

Martyrs Get Pensions

Medicine

The House bill providing pensions of \$125 per month for Army officers and enlisted men who took martyrs' parts in the yellow fever investigations carried on by army doctors in Cuba in 1900, or for their widows or heirs, has been passed by the Senate.

There are 14 of these men, twelve of whom were privates. A pension for Mrs. Walter Reed, wife of Major Reed, who was in charge of the yellow fever work in Cuba, was provided years ago, but recent efforts to increase this amount above its present amount of \$150 per month failed in the House, the chairman of the Pensions Committee there maintaining that such pensions must be held down within "reasonable limits".

The bill as passed does more than make certain pensions of \$125 per month for each of the men concerned.

It provides that the Secretary of War shall publish their names annually in the Army Register as a roll of honor, and that each of the men or their heirs shall be presented with a gold medal. The Secretary of the Treasury is to decide upon the design of these medals and \$5000 is to be appropriated for making them.

The names to be carried on the roll of honor are: Walter Reed, James Carroll, Jesse W. Lazear, Aristides Agramonte, James A. Andrus, John R. Bullard, A. W. Covington, William H. Dean, Wallace W. Forbes, Levi E. Folk, Paul Hamann, James F. Hanberry, Warren G. Jernegan, John R. Kissinger, John J. Moran, William Olsen, Charles G. Sonntag, Clyde L. West, Dr. R. P. Cooke, Thomas M. England, James Hildebrand, and Edward Weatherwalks.

Senator David Reed, Republican, of Pennsylvania, chairman of the Senate Military Affairs Committee, in explaining the bill to the Senate, where it passed with no opposition, said:

"Back in October, 1900, Dr. Walter Reed took his yellow fever experiment crew to Cuba and did one of the greatest things that had ever been done up to the time in the history of preventive medicine. He found that all existing theories for the cause of yellow fever were wrong, and he proved that it was due to the bite of an infectious mosquito of a particular variety.

"He could not have proved that fact had it not been for the heroic assistance of about 25 men in his detachment who underwent the most terrible experiments in order to prove that yellow fever (*Turn to next page*)

Michelson Our Biggest Asset

Physics

Prof. Albert A. Michelson, eminent physicist of the University of Chicago, is a bigger world asset than any billion-dollar corporation in the United States or all of them put together, declared Dr. Robert A. Millikan of the California Institute of Technology, at the dinner of the Society of Arts and Sciences where both these eminent scientists were awarded the society's gold medals for 1929 for scientific achievement.

"I personally believe that the United States has not had in this generation a greater economic asset than Albert A. Michelson," said Dr. Millikan. He based his statements on the importance of Professor Michelson's super-refined experiments which in themselves and in the paths they have opened to other investigators have revolutionized many of our ideas.

"In the last analysis there is nothing that is practically important at all except our ideas, our group of concepts about the nature of the world and our place in it, for out of these spring all our conduct," Dr. Millikan said.

Specifically he referred to Professor Michelson's ether drift experiments, carried on for 40 years. This great work proved definitely that there is no speed of the earth with respect to ether. Einstein's startling theory of relativity grew chiefly out of Professor Michelson's experiment. "Historically it is hard to see how it

could have been arrived at without both Michelson's own very exact measurements and others of the kind he led the way in showing how to make," Dr. Millikan explained.

His own work with cosmic rays is likewise based on the Michelson and Einstein results. Millikan and his co-worker, Dr. George H. Cameron, concluded as a result of their experiments that the evidence is very strong that the cosmic rays are the subatomic radio signals broadcasting the continuous creation of the abundant elements somewhere.

"In the future, as in the past," said Dr. Millikan, "man will depend entirely upon the sun for his supply of available energy." The process of building up atoms in space, of which cosmic rays are evidence, which would give a practically unlimited supply of energy, cannot take place on earth.

Earlier in the day Dr. Millikan reviewed the chief features of his work with cosmic rays, speaking before the joint meeting of the American Physical Society and the Optical Society of America. Dr. Millikan reiterated that neither the sun nor the stars had any effect on cosmic rays and showed the steps by which he arrived at his conclusion that those rays, together with two other generalizations, are direct evidence that the process of atom building is going on now.

Science News-Letter, March 9, 1929

Light Fan Guides Fliers

Aviation

Rotating fans of vari-colored light such as will guide future aviators to safe landings at night are now in operation at the Cleveland municipal airport.

The airport beacon by rotating reaches the pilot at any angle at which he may approach the field. Half of the beam is white and half red, producing alternate flashes to distinguish the beacon from the brilliant lighting of parks, railroad yards or streets. High candlepower is used in order that light may penetrate fog as effectively as possible. Color is produced by special cover glasses placed over the incandescent lamp projectors.

Science News-Letter, March 9, 1929

The American negro is less susceptible than the white man to diseases which enter the body by way of the skin, a zoologist at the University of California declares.

Bantams to Hunt Beetles

Entomology

A greenhouse owner near Philadelphia is hunting for a flock of bantam chickens which he proposes to turn loose among his plants, states Dr. W. A. McCubbin of the Crop Protection Institute. The idea is that they will devour the Japanese beetles as fast as these insects emerge from the soil. Although their numbers are too few to cause any considerable loss from adult feeding injury, the greenhouse man is sensitive about the matter; possibly in the present state of public sentiment he feels toward them as the housewife does toward bedbugs—it's not nice to have them around. Hence the bantams, which are known to have been used with good effect in greenhouses afflicted with the strawberry root worm.

Science News-Letter, March 9, 1929

The volcano Etna covers an oval site 30 miles long and 23 miles wide.

Interesting Books of 1928

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was not contagious but was contracted only in this one way.

"Some of these men put on the underclothing and night clothing of persons who had died of yellow fever, and for a month slept in the stained and almost indescribable bed clothing of patients who had died of yellow fever.

"Probably no finer heroism for the benefit of humanity had ever occurred in the history of the world. Others of these men, after the theory of mosquito inoculation had been proved to be probable, exposed themselves to the bite of infectious mosquitoes and when at first they did not fall ill of yellow fever they exposed themselves again and again until they did get it."

Mrs. Mary Goldberger, widow of Dr. Joseph Goldberger, late of the U. S. Public Health Service, is also now assured of a pension of \$125 per month.

Science News-Letter, March 9, 1929

Backward Progress

Archaeology

W. J. PERRY in *The Children of the Sun* (Dutton), quoted in *The Scientific World View* (Macmillan):

Going backwards in time in America is like the ascent of a series of cultural steps, at the summit of which stands unchallenged the earliest of all, that of the Maya.

Science News-Letter, March 9, 1929

The Newer Photosynthesis

Plant Physiology

From a radio dispatch in a recent New York paper:

Some years ago Professor Willstaetter of Munich was able to analyze the breathing substance in plants called chlerephewllabi.

Science News-Letter, March 9, 1929

In ancient times honey was the chief sweetening for food and sweets.

A public health report states that Malta fever in Iowa presents a health hazard comparable to that of typhoid.

Pima Indians who used irrigation 400 years ago are now to have a highly developed system of irrigation canals as the result of the Coolidge Dam project.

The Field Museum has received shoes once worn by an Australian medicine man, which were rounded at both ends so that the tracks would not indicate the direction in which the wearer was traveling.