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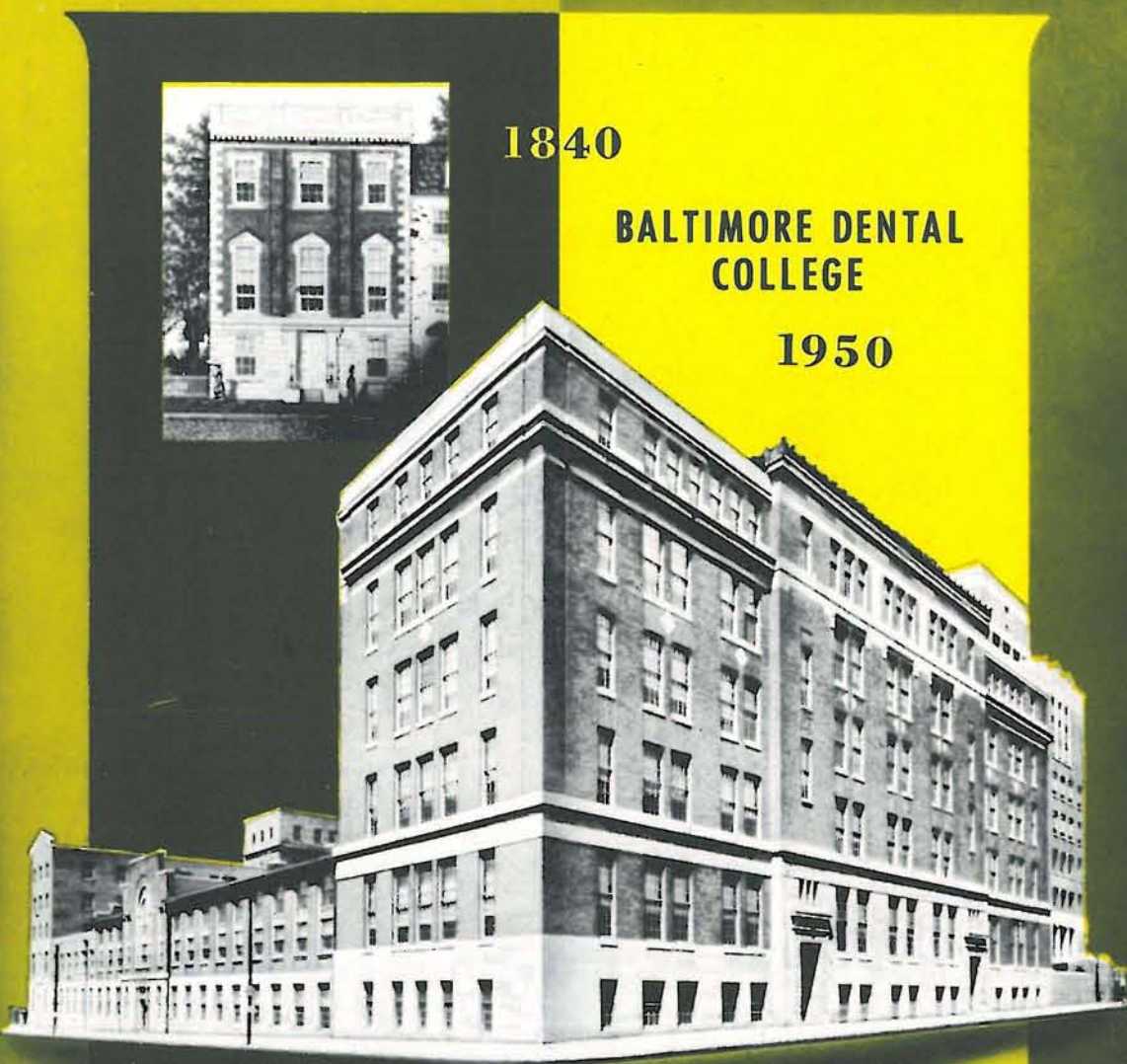
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# TIC



1840

BALTIMORE DENTAL COLLEGE

1950



**AUGUST - 1950**

TWENTY-FIVE CENTS



They receive a thorough physical examination, and their eyesight and hearing are checked, for cleft palate and hearing difficulties often go hand-in-hand.

In class they work hard (though the children think they're playing games) on blowing exercises. The music hour is devoted to instruments that require blowing through the mouth. All training is pointed to elimination of the child's nasal speech.

There's even homework, a game to play back in the boarding home.

And finally, the eight weeks' session ends and the child is ready to go home to his parents. Parents come to visit the child on the last day, to see how the school is run, to note the progress the child has made, and to receive a summary of the school's discoveries about the child.

#### All Show Improvement

"There is always an improvement," says Mrs. Phair. "Some children improve more than others, but everyone shows some improvement. Most all of them make wonderful adjustments in spite of being away from their own homes.

"Now with the advances in surgery," concludes Mrs. Phair, "with the state program of retraining, with the University's efforts to train speech correction teachers, there is little reason for any child with cleft lip or cleft palate to be 'handicapped.'"

Mrs. Delia Fraser, public school teacher, learns while she teaches. The tinkling of glass is reward for the effort children must make to blow through the mouth. They think it is fun; the teachers know it is work.



Another blowing exercise to help children in speech correction. Wisconsin University speech correction students receive training in handling these problems; the children get help in improving their speech.

## TIC for Dentists, Dental Assistants and Dental Hygienists

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Editor, JOSEPH STRACK



August 1950

### THE BALTIMORE COLLEGE OF DENTAL SURGERY

*The story of the world's first  
school of dentistry* ..... 1

### COMBATING FEAR IN THE DENTAL PATIENT

*"... a truly recognized health  
service - instead of an ordeal."* 2

### Rx FOR LIVING

*Meet Dr. G. A. Stevenson, the  
dentist-pilot who has flown  
more than 200,000 air miles* ... 4

### EAST GOES WEST

*A report on some hectic doings in  
a Hollywood dental office* ..... 6

### GENES, CARRIERS OF HEREDITY

*The first photographs of genes,  
the culmination of fifty years  
of research* ..... 8

### THE STRONG-CARTER DENTAL CLINIC

*The director of Hawaii's famous  
clinic reports on how dental  
health is being brought to the  
people of the territory* .....10

### COLLECTING YOUR ACCOUNTS

*A prominent business counselor  
gives his advice* .....12

### CLEFT PALATE CLINIC

*Every dentist will be interested  
in what Wisconsin is doing to  
wipe out this handicap* .....15



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## The Baltimore College of Dental Surgery

### The First Dental School in the World

THE BALTIMORE College of Dental Surgery occupies an important and interesting place in the history of dentistry. At the end of the regular session 1939-40 it completed its one hundredth year of service to dental education. The Baltimore College of Dental Surgery represents the first effort in history to offer institutional dental education to those anticipating the practice of dentistry.

