

POPULATION

Cause of Population Rise

Tremendous increase not due to rising birth rate, but to falling death rate. Increase in soil productivity next step due.

► THE tremendous increase in the world's population in recent years is the result not of a rising birth rate, but of a falling death rate, Sir Paul Fildes, British microbiologist, told the Royal Society in his recent Leeuwenhoek Lecture.

The falling death rate has been brought about by the successful interference of medical bacteriologists with the disease germs which had previously tended to reduce the population. Bacteriologists during the past two decades have exerted an influence upon the economic and political world situation by making possible an excessive growth of human population, Sir Paul states.

Now it falls to the bacteriologists to at-

tempt to restore the equilibrium between population and food by tackling the problem of increasing soil productivity through the study and greater utilization of soil bacteria, he urged.

The present effect of applied bacteriology is the latest chapter in the development of microbiology from the days of Leeuwenhoek who, in the 17th century, was the first person ever to see and describe bacteria under a microscope.

Sir Paul delivered the first of a new series of lectures before the Royal Society in honor of Leeuwenhoek.

Science News Letter, January 13, 1951

MEDICINE

Babies and Mothers Aided

► PREMATURE babies, patients needing skin grafts, and mothers facing the child-birth danger of toxemia are among those who may benefit through ACTH, it appears from reports at a conference in Chicago sponsored by Armour Laboratories, chief producer of the drug.

ACTH is a hormone from the pituitary gland in the head which stimulates the adrenal glands. It first gained fame as a companion to cortisone, adrenal gland hormone, in relieving the pain and crippling of arthritis. In the past year and a half both cortisone and ACTH have gained laurels as potent remedies in many diseases.

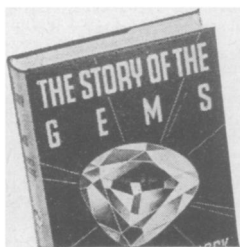
Premature babies grow more vigorous, with stronger cries and voracious appetites, when stimulated by doses of ACTH, Drs. S. Levine, H. Barnett, C. Bierman and H. McNamara of Cornell University and New York Hospital reported.

After 42 unsuccessful attempts over a four and a half year period, skin grafts finally were made to take on a nine-year-old boy when ACTH was given, another group of scientists, Drs. Berry F. Edwards, Frank L. Engel, T. B. Schwartz, and Samuel P. Martin of Durham, N. C., reported.

Dramatically good results in two patients with severe toxemia of pregnancy were achieved by a combination of ACTH, cortisone and the synthetic female hormone, stilbestrol, Drs. W. Gaton, D. Reid and C. Roby of the Boston, Mass., Lying-In Hospital reported. The ACTH and cortisone were not effective without stilbestrol. Just why is not known.

A tie-up between ACTH, cortisone and vitamin A has been discovered in studies by Drs. C. Klopp, A. Danish and C. Tabor of George Washington University, Washington, D. C. Rats without adrenal glands to be stimulated by ACTH and to produce cortisone cannot maintain a good amount of vitamin A in their blood, even when their diet furnishes plenty of the vitamin.

Science News Letter, January 13, 1951



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"Adventures in Science" with Watson Davis, director of Science Service, over Columbia Broadcasting System.

Dr. C. C. Dauer, medical advisor, National Office of Vital Statistics, U. S. Public Health Services, and Dr. Kenneth S. Landauer, director of Medical Case Services, National Foundation for Infantile Paralysis, will discuss "What is New in Infantile Paralysis."

AGRICULTURE

Fifth of U. S. Crust Was Blown to Where It Is

► GIANT dust storms are nothing new under the American sun. More than 20% of the U. S. crust is where it is because it was blown there, the American Association for the Advancement of Science was told.

A National Research Council committee of five geologists and five soil scientists made a progress report on their job of preparing an overall soil map of the United States, Canada and Alaska showing wind-laid deposits dating from glacial times.

The map, now nearly completed, shows that there is as much as 40 to 50 million acres of sandy soil, largely in Nebraska, Texas and Arizona, which were worked over and left the way they are by the winds.

From the outwash and bulldozed leavings of giant glaciers, a yellowish-brown loam called loess was blown into the corn and wheat belts of the midwest, the cotton belt east of the Mississippi and south of Kentucky, the wheat-and-kafir-growing areas of the High Plains of Texas and Oklahoma.

The soils of approximately one-fifth of the United States have this loess as a major constituent, Dr. James Thorp of the U. S. Department of Agriculture said in making the committee's report.

There is a close relationship between the loess and glacial deposits of the central United States and regions of the Northwest, he said. On the other hand, probably much of the wind-laid land of the western Great Plains was blown from surface untouched by glaciers. It was mixed with silt picked up by winds screaming over floodplains of streams which rose in mountain glaciers.

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