

## MEDICINE

# Nobelist Fights Yellow Jack

America's fighting men as well as millions in Africa and South America can cheer award of 1951 Nobel Prize for Medicine to Dr. Max Theiler.

► AMERICAN SOLDIERS, sailors and Marines of World War II as well as countless millions of men, women and children living in South America and Africa can cheer the award of the Nobel Prize for Medicine this year to Dr. Max Theiler of the Rockefeller Foundation, New York.

For it was Dr. Theiler's research of nearly two decades ago that produced a successful vaccine against yellow fever, once a world-wide scourge and until 1932 a constant danger to persons visiting, living or fighting in tropical regions of those continents.

Among vaccinated American servicemen stationed in Africa and South America, not one known case of yellow fever was reported, thanks to Dr. Theiler.

When Walter Reed, American Army officer, assisted by brave volunteers, proved the role of the mosquito in carrying the disease, it seemed as if the conquest of yellow fever had been made. But it had only begun. Yellow fever was cleaned out of the United States and some other regions by warfare against the stegomyia mosquito that carries it. For another 30 years, it took its deadly toll in other parts

of the world and among the scientists who battled to conquer it.

Until Dr. Theiler's discovery, it had never been possible to give yellow fever to mice, only to monkeys. Efforts to get a strain of the yellow fever virus from monkeys for vaccinating humans were unsuccessful.

Dr. Theiler, then an assistant and later instructor at Harvard Medical School, found that when he injected an irritating substance in the brain of a mouse at the same time that he injected the yellow fever virus, he could produce the disease in the mouse. Passing the mouse virus along from one mouse to another weakened the virus enough so that when given with blood serum from a recovered yellow fever patient, it could safely and effectively be used to vaccinate humans.

Later, Dr. Theiler and associates found a way to make the yellow fever virus grow in chick embryos and for some years this has been the source of material for the vaccine now used in the United States.

Science News Letter, October 27, 1951

## DENTISTRY

## Antibiotics Save Abscessed Teeth Formerly Extracted

► MANY A person's two front teeth have been saved by aureomycin and penicillin, Dr. Edward L. Sleeper of Tufts College Dental School, Boston, reported to the American Dental Association meeting in Washington.

The mold drugs are used to clear up infection in cases of abscessed teeth. Practically all such teeth can be saved, no matter how severe the infection, Dr. Sleeper said.

"Many front teeth, in younger individuals especially, have been so loose when acutely involved that they could have been extracted with one's fingers," Dr. Sleeper said.

"Yet, when the infection was under control and the tooth root canal filled and treated, the patient had a functional tooth of his own."

"Pyorrhea" no longer means the patient is doomed shortly to lose all his teeth, as it did 25 years ago, Dr. Harry B. McCarthy of Baltimore reported.

The term then was used for most ailments of mouth tissues and gums and it was widely believed that there was no cure for it.



**NOBELIST THEILER** — Dr. Max Theiler of the Rockefeller Foundation has been awarded the 1951 Nobel Prize for Medicine for his part in making yellow fever an almost extinct disease.

Dentists now know more about ailments of these tissues, called periodontal tissues, and are equipped to treat them. The attitude of defeatism dentists once had for such ailments is "fast passing out of the picture," Dr. McCarthy said.

"We can safely tell our patients, except those with very advanced periodontal involvement, that we can, with adequate treatment on our part and the proper home care on their part, retain their teeth and supporting tissues in a healthy condition for many years."

Science News Letter, October 27, 1951

## WILDLIFE

## Beaver Less Eager, Build Cornstalk Dams

► BEAVERS FAMED for building sturdy dams of aspen, cottonwood, and willow are constructing dams of cornstalks in the prairie counties of southwestern Minnesota. The beavers' whole livelihood comes from the farmers' cornfield. They eat the stalks and ears of corn and surprisingly build their dams of cornstalks. The odd cornstalk dams are holding up well.

"The beavers don't have to work so hard to eat in cornfields as they would in a deciduous tree grove," explains Frank Blair, director of the Minnesota Conservation Department's Game and Fish Division in Worthington. "Like some people, they follow the line of least resistance. They apparently are enjoying their new diet of corn."

"Eager beavers," however, in wooded areas of Minnesota still work hard cutting down trees to feast on the tender, succulent, top bark.

Science News Letter, October 27, 1951

## MYCOLOGY

## "Mushrooms" Grown in Fruit Cannery Wastes

► "MUSHROOMS" FOR mushroom soup and other flavoring uses may become a food product of the South, a Southside Chemical Conference in Wilson Dam, Ala., was told. The "mushrooms" would be root-like mycelia grown in waste materials from fruit canning factories. If properly taken care of, mycelia grow up to the familiar full size mushroom, but they have the mushroom flavor when still in the early, root-like stage.

In laboratory liquid farms, mycelia have already been grown successfully on by-products of the citrus industry by a team consisting of S. S. Block, T. W. Stearns, R. L. Stephens and R. F. C. McCandless of the University of Florida. Successful commercial production by this method would mean a cheaper source of "mushrooms" for mushroom soup, since mycelia can be cultivated more quickly.

Science News Letter, October 27, 1951