

DENTISTRY

Thymol, Alcohol, Ether Used In New Dental Pain-Killer

Ingredients Obtainable at Any Good Drug Store Make Mixture That Has Banished Dread of Dentist's Chair

DENTISTS all over the country are visiting their druggists. They are buying three things: thymol, ethyl alcohol, and sulphuric ether. These are the ingredients of the new Hartman formula that takes the pain out of tooth drilling.

Announced by Prof. Leroy L. Hartman, professor of dentistry in the Columbia University School of Dental and Oral Surgery, the new pain-killer is applied to the dentin of a tooth, lying just below the enamel, and makes possible drilling of a cavity without feeling on the part of the patient.

Here is the formula which Prof. Hartman disclosed before 3,000 of his fellow dentists at a joint meeting of the First and Second District Dental Societies of the State of New York:

Formula by weight

Thymol $1\frac{1}{4}$ parts
Ethyl alcohol 1 part
Sulphuric ether 2 parts

The solution is kept in a brown bottle and applied directly to the dentin with a moistened pellet of cotton. The pain-killing effects lasts one hour if the cavity is kept dry by the use of a rubber dental dam. If saliva dilutes the solution the effect may last only twenty minutes. But because the local anesthetic is designed to kill pain only during drilling, the time is ample. A seventy-five cent bottle of the Hartman formula is sufficient for 200 applications.

Not Good for Self-Treatment

Sufferers from toothache are doomed to disappointment if they rush to the nearest drug store, have the solution prepared and apply it directly to an aching tooth. It must be placed in contact with the dentin inside the tooth and not on the outer enamel for its pain-killing effect. The discoverer of the formula and officers of the dental society warned:

"In the interest of public welfare we warn the public against attempting to use this preparation for the self-treatment of toothache. It is effective when used by a dentist under the proper conditions."

The only possible condition where the solution might aid a home sufferer temporarily would appear to be in the case of a large cavity in a tooth where the dentin is exposed and the outer enamel broken away. With a sure means of preventing pain during drilling, however, many persons who dread the dentist's chair should feel more like visiting their dentist regularly.

A drug manufacturer has already begun the preparation of the tooth desensitizer for distribution to dentists of the nation.

Out of 500 volunteer cases which Prof. Hartman has treated, the only failures occurred when the solution came in contact with phenol, or carbolic acid, which is commonly used in dentistry to sterilize cavities. The phenol must be removed from the cavity, or else several applications of the Hartman solution must be applied to dissolve the phenol.

A doctor turned patient had "his greatest thrill in a dental chair" when a cavity in one of his very sensitive teeth was drilled and filled painlessly with the aid of the new "desensitizer" developed by Dr. Hartman.

Dr. Hartman related the incident in a report of his desensitizer at the meeting of the First and Second District Dental Societies of the State of New York. The name and chemical composition of the desensitizer were made public for the first time at this meeting.

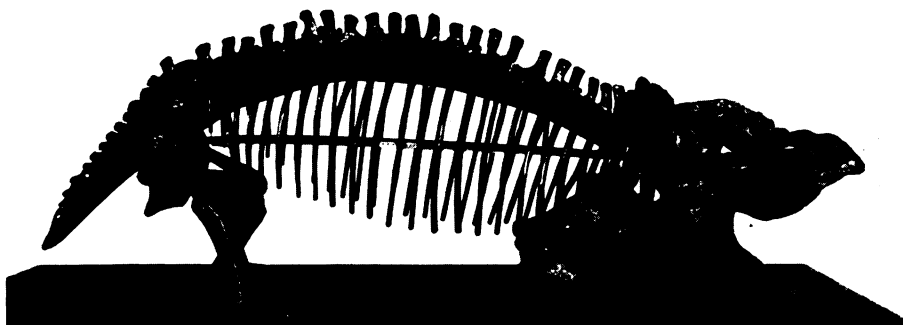
Unlike other anesthetics, which must be injected into the nerves or pulp of the teeth, Dr. Hartman's pain-killer is applied on a bit of cotton directly to the dentin, the area beneath the enamel of the tooth. Dentists have previously held that there are no nerves in the dentin. Dr. Hartman believes this idea is contradicted by the experience of patients who "say that the only part they dread in a dental operation is when you suddenly strike the nerve with the drill."

A Dentist as Guinea-Pig

This painful experience will soon be a thing of the past, it seems, as a result of Dr. Hartman's discovery. Less than two minutes after the desensitizer has been applied, the drilling may be started without pain or discomfort. The pain-killing effect lasts from twenty minutes to an hour, giving plenty of time to prepare almost any cavity for filling. There are no unpleasant after-effects and the pulp of the tooth remains normal.

