

MEDICINE

Synthetic Antiseptic Found Effective Against Hookworm

Potent Drug is Harmless to Man and Can be Used as Well In Fighting the Round-Worm Which Causes Ascariasis

A SAFE and apparently certain treatment for hookworm has been found in the synthetic antiseptic hexylresorcinol.

This important discovery in the field of medicine was announced by Dr. Veader Leonard of the School of Hygiene and Public Health of the Johns Hopkins University before the Section on Tropical Medicine of the Third Pan-American Medical Congress in Mexico City recently.

Dr. Leonard himself first described the bactericidal properties of the drug, but not the fact that it is effective against hookworm and ascaris. Since 1924 it has been known that the synthetic chemical, hexylresorcinol, is seventy times stronger than carbolic acid, and at the same time practically non-toxic to man. It has been used as a general as well as internal antiseptic during the past few years.

Discovered its Potency

Dr. Paul D. Lamson, professor of pharmacology at the Vanderbilt University School of Medicine, discovered its potency in hookworm disease and ascariasis, while investigating the problem of safe remedies. The work was sponsored by the International Health Division, Rockefeller Foundation.

Hookworm, the "disease of backwardness," is one of man's oldest diseases, for its symptoms are apparently described in ancient Egyptian papyri. In present times it is claimed that one-half of the world's population lives in areas where it is prevalent. Millions of people are infected by it, and the havoc it does is incalculable.

The problem in America, Dr. Leonard says, is largely a matter of the control of the two parasites, hookworm, and ascarids or common round-worms. Carbon tetrachloride and oil of chenopodium are specific against only one of these parasites, while many patients have both. Treatment with carbon tetrachloride is sometimes dangerous. While it may kill the hookworms, it irritates the ascarids and causes them

to begin a migration to escape the drug, with serious effects upon the patient.

The new drug, hexylresorcinol, is effective against both parasites, and against even a third, *Trichuris trichiura*. The chemical is easy to take, has no bad after-effects, and seems to be one hundred per cent. efficient when directions are followed. It is effective in this instance only in its crystalline form, made into sugar-coated pills. Four-tenths of a gram is enough for children under six, while one gram is enough for persons twelve or over. It must be taken on an empty stomach and no food should be eaten for four hours afterwards.

Dr. Leonard does not yet know whether this drug will be as effective against European hookworm as against the American, or less so as is true of carbon tetrachloride. It is not known whether it will be useful against other nematodes and cestodes parasitic to man. Present results are based on experiments made with about 1,500 persons in the United States. Other investigations now on foot in Japan, China, the Philippine Islands, India, Siam, Egypt, the southern part of the United States, and Mexico may answer these questions.

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ASTRONOMY

Good Reports Received From Meteor Observers

METEOR watchers have had good success during their recent vigils for the Perseid shower of "shooting stars," Dr. Charles P. Olivier, director of Flower Observatory, Upper Darby, Pa., has informed Science Service. In response to his recently broadcast request that amateur observers throughout the United States and Canada keep systematic records of the numbers, times and directions of fall of all meteors observed, he has already received reports from 47 groups and individuals, scattered through 22 states and provinces. Watchers in the neighborhood of his own observatory and elsewhere in the

East were disappointed, because of cloudy weather during the climax period for the shower.

"While many more reports are doubtless en route, enough are in to prove that the maximum of the Perseids was quite a good one," Dr. Olivier states. "For observers with good eyesight and clear skies, the rate after midnight rose to two per minute, which is well over the average reported in most years. Of course those handicapped by poorer conditions saw fewer. Many brilliant meteors accompanied the shower and numerous observers are enthusiastic over what they saw.

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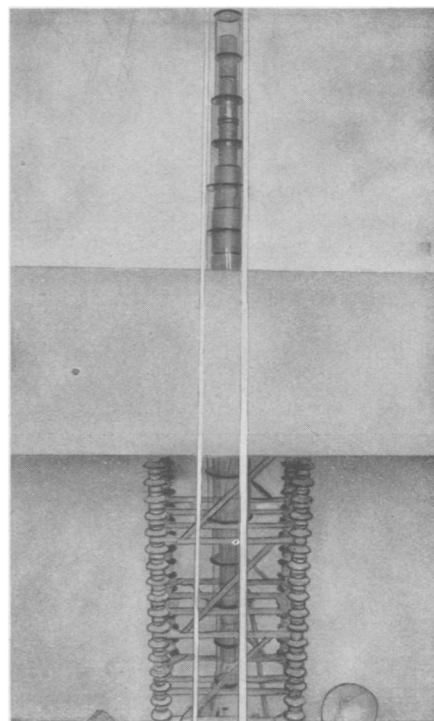
PHYSICS

X-ray Tube of More Than Million Volts Installed

NOT SATISFIED with two 600,000-volt X-ray tubes, California Institute of Technology physicists have installed a giant 1,200,000 X-ray tube in the new Kellogg radiation laboratory.

Under the direction of Dr. C. C. Lauritsen, nationally known X-ray expert, the tube was assembled. It occupies the center of a specially designed room. The tube is exactly 30 feet high.

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A TOWER OF HEALING

The thirty-foot X-ray tube which will be used for research into new methods of treating cancer and other ills.