The first lectures on dentistry in America were delivered by Dr. Horace H. Hayden in the University of Maryland School of Medicine, between the years 1823 and 1825. These lectures were interrupted in 1825 by internal dissensions in the School of Medicine and were discontinued. It was Dr. Hayden's idea that dental education merited greater attention than had been given it by medicine or could be given it by the preceptorial plan of dental teaching then in vogue. It was also his opinion that dental education should be developed as a special branch of medical teaching. The unfortunate circumstances of internal strife in the medical school defeated the purpose of Dr. Hayden to engraft dental education upon medical education.

#### One Hundred Years of Service

Dr. Hayden began the practice of dentistry in Baltimore in 1800. From that time he made a zealous attempt to lay the foundation for a scientific, serviceable dental profession. In 1831 Dr. Chapin A. Harris came to Baltimore to study under Hayden. Dr. Harris was a man of unusual ability and possessed special qualifications to aid in establishing and promoting formal dental education. Since Dr. Hayden's lectures had been interrupted at the University of Maryland and there was an apparent unsurmountable difficulty confronting the creation of dental departments in medical schools, an independent college was decided upon. A charter was applied for and granted by the Maryland Legislature on February 1, 1840. The first faculty meeting was held on February 3, 1840, at which time Dr. Hayden was elected president and Dr. Chapin A. Harris became dean. The introductory lecture was delivered by Dr. Hayden on November 3, 1840, to the five students matriculating in the first class. Thus was created as the foundation of the present dental profession the Baltimore College of Dental Surgery, the first dental school in the world.

#### Founders of Dentistry

Hayden and Harris, the admitted founders of the dental profession, contributed, in addition to the factor of dental education, other opportunities for professional growth and development. In 1839 the *American Journal of Dental Science* was founded, with Dr. Harris as its editor. He continued fully responsible for dentistry's initial venture into periodic dental literature to the time of his death. The files of that publication testify to the fine contributions made by Dr. Harris.

In 1840 the American Society of Dental Surgeons was founded, with Dr. Hayden as its president and Dr. Harris as its corresponding secretary. This was the beginning of dental organization in America, and was the forerunner of the American Dental Association, which now numbers approximately 68,000 in its present membership. The fore-

going suggests the unusual influence Baltimore dentists and the Baltimore College of Dental Surgery have exercised on professional ideals and policies.

In 1873, the Maryland Dental College, an off-spring of the Baltimore College of Dental Surgery, was organized. It continued instruction until 1879, at which time it was consolidated with the Baltimore College of Dental Surgery. A department of dentistry was organized at the University of Maryland in the year 1882, graduating a class each year from 1883 to 1923. This school was chartered as a corporation and continued as a privately owned and directed institution until 1920, when it became a State institution. The dental department of the Baltimore Medical College was established in

1895, continuing until 1913, when it merged with the dental department of the University of Maryland.

The final combining of the dental educational interests of Baltimore was effected June 15, 1923, by the amalgamation of the student bodies of the Baltimore College of Dental Surgery and the University of Maryland School of Dentistry; the Baltimore College of Dental Surgery becoming a distinct department of the University under State supervision and control. Thus there came about a merging of the various efforts at dental education in Maryland. "From these component elements have radiated developments of the art and science of dentistry until the strength of its alumni is second to none, either in number or degree of service to the profession."

## Combating Fear in the Dental Patient

By CHARLES L. MEISTROFF, D.D.S.

**D**ESPITE all our advances, our dramatic relief of toothache, our truly lifelike restorations, and our miraculous procedures of oral rehabilitation, we, as a profession, are still stymied by the universal bugaboo of "fear of the dentist." If it continues much longer, we should not be surprised if Nature includes another gene in the human reproductive cycle for dentist-phobia to make it an inherited characteristic instead of an acquired one.

Why is it that many patients look upon any major abdominal surgery—an amputation, a fracture reduction, any surgical instance—as something routine in the way of life, but when it comes to visiting the dentist mental pilgrimages to limbo are reflexed? In spite of modern day progress, "fear" is still the most beclouding factor in the dental realm. Why? Can it be that the average dentist just hasn't the patience to take his patient in hand? Is it because he is too busy with the practical side of dentistry that he has neglected the human side? It seems that the human and humane sides are somewhat minimized. There should be more of the pedodontist in all of us, to treat each and every patient like a little child and not as an item in the daily office schedule. Patients are suffering from something they can't remedy themselves; they want to be

treated and handled gently by us. Dental patients are made through our synthetic, high-pressure type of living. They become patients because of their personal neglect and carelessness. They are held by confidence or by gratifying relief from pain. No one is born a dental patient, but most people become dental patients sometime during their lives.

How much time is spent mentally preparing the patient? What is done for emergency tooth-



## Cleft Palate Clinic

Text and photographs by Authenticated News

**W**ISCONSIN, the state, and Wisconsin, the university, are combining forces to wipe out the handicap of cleft palate in Wisconsin.

The state, through its lawmaking power and its department of public instruction, and the University of Wisconsin, through the cleft palate clinic at the Wisconsin Orthopedic Hospital, are helping to stamp out one of the great handicaps of childhood.

Where nature left off the state and the University take up, to prevent not only speech handicaps but also the unhappy sense of "being different" from other children.

In the clinic, the children with a cleft lip or cleft palate receive speech correction training. It is also a training ground for University of Wisconsin students of speech correction.

There are several summer school students working in the center, which has operated during the summer session for the past nine years. All of the students are speech correction teachers in the state during the regular year. They come to summer school to learn the latest techniques for correcting faulty speech caused by cleft lip or palate.

No one knows the cause of cleft lip, (sometimes incorrectly called "hare-lip,") or cleft palate. Some believe it may be caused by poor diet or glandular disturbances during pregnancy. Others hold a theory that it may be inherited.

But, it is a fact that, in the State of Wisconsin, one out of every 770 babies will be born with an improperly joined roof of the mouth, or lip, or both.

The doctor who discovers this condition at birth is required by law to report the fact to the state board of health. And the wheels begin to turn.

A cleft lip may be repaired by surgery within ten days after birth. Cleft palate surgery is usually delayed until the child is about eighteen months' old. In the meantime the parents receive material from the state which tells them how to feed the baby and, later, help in improving the child's speech.

Because the English language requires that air be expelled through the mouth to form many

words, children with cleft palate who find that hard to do speak with a nasal tone.

When the repair operations have been done, the child may still have the habits of improper speech which were formed earlier. The task then is to retrain him.

### How the Program Operates

The speech training center takes over at this point.

