

# SCIENCE

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Science: DR. F. R. MOULTON ..... 571

## Scientific Events:

*The Oxford University Bureau of Animal Population; The Maria Moors Cabot Foundation for Botanical Research; Seventh Annual Field Conference of Pennsylvania Geologists; Grants of the Geological Society of America. Recent Deaths and Memorials* ..... 575

Scientific Notes and News ..... 578

## Discussion:

*The Excessive Meekness of American Botanists: DR. NEIL E. STEVENS. "Races" and "Homing" of Salmon: PROFESSOR A. G. HUNTSMAN. Philosophy of Physics: PROFESSOR V. F. LENZEN. Further Discussion on Submerged Canyons: H. H. HESS* ..... 580

## Scientific Books:

*The Organic Chemistry of Nitrogen: PROFESSOR MARSTON TAYLOR BOGERT. Life Histories: PROFESSOR EDWIN B. WILSON* ..... 584

## Societies and Meetings:

*The Illinois State Academy of Science: DR. WILBUR M. LUCE. The New Hampshire Academy of Science: PROFESSOR GEORGE W. WHITE* ..... 586

## Special Articles:

*The Behavior of Certain Dusts under Mechanical Impingement: J. B. FICKLEN and L. L. GOOLDEN. Ovulation Induced out of Season: DR. ROBERTS RUGH. Homotransplantation of Adrenal Cortical Tissue: DR. LELAND C. WYMAN and DR. CAROLINE TUM SUDEN. Immunity of Certain Insects to Selenium Poisoning: PROFESSOR SAM F. TRELEASE and HELEN M. TRELEASE* ..... 587

Science News ..... 8

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## SCIENCE<sup>1</sup>

By DR. F. R. MOULTON

PERMANENT SECRETARY OF THE AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE

A FEW weeks ago I read an interesting article on the enormous increase in the population of the world during the past two or three centuries. In that very brief interval the number of living human beings increased perhaps fivefold. Simply as a biological phenomenon this extraordinary growth in population in the course of fewer than a dozen generations raises interesting questions respecting causes and equally interesting ones respecting consequences.

Of the continents, Europe is by far the most densely populated, with an average of about 130 inhabitants per square mile. Then follows Asia, in which the hordes of India and China give an average of about 60 per square mile. Even in India there are only 177 persons per square mile, or about one third the population density of Great Britain, while China is less

<sup>1</sup> Abbreviated from an address delivered before the Lancaster, Pa., Branch of the American Association for the Advancement of Science.

densely populated than Illinois. The average population density of North America is about 19 per square mile; in both Africa and South America it is approximately 11 inhabitants per square mile, while in Australia it is only 2.2 persons per square mile.

Several factors have undoubtedly contributed to the recent remarkable increase in world population, but it is probable that the most important of them has been the application of science. This conjecture is supported by the fact that, except in those cases in which migrations have been major factors, populations have shown the greatest increases where the applications of science have been most abundant. It is also supported by the fact that on the whole the densest populations are where science finds its highest development.

In recalling the amazing increase in human population of the globe in the past few generations and in suggesting that the increase is probably due in large

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