

greens and over) with only scattered local rains as compensation.

The drought, already called the most severe in the history of the nation, "has been intensified and where rains occurred they afforded only temporary relief, except locally," states the newest report.

Science News Letter, August 22, 1936

PSYCHOLOGY

"Blanks" Occur in Mind Several Times a Minute

YOUR mind "goes blank" several times every minute. During these blank periods you involuntarily stop work for a couple of seconds. If you are tired, the stops occur oftener—maybe eight or ten times each minute—and they may last twice as long.

This automatic putting on of brakes by the brain was discovered in experiments conducted at the psychology laboratory of the University of Chicago, under the direction of Prof. Arthur G. Bills. The "blocks," as Prof. Bills calls these blank periods, are not complete, he explains. The individual does not lose track of what is going on, but he must stop mental work on the task at hand.

Blocks partly account for the "er-r-r" and "ah" which public speakers put between words. These blanks are particularly conspicuous when a person is doing rapid calculating. Every so often, he is unable to proceed and stalls. Fatigue increases both the frequency and the duration of the blocks, causing bunching of responses or spurts of work.

Stutterers Block Often

Stutterers block about twice as often as normal persons and their blocks last longer, it was found.

"It is safe to assume that there is a common neurological basis between blocking and stuttering," Prof. Bills concluded.

Mental blocks are enforced resting periods, he explained. They may account for the fact that continuous mental work does not impair mental efficiency to nearly the same extent that muscular work impairs muscular efficiency, he believes.

By giving his subjects artificial rest periods timed to coincide with their blocks, Prof. Bills found that he could practically eliminate the blocks. He also found that most errors occur just before or just after a block; and that when the tasks are more tiring, the number of blocks is greater.

Science News Letter, August 22, 1936

ASTRONOMY

Tiny "Nearest" Planets Are Given Classical Names

THE TWO tiny planets, or asteroids, which approach closer to the earth than any other known body except the moon, have now been given names to honor two mythological characters who have so far been omitted from the sky. According to the Astronomisches Recheninstitut in Berlin, the one discovered in 1932 by Dr. Karl Reinmuth of the Neu-Babelsberg Observatory of the University of Berlin, has been named Apollo, after the ancient god of the sun, who also concerned himself with prophecy, song, and music.

This little body, probably about a mile in diameter, can come within as little as 3,000,000 miles of the earth.

The second asteroid was found in February of this year by Dr. E. Delporte

of the Belgian National Observatory near Brussels. On Feb. 5 it was only 1,376,000 miles away, within 75,000 miles of the closest that it can ever possibly approach. This has been named Adonis, after the beautiful youth who was beloved of Aphrodite.

It has tentatively been called Anteros in the United States, after the god who was opposed to Eros, the god of love. This name was appropriate, because formerly an asteroid called Eros had held the honor of making the closest approach—about 14,000,000 miles. Still another, called Amor, also a discovery of Dr. Delporte, in 1932, comes closer than it, reaching a minimum distance of 10,000,000 miles.

Science News Letter, August 22, 1936

PHYSIOLOGY

An Athlete's Knee Is His Most Vulnerable Spot

IN ACHILLES, it was the heel. In the modern athlete it is the knee.

On athletic fields more injuries occur to the knee than to any other part of the player's anatomy, Dr. Marcus H. Hobart, who for twelve years has been handling athletic injuries at Northwestern University, finds. He presents (*Journal, American Medical Association*, Aug. 15), a review of his experiences, with detailed statistics on the injuries that have occurred in that university in the last five years.

Football, as might be expected, has the longest casualty list of any sport. Dr. Hobart thinks this only natural for "probably five or six times as many students play football as any other sport."

Next to football in frequency of injuries comes wrestling, and after that basketball, baseball, track, swimming, water polo and boxing. Other sports are too safe to merit consideration.

The knee takes the brunt of the punishment for several reasons. Its position is exposed, it can be affected by both direct and indirect force, and since the ankles are well protected and do not

give way, the strain is transmitted to the knee. Dr. Hobart thinks it might be better not to strap players' ankles so tightly.