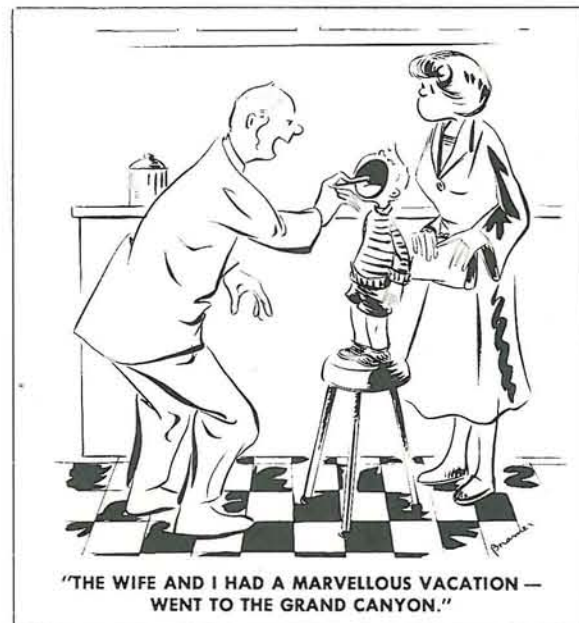
Mrs. Gretchen Phair, supervisor of speech correction in the State Department of Public Instruction's bureau for handicapped children, outlines the program in the speech training center. "We try to get the children at the four-year age level," she says, "before they have started school. Older children who have missed speech correction training in their schools may also be referred to the center."

When the child enters the center for the eight weeks' session, a recording is made of his speech. A recording is also made at the end of the session and the improvement is noted.

Every possible precaution is taken to guard the child's health and welfare while he is in Madison, Mrs. Phair explains. The children stay in boarding homes approved by their parents, and are taken to the clinic by volunteer helpers—students from Madison high schools.

Recordings note the improvement in speech. Miss Betty Sulliver, speech correction teacher, helps the children to pronounce difficult sounds in an effort to eliminate the nasal tone characteristics of cleft palate children.





"THE WIFE AND I HAD A MARVELLOUS VACATION — WENT TO THE GRAND CANYON."

Particularly in smaller communities, where the dentist has an opportunity of observing his neighbors, friends and fellow townsmen, odds and ends of information can frequently save him from loss. Divorcees should be considered carefully as credit risks. Many of them trade on their former marital status and permit creditors to assume they are still married and with a financially responsible spouse. Too, ex-husbands sometimes show reluctance to pay for the dead past accounts of wives, even when legally responsible.

12. When payment is received the dentist should post the amount immediately, showing the new balance. This will ensure that when statements are mailed out the new balance will be reflected. Nothing can be quite as annoying for a patient as to receive a statement on, say, the second of the month that does not indicate payment on account as late as the twenty-fifth or thirtieth of the previous month.

13. To help avoid credit oversights on statements, they should be made and mailed the same day. Making up statements in odd moments during the last week before mailing will inevitably result in some statements not being up-to-date.

14. A promissory note may be worth trying for in settlement of an old account. Once a note has been given, the patient will be unable to contest the bill as he might be tempted to do with a book account. However, the dentist should be warned

not to accept a note calling for more than the legal rate of interest. The patient himself, in a seemingly generous frame of mind, may offer an interest rate higher than the legal rate knowing this will make the note unenforceable.

15. If the dentist has any reason to believe a patient's check will "bounce," particularly where it is given reluctantly, he should cash it, if possible, at the bank on which it is drawn. If the dentist's own bank balance is low and he draws against the bad check, his own checks may "bounce." This can injure his standing with his own creditors as well as with his bank. If it is not possible to cash the check, the dentist should not draw against such a deposited check until it has cleared.

16. Exercise care in turning over bad accounts to an attorney or a collection agency. Generally, this course of action should be reserved only for proven dead beats or patients who are impervious to other collection approaches and the dentist's just claims. Of course, many dentists and physicians use ethical collection agencies to handle their collection problems.

17. If the dentist himself brings suit, he should do so only if there is a reasonable prospect of enforcing a judgment after it is obtained. Court action should not be taken as a punitive measure. Otherwise, the dentist only adds collection and legal costs to the bad debt for an additional loss. However, some patients may have future prospects which may justify a court judgment, provided the bill is substantial. This judgment can be renewed periodically at nominal cost until the defendant accumulates sufficient assets to justify attachment.

18. Once court action is started, the dentist should follow through. The dentist or his agent should not hesitate to attach the debtor's assets of whatever nature or wherever found.

19. While not directly a part of collection technique, the dentist may find it advisable to send each patient a brief note of thanks when a bill is paid in full. This will favorably impress patients; when they again incur a dental bill they will be predisposed to protect the high opinion of them held by the dentist.

No dentist who extends credit will ever be able to eliminate all credit losses, but he can adopt certain credit-granting attitudes, policies and techniques which can sharply reduce those losses.

aches in a full office? Can you honestly treat twenty, thirty or more patients a day and still do justice, still do good and irreproachable work as you would do on eight patients? How often have you stopped to think that one good hour's visit to do all the necessary work on a particular patient might be preferable to four hurried appointments and trembling at the chair? There is no need to hurry to do a piece of work and then have to spend otherwise productive time and effort on a non-productive basis for dry-sockets, omission of extraction debridement, denture adjustments based on time-saving impression techniques, quick and hurried repairs that must be done over, and so forth. All these come back sooner or later and collect from the dentist what they were supposed to have saved in time, and produce more patients in the office schedule. They may be all right as high pressure procedures but they do not produce the one desired result—a completely and thoroughly satisfied understanding patient with no fear of the dentist or his envisioning.

How many times have patients told you, "Doc, Dr. Blank says he is too busy with other work to pull this aching tooth. Any chance of getting you to do it?" Or, "He said he couldn't do anything for me under five weeks." At least isn't it humane to instruct the nurse to give him a sedative, or you to prescribe for him? Heaven knows we are overloaded with samples of Anacin and Empirin Compound.

Does it take so much extra effort to give him a few envelopes and let him remain till you can get to him as he waits for extraction or relief? Emergency toothache takes precedent over anything in the office. It is in the same category as a fracture or an acute infection. Yet it is looked upon as something to squeeze in between patients—something that knocks the daily schedule to pieces, delays lunch, or prevents one from getting out early or meeting the boys at the golf club on time.

Do you let the patients view all the surgical steel before an extraction? Do they see all the preliminaries with the syringe? Do you try to make the injection as painless as possible? Or are you indifferent in ramming the needle home? Did you ever try to use a 27 gauge needle for a mandibular? Did you ever use a 28 gauge needle for local infiltration, on the upper anteriors or for intra-osseous injection? Try it on yourself sometime and notice the almost complete absence of pain.

