



## A VERY SMALL SPECIMEN

The Carnegie Institution's annual exhibit in Washington this winter was enlivened with a few bits of actual desert, transported East for the purpose. There were potted specimens of things one ordinarily only reads about: palo verde, ocotillo, agave, and a "very small" giant cactus of the genus *Carnegiea*. When full size, this strange vegetable is of tree height, and dominates the landscape where it grows. Dr. Forrest Shreve, in charge of the Desert Laboratory at Tucson, is shown "yardsticking" for this specimen.

## MEDICINE

## Find Drug That Will Keep Sleepy Persons Wide Awake

Students Who Sleep in Class But Cannot Blame Professor Relieved by Drug that Also Aids Cataplexy

**A** DRUG to keep sleepy persons awake is now being used in medical treatment with pronounced success.

First report on the use of benzedrine for the treatment of what the doctors call narcolepsy, or sleep attacks, is made by Dr. Myron Prinzmetal of Los Angeles and Dr. Wilfred Bloomberg of Boston. (*Journal, American Medical Association*, Dec. 21)

Students especially are given to sleep attacks, and for these their own central nervous systems rather than their professors are to blame.

Nine cases of persons who fell asleep at least three times a day are reported by the physicians, whose work with benzedrine has been done in connection with the neurological service of Boston City hospital and Harvard Medical School. In each of the nine cases re-

lief was complete when suitable doses were given. The drug also gives practically complete relief of cataplexy, a state of muscular rigidity produced by sudden emotion, shock or fear.

The studies made show benzedrine to be three times as effective in preventing attacks of sleep as ephedrine, the treatment usually given.

Seven of the cases reported were among students; the other two affected were a housewife and an office worker.

Three of the students suffered from momentary generalized weakness whenever they laughed. One girl had to give up college because she couldn't avoid falling asleep in classes.

An eleven-year-old school boy slept all the time he was not actively occupied, and consequently failed in his school work. One sleepy young man

had been injured in a football game, after which he became more and more drowsy until he had six sleep attacks every day.

The two physicians state that benzedrine has a profound stimulating action on the higher centers of the central nervous system. It has been used in hay-fever and asthma.

*Science News Letter, December 28, 1935*

## GENERAL SCIENCE

## Formula for Racing Shown At Carnegie's Exhibit

**A** FORMULA for the racing capacity of a Thoroughbred horse yet unborn . . . pieces shot out from the sea's bottom a mile and a third down . . . a new link in the early life of the monkey . . . evidence that man lived in America 10,000 B.C. . . . warning that silt is still a problem at Boulder Dam . . . pressures of 180,000 pounds per square inch.

These and other new developments in a score of scientific fields were reported to the Board of Trustees of the Carnegie Institution of Washington at an exhibition demonstrating high points in the Institution's work.

Mathematical estimates of the racing capacities of Thoroughbred colts yet unborn have been worked out by Dr. Harry H. Laughlin of the Institution's Eugenics Record Office at Cold Spring Harbor, N. Y. Dr. Laughlin's formulae take into account past performances of all notable racehorses in any given animal pedigree, and although they definitely cannot be used for setting the odds in any particular race, they will give the owner an idea of what he can expect of his foal in the long run. Dr. Laughlin has even worked out an ideal "synthetic" horse, which has not yet been realized in the flesh, although it has been possible to approach him, given proper breeding opportunities.

Samples of seabottom rocks can be obtained by a kind of short cannon that is lowered on a cable, to fire a hollow projectile against the floor with a charge of powder. The hollow shell punches out a piece of the bottom just as a watermelon "plugger" takes a sample of the melon. The solid sample can then be hauled to the surface for study and preservation. In the development of this apparatus, the Geophysical Laboratory of the Carnegie Institution and the Geological Society of America worked in cooperation, with assistance also from the du Pont Powder Company and the U. S. Lighthouse Service. (*Turn Page*)