Next in frequency to knee injuries come those to the fingers and toes, ankles, shoulders, nose, face, elbows, back and legs, and feet.

Athletic injuries are either in a class by themselves or in a class with war injuries, the idea being to return athlete or soldier to team or trenches quickly and fully recovered. So that a student may be returned to practice or play only when it will do him no damage, Dr. Hobart states that a physician should be in full charge of the physical side of the team, as the head coach is in charge of the athletic side.

Fractured bones, in Dr. Hobart's athlete cases, are almost always put in a cast rather than a splint, as the cast cannot be easily removed. The general rule, he says, is to use a cast for fractures in children, athletes, idiots and doctors.

Sprains are the most common injuries in athletics, followed by contusions and concussions, fractures, cartilage injuries,

lacerations, dislocations and other hurts.

This team doctor never allows a player to go on the field with a bandage on his face. Bandages, he says, only excite opponent players of a certain

type to tear them off. He puts a colodion dressing on the wound, and this dressing is removed immediately after the game and a bandage applied.

Science News Letter, August 22, 1936

ENTOMOLOGY

Cannibalistic Enemies Among Corn Ear Worms

Tight Husks and Resulting Crowding Encourage Them In This Evil Practice With Benefit to the Farmer

INSECTS that prey on other insects have long been recognized as man's allies: the agricultural expert turns loose swarms of such parasites and predators to prey upon pests and thereby save crops.

But there is one pest that is its own worst enemy—the corn ear worm. These repulsive larvae, that appear in ears of sweetcorn to the disgust of all proper housewives, are cannibals, and regularly eat each other up whenever there is an opportunity. Thus it comes to pass that the one ear worm you find in an ear of corn may be the living sarcophagus of a number of his departed mates, like that sad survivor of shipwreck in the "Bab Ballads," who in his sole person represented, among others

"... the Bosun tight,
And the Midshipmite,
And the crew of the Captain's gig."

Dr. George W. Barber, entomologist

in the U. S. Department of Agriculture, has made a study of the ways of this self-destructive pest, which he reports in a recent Department publication (Technical Bulletin No. 499, U.S.D.A.; *Govt. Print. Off.*, 5 cents).

The corn ear worm, it appears, eats corn silk, green corn grains, or his brethren, all with quite equal appetite. If anything, he prefers his brethren; for wherever two or three corn ear worms are gathered together, presently there is only one. As a rule, the bigger and older ones are somewhat more cannibalistic than the younger and smaller individuals, but the young worms "go native" very readily if occasion (and a brother ear worm) offers.

Under normal conditions, the ear worms mature more rapidly on a mixed diet of corn and each other than they do if kept in crowded quarters with nothing but other ear worms to eat. Nevertheless, specimens kept in tin salve

boxes on a strictly cannibalistic regimen grew perfectly well and finally matured as normal corn ear worm moths.

The degree of cannibalism developed on actual ears of corn depended to a considerable extent, Dr. Barber found, on the tightness of the husks. The worms normally enter the ear by way of the tip. If the husks are loose, they keep more or less out of each other's way, with resulting greater damage to the corn through the feeding of several individuals. But if the husks are tight, the worms are crowded together, cannibalism develops quickly, and soon there is only one survivor to feed on the young kernels.

Corn breeders can take advantage of this fact, Dr. Barber suggests, by producing tight-husked varieties.

Science News Letter, August 22, 1936

METEOROLOGY

Early News Photographer Catches the Sun-Dogs

AN ALERT news photographer, at work in the early morning hours, obtained the interesting photograph of sun-dogs reproduced on this page.

Sun-dogs are observed much less frequently than their comparatively common occurrence would lead one to suppose, and a good photograph of

SUN-DOGS

This unusual photograph was taken from the top of the Detroit News building by William L. Seiter of the Detroit News' photographic staff. Two negatives were used.

