



MEDICINE

Five-Day "Cure" of Syphilis Ready for Wider Trial

Speedy Eradication of Syphilis and Gonorrhea Now Anticipated From Two New Treatment Methods

FIVE-DAY treatment of syphilis instead of the present 18-month course of treatment, may be generally available within another year or so. In this case both syphilis and its twin deadly plague, gonorrhea, for which sulfanilamide is hailed as a speedy remedy, will vanish from the land with such other conquered plagues as yellow fever, cholera and bubonic plague itself.

It is not too much, in fact, to expect that if the five-day syphilis treatment becomes established, public health officers will be able to enforce quarantine and treatment of syphilis patients, to prevent their spreading the disease, as they now require isolation of smallpox patients for the protection of the community.

The speed-up treatment of syphilis is accomplished at Mt. Sinai Hospital, New York City, by dropping syphilis-curing arsenic drugs into the patient's veins all day long for five successive days. At Miami Valley Hospital, Dayton, Ohio, Dr. Walter M. Simpson has been speeding syphilis cures by putting the patients under chemical treatment in the hot box or artificial fever machine. The fever intensifies and fortifies the curative action of the chemicals.

Stopping the spread of syphilis at

present depends on the patients having the money and persistence to continue treatments once a week for 18 months. U. S. Public Health Service records show that about four-fifths of the patients stop the treatment before they have ceased to be a danger to the community, that is, while they are still in the infectious stage. The five-day method keeps the patient in the hospital until he is no longer infectious.

This method, after a seven-year trial on 350 patients at Mt. Sinai Hospital, is now ready for release on trial in other well-organized hospitals. Prompt cures of the first 25 patients, cures which were permanent in the case of 15 who have been observed over five years, and cures in 85% of the total group were reported at a New York conference of syphilis specialists and public health officials under the chairmanship of Surgeon General Thomas Parran, U. S. Public Health Service.

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Sap from *sugar maples* in New York State is running sweeter than last year, but not up to the highest record—7% sugar content from a tree in Burlington, Vt.

AGRICULTURE

New Wheat Varieties Resist All Rusts

UNCEASING warfare goes on between wheat breeders and the most destructive of wheat's fungus foes, black stem rust. Although this fungus is known under only one specific name, *Puccinia graminis Tritici*, it is an exceedingly variable species, and is constantly evolving new strains, principally by natural hybridization. So it has come to pass that many a hopeful immune strain of wheat has been developed, only to be overtaken in a few years by a new strain of the rust fungus.

Newest recruits to the army of immune wheats are announced from the Dominion Rust Research Laboratory at Winnipeg, Canada, by a triad of researchers: R. F. Peterson, T. Johnson and Margaret Newton. There are six new wheat strains, five from seed imported from Kenya Colony in Africa, the sixth a native Canadian product. All six have thus far shown very high resistance to 20 strains of rust, to which they were purposely exposed.

The one all-Canadian wheat variety in the group owes its existence not to professional scientists but to an observant farmer, M. S. J. McMurachy, of Strathclair, Manitoba. Mr. McMurachy noticed one rust-free plant in a field of rusty wheat, one day ten years ago. He kept the seed and increased it. When his planting of the new variety came triumphantly through the bad rust season of 1935 he brought it to the attention of the Winnipeg laboratory.

Quite properly, the new variety has been given the name McMurachy's Selection.

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AERONAUTICS

Airplane Armor Possible If Gunner Sits in Turret

ARMOR protection for warplane crews is again demanded, after several years in abeyance. If it seems necessary in American bombers, weight might be saved by adapting a British idea just made public. Newest British bombers have guns at any convenient place, in tail, nose, underneath, but the gunner sits in a central turret, aiming them by remote control. Gunner's turrets are beginning to be armored in the British craft, but it would be easier to case this position in light armor, with considerable saving in weight over what would be required were the guns there also.

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