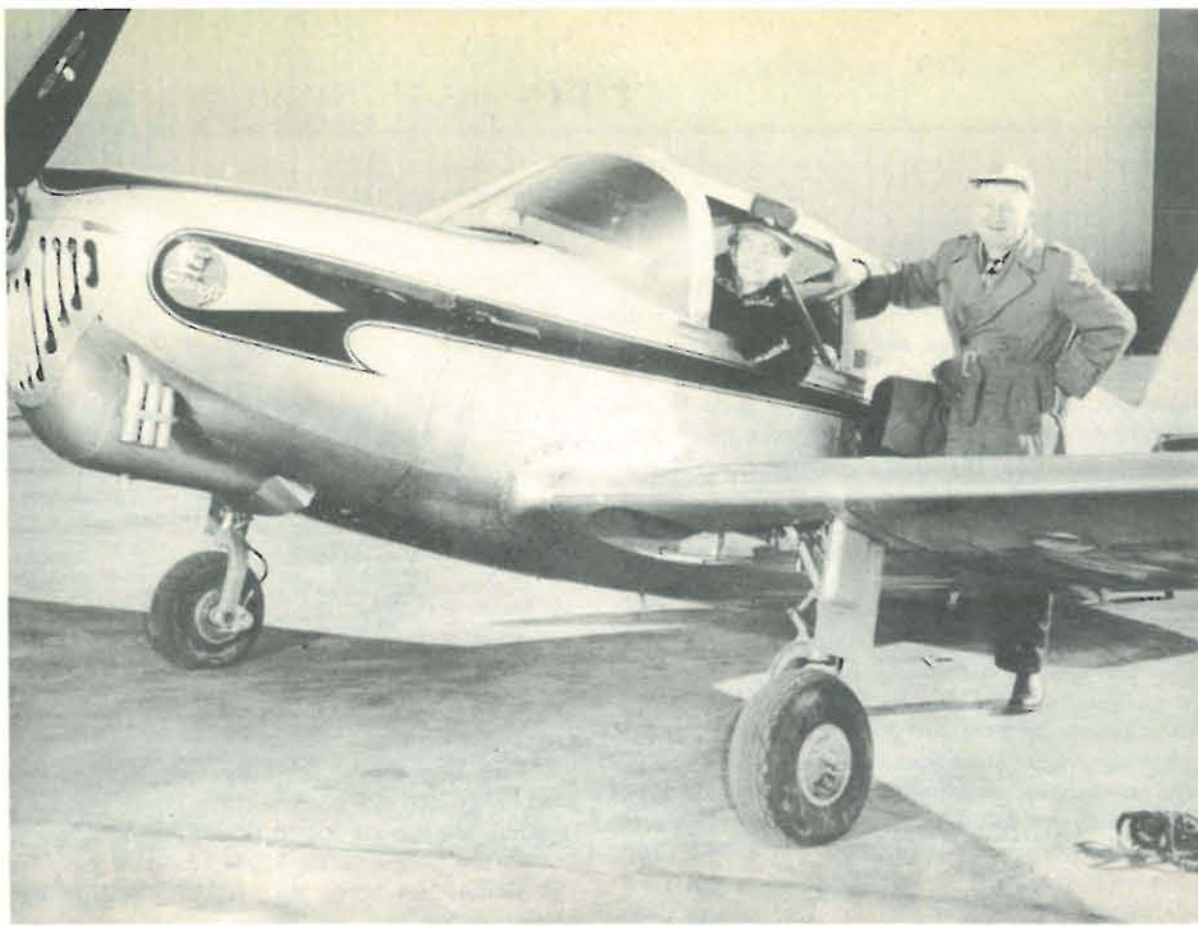


"OH, BOY! THIS'LL KILL YOU!"

Can you really honestly test for anesthesia and then tell the patient there could not be any pain—it's simply his imagination? Do you stay with the patient after the administration of the anesthetic for a few minutes to ease him, or do you run off immediately to attend to something else, or yell from the depths of the dark-room or the laboratory, "Is it dead yet? Does your tongue feel thick? Is the toothache gone?" Put yourself in the patient's place. What would you do or think?

No individual practices at any time in his life how to become a perfect dental patient. It's up to the dentist to make him one. Don't "ride" him if he does something wrong. If he has any erroneous ideas about any phase of dentistry, take the time and trouble and patience to explain to him in layman's language and not in a pedantic splurge of incomprehensible technical and professional terms. On the other hand, don't explain to him in such a way so to cause him to think you regard him as a moron, or display an overbearing attitude. The average dental patient is thirsty for knowledge. If he knew dentistry, he would treat himself and not bother you. Since he does not know, lead the way and he will follow. Look upon the dental patient as a dental penitent, not a dental sinner, and you will have a convert who will follow you and bless you for his dental salvation.

Dentistry cannot earn any more from its tenets and endeavors than we, its practitioners, put into it. The efforts of every practitioner to make of each case of dental rehabilitation one of promise, each understood patient a satisfied patient, will make for the profession as a whole a truly recognized health service—instead of an ordeal.



Dr. Stevenson and a favorite passenger, his 83-year-old mother.

## R for Living

DENTIST G. A. STEVENSON — PLANE-PILOT

By JOSEPH GEORGE STRACK

WHEN Dr. George A. Stevenson decides to take a week-end trip, he sits in the living room of his Harvey, Illinois, home and looks over a map to select a route. Millions of week-enders follow the same ritual. But, instead of choosing a spot in Illinois or an adjoining State, Dr. Stevenson may select Texas, New Mexico, California, Oklahoma, or just about any other State in the nation, for his week-end trip. He thinks in terms of thousands of miles, not hundreds, for he uses a plane, not a car.

The Illinois dentist has been piloting planes for eleven years; has spent the equivalent of eighty-three days in the air, or 2,100 flying hours; and has traveled more than 200,000 air miles. He changes planes as a motorist changes cars; his present plane, a two-place Swift, is his sixth.

One of America's 45,000 private-plane owners, Stevenson is no amateur "flying enthusiast." He is an able, time-tested aviator who handles aircraft with skill and assurance. *Flying*, a magazine of the aviation industry, said of him recently: "There are a lot of 55-year-old pilots and a few flying dentists, but none can match Dr. Stevenson's record for getting around."

### Why Fly?

What prompts men to fly? Dr. Stevenson has a quick, forthright answer: "Flying is an excellent means of transportation. It cuts traveling time in half. You can travel a thousand miles by air with greater ease than you can drive a hundred miles in a car. With a plane you can double the number of places you can visit in a given time. For example, I have been able to do in a



2. He should not apologize in asking for money. It is the dentist's money — not the patient's.

3. He should not explain why he needs the money, such as overdue bills of his own that must be met. This is psychologically wrong. It will not get the sympathetic response hoped for; it may even encourage the debtor to put off payment longer. Begging and entreaty hint of weakness.

4. "Bulldozing" a patient, even a delinquent one, is usually bad technique.

5. The dentist should make it a firm policy to send out statements regularly on the same date each month, preferably on the first. Haphazard billing serves only to make patients believe the dentist doesn't expect prompt payment. Many consumers rely on monthly statements as reminders, and pay their outstanding bills between the fifth and tenth of the month. If the dentist's statement is not among those bills, he may be by-passed until the following month.

