SCIENCE

VOL. 89 FRIDAY, JUNE 2, 1939 No. 2318

Dedication of the McDonald Observatory: Edited by DR. OTTO STRUVE 493

Biophysics and Hydraulic Engineering: DR. J. F. HERRICK 499

Obituary:
Recent Deaths and Memorials 501

Scientific Events:
The Lake Laboratory of the Ohio State University; The Battelle Memorial Institute; The Food Technology Conference at the Massachusetts Institute of Technology; The Stanford University Meeting of the Pacific Division of the American Association for the Advancement of Science; The Election of Foreign Members of the Royal Society 502

Scientific Notes and News 504

Discussion:
Birth Pains of the Association: DR. F. R. MOULTON. *Preliminary Announcement of the Goose Lake, California, Meteorite:* DR. FREDERICK C. LEONARD. *A Parasite of the Puerto Rican Mole-cricket:* DR. GEORGE N. WOLCOTT. *Ovum Culture:* PROFESSOR GREGORY PINCUS. *Lectures in Geology and Geography:* PROFESSOR CHESTER R. LONGWELL 507

Societies and Meetings:
Sigma Pi Sigma Convention: PROFESSOR MARSH W. WHITE. *The Kansas Academy of Science:* DR. ROGER C. SMITH 509

Special Articles:
A Comparison of Water Culture and Soil as Media for Crop Production: DR. D. I. ARNON and PROFESSOR D. R. HOAGLAND. *The Chorio-allantoic Membrane of the Developing Chick as a Medium for the Cultivation and Histopathologic Study of Pathogenic Fungi:* DR. MORRIS MOORE. *The Transmission of Lymphocytic Choriomeningitis by Mosquitoes:* L. T. COGGESHALL. *Increased Glycuronate Excretion following Administration of Sulfapyridine:* JOHN V. SCUDI, HERMAN D. RATISH and DR. JESSE G. M. BULLOWA 512

Science News 10

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THE DEDICATION OF THE McDONALD OBSERVATORY

Edited by Dr. OTTO STRUVE

DIRECTOR OF THE YERKES AND McDONALD OBSERVATORIES

THE dedication of the W. J. McDonald Observatory of the University of Texas, on Mount Locke, near Fort Davis, Texas, took place in the afternoon of Friday, May 5. More than 400 invited guests from all parts of the United States, from Canada, Mexico and some European countries were present on the observing floor of the 62-foot dome. The speakers were located on the observing bridge. Dr. Edward Randall, vice-chairman of the Board of Regents of the University of Texas, introduced the speakers.

The session was opened by Mr. C. J. Stilwell, president of the Warner and Swasey Company, who described the activities of his firm in the production of large telescopes and who formally turned over the keys of the dome to Dr. Otto Struve, director of the McDonald and Yerkes Observatories.

In accepting the observatory from the Warner and Swasey Company Dr. Struve spoke as follows:

The purpose of this observatory, in the words of the man whose name it bears, is "the study and promotion of the study of astronomical science." To promote the study of astronomical science means to discover the fundamental laws of nature which govern the structure of the material universe and the changes within it. It means that astronomers must not be passive observers of strange and unexplained phenomena in the cosmos but must be active and intelligent explorers of the vast unknown.

Mr. Stilwell, when I recommended in 1933 to the Board of Regents of the University of Texas that the contract for this observatory be awarded to the Warner and Swasey Company, I knew that your distinguished director of engineering, the late Mr. E. P. Burrell, would be able to meet the exacting specifications which our committee of astronomers had prepared. The telescope was not intended to be just one more expen-

virus was found to be present in high concentration in the circulating blood of some experimental animals, the possibility of an insect vector was considered. Experiments completed have demonstrated the ability of *Aedes aegypti* mosquitoes to transmit the disease to guinea pigs by bite.

In the initial experiment a guinea pig was inoculated subcutaneously with 1.0 cc of a 1–10 dilution of frozen and desiccated blood from one of the monkeys which had died 6 months previously. On the seventh day following inoculation, when the guinea pig was obviously ill, a lot of normal *Aedes aegypti* was allowed to feed upon it. Five days later seven of these mosquitoes were first allowed to bite a normal guinea pig, then were ground finely in a mortar with normal saline and injected into another normal guinea pig. The guinea pig which received the injection of killed mosquitoes died on the seventh day, and the one which was bitten by the same insects died on the eighth day. Before death another lot of normal *Aedes aegypti* was allowed to feed upon the latter animal. These mosquitoes also produced a fatal infection when six days later fifteen of the insects were permitted to bite a normal guinea pig, thus establishing two serial consecutive guinea pig-mosquito-guinea pig passages.

Other experiments have shown that the mosquitoes are capable of transmitting the virus as early as the fourth day and at least as late as the fifteenth day after feeding on an infected animal. Death has occurred between the eighth and eighteenth day following the bite of infected mosquitoes, while duplicate guinea pigs which were inoculated with an emulsion of the same mosquitoes usually died twenty-four to forty-eight hours earlier. In one experiment the bite of sixteