

MEDICINE

Childbirth and War Are Now Robbed of Gravest Danger

New Chemical Saves 17 Out of 20 Mothers Infected With Childbed Fever—Wound Infections Fought

CHILDBIRTH robbed of its gravest danger for mothers. Maternal deaths from the most dangerous form of dreaded puerperal fever prevented in 17 out of 20 cases.

Medical science is on the brink of these great life-saving achievements if present hopes are justified.

Four out of five mothers who now die of "childbed fever" are saved by a new treatment used at Queen Charlotte's Hospital, London. There about half the puerperal fever cases in the English metropolis are treated. Dr. Leonard Colebrook, director of the Bernhard Baron Memorial Laboratories at the hospital, is now visiting in this country and relating the results obtained with the new treatment to American physicians and medical scientists.

This latest medical conquest recalls the dark days before the germ theory of disease was established when motherhood was so often a death sentence. Then Oliver Wendell Holmes and Ignaz Philipp Semmelweis demonstrated that the infection of childbed fever came from the dirty instruments and hands of the doctors and nurses. Antiseptics, and later asepsis, killed these germs. Now the work accomplished by Dr. Colebrook and his colleagues at Queen Charlotte's Hospital makes bringing children into the world even safer.

Credits Germans

Dr. Colebrook, however, modestly insists that he is "not the hero" of the story. That glory belongs, he says, to two German chemists, Mietzch and Klarer, who first prepared a certain red dye, and to Dr. G. Domagk, also a German, who first showed that this dye was able to protect mice infected with the deadly streptococcus of puerperal fever and other serious human ailments.

Prontosil is the name of the dye that seems destined for a high and shining place in medical science. The saving of maternal life, important as that is, is only part of the achievement expected of Prontosil. This red dye may give physicians the long-sought "ideal internal antiseptic"—the chemical that can

kill disease germs in the body without injuring body tissues. For while Prontosil itself only destroys certain members of one family of germs, Dr. Colebrook hopes that chemists and biologists will learn from the action of this dye how to make other chemicals that will prove certain and safe cures for other human ills due to micro-organisms.

Go Slow

Dr. Colebrook emphasized this point at a meeting of the Washington Branch of the Society of American Bacteriologists. He urged practicing physicians to go slowly in their use of the new treatment. At this stage, he explained, it is more important to learn how the chemical acts, and how it may be made even more effective, than it is to build up a record of enormous numbers of patients cured by Prontosil.

Puerperal fever, dreaded childbirth complication, is only one of the diseases caused by streptococci. Erysipelas, scarlet fever, septic sore throat and

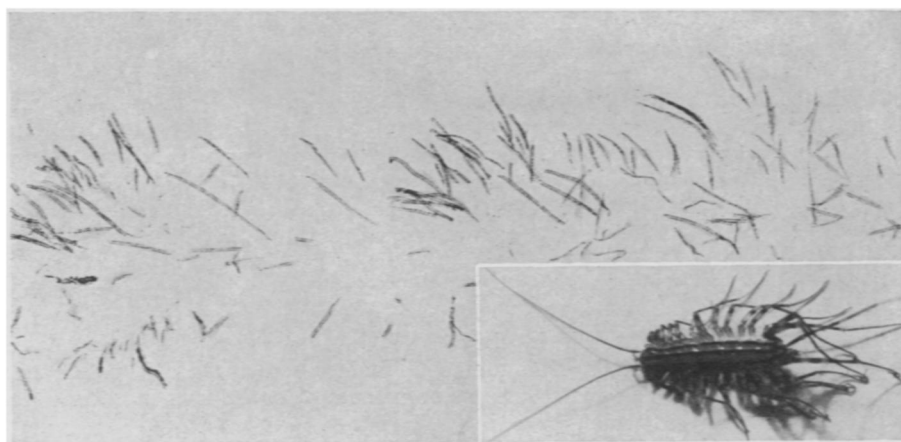
septicaemia, commonly called blood-poisoning, are others. For all of these Prontosil is possibly the long-sought cure.

Puerperal fever, however, is the particular infection that Dr. Colebrook and associates at Queen Charlotte's Hospital have studied. This condition is due to infection. Other germs besides streptococci may cause the condition, but fully one-half the cases, and those the ones most often ending in death, are due to infection with a particular streptococcus identified by scientists as Beta hemolytic streptococcus.

Heavy Toll

This deadly disease germ, a tiny, round organism, takes the lives of 1,200 mothers in childbirth every year in England and Wales, approximately 4,000 in the United States, and inflicts serious illness and suffering on five times that number of mothers, too often at the birth of their first child.

For five years before the discovery of Prontosil, Dr. Colebrook and colleagues at Queen Charlotte's Hospital had been studying this deadly puerperal fever. They have learned much that may help to prevent the condition, though that is part of another story, but they learned of no way that would prevent the deaths of mothers who became infected. Not all mothers with this condition die, but no treatment so far can be credited surely with saving the lives of any who recover.



CENTIPEDE WRITES SEISMOGRAM

The Fly, in the fable, clung to the spoke of the chariot-wheel, saying, "See what a dust I raise!" A similar parable might be told of the centipede called George, who is official mascot in the private seismological observatory of Mrs. M. M. Seeburger of Des Moines. George wandered across a freshly prepared sheet of seismograph record paper, leaving a trail of scrambled footprints more portentous-looking than the record of a mighty earthquake that ruins great cities. George emerged from hibernation a short time ago; by this token, says Mrs. Seeburger, she knows that spring is at hand.