6. An exception in the mailing date for statements may be warranted in certain circumstances. If a patient has fixed income coming in every month at a certain time, it may be effective to send the statement so that it arrives on

pay check day. Where a patient has over-extended his credit, his various creditors may be on a first-come-first-paid basis. In such a case a first-of-the-month statement may arrive much too soon or far too late.

7. Don't follow up statements too fast, especially sound accounts. Other business and professional men count on their first-of-the-month billings to bring in funds to pay their bills, including what they owe to dentists.

8. Don't write a debt off as bad except as a last resort. Bad debts come off net profits entirely.

9. Attempt to distinguish between dead beats and delinquent accounts of patients who are having temporary financial reverses. Don't baby the former; don't be ruthless with the latter, because they may still be turned into good accounts again.

10. If an account starts going sour, attempt to find out why. If the patient's circumstances have changed, it may suggest an intelligent course of action looking toward collection. This cannot be determined without possessing the facts. The dentist should guard against accepting idle gossip about a patient as fact, especially if it involves a question as to the patient's credit standing. Test such rumor for its truth.

11. However, the dentist should not turn a deaf ear to bits of information that come his way. By winnowing this intelligence, he may find certain kernels of fact that can be invaluable in collecting delinquent accounts and in guiding him in extending credit. Income is not the only determining factor in a patient's ability to pay or to contract a new dental bill; nor does it reveal willingness to pay.

Here are just a few of the questions that may arise in considering the collection problem presented by a certain delinquent account, or in the granting of new credit to a patient. Are certain bad character traits becoming more pronounced? Is an occasional drinker sinking into the slough of compulsive tipping? Is a divorce looming with probable expensive alimony payments in prospect, or a heavy cash settlement likely? Is a patient living beyond his means? Is he gambling heavily? Is he speculating in stocks to the neglect of his business? Any of these is considered a danger signal by experienced credit men.

## Collecting Your Accounts

By HAROLD J. ASHE

**U**NDER NORMAL business conditions, the collection of outstanding accounts should not be too serious a problem if the dentist systematizes collections and gives it the attention it deserves. Usually, where a disproportionate number of accounts are chronically overdue it is because of one or more of the following causes:

- (1) the granting of credit to poor risks
- (2) failure to define terms of payment
- (3) haphazard collection efforts

Timely collection of accounts is the keystone supporting a sound and profitable dental practice. Weaken this keystone and the dental practice may crash. It cannot be emphasized too strongly that there is a collection law of diminishing returns on outstanding accounts. The older the account is permitted to become, the less likelihood there is that it will be collected in full.

Not a few dentists set their creaking collection machinery in motion only when they themselves are being pressed for payment by their creditors. That is, they arouse themselves to collect delinquent accounts only when and to the extent that their own debts and personal needs make such action imperative. This makes fee collecting a rat race in which it is a tossup whether the dentist will win or lose in his struggle to obtain funds to pacify his creditors.

### Solving Half of the Problem

At least half the difficulty of collections can be solved at the time the dentist first contracts to do work for a patient. If at that stage the dentist fails to lay the basis for easier collections, he has only himself to blame.

Should the patient want time in which to pay his bill, the dentist must bear in mind that he is extending to the patient a *loan* in the amount of any unpaid balance due at completion of the work.

The dentist should satisfy himself by questioning the patient, and perhaps by outside in-

quiry, that the patient is financially able to meet the indebtedness—and that he is a person who pays his bills. The two conditions are not always identical.

If the patient is of limited means, it may be wise to limit the amount of the dental work to the most immediate needs. This becomes a practical problem of "cutting the cloth to suit the purse." A dentist who ignores danger signs and permits a patient to run up a bill which is prohibitive for the patient, must share responsibility if the bill stretches out into the years and finally is written off, in whole or in part, as a bad debt. It is axiomatic in consumer credit circles that, no matter how worthy the customer, his need is secondary to his ability to pay. Many dentists, however, let their professional views prevail over their business judgment.

At the time credit is granted there should be a clear understanding between patient and dentist as to the exact time of each payment and the exact amount. Once this is determined, the patient should not be led to believe that he may readjust these facts to suit his convenience or his whim. The dentist should not approach this consideration with a casual or careless attitude, else he will convey his seeming indifference to the patient.

In laying the basis for extending credit to a patient, the dentist should certainly learn the patient's place of employment or his sources of regular income. He should also learn, if the patient is employed, when the patient is paid. This last point will be elaborated on later.

### Check List of Do's and Don't's

Some fundamental collection rules, attitudes and practices that may prove helpful in establishing a firmer control on outstanding accounts are listed for consideration. This list is not presented as a complete one, nor as a list of "musts." Rather it is a series of suggestions, a number of which might be helpful to the reader.

1. When an account is due, the dentist should be forceful, yet polite, in insisting upon payment.

short time what a number of motorists hope they will be able to do in a whole lifetime—visit every State in the nation. I have done not only this, but I have visited every province in Canada as well, and have made several trips to Mexico, Alaska and other places besides. Most of these flights were week-end trips. I left my office Friday and was back Monday morning, ready for my patients.

"There is nothing glamorous, romantic or mysterious about flying. But a plane makes it possible to see a lot more of this world, in a much shorter time, than any other means of transportation. It is, therefore, a sensible, sound and practical way of multiplying and extending the pleasures of traveling. Most of us, when we learned to drive



An old lady pilot descending from a plane always startles air-show audiences. The "old lady" is Dr. Stevenson.

a car for the first time, exclaimed in effect: 'When I think of all the fun I missed in not having learned to drive before!' I can assure persons who don't fly that they will say the same thing if and when they learn how to pilot a plane."

### Risky?

What about the risks? Since he first began to fly in 1939, he has had two accidents. Once he broke his ankle, and another time he broke a finger. Both accidents occurred when he fell while walking!

### Costly?

Is flying a plane costly? Stevenson paid \$3,000 for his 125 h.p., second-hand Swift. With ground-damage insurance, licensing, maintenance, gas, oil and all other expenditures, he estimates that it costs him \$5 per hour to fly 250 hours a year.

### Hard to Learn?

How long does it take to learn to pilot a plane? "It is no more difficult to pilot a plane than to drive a car." The flying-dentist flew solo after twelve hours of instruction, got his private pilot's license after fifty-one hours of solo flying.

Dr. Stevenson gets a lot more out of flying than fast transportation. Interested in history, geography and literature particularly, he plans trips to locations that have such significance. He has flown to Chichen Itza in Mexico to look over the Mayan ruins there, and visited the spot at which Cortez invaded that country. He flew to Death Valley to see the legendary home of Death Valley Scotty. In Wyoming he circled over the Devil's Tower, a geological oddity that is more than 1,200 feet high.

