

## PERUVIAN FEVER GERM DISCOVERED

The Rockefeller Institute is responsible for the isolation of another germ. This time it is the microbe that causes oroya fever, a curious, highly fatal disease that occurs only in restricted localities of the Andes at altitudes above 6000 feet.

In a recent issue of Science, Dr. Hideyo Noguchi and Dr. T. S. Battistini gave a preliminary report on their work on this organism which they have succeeded in growing for the first time in artificial cultures. It is known as Bartonella bacilliformis and has been recognized for sometime as the cause of Peruvian fever but no one has ever before been able to grow it in the laboratory or to inoculate animals with it. Dr. Noguchi and Dr. Battistini have produced typical forms of the disease in monkeys and have recovered the organism from the red corpuscles of the blood of the diseased animals with which they have infected others.

Since oroya fever can now be produced artificially in the laboratory it can be studied constructively to ascertain protective measures. Its restriction to dark, narrow mountain valleys of Peru has suggested that it is spread by an insect carrier whose range is confined to this particular region. The disease is of long duration characterized by several weeks of fever and a marked destruction of red blood cells similar to pernicious anemia. After several weeks or even months of fever, eruptions occur on the skin which have given rise to the name of Peruvian warts.

The percentage of fatality is fairly high and early accounts of the Spaniards attribute many deaths to this cause. Pizarro is said to have lost 700 men by it. Like tetanus, infection must occur through the blood stream, an additional reason for believing that it must be contracted from an insect bite.

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## TRAINING FOR MORONS: NOT STERILIZATION

The problem of mental deficiency need not be the great bugaboo we have always thought it, according to Dr. George K. Pratt, assistant to the Medical Director of the National Committee for Mental Hygiene.

Medical science has established, he maintains, that approximately fifty per cent. of the cases of feeble-mindedness are not congenital. This means that the social menace of the mentally deficient is not half so great as the gloomy family trees of the Jukes and the Kallikaks and such notorious clans have tended to make us believe. Feeble-mindedness, when it does not directly originate in the faulty germ plasm received from either father or mother, is due to birth injuries or infectious disease. Spinal meningitis and several of the infantile diseases may result in permanent injury to the brain tissue. The ensuing mental lacks are just as complete as in hereditary cases, but there has been no evidence to prove that they can be transmitted to the next generation.

Less than ten per cent. of the whole number of feeble-minded are of the potentially vicious class. These, it has been found, are comprised almost entirely of neglected types who have grown up in bad environment. In other words, many of the mentally deficient when properly trained and supervised can be fitted in the community as more or less useful citizens.

The individual of low mental test is especially suited to take over many of the mechanical operations of modern industry. In monotonous and repetitive tasks, often excessively distasteful to workmen of higher caliber, he is of unique value.

The new medical outlook holds that only the vicious ten per cent. and the intellectually lowest types should be segregated. Many of the others should be given institutional training according to their various capacities and taught simple trades. Depending on their personality and ability for adjustment to environment, they should be returned to their communities when they can go to work under such supervision as individual cases require.

Surgical sterilization is not a solution for the problem this class presents, according to Dr. Pratt. It is impracticable to administer it with justice, and if administered to all would bring serious attendant evils in its wake. The knowledge that half the mentally deficient are not hereditary cases, as well as the evidence of their potential usefulness, has lessened the fear of them as a social menace until sterilization no longer seems necessary or advisable when its numerous drawbacks are considered.

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#### BLOOD TESTS FOR WHOOPING COUGH

The newest way of attacking whooping cough is by blood analysis.

Dr. C. F. Powers of the Yale Medical School has ascertained by chemical examination that the calcium content of the blood of patients suffering from severe cases of whooping cough is very low. This he remedies by administering calcium chloride. He also advocates applications of radiant energy or X-rays for what he calls the electrical hyperirritability of the nerves or convulsions. These are measures for bad cases that are complicated by a previous condition of rickets but even for children with the more moderate form of the disease without complications, Dr. Powers recommends X-rays.

Ether is occasionally resorted to to quiet the more violent paroxysms while for all degrees of whooping cough the best all round remedy is codliver oil because it helps build up against the condition of malnutrition that often persists till long after the last final whoop.

Dr. J. C. Regan and Dr. A. V. Tolstouhov of Brooklyn have found in making chemical analyses of the blood of whooping cough patients that the hydrogen ion concentration, that is, the acidity of the blood, is greatly lessened in proportion to the severity of the disease. They also noted a considerable decrease in the amount of phosphorous. Just what use can be made of the knowledge of these interesting changes is not yet determined.

Physicians who specialize in the diseases of children use a blood test in diagnosing doubtful cases. It consists of counting the number of white blood cells which increase greatly if whooping cough is really present. It is not certain, but is often of great assistance when considered in connection with other symptoms, for it is very important to keep even the mild cases isolated so that they may not infect other children.

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