not quite so conveniently close to the center of town."

Because of the uncertain nature of their evening hours, their professional day starts a little later than in most

localities. In the morning, before breakfast, the dentist does his laboratory work, and he has more of it to do than most dentists, because the nearest city with a professional laboratory is a great many miles away.

Spare time? His wife laughed as she talked about it. "I used to think it was wonderful to have a home office, but now I am not so sure. I confess there are times when I wish our home was miles away from the office. We are at the beck and call of the public twenty-four hours a day."

Occasionally, the two of them lock up and escape for a week or two of city living. They enjoy the luxury of a hotel, sleeping late in the morning, and leaving their lights on for hours on end without the fear of a patient with a toothache standing on their doorstep. When their holiday is over, they head back home and go to work in a town where they are greatly needed - these two very useful people.



Dental Thisa and Data

The "green tide" of chlorophyll toothpaste that engulfed the public more than a year ago has finally ebbed. From the time of its initial introduction in the consumers' market, the American Dental Association, always alert to misleading dental ads, cautioned against the sensational anti-caries claims. More recently, researchers at Johns Hopkins University showed that chlorophyll, even as a deodorant, was ineffective. "Chlorophyll," they said, "masks odors because of the mixture in which it is sold." . . . Nevertheless, the search for chemicals to fight caries goes on. A leading advertising journal predicts that the next magical ingredient to follow the "anti-enzyme" in dentrifices will be Permachem - "a new sterilizing agent composed of highly ionized silver and other active agents." Its discoverers claim that it will prevent the growth of disease-producing bacteria and successfully combat tooth decay. . . . A University of Illinois blood specialist has come up with an interesting and unique method of extracting teeth when bloodless operations are necessary, particularly for hemophiliacs. The instrument is a rubber band. Placed tightly around the tooth it works its way down below the gingival tissue until the supporting alveolar is denuded. Eventually, the tooth is loosened up and practically falls out of its own accord. The process takes from one week to six months, depending upon the osseous structural support, and very little blood is lost. . . . Some average dental fees in the Allied Zone of Germany are: An extraction is 5 marks or about \$1.20. However, if the patient is covered by health insurance (as is the case with 80 per cent of the patients) the dentist gets 50 cents. A one-surface filling is also \$1.20, while an injection of novocaine is an additional 50 cents.

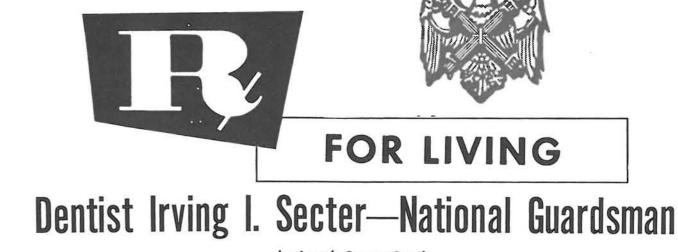
## Inci-dentals

Writing in the Scientific American, a professor from the Harvard School of Dentistry claims that if the deterioration of human teeth continues at its present rate, in another 1,000 years there may not be a sound human tooth in the world. We can't argue with that, but if the present rate of deterioration of human relations continues, will anyone be around in 1,000 years? . . . A pawnshop in Atlanta, Georgia, reported that a destitute man pawned his upper full denture for \$3. The next day he reappeared and pawned the lower full denture for \$3. Two things are apparent from this story: (1) the lower denture, surprisingly enough. was more comfortable than the upper denture and (2) the \$6 surely wasn't spent on food.

## Tic Tips

Use a 10 per cent hydrochloric acid solution to remove the brown sediment or discoloration in the cuspidor bowl easily and quickly. . . . High spots or pressure areas inside of clasps may be located by rubbing the clasp area with a red pencil and then noting where the pencil markings rub off or by flowing a fine film of black carding wax over the inside of the clasp and then noting where the wax has been rubbed off by the high spot. . . . To eliminate the last minute preparation of suture material and needle, keep a threaded suture wrapped around a cotton roll into which the needle is inserted and keep in a cold sterilizing solution. . . . Before final polishing of an amalgam filling with tin oxide or whiting, a good preliminary brushing can be done with an abrasive paste made of medium grit pumice and glycerin. Toothpaste may be added to whiten and flavor the mixture and a small amount of denture powder can be used to serve as a binder.





Doctor Irving I. Sector of Chicago believes so strongly in that tenet of George Washington that, following three years of active duty in the Air Force in World War II, he served three additional years with the organized reserve corps and three years with the National Guard, has a son in the Guard, and, unable to continue in the Guard himself, has become a one-man recruitment unit for the citizensoldier organization that is older than the Nation itself.

