

## Experimental Toothaches

Students of pharmacology have offered themselves as volunteers in a "toothache squad" to find out what drugs are the most effective in quelling an aching molar. Dr. Hans Heinroth, a member of the faculty in the department of dentistry at the University of Halle, Germany, conducted the tests which put morphine at the top of the list of the dental pain relievers.

The volunteers submitted to having an electric current passed into their teeth. When pain was produced in this way a signal was given by the sufferer, who sharply raised his right hand. A drug was then administered and the time it took to relieve the pain—or not to relieve it in some cases—was recorded. The drugs most often used to relieve toothache, headache and neuralgia were among those tried. They included quinine, aspirin, pyramidon and phenacetin. Of this group phenacetin was the most effective, and Dr. Heinroth suggests that it is probably better as a cure for normal pain of this type than its allies, which he says are on the whole used more often.

Among sedative drugs hedonal was found to have the best results. Heat and cold were also tried. In the case of toothache heat was found to increase the suffering, whereas cold gave relief. A little alcohol very slightly increased the painful sensations, but a large dose had the effect of blunting them.

Scopolamine, which is used with morphine to induce "twilight sleep," was tried out but was not found to be particularly efficacious in relieving toothache.

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### American Diamonds

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derneath to adorn the fingers of America's future brides only time and hard labor can tell. Geologists will not go so far as to say that we have another Kimberley down in the Ozarks, but many of them admit that diamond prospects in Arkansas are at least promising.

Fortunately peridotite is easily recognized by petrologists and geologists, so that would-be investors in possible diamond bearing lands need not be fooled out of their money if they call in expert advice before they actually buy. It is a good thing to remember in this connection that a glassy pebble that will not take a scratch from a piece of emery is



DR. W. F. FOSHAG, mineralogist of the U. S. National Museum, with one of the Arkansas diamonds. He has the job of putting in order and arranging in the museum files pounds of topazes, ounces of opals and some 16,000 other specimens in the famous Roebling collection.

worthy of an examination by a mineralogist. Furthermore, though the diamond is the hardest substance known, hardness does not mean strength, and pounding the suspected gem with a hammer is no fair test of its genuineness. There are several records of American diamonds that have failed to survive this drastic treatment which is popularly supposed to be a sure way of proving a stone's value.

Several diamonds have been found and equally many have undoubtedly been lost in gold placers in California. They are thought to be originally derived from the same type of diamond bearing rock that has been washed down in broken bits in streams from the mountains of volcanic origin. Most of them are small, and there is no telling how many more of the white glassy crystals have been thrown out of the rockers and washing pans of miners interested only to the gleam of yellow dirt.

In the Piedmont region of the Atlantic coast there have been a few found. Virginia claims a single isolated diamond, a big one around 23 carats having been dug up by a laborer working on a street excavation in Manchester as long ago as 1855. In Dysartville, N. C., a shiny pebble later found to weigh four and two-thirds carats attracted the attention of a little boy sent to a spring for water. He fished it out and carried it home. where it excited sufficient interest on the part of the grown-ups to send it to New York for examination. It proved to be the real stuff, and a model of it was displayed in the Paris Exposition of 1889. It is now in the

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## World Figure Code

A new international language, which aims to make it easier for people of one nation to communicate with another, has been invented by an officer in the U. S. Army. The language inventor is Capt. Manly B. Gibson, of the U. S. Coast Artillery, and the language is made out of the common numerals zero to nine, which are familiar to people in most civilized parts of the world.

The system, known as the Gibson code, is said to be applicable to wire, letter and radio communication between different countries. The inventor has so arranged the code that each of 10,000 principal words in the English language is represented by a number, and this number also represents the corresponding word or idea in 20 other important languages.

All nouns begin with the figures 1, 2 or 3; verbs start with the figure 4; adjectives with 5; adverbs with 6; pronouns with 7; conjunctions with 8; and prepositions with 9. Thus in this code: "The boy eats the red apple" would be written: 5 111 409-10 5 516 2013. The hyphenated figure representing the verb signifies its tense. That is to say, if a verb number is followed by a hyphen and the figure 10 it is present tense; and if followed by a hyphen and the figure 30 it is future tense. Likewise the singular and plural nouns are designated by odd and even numbers respectively; for example, 111 means "boy" in any language whereas 112 denotes the plural "boys." In each sentence the predicate is underscored by one line and the subject by dashes by the writer. Direct questions are preceded and followed by interrogation points. Numbers are differentiated from words by being preceded by #.

The code books of the new system will have two parts—a writer's and a reader's section. The writer's section, to be used when composing messages, will be a list of words in alphabetical order followed by the code number assigned to them. The reader's section, on the other hand, will be numbers in numerical sequence followed by the words in that particular language they represent, and will be used when deciphering messages.

The practicality of the new code system has been put to test at the Presidio in San Francisco where groups of soldiers speaking different native tongues and equipped with

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