

# SCIENCE

VOL. 91

FRIDAY, APRIL 19, 1940

No. 2364

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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.

## RECENT ADVANCES IN CHEMOTHERAPY<sup>1</sup>

By Dr. M. L. CROSSLEY

DIRECTOR OF RESEARCH, CALCO CHEMICAL DIVISION, AMERICAN CYANAMID COMPANY

Two paintings, "The Alchemical Making of a Medicine in the 16th Century," by Michael Diemer, and the "Elixer of Life" by John A. Lomax, tell an inspiring story of man's belief that from chemical investigations would result new and potent drugs capable of combating diseases and alleviating human suffering. The discoveries of the past few decades in chemistry are encouraging evidences that the alchemist's dream is being realized. Chemical compounds having no counterparts in nature have been produced and shown to be effective therapeutic agents. A beginning has been made; new and important discoveries will follow. Man may confidently look forward

to a time when he will have available the means of destroying the parasitic hosts that find access to his body and conspire to destroy him.

These agents of destruction are many. They are all about man. He is always on the defensive. His life depends upon the state of his preparedness for constant chemical warfare against both plant and animal invaders. He is attacked by worms; roundworms, hookworms, pinworms, other kinds of worms; protozoa, bacteria and viruses. They would convert him into a regular British Museum of infirmities, as Mark Twain once said. They invade his intestines, his muscles and his vital organs, producing diseases which reduce his efficiency and often deprive him of life. These disease-producing organisms are the "reds" of

<sup>1</sup> An address before the Western Connecticut Section of the American Chemical Society, January 22, 1940.

# Science

91 (2364)

*Science* 91 (2364), 369-390.

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