His reasons are impressive: "What American today doesn't feel, more than ever, grateful that he is a citizen of the United States? And feel too, more acutely than ever before, his obligation to protect and preserve his country? Who will question that, during our lifetime at least, we shall live in a world in which we must be constantly prepared? Modern weapons of war being what they are, all of us-soldier and non-soldier alike-would be called upon to play an active part in another war. All of us, then, should learn how to be prepared to play his part, to learn how to defend his country and himself. The National Guard offers these opportunities to discharge one's obligations, and the dentist, through the Guard, can make a genuine contribution to his community, to his State, and to the Nation. I know. I've had that privilege."

# Regarding Your Son

Doctor Secter, who has served as division dental surgeon in the Guard, believes that the Guard is especially advantageous for youths. He says: "Your son, doctor, like every young man who is seventeen years of age or older, will soon be faced





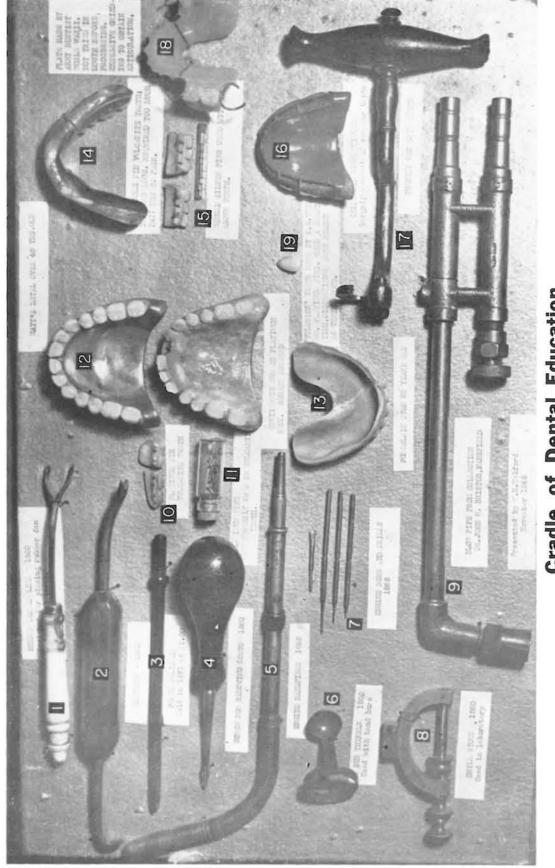
# FOR LIVING

by Joseph George Strack

# ... every citizen who enjoys the protection of a free government owes not only a portion of his property but even of his personal services to the defense of it.

with the possibility of some kind of military service. This is one of the most important decisions of modern-day youth, a decision that you and I did not have to make. He has two choices: (1) To wait and see what happens to him under Selective Service, or (2) to prepare now, in the National Guard, to meet his military obligation. If he is inducted, he will leave for military service without any training or experience. If he joins the Guard, he can begin his military training while he is still living at home and attending school, or working at his job. In other words, he will be able to break into military training gradually, with friends and neighbors who are also citizen-soldiers like himself. He will be able to choose his own branch of service. He will be paid for this training. He will have many educational opportunities-more than four hundred and fifty courses will be open to him. He may acquire new skills-in radar, radio, mechanics, personnel administration, and other fields. Promotion to officer status, retirement benefits, sports, recreation-these are additional benefits offered by the Guard. I believe that one of the greatest benefits is this: The Guard takes the shocks out of military service. It makes the adjustment from civilian to military life not only gradual but painless. That is another reason why I am glad that my son is in the Guard. I wish that the sons of other dentists would investigate its possibilities."

More than two thousand communities in the Nation support Guard units. The Guard is organized and recruited by the States and is commanded by the governors of the States when the units are



# adle of Dental Education

Display presented to the museum in 1938 by W. H. Wolford conta 1. rubber dam applier, 1860. 2. elevator, 1860. 3. Porte polisher, s in 1871 for \$1. 4. screw for removing roots, 1860. 5. engine ha piece, 1868. 6. bur thimble, 1860. 7. engine burs and drills. 8. c stock, 1860. 9. blow pipe from collection of Doctor J. H. Bristor, Ma field. 10. platinum pin. vulcanite teeth. 11. platinum pins, size form ly used in vulcanite teeth. 12. continuous gum on platinum base, r ber rebased. 13. porcelain over sixty years old. 14. detachable

anite teeth. Not used long, required too much patience to pack. German silver pins used with above teeth. 16. celluloid discontinlargely account of camphor taste. 17. turnkey for extraction. 18. e made by U.S. Army dentist, World War II. (Not tried in mouth re processing; excessive grinding to obtain articulation.) 19. "Vulx" teeth made by S.S. White, Company. (Platinum pins; used a t time. discontinued for some reason as teeth above.)



