

MEDICINE

New Anti-Malarial Drug

War Department announces that a preventive substance has been found sufficiently promising to warrant tests under field conditions.

► **FIRST INDICATION** that the Army has a new drug for fighting malaria, and one sufficiently promising to be worthy of trial under field conditions, appears in an announcement from the War Department.

The name of the new drug has not been released, but its existence was mentioned in a report that 50 enlisted men who volunteered to expose themselves to malaria in the jungles of New Guinea have been awarded the Legion of Merit for this courageous service "beyond the call of duty."

"Simultaneously," the announcement states, "malaria tests were conducted with two other groups of soldiers."

"One of these was given atabrine as a malaria suppressive, while the second group used a drug whose efficacy has not been disclosed fully. The purpose of the triple experimentation was to obtain comparative data on the malaria cases contracted in the three groups."

The third group was not given any suppressive drug, nor were any steps taken to ward off the potentially-deadly attack of the malaria-carrying mosqui-

toes while the men cleared the jungle, dug ditches, built bridges and lived in a swampy coconut grove close to a native village where the inhabitants showed a high percentage of malaria infection.

An undisclosed number of these men got malaria for which they were given prompt treatment, but only after they became victims of the disease.

The new drug might be a brand-new chemical developed in one of the research institutions working on this problem. Promin, a relative of the sulfa drug family, was reported a year or more ago to have anti-malarial activity, but its present status has been a military secret.

Penicillin, the potent germ-killer from mold, is also said to be undergoing trial as a possible anti-malaria weapon. The recently announced fact that it can rid the human body of the spirochetes of syphilis gives support to the idea that it could have a similar action on other organisms high in the biological scale, such as the malaria parasites.

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baby and the mother has not previously had a blood transfusion with Rh blood, then the baby may come into the world alive although he is likely to have a bad case of jaundice.

By the time the second baby comes along, however, the mother has built up in her blood a resistance to the Rh factor. Now a mixing of the Rh blood with hers will probably mean death to the infant. Before the cause became known to physicians, this tragedy often developed into a double one. Since the childbirth in such cases was usually very difficult, the mother was often given a transfusion and her husband was naturally the one most likely to volunteer as donor. Typing of his blood might indicate that it was suitable, for until recently the Rh factor was not known and hence not looked for.

But the mother, already weakened by battle against the lethal factor in her baby's blood could not stand another dose of it by transfusion. She would die, killed by the blood of her loved ones.

On the average, in the United States, 13 out of every hundred marriages are between a father with Rh blood and a mother who has no Rh. Some of these marriages are doomed to childlessness or a series of tragedies—miscarriages and stillbirths. But others, although likely to suffer from some such incidents, still have a fair chance of producing healthy children.

When the father with Rh blood is the child of parents both of whom had Rh blood, then the marriage has a poor chance of being blessed with more than one child. If, however, the father with Rh blood has inherited the non-Rh gene, there is a fifty-fifty chance that any child of his will be free from the Rh factor, so that this will not be a barrier to safe birth. Such husbands with combined inheritance—heterozygotes, as they are known scientifically—can be found by the new British test; 60% of Rh husbands on the average are of this type.

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New Blood Test

New light on conjugal childlessness furnished by British research. Tests distinguish couples who can't hope to have more than one normal baby.

► **LIGHT** on the tragedy of childless marriages and babies dead before they taste the first breath of life is provided by a new British research.

A method of distinguishing incompatible couples who can never hope to have more than one normal, healthy baby from others who have a somewhat better chance of having a family is reported by Drs. R. R. Race and G. L. Taylor, of the Galton Laboratory Serum Unit, Medical Research Council, in the British journal, *Nature*. (Sept. 11)

A blood factor known as the Rhesus factor, or Rh for short, because it was first discovered in the Rhesus monkey,

is the cause of the tragedy. It is a harmless blood factor in itself; in fact it is contained in the blood of 85 out of every hundred persons. But if the blood containing this factor is mixed with blood not containing it, then difficulties arise.

In the tragic cases of Rh-caused stillbirth it is really the mother's own blood that kills the child. Although physicians do not understand how, there must be a little mingling of the blood of the unborn baby with that of the mother. When the baby has inherited from the father the Rh factor and the mother has non-Rh blood, then the blood of the two cannot mingle safely. If the child is the first

CHEMISTRY

Perkin Medal Awarded For Applied Chemistry

► **THE PERKIN MEDAL** will be presented to Gaston F. DuBois, vice-president of the Monsanto Chemical Company, St. Louis, by the American Section of the Society of Chemical Industry on Jan. 7 in recognition of his contributions to applied chemistry.

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