

MEDICINE

Dr. White Goes to Russia

► DR. PAUL DUDLEY WHITE, the heart specialist who attended President Eisenhower, will go to Russia early in September.

The Boston heart doctor, with four other medical specialists, has been invited to visit the Soviet Union by the Russian Ministry of Health, SCIENCE SERVICE learned.

Dr. White said, "a few colleagues and I have arranged, at the invitation of the Ministry of Health of the U.S.S.R. and the approval of the State Department, a brief visit to Moscow for eight to ten days to confer with a few Russian physicians interested in the two particular subjects, concerning which we would like to get their advice and cooperation.

"The first of these subjects is medical rehabilitation with particular reference to cardiovascular disease, strokes, diseases of the pulmonary and peripheral vascular diseases.

"The second in which we are particularly interested is what we call cardiovascular epidemiological research, which includes the relationship or effect of the

various ways of life on the heart and blood vessels with particular reference to the rheumatic diseases, high blood pressure and coronary heart attacks."

Dr. White said the group will "probably" travel by air from Copenhagen to Moscow late in August and return at the end of the first week in September to Stockholm.

In Stockholm, several of the group will take part in the Second Congress of Cardiology meeting there. This Congress, Dr. White said, is under the presidency of Prof. Gustav Nylin of Sweden.

The other members of the group traveling to Moscow will be Drs. Howard Rusk of New York University, Ancel Keys of the University of Minnesota, James Watt, director, National Heart Institute, Bethesda, Md., and Mark Field, Boston sociologist.

Dr. White, in discussing his forthcoming trip to Russia, said, "this conference, privately arranged, will probably, we expect, be preliminary to cooperative activity in these fields which have already enlisted other international groups."

PUBLIC HEALTH

Great Epidemics Coming

► THE WORLD has not seen the last of the great and devastating epidemics that have swept thousands to their deaths down through recorded history.

This prediction was made by Dr. James A. Tobey, writer and lecturer on public health matters, after discussing the world's first great epidemic and its cause.

"During the past half century," Dr. Tobey says, "the United States has been remarkably free of epidemics, except for occasional outbreaks of influenza, poliomyelitis, and certain other virus diseases which we do not yet know how to control.

"The day of the great epidemics in the world is not yet over, however, although perhaps some day it will be."

The first great epidemic about which we know very much happened 2,400 years ago, Dr. Tobey reports. This was the plague of Athens in 430 B.C., one year after Athens went to war with Sparta and her Peloponnesian allies.

The population of Athens at the time was estimated to be 100,000, plus thousands of refugees from Attica. At the end of the epidemic, more than one-half this population, in addition to many more outside the city's walls, had perished. The best known victim of this epidemic was Pericles.

Dr. Tobey notes there has been much discussion as to what caused the plague.

"Some assert that the epidemic was typhus fever," he says, "while others are convinced that it was bubonic or pneumonic plague."

Perhaps the strongest theory, Dr. Tobey reports, is that postulated by the late Dr. Hans Zinsser, an epidemiologist, who concluded that the epidemic was smallpox.

On the other hand, Dr. Tobey states in the Massachusetts Institute of Technology's *Technology Review* (June), "the plague of Athens might, moreover, have been some malady that no longer exists, one that has become extinct like the mastodon and the dinosaur."

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AGRICULTURE

Alcohol Vapors Keep Potatoes From Sprouting

► VAPORS of alcohols in a variety of concentrations will keep potatoes from sprouting.

English scientists suggest in *Nature* (July 28) that farmers will find vapors of all alcohols more practical than suppressant dusts because alcohol vapors are effective even after signs of sprouting have been observed.

Extending past research with ethyl alcohol, W. G. Burton and R. J. Gibbs tried using a variety of alcohol vapors on potatoes. The Department of Scientific and Industrial Research scientists exposed three different varieties of potatoes to concentrations of ten different kinds of alcohol vapors, all of which were effective.

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● RADIO

Saturday, August 11, 1956, 1:45-2:00 p.m. EDT "Adventures in Science" with Watson Davis, director of Science Service, over the CBS Radio Network. Check your local CBS station. Dr. George W. Hart, dean emeritus of the University of California School of Veterinary Medicine, will discuss "Animal Diseases."

CYTOLOGY

Mouse's Eye Shows How Hormone Affects TB

► WHY CORTISONE, anti-arthritis hormone, has a bad effect in tuberculosis has been learned from watching its effect on tuberculosis in the eye of a mouse.

The mouse eye study by Drs. J. M. Robson and K. A. Didcock of Guy's Hospital Medical School, London, is reported in the *American Review of Tuberculosis and Pulmonary Diseases* (July).

Cortisone, they found, has the effect of favoring the spread of tuberculous infection by stopping the white blood cells and scavenger cells from reaching the infecting TB germs. Ordinarily these cells rush to surround the invading germs.

At the same time, the TB germs multiply rapidly.

When the body finally sends in a mass of cells to stop the germs, it is too late and the scavenger cells are rapidly destroyed.

Although this interference by cortisone with the scavenger cells is its main action in favoring spread of tuberculous infection, the hormone may also change the virulence of the TB germs and interfere with immune processes the body normally has for fighting TB infection.

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PHOTOGRAPHY

Gun Movie Camera Adjusts Itself

► THE U. S. Air Force has a new self-adjusting gun camera that works like the human eye, the Air Research and Development Command reported in Baltimore, Md.

The motion picture camera, used to record the effects of gunfire and the maneuvers of enemy planes, automatically adjusts itself to varying light conditions, insuring correct film exposure.

In operation, a built-in neon light shines at a constant intensity on the camera shutter, which has been coated with selenium. The reaction of the light on the selenium sets up an electrical impulse. At the same time, sunlight entering the shutter sets up a secondary impulse. A tiny computer compares the impulses and adjusts the camera opening.

The camera is so rapid that it adjusts to an accuracy of within one-half stop in 1.8 seconds. Known as KB-5, it was developed for the Air Force by the Fairchild Camera and Instrument Corporation of Syosett, N. Y.

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