by Harry Cimring

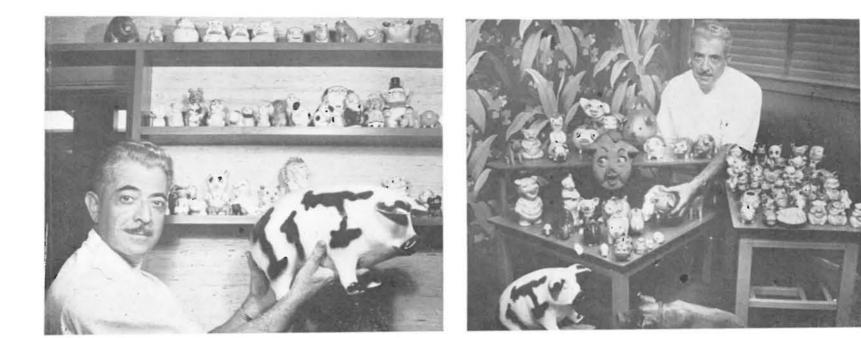
Doctor Harry Oliver Goffin, of Los Angeles, isn't one to allow a nomenclatural peculiarity to get him down. Doctor Goffin accepted it, got in tune with it, turned it to his advantage, and has since enjoyed it thoroughly.

When, during his youth, his girl-friend gave him a monogrammed tie-clip, he hesitated to wear it only momentarily. All the wiseacres pointed out that it spelled H.O.G. Goffin went along with the gag.

In dental school, the teachers and his fellow students commented on the manner in which he initialed his papers H.O.G. Being a somewhat talented doodler, he thereupon added a pig's head to his now well-recognized signature. This fact, properly illustrated, eventually found its way into the late Bob Ripley's "Believe it or not."

When he needed a subject for his wax-carving class, he instinctively chose a pig.

Having a subject forced upon him, first by his parents at birth, later by friends and relatives, the good doctor became interested in ceramic pigs and eventually acquired a few—and a hobby. As time went by, his collection was augmented, mostly by





patients who took to the idea with gusto, until today Doctor Goffin has about three hundred pigs, ranging in size from a fraction of an inch to a foot and a half (a cement doorstop), made of all types of material and from all parts of the world. One was sent by a patient from Argentina.

With tongue in cheek, Doctor Goffin even designed a coat-of-arms and had beautiful two-color business cards printed up incorporating the emblem. He suddenly dropped the idea, however, when one patient wanted to know if he was in the meat-packing business.

So engrossed in his porcine hobby was H.O.G. that he commissioned the architect of his recently constructed office building to design the reception room to include a recessed shelf along one wall to house about two dozen of his handsomest ceramic pigs. The remainder, as pigs usually do, overrun his business office and laboratory.

This doctor doesn't find his monogrammed pastime a boar.



Before this hand-made, foot-propelled bellows was made, dentists used a mouth blow pipe for soldering. Made by a Mount Vernon, Ohio, carpenter for Ohio dentists.

Bainbridge, a tiny Ohio hamlet in 1825, was delighted to welcome a new doctor. Doctors were scarce in Ross County, and Bainbridge, about twenty miles from the county seat, had a long, hard ride for the doctor whenever sickness came. But with the new doctor right there in town, Bainbridge could breathe easy.

In 1938, that same "new doctor" of 1825 was welcomed again in Bainbridge, but this time, as a dentist. The Ohio State Dental Society had bought the little brick cottage on the Cincinnati Pike where the doctor had lived and practiced, and were making it into a museum.

Doctor John Harris had lived in Bainbridge fewer than five years, but he had left an indelible mark on the town. For in the small cottage Doctor Harris held a private class in the first dental school in the United States.

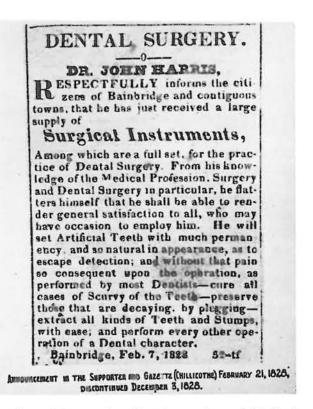
John Harris was a native of Pompey, New York, who had lived and studied medicine at Madison, Ohio, near Cincinnati. Interested in dentistry, he had learned as much of technique as he could



By 1850 the dental chair had changed astonishingly. Here is an upholstered chair, foot-stool, and head rest. The modern dentist of 1850 used a foot treadle to provide power for his drill.

from the itinerant dentists who came to practice in Cincinnati.

