

SCIENCE

A WEEKLY JOURNAL DEVOTED TO THE ADVANCEMENT OF SCIENCE, PUBLISHING THE
OFFICIAL NOTICES AND PROCEEDINGS OF THE AMERICAN ASSOCIATION
FOR THE ADVANCEMENT OF SCIENCE.

FRIDAY, JULY 1, 1904.

CONTENTS:

*The Relation of Modern Chemistry to Modern
Medicine:* PROFESSOR J. H. LONG..... 1

Scientific Books:—

Hofer's Handbuch der Fischkrankheiten:
M. C. MARSH. *Katalog der Bibliothek der
Gesellschaft für Erdkunde zu Berlin:* J. M.
NICKLES 14

Societies and Academies:—

The Chemical Society of Washington: DR.
A. SEIDELL. *The Philosophical Society of
Washington:* CHARLES K. WEAD. *Section
of Astronomy, Physics and Chemistry of the
New York Academy of Sciences:* DR. C. C.
TROWBRIDGE 15

Discussion and Correspondence:—

Appendicitis and the Race: PROFESSOR ED-
WIN G. DEXTER. *'The Tree Dwellers':*
KATHERINE E. DOPP..... 19

Special Articles:—

*Mont Pelé from October 20, 1903, to May
20, 1904:* DR. EDMUND OTIS HOVEY. *The
Occurrence of Taurin in Invertebrate Mus-
cle:* DR. HAROLD C. BRADLEY. *The Pterido-
spermaphyta:* PROFESSOR LESTER F. WARD. 23

*Influence of Boric Acid and Borax on Diges-
tion and Health* 26

Laboratories for Botanical Research..... 27

*International Catalogue of Scientific Litera-
ture* 28

Scientific Notes and News..... 29

University and Educational News..... 32

THE RELATION OF MODERN CHEMISTRY TO MODERN MEDICINE.*

THE history of the relation of chemistry to medicine is interesting to the physician as well as to the chemist, but has been studied mainly from the standpoint of the latter. From the remotest periods chemistry, or, more accurately, the crude science or art which preceded it, found application in two directions, first, in the treatment of metals or ores or similar bodies to produce something of greater value, and secondly, in the curing of disease or prolonging of life. In both fields of effort the attempts were and remained through some thousands of years of the simplest character. Even in the work of Galen, who flourished two hundred years after Christ and who has been styled the first of the great physicians, there is little which suggests any attempt toward a systematic knowledge of chemical substances. According to the philosophy of the Egyptians and Greeks then current, all things, including the human body, were made up of a limited number of elements or qualities, usually four. With the proper mixture of these the body remained in normal health, but with the qualities out of proportion disease followed which must be attacked through the corrective agency of medicines. Galen's medicines were mostly simple vegetable infusions or extracts of roots, barks and leaves, and the term galenical we still retain to describe the remedies which are essentially indefinite mixtures secured by processes similar in principle to those introduced by

* Address before the Sigma Xi Society of the University of Kansas, June 6, 1904.