

## PUBLIC HEALTH

# Report Typhus Vaccine Trial Going Forward on Large Scale

## Health Officials Vaccinate 3,600 Indians in Bolivian Highlands Who Live With Untreated Others

**F**IRST large scale trials under satisfactory conditions of anti-typhus fever vaccine are now under way in the highlands of Bolivia.

Dr. R. E. Dyer, assistant director of the U. S. Public Health Service's National Institute of Health, has just returned to Washington from a medical expedition to that area.

With his colleague, Dr. N. H. Topping, who is still en route from La Paz, Dr. Dyer vaccinated about 3,600 Indians over 10 years of age living in the Bolivian highlands where typhus fever occurs every year during the rainy season, frequently flaring into disastrous epidemics.

"We split the families in the middle," Dr. Dyer stated, explaining that in this way each vaccinated person is matched by an unvaccinated person living under exactly the same conditions in the same house and even sleeping in the same bed and thus equally exposed to louse-borne typhus fever germs.

Every two weeks a Bolivian doctor

now visits each family. If he finds any typhus fever patients, he will take a sample of the patient's blood and send it to the National Institute of Health in Washington. Two weeks later he will take another sample of the patient's blood or, if the patient has died, he will collect a sample of blood from his spleen and send that to the Institute for examination.

In this way, the Public Health Service expects to learn, within the next six months, the exact value of this vaccine which, if successful, may be sent to England for British troops on duty in typhus fever regions of Europe and may also be used for American troops if hemisphere defense takes them to typhus fever regions in South America.

The vaccine was prepared by the method originated by Dr. Herald R. Cox, of the National Institute of Health. Previous attempts to learn its value from trials in typhus fever regions of central Europe failed because of war conditions.

*Science News Letter, October 11, 1941*

bony growths which projected into the canals connecting the vertebrae in the spine. These bony obstructions usually occurred between the fifth and sixth and sixth and seventh cervical vertebrae, near the large bone projecting at the back of the neck, limiting the space allowed for passage of spinal cord and nerves. This resulted in the crippling pain to neck and arm and often affected chest muscles.

Heat applied over the affected neck vertebra, with massage, traction and manipulation relieved the majority of patients of pain.

*Science News Letter, October 11, 1941*

## ● RADIO

*Thursday, October 16, 3:45 p.m., EST*

On "Adventures in Science," with Watson Davis, director of Science Service, over Columbia Broadcasting System.

Dr. John L. Rice, Commissioner of Health of the City of New York will tell of the highlights of the convention of the American Public Health Association.

Listen in each Thursday.

*Monday, October 20, 9:30 p.m., EST*

Science Clubs of America program over WRUL, Boston, on 6.04 and 11.73 megacycles.

One in a series of regular periods over this short wave station to serve science clubs, particularly in high schools, throughout the Americas. Have your science group listen in at this time.

## MEDICINE

# New Cause and Relief for Arthritic Pain Discovered

## X-Ray Pictures Show Bony Growths Which Project Into Canals in Vertebrae in the Spinal Column

**R**ELIEF for the arthritic stiffness and soreness that plagues many men and women past 40 years of age can be given by treatment directed toward a newly discovered cause of the condition, Dr. Charles S. Capp and Dr. Stacy R. Mettier, of the University of California Medical School, report.

Pain and muscular stiffness of neck and shoulder that make it impossible for the patient to comb his own hair, reach behind his own back, or that even prevent the use of hands in fine movements such as sewing or writing,

were formerly laid to two causes: an injury or pressure of a rib on the brachial plexus, a great nerve in the neck; or a cancerous or bacterial attack that destroys neck vertebrae.

But, doctors found, many patients past their fortieth birthday suffered the symptoms when these causes were not present. Some physicians put the blame in such cases on an inflammation of a spinal nerve.

Dr. Capp and Dr. Mettier, using a new method of diagnosis, found that X-ray pictures of 30 patients showed



**TREE-SIZE TOBACCO**

*This tobacco growing in a California garden is of a giant kind obtained from an island off the South American Chilean coast. Elsewhere, it is believed to have been extinct for millions of years. These plants were cut back to about five feet, or less, in the winter of 1938. (See SNL, Sept. 20)*