About 1825, he established a practice of medicine and dentistry in Bainbridge, Ohio, about seventy-five miles northeast of Cincinnati. He was so well received in the small village and rural community that, after he had practiced there two years, he dared to run an announcement in the Chillicothe Supporter and Gazette declaring his in-



tention of instructing "a private class of Medical Students preparatory to entering a Medical College." "No student will be received," stated the announcement, "who has not at least a first rate English education. Terms of tuition will be reasonable, depending on circumstances." History stands back of Doctor Harris and his students to show they had remarkable training and inspiration which they carried away from Bainbridge zealously.

Families being as they are, it is interesting to note that Doctor John Harris' most important student in dentistry was his brother, Chapin, who had studied medicine with him at Madison. Chapin Harris, M.D., D.D.S. (1806-1860), became co-founder of the Baltimore College of Dental Surgery in 1840, the first dental college in the world. Chapin rather surpassed his older brother in dental affairs. He was editor of the American Journal of Dental Science, the first dental journal in the world, and author of the first dental dictionary and other books.

**Cradle of Dental Education** 

by Leland and Rita Puttcamp

Chapin Harris was only one of the outstanding nineteenth century dentists to learn dental science from John Harris. Others were: James Taylor, M.D., D.D.S. (1809-1881), who founded the Ohio College of Dental Surgery at Cincinnati in 1845, and was the first editor of Dental Register of the West, the second dental journal in the world. John Allen, M.D., D.D.S. (1810-1902), who was known as the "perfector of porcelain dental art" and as the inventor of "continuous gum work." He worked with Doctor Taylor in founding the Ohio College of Dental Surgery. Samuel T. Church, D.D.S., who was a professor of operative dentistry in the Baltimore College of Dental Surgery from 1858 to 1861.

Doctor John Harris' influence on dental education was great in that two other schools grew out of the original "private class," and that his students spread his precepts through dental organizations, publications, and conventions, which, in the main, they were instrumental in starting. Former students who became president of the American Dental Convention included James Taylor, 1856; Chapin Harris, 1857; and John Allen, 1861.

The father of dental education, having passed on his knowledge and ability to his students in Ross County, Ohio, followed an itinerant practice until his death in 1849.

Gracious Mrs. Frances Moore, who was born in Bainbridge, just across the street from the museum, is the institution's caretaker and hostess. From



Lathe and press for swedging dentures and old electric motor equipped with brush for polishing plates and teeth.

April to November, tourists, attracted by the signs just outside town, keep Mrs. Moore busy showing them the museum, answering questions, and keeping the little place spotless. From November to April, visitors are few, but if Mrs. Moore knows that you are coming, there will be a fire blazing on the hearth to warm the little room and to help create the illusion: "Doctor is in; please be seated"-1825 style.



"The Cradle of Dental Education" in Bainbridge, Ohio, is a museum now, sponsored by the Ohio State Dental Society. Once the home of lion-tamer Clyde Beatty, the little cottage was bought and made into a shrine to Doctor John Harris in 1938. Doctor Edward C. Mills, Columbus, Ohio, was the leader of the museum movement.



Dr. Mills

Doctor Edward C. Mills, 220 South Cassady Avenue, Bexley, Columbus, Ohio, spear-headed the interest and the resulting action of the Ohio State Dental Society in purchasing the brick cottage in Bainbridge, Ohio, which is now used as a dental museum and a shrine to Doctor John Harris.

Born in Chillicothe, Ohio, a scant twenty miles from Bainbridge, Doctor Mills became interested early in life in the work of Doctor Harris and the first school of dentistry in the United States.

Doctor Mills is editor-emeritus of the Journal of the Ohio State Dental Society, of which he was editor for twenty-five years. He practiced dentistry in his native Chillicothe and in Columbus, Ohio, for a total of fifty-six years. He was a member of the original faculty of the dental department, Ohio Medical University, in 1892, a school from which has grown the present Ohio State University College of Dentistry.

After the establishment of the Bainbridge museum in 1939, Doctor Mills made the principal address at the unveiling of the John Harris, M.D., D.D.S. memorial at Hertford, North Carolina, in 1944; and continues as chairman of the board of trustees for the "Cradle of Dental Education" in Bainbridge, Ohio.