The Control of Population Growth: Professor S. J. Holmes

Neuer Biological Aspects of Protein Chemistry: Dr. Max Bergegm and Dr. Carl Niemann

Scientific Events:
Congressional Appropriations for Scientific Work; The Leverhume Fellowships in Great Britain; The Annual Science Exhibition; Officers of the Southwestern Division of the American Association for the Advancement of Science. Recent Deaths and Memorials

Scientific Notes and News

Discussion:

Special Articles:
Radioactivity of Potassium and Geological Time: Dr. A. Keith Brewer. A Possible Acid Seed Soak for the Control of Bacterial Canker of the Tomato: Dr. H. Loraf Blood. Vitamin B, and the Synthesis of Fat from Carbohydrate: Dr. E. W. McHenry. The Experimental Production of Intersexual in the Female Rat with Testosterone: R. R. Greene and Dr. A. C. Ivy


Science News

SCIENCE: A Weekly Journal devoted to the Advancement of Science, edited by J. McKeen Cattell and published every Friday by

THE SCIENCE PRESS
New York City: Grand Central Terminal
Lancaster, Pa. Garrison, N. Y.

Annual Subscription, $6.00 Single Copies, 15 Cts.

SCIENCE is the official organ of the American Association for the Advancement of Science. Information regarding membership in the Association may be secured from the office of the permanent secretary, in the Smithsonian Institution Building, Washington, D. C.

THE CONTROL OF POPULATION GROWTH1

By Professor S. J. Holmes
University of California

Unless I misread the signs of the times, we are approaching a period in which nations will give more attention than formerly to the control of their population growth. Hitherto, as a rule, population has been suffered to take care of itself. Nations have adopted measures for the conservation of their natural resources of coal, iron, oil, forests and animal life, but they have given little heed to the conservation of their human material, and much less to the improvement of its quality. According to the familiar teachings of Malthus, population is subjected to an automatic regulation in that it tends to increase faster than its means of support, and hence increases until conditions become so bad that further growth becomes impossible.

For the majority of mankind, therefore, Malthus believed that there was little prospect of escape from a life of hardship and toil. The only hope he held out by which human beings could avoid the unhappy lot which their reproductive propensities inevitably bring upon them was in so-called prudential restraint, or voluntary abstention from marriage, or its postponement until numbers became reduced to the point at which there would be plenty for all.

Malthus was evidently unaware of the extent to which many peoples have contrived to avoid the drastic checks which nature imposes upon unregulated fertility. His celebrated essay brought out the very important principle that population tends to increase faster than the means for its support, and that nature regulates its growth by her none too gentle methods. The rapid growth of population during the nineteenth century following the publication of this essay was hailed by many of Malthus's opponents as affording a refutation of his gloomy conclusions. In this century the population of Europe increased from 187,000,000 to over 406,000,000; that of England and Wales from

1 Address before the annual joint meeting of the chapters of Phi Beta Kappa and Sigma Xi of the University of Washington.
Editor's Summary

This copy is for your personal, non-commercial use only.

**Article Tools**  Visit the online version of this article to access the personalization and article tools: http://science.sciencemag.org/content/86/2226.citation

**Permissions**  Obtain information about reproducing this article: http://www.sciencemag.org/about/permissions.dtl