Pointing out that flying a private plane is quite dependent upon weather conditions—"and many times it would be more efficient to use other means of transportation"—the dentist-flyer says: "However, the thrill and exhilaration that comes with flying your own plane more than compensates for these occasional delays."

During the war Stevenson was a lieutenant in the Civil Air Patrol. He was assigned to Fort

Andy, Scotch terrier, is a constant air companion.



Sheridan, Illinois, where he flew his plane before anti-aircraft gun crews who were learning how to sight and operate the guns.

His constant air companion is Andy, his Scotch terrier. Andy sports a gold-crowned tooth. He runs up to the plane whenever his master opens the cockpit door, just as any ordinary



Dentist Stevenson

pooch hovers about the family car. Andy is probably the record-holder among flying dogs.

**Everybody Flies**

Dr. Stevenson has another flyer in the family — his son Bob. Young Stevenson, now twenty-four, piloted Liberators over Japan in the 7th Air Force. Moreover, his other son, twenty-one-year old Loring, served in the Naval Air Corps. Mrs. Stevenson, with an aviator-husband and an aviator-son, hears, and understands, as much aviation jargon as any other woman in America. She is never sure in what State — or what country — she may find herself the next day.

A graduate of the Northwestern University Dental School, Dr. Stevenson is trying to induce his boys to study dentistry. No luck, so far.

“My family, my mother, my friends, even my dog, have flown all over North America with me,” Dr. Stevenson says. “They are no different than other American people. They have learned to like, to enjoy, flying. That, I believe, indicates that flying will become increasingly popular as more and more people take plane trips and learn to pilot planes themselves. The day that a Henry Ford appears in the plane-manufacturing industry is the day that flying will begin to take its place alongside of motoring.”

*East Goes West*

By MARGARET ANDERSON, D.A.

I DON'T know how we got into this mess we've had on our hands for the past month. I guess it's all my fault. Maybe I should have said "Sorry, wrong number" when the sing-song voice chanted over the telephone "I want to make appointment for friend with toothache," but I didn't.

Friend came in accompanied by Sing-Song, who explained that Friend had just arrived from Hong Kong, China, could neither speak nor understand English, and could not enroll in the school where he might learn to accomplish all this until his teeth were restored to normal.

For the life of me I couldn't understand why his teeth were so important in learning to master the English language, but didn't press my point.

I moved my glance from Sing-Song to Friend, who was grinning from ear to ear, his head bobbing up and down like an apple on water. He might have been any age, from fifteen to fifty, for all I knew. To me the Chinese are ageless. I bobbed my head to Friend, excused myself to Sing-Song, and went back to Doctor.

"Chinese?" he asked.

"Yep, the real McCoy. Neither speaks nor understands English. Fresh from Hong Kong!" I glibly announced.

"Well, that's just great! What am I supposed to do, learn to speak Chinese in the next ten minutes?" Doctor exploded.

"Oh, it's not that bad; he has an interpreter along."

Doctor waved his hands, "Well, bring them in. Let's get going!"

I brought them in.

Upon examination, Doctor discovered eight visible cavities and four first molars with crowns missing. He suggested X-rays. Sing-Song agreed.

They returned the next day and Doctor made his diagnosis. Sing-Song said to proceed. He gave us one-third down, a telephone number to call in case we had to ask Friend something, and said he had to get back to his laundry. He conversed in Chinese with Friend for ten minutes then departed.



Dr. Dawe, a youthful patient, and Annie Kerr, an assistant.

dental clinic, including sodium fluoride treatments. During the calendar year 1948, a staff of five dentists and five assistants cared for 2,678 children of Honolulu at a cost of \$49,803.36, an average of \$18.44 per child. Operations, numbering 27,436, were performed, requiring 14,506 half-hour appointments. The average cost per operation was \$1.80 and each appointment cost \$3.42.

**Eligibility Based on Need**

A careful investigation of the financial status of families applying for admission makes it possible for the Clinic to give its benefits to suitable



Dental health



The Staff. Standing: D. S. Wada, Dr. W. Ball, Dr. P. K. Yee, H. C. Doane, Dr. T. Park, O. Peltier, Dr. S. Fassio and Dr. M. Kau. Seated: A. Kerr, G. Corsbie, Dr. Dawe and A. Kufferath.

cases only and protect the dental profession from encroachment upon its rights. The Clinic serves the eligible children in the first six grades of Honolulu's thirty public elementary schools and twenty-one public elementary school kindergartens, and all eligible pre-school children from two years on brought to the Clinic. Recently, the policy was changed to include eligible children in private schools and private school kindergartens. Every child accepted for treatment is expected to pay a fee of ten cents on the occasion of each visit to the Clinic. However, no child is denied treatment because of his inability to pay. It is obvious that the charge is made for its psychological effect upon the individual, rather than for the monetary return.

**Dental Education Achieved**

There are very few people in the Territory of Hawaii today who are not aware of the value of dental service and the importance of dental health. This ideal situation is a direct result of the program of dental health education inaugurated by Mrs. George R. Carter almost thirty years ago.

Receptionist Healani Doane assigns patients to their dentist.



## The Strong-Carter Dental Clinic

By JOHN H. DAWE, D.D.S., Director

EVERY community has its public spirited citizens—men and women who devote the best part of their lives striving to improve the welfare of their less fortunate fellow men. In this respect, Hawaii is greatly blessed.

Thanks to the generosity and vision of a kindly woman, whose only wish was to bring happiness to the people of Hawaii and who believed that the best way to accomplish this was to bring about and maintain a state of health among them, the Territory of Hawaii has one of the best dental health programs in the nation today. Desiring to erect a memorial to her parents, Henry A. and Helen P. Strong, a memorial which would contribute to the welfare and happiness of children, the late Mrs. George R. Carter in 1920 established the Honolulu Dental Infirmary.

The primary purpose of the Honolulu Dental Infirmary was to provide dental care for the children of Honolulu whose parents were not financially able to have them treated by a private dentist. However, it was realized that a dental health program which did not educate children and parents on the importance of dental health and the value of dental service would accomplish little. With that in mind, a training school for dental hygienists, also sponsored and financed by Mrs. Carter, was opened September 1921. The educational phase of the dental hygiene program is carried on by dental hygienists, working as



The late Mrs. George R. Carter, founder of the Clinic.

teachers in the Territorial school department, while the dental profession assumes the responsibility for correcting or eliminating dental defects.

