GENERAL SCIENCE

Abolition of Maternity Price of Woman's Equality

Well-Known Princetonian Looks at The World Through Biological Glasses; Says Democracy Biologically Necessary

W OMAN can achieve full equality with men, full freedom such as the male sex enjoys. But only if she pays for it with her function of mother-hood.

So declared Dr. Edwin Grant Conklin, emeritus professor of biology at Princeton University, in the Westbrook Lectures which he delivered at the Wagner Free Institute of Science.

Dreams that babies can be produced "ectopically", that is, by laboratory methods outside the mother's body, Dr. Conklin characterized as "vain imaginings." So too, with the super-socialistic notion that a few women, selected as "race mothers" to produce all the children while all the rest are free for their careers. If there are to be children, it the race is to continue, it will have to be the age-old biological method, he declared.

Dr. Conklin is not haunted by the "Malthusian ghost," bugbear of many sociologists. "Science has created a human population problem by increasing the means of living and decreasing the death rate," he admitted. "However, overpopulation is limited to certain places or peoples, and it soon corrects itself. There is now more danger of underpopulation in Western Europe and North America than of overpopulation."

Progress in human affairs is still possible, but it must come mainly through improved control over man's environment, Dr. Conklin told his audience.

Slow

"Improvements of heredity must necessarily be very slow," Dr. Conklin said. "In its present state the world cannot wait for such improvement, whereas great progress can be made by the better use of the inherited capacities we have, by cultivation of better education, better habits, better morals.

"Many social evils, such as slavery, witchcraft, torture of heretics, dueling, etc., have disappeared under the influence of enlightened public opinion.

May we not hope that national, racial, and class antagonisms and wars may be overcome in the same way?"

Democracy need not be abandoned for any discernible biological or social reason, critics and doubters to the contrary notwithstanding, declared Dr. Conklin.

Liberty, equality, and fraternity, the triple slogan of Democracy's battles a century and a half ago, he put to the biological touchstone.

Liberty, he said, has been the goal of human struggle since the dawn of history, and much progress has been made toward its better attainment. Yet there is no absolute freedom; "fanatical extremes of liberty and anarchy find no successful counterpart in biology where life and progress consist in balance and compromise."

A Stumbling Block

Equality as a rigid dogma has been a stumbling block of unrealistic supporters of democracy. Dr. Conklin pointed to the obvious natural inequalities that exist among men, and declared that their very existence renders democracy a necessity, so that individual merit may seek its own level unhampered by rigid family and class distinctions. "Hereditary aristocracy is founded upon an obsolete idea of heredity," he declared. "It confuses the human law of entail with the natural law of Mendel."

Fraternity, the third great revolutionary democratic watchword, has deep roots in biological truth, the speaker indicated. "All men are cousins if not brothers. All trace back to common ancestors. The most diverse races of men have more fundamental resemblances than differences."

Democracy, Dr. Conklin insisted in conclusion, contributes more than any other system to general peace and progress, "and there is no sufficient biological or social reason for thinking that it must be abandoned."

Science News Letter, April 10, 1937



OLDEST HITCH-HIKERS?

ARCHAEOLOGY

Metal Statues of Man Called World's Oldest

THE oldest metal statuettes of men and women ever discovered have been unearthed in ruins of a temple in Syria, dating from 3300 B. C.

Quaint, stiff little figures with solemn faces and arms folded or bent sharply upward, these copper statuettes are believed to represent gods of war and goddesses of fertility. They were discovered by the Syrian expedition of the Oriental Institute of the University of Chicago, at Tell Jedeideh. The male figures wear silver helmets almost hiding their eyes, and the women have silver curls or an elaborate headdress.

Several months of careful cleaning have been required to remove the corrosion wrought by 50 centuries, revealing the striking sculptural style.

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PUBLIC HEALTH

Relief Rolls Show Economic Importance of Syphilis

THE SERIOUSNESS of syphilis from a dollars-and-cents standpoint has been proved in Fulton County, Georgia.

A study of syphilitic and non-syphilitic persons on the relief rolls of that county has been made with federal funds, and Dr. J. G. McDaniel, of At-

lanta reports the results. (Journal, American Medical Association, April 3.)

About 34 per cent. of the Negroes and 7 per cent. of the white persons on the county relief rolls are syphilitic. Of that number 17 per cent. between 20 and 40 years are not able to do competitive work. Sixteen per cent. of those past 50 years are not able to work at all.

The Fulton County study showed a sudden drop in the number of the syphilitic between the ages of 39 and 60 and over. This rapid decrease means one of three things, according to Dr. McDaniel—the people died, have been treated or are not able to report.

No orderly train of symptoms could be found resulting from syphilis in the Fulton County study.

