

PUBLIC HEALTH

Influenza May Strike

➤ INFLUENZA, one of the most unpredictable of communicable diseases, is resting "on cat feet" across the nation right now. It has already struck once this year in mild epidemic form at an Air Force base in Colorado. When and how severely it will strike again is a perennial riddle to public health authorities.

It will probably not lie dormant for the rest of the winter months. At the least, there will be sporadic outbursts of it throughout the country. If the right conditions occur, it could sweep across large areas of the U. S. practically overnight.

One fact health officials do know is that this fast-spreading respiratory disease occurs in cycles. The two most prevalent types, type A and type B, seem to return at regular intervals, Dr. C. C. Dauer, Influenza Information Center for the U. S. Public Health Service, said.

Type A seems to occur every two or three years, while type B seems to occur every three or four, he said.

"We are most likely to have outbreaks of type A this year, but how extensive they will be is not known," he added.

One of the constant problems facing public health officials is the variability of the influenza virus itself. Any sudden

change in the structure of the virus could quickly make presently used vaccines useless against the illness.

Just such a sudden change took place in the type A virus in 1947, Dr. Dauer said. Much of the vaccine then on hand was powerless, and the disease was able to spread unchecked.

In this country, a constant study of the virus structure is made by the Influenza Strain Center located in the Communicable Disease Virus Laboratory, Montgomery, Ala. So far there have been no indications of any major changes in the viruses, and the prepared vaccines now on hand are probably effective against them, Dr. Dauer said.

The variations in influenza epidemics are completely unpredictable, he added. Some epidemics cause no increase in deaths while others cause a considerable change in the general death rate.

Not all of these deaths can be attributed to respiratory complications like pneumonia, the health official said. Many times, the effects of influenza are "just enough to tip the scales" in victims of other diseases who are seriously ill.

Science News Letter, February 9, 1957

PALEONTOLOGY

No Africa-America Bridge

➤ AN ANCIENT "living bulldozer" and his strange relatives are helping to raise doubts about prehistoric land bridges that supposedly existed between Africa and South America.

The mammal-like "bulldozer" was a member of a family of animals called dicynodonts, plant-eating reptiles that roamed the earth 200,000,000 to 150,000,000 years ago. They ranged in size from a chipmunk to a rhinoceros.

Drs. Charles L. Camp and Samuel P. Welles of the University of California's Museum of Paleontology have recently published (University of California Press) a study that indicates the dicynodonts of North and South America and those of South and East Africa may have all belonged to a single family.

One theory has been that during the Triassic period (200,000,000 to 150,000,000 years ago) land connections may have existed over which the animals may have crossed from Africa to the New World via South America.

But the relationships and distributions of the fossil animals indicate the dicynodonts came to the Western Hemisphere over some northern bridge between Eurasia and North America.

Work with other fossil animals also sug-

gests the northern bridge, and there is evidence for a connection between North and South America at the same time.

The bones of the dicynodont that looked like a "living bulldozer," *Placerias gigas*, were found in the Arizona Painted Desert. It was the size of today's rhino, but looked like nothing now living. Gigas was flat-footed and plodding, and had a big head faintly resembling a turtle's. Its muzzle was covered by a horny beak, plus, in the males, a pair of short tusks along the face. The tusks were formed by the growth of bone rather than from teeth as in true mammals.

Gigas' hindquarters were elevated in the walking position and the short, massive forelegs were spread outward from the shoulder. He carried his heavy, barrel-like body on stout limbs, with the head probably tilted toward the ground and held low, giving the appearance of being ready to scoop up the sod.

The dicynodonts were the chief grass-eating reptiles of their day. They apparently used the tusks to root vegetation, then the toothless lower jaws moved in a fore-and-aft motion for chewing in a cupped or grooved part at the front of the mouth.

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• RADIO

Saturday, Feb. 16, 1957, 1:45-2:00 p.m., EST. "Adventures in Science" with Watson Davis, Director of Science Service, over the CBS Radio Network. Check your local CBS station.

Dr. Howard L. Bevis, Chairman of the National Committee for the Development of Scientists and Engineers, will discuss "The Need for Scientists and Engineers."

About 1,740,000,000 gallons of water was withdrawn from U. S. ground, lakes and streams each day during 1955.

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