Dr. Hartman reported to the dental society a number of cases of patients who had always been especially sensitive to the dentist's drill. Among them was Dr. T., who made a special trip to New York to find out for himself about the new solution.

"He claimed to be the world's worst patient," stated Dr. Hartman, "and ask-



OLDER THAN THE DINOSAURS

Two hundred million years ago, in the Late Permian age, there was living flesh on these bones: a thick-bodied, sluggish, plant-eating reptile about seven feet long. It had horny jaws, toothless except for a pair of tusks in the male. Probably an easy victim to the reptiles-of-prey that roamed the South Africa of that time, this beast has left few and very fragmentary remains. This practically complete skeleton, brought to the University of Chicago by Dr. A. S. Romer, is the first of its kind to be mounted in any museum. The creature, known to scientists as *Dicynodon tigriceps*, is given a full description in the *Journal of Geology* by Everett Clare Olson.

ed if I would just open a cavity for him so he could have a personal experience. I followed his directions, used a stone to cut through the enamel and exposed the dentin. Then, used a 34 inverted cone bur and made one cut into the dentin. He squirmed from the pain.

He then asked me to make the application. I used the same bur, prepared a cavity and filled it with cement. He got out of the chair, threw his arms around me and hugged me. It had been his greatest thrill in a dental chair."

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VITAL STATISTICS

Supreme Court Justices Are Not Unusually Long-Lived

DESPITE the general impression that Justices of the U. S. Supreme Court are an unusually long-lived body of men, statistical analysis shows that this is not the case.

As a group, each of the 66 Justices appointed since the court has been in existence lived about a year longer than would be expected for men of their ages in the ordinary walks of life, statisticians of the Metropolitan Life Insurance Company have figured.

Since 1862 the average age of the Justices at appointment has been considerably older than before that date, the figures also show. The situation has been reversed in so far as Presidents are concerned, it is pointed out.

The older average age at appointment of the Supreme Court Justices may be due to the fact that the rapidly growing complexity of our legal structure demands men of riper age. Whatever the reason, the average older age of these appointees during the period since 1862 "seems not to have affected their ability to carry on, if we may be guided by their longevity as compared with that of judges appointed in prior years. The average age of these later justices was almost four and one-half years greater than that of the earlier group—73.7 years as against 69.3," the life insurance company statisticians state in their report.

"During the 146 years that the United States Supreme Court has been in existence, 76 appointments and two reappointments—John Rutledge and Charles E. Hughes—have been made to this distinguished body. Of these 76 men, 66 are dead, their average age at death being 71.4 years. This cannot be called a particularly advanced age despite the fact that there have been three nonagenarians and nine octogenarians on the Supreme Court Bench since its foundation. As nearly as can be computed, the aggregate years of life expectation

of these 66 men at the time of their appointment was 1,205, while the total number of years actually lived was 1,265. As a group, each lived about one year over the life expectancy of men of their ages in ordinary walks of life.

"Prior to the Civil War the picture was somewhat different from that following it. The total years of life expectation of the justices appointed during the earlier period numbered 712, while their actual years of life totalled 713. They thus fulfilled almost exactly the term of life that ordinary men of their age might expect. Subsequent to the Civil War, the number of years lived by the judges somewhat exceeded the expectation of life at time of appointment (552 years as against 493), namely, by not quite two years each over the expected. It can hardly be said, therefore, that life on the Supreme Court Bench is outstandingly conducive to longevity, as is generally supposed."

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PSYCHOLOGY

Emotional Appeal to Voters Garnered Most Ballots

POLITICAL psychology is an ancient art, but as a science it is just in the process of being born, Prof. George W. Hartmann, psychologist of Pennsylvania State College, told the New York Academy of Science recently.

In a recent test, Prof. Hartmann said, a minority party in a Pennsylvania city checked the vote-pulling power of a pamphlet written with a rational appeal in the form of a series of suggestions for social and economic change, as compared with an emotional appeal pamphlet in the form of a sentimental letter involving primarily an appeal to parental interest.

Distribution was made in three ways: in certain wards of the city, 5,000 copies of the rational pamphlet were personally handed to the voters; in other wards, 5,000 copies of the emotional appeal were similarly given out; and finally other wards were left alone as control districts.

When the votes were checked, in a comparison with the previous year's voting the greatest increase was found in the wards receiving the emotional appeal; next came the rational appeal, and finally the control wards. The emotional pamphlet was twice as effective as the rational questionnaire type of literature.

Two weeks after the election a follow-up check of the voters showed that three times as many people remembered the emotional leaflet as recalled the nature of the rational one.

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THE CARACOL, AN OVERGROWN RUIN, FROM AN OLD PRINT