All physical abnormalities were more frequent in persons who had syphilis.

"There is no disease that I know of, found among such large numbers, that responds so beautifully to treatment as does syphilis, nor can I think of one that has a longer latent period before serious symptoms manifest themselves, thereby affording a golden opportunity for diagnosis and cure or at least an arrest of the disease," Dr. McDaniel states.

Science News Letter, April 10, 1937

MEDICINE

Fever Does Not Kill Germs; Should Build Up Resistance

FEVER treatment does not cure disease by killing disease germs. In diseases like syphilis and gonorrhea, fever should be used with chemical treatment as a means of building up resistance of organs and other body tissues against the germs of the diseases so that "the infection must eventually die away by itself."

Prof. Julius Wagner-Jauregg, Nobel Prize winner who originated fever treatment for the mental disease that is the late stage of syphilis, gave this explanation of how fever helps cure disease in a message to the First International Conference on Fever Therapy. The conference, of which he is honorary chairman, was held in New York last week.

Spirochetes Persistent

Contradicting those who believe that the high artificial fever cures by killing the disease germs, Prof. Wagner-Jauregg, pointed out that the spirochetes of syphilis are present in the human organism for different periods of time. They are still capable of living even after a successful treatment with artificial fever, whether induced by malaria or by physical means such as short waves of fever chambers. The same holds true for the organisms of gonorrhea. The patient, however, is well after successful treatment, so the great Viennese scientist advised fellow medical men to revise their theory but to keep up the method of treatment.

Prof. Wagner-Jauregg first tried malarial fever as a cure for general paralysis of the insane, dread late stage of syphilis, in 1917. His success with this kind of fever treatment, in which the fever was produced by deliberately giving the syphilitic patient malaria, started a world-wide wave of fever treatment culminating in the conference. Long before 1917, however, Prof. Wagner-Jauregg had tried to cure mental diseases by artificial fever. In 1891 he made his first attempts, using tuberculin. Some of these early patients recovered and "enjoy the best health even now, after more than 20 years," Prof. Wagner-Jauregg reported. As early as 1887, he held that the high fever does not kill the germs but is an index of the intensity of the curative process running its

The importance of using chemical methods along with artificially produced fever in treating disease was also emphasized by Prof. Wagner-Jauregg.

Fulfills Old Prophecy

A prophecy made over half a century ago, that electricity would be used in treating disease, has come true and the scientist who made it is still alive to see his then rash statement justified.

The scientist is the 86-year-old Prof. A. D'Arsonval of Paris, whose galvanometer is familiar to every high school physics student. He recalled his early statement in a message to the Conference. Prof. D'Arsonval is honorary president of the French committee of the conference.

"I am forgiven today," Prof. D'Arsonval concludes his message, "for the phrase which I am proud of having written in 1882 and to which, at the time, I owed the animosity of doctors and pharmaceutical chemists.

"'I am persuaded,' I said, 'that the therapeutic of the future will employ, as a curative means, the physical modificators, heat, light, electricity and other agents still unknown . . . And that the most poisonous drugs of chemistry will have to give place to these imponderables that have the advantage of introducing no poison into the organism.'"

Warns Against General Use

A warning against abandoning the tried and tested chemical means of treating early syphilis for the newer fever treatment was sounded at the Conference of Fever Therapy. The warning came from Dr. Walter M. Simpson, director of the Kettering Institute for Medical Research, Miami Valley Hospital, Dayton, Ohio, and his associate, Dr. H. Worley Kendall.

Artificial fever treatment is effective in the treatment of neuro-syphilis but its use in treating early syphilis, before nervous and mental symptoms have developed, is still in the experimental stage, these physicians said.

The combined fever and chemical treatment "is not applicable at the present stage of its development to any mass management of the million or more individuals in this country who urgently require treatment for syphilis, each year," Dr. Simpson declared.

Malaria Germs Injected Into Brain

A new method of using malaria to treat paresis, the mental disorder due to syphilis, was reported by Dr. Maurice Ducoste, chief physician at the Psychiatric Hospital, Villejuif, France.

Dr. Ducoste injects directly into the brain a small quantity of blood containing malarial germs. He adds tetanus (lockjaw) antitoxin to the malarial blood before injecting it and believes this makes the treatment more effective.

Out of 453 patients treated in this way in the last 10 years, 353 have been cured, Dr. Ducoste reported. There were 26 deaths from other diseases or accidents several months or years after the treatment. The failures amounted to 12.8 per cent.

Use of fever treatment in eye conditions, particularly those due to syphilis and gonorrhea, was reported by Dr. L. Hambresin of Paris and by Dr. John S. McGavic of the Cincinnati General Hospital in this country.

In the condition known as specific simple atrophy (wasting) of the optic