### More Than 47,000 Children Served

On November 17, 1920, the Honolulu Dental Infirmary, now known as the Strong-Carter Dental Clinic, opened its doors to the first patient in a little cottage at 541 South Hotel Street, Honolulu. Since then, 47,245 children have received dental care at a cost of almost \$900,000 to the Strong Foundation, the endowment created by Mrs. Carter. For the past twenty-four years, the Clinic has been located at Palama Settlement, 810 North Vineyard Street, in a congested district one mile from the business center of Honolulu. It is housed in a two-story building surrounded by flowering shrubs and trees. Last year the building was remodeled and new equipment installed, and facilities are now available for ten dentists. This project, which represents an investment of approximately \$35,000, was financed by special grant from the Strong Foundation.

With the exception of orthodontics, the Clinic provides all the routine services of a children's

I looked at Doctor, he looked at me, then we both looked at Friend—who was grinning and bobbing in absolute trust—before we commenced our work.

Friend was completely entranced by everything we did. So completely entranced, as a matter of fact, that he couldn't stop grinning.

Doctor drilled a bit, and then filled Friend's mouth with water. I motioned for him to spit out, but he swallowed and spent the next few moments peering down into the hole of the cuspidor, while he trailed his finger in the water and giggled.

After six such performances I couldn't bear to see Doctor mop his brow anymore. I called Sing-Song and said, "How do you say spit in Chinese?"

He answered, "Toowasooway."

"How do you spell it?"

"Spell?"

"Yes, spell. S-P-E-L-L!"

"I don't know."

Back to the chair. Friend still wore the perpetual grin. I pointed to the cuspidor. He was delighted.

"Toowasooway!" I snapped. He gaped at me in astonishment then started spitting as though he would never stop.

"What did you say?" asked Doctor.

"I think I said 'spit'."

Doctor's questioning look turned to one of admiration. "How do you know?"

"Because Sing-Song said so, but he didn't know how to spell it."

The look of admiration faded. "Chinese don't spell *anything!*"

"Well, how am I supposed to know that?" I said in disgust.

We continued our work. "Toowasooway, toowasooway," I murmured over and over again. Golly, what a lot of letters just for spit!

I noticed a frown between Doctor's brows.

"What's wrong?"

"Just an exposure, that's all."

I peeked into the tooth and saw the nerve waving.

"I wonder if it hurts him?" Doctor said.

"I don't know. Does he act like it?"

"God only knows. I can't get anything out of him but a grin."

"Maybe the Chinese don't feel pain," I volunteered.

"Well, I don't want to be called out of bed at two in the morning if he decides they do!" Doctor barked back.

To the telephone and Sing-Song again: "If I get him to the telephone, will you ask him in Chinese if it hurts? I couldn't remember all that."

Friend went to the telephone. They talked for five minutes, then I took over.

"He said 'no'," said Sing-Song.

I decided the shorter the word the longer it took the Chinese to say it. We went back to the chair.

"He said 'no'," I announced.

"Well, it took him long enough to make up his mind!" Doctor snapped.

We put a dressing in the tooth, and Friend departed. Before he left he bowed and said, "Deweygan."

"What was *that?*" Doctor asked.

"I don't know. Sounded like 'do it again!'"

I worried about it for an hour. Then, when Doctor wasn't looking, I called Sing-Song.

When Doctor left that night I said, "Deweygan, Doctor."

He gave me a worried look.

I decided it must be all in the way one used the accent.

Two days later Friend reappeared with three friends. "Holdama!" they all greeted me.

Indignantly I placed Friend in the chair, then motioned Doctor into the lab. "There are three more out there," I said, waving towards the reception room, "and I think they all said 'damn something' to me!"

"Well, go out and say it back. You don't have to take that kind of talk from anyone!"

So that's how it all began, and heaven only knows where it's going to end! Our reception room looks like a Chinese clinic every afternoon around three these days. I think all of Hong Kong must be in Hollywood, but I *am* learning to speak Chinese fluently, and they (fine people that they are) *do* pay their bills—so I probably shouldn't complain.



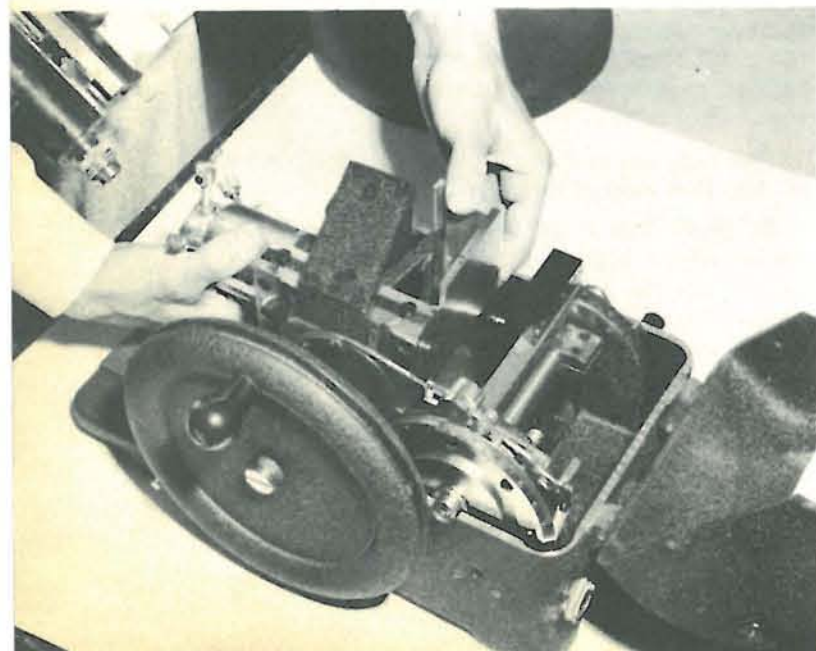


Dr. Richard F. Baker at the electron microscope ready to photograph the world's first photograph of genes.

Genes, tiny carriers of heredity in all living things have been seen under an electron microscope for the first time. They turned out to be spindle-shaped particles about 1/100,000th of a centimeter long and 1/1,000,000th of a centimeter wide. This is much smaller than the wavelength of visible light, and hence could not possibly be seen with a light microscope. A centimeter is one-half inch. The genes, even in sections magnified 120,000 times under the electron microscope, were still only tiny particles about one-half inch long.

Dr. Daniel C. Pease and Dr. Richard F. Baker, of the University of Southern California, obtained the first pictures of the genes of fruit flies. Their achievement was the culmination of

Removing the thin sectioning attachment from a standard Spencer rotary micron. This device reduces the machine's unit of cutting from the standard micron to one-tenth micron and now two-tenths micron, and has made it possible for scientists to obtain the first photograph of genes in fruit fly chromosomes.



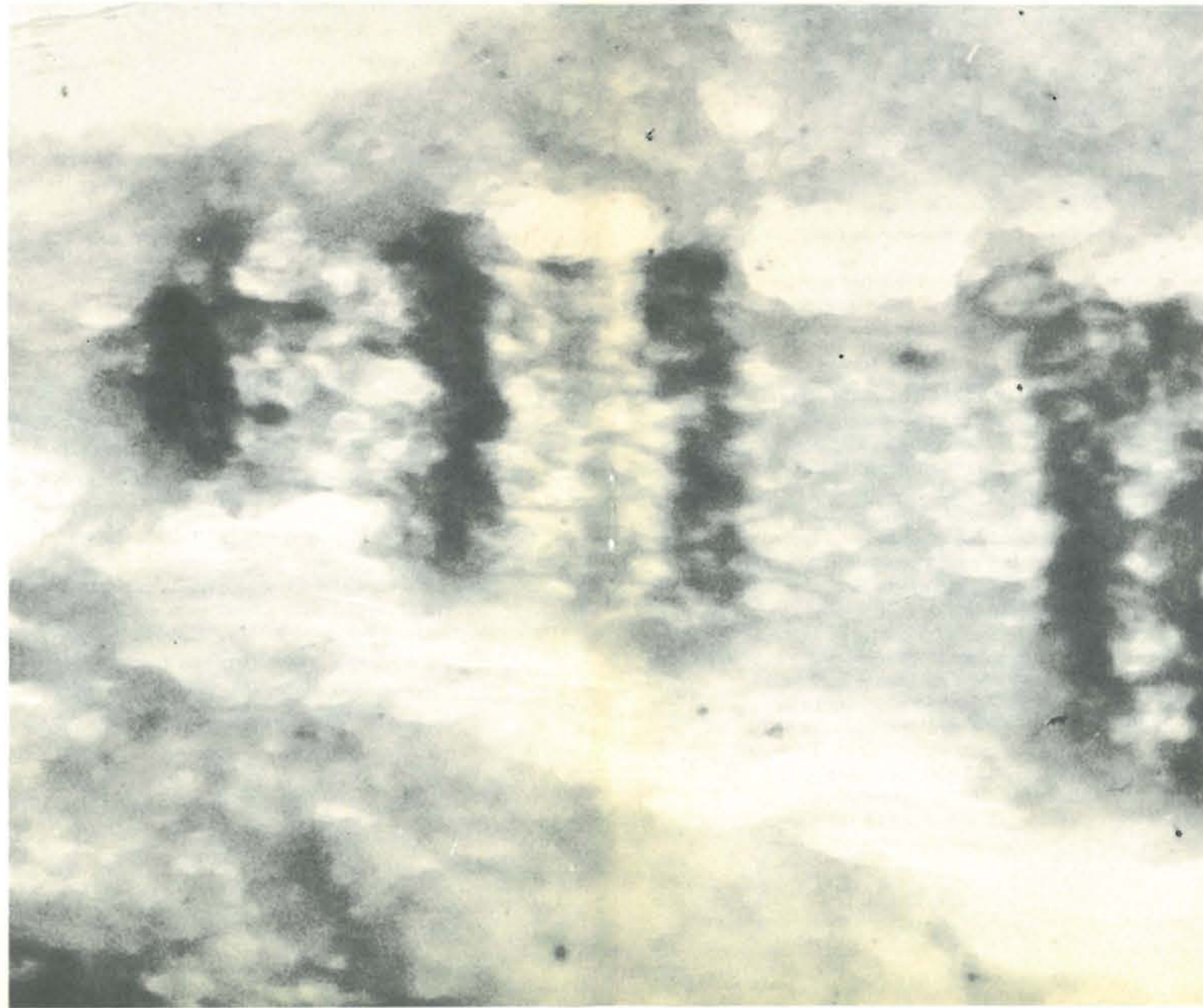
# Genes, Carriers of Heredity, Seen Under Microscope for First Time

Text and photographs by Authenticated News

fifty years of research by thousands of scientists in all parts of the world.

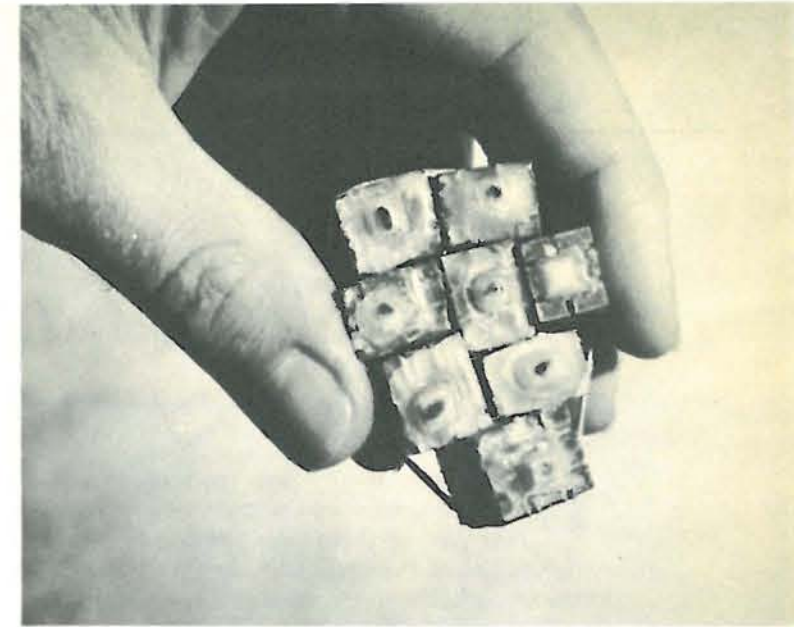
Genes determine such heredity traits for humans as height, weight, and color of hair and eyes. Scientists have been aware of the existence of genes for about a century, since Gregor J. Mendel first laid down the laws of heredity in Austria by experiments in cross-breeding of sweet pea plants.

World's first photograph of genes. Magnified 70,000 times, this section of chromosome from the salivary gland of the fruit fly shows genes to be small particles making up the cross bands. Light gray spots between the black lines are genes.



Genes had been only a theoretical concept until they were seen under the electron microscope. The ability to see genes, along with disease-carrying viruses which have already been isolated, is expected to speed biological and medical research.

No one knows how many genes the human body has but they are estimated in the thousands. Every cell in the human body has forty-eight



A cluster of specimens double imbedded in collodion and hard paraffin ready for thin slicing in the microtome. Each block will be sliced into 250,000 pieces. Sections are mounted and viewed through the microscope.

chromosomes, which act as carriers for the genes. The genes are strung along the chromosomes. The fruit fly is the most widely studied genetic material because the insect's chromosomes are larger than most and because generations are born every two weeks. Fruit flies are known to have between 2,500 and 5,000 different genes.

Before the scientists were able to see genes under the electron microscope, they had to develop a process of slicing animal tissue as thin as 1/250,000 of an inch. This was necessary because a beam of electrons will not penetrate effectively tissue sections thicker than .0000039 to .0000078 of an inch. The genes were then seen in sectioned chromosomes.

Dr. Daniel C. Pease cuts a section of tissue and observes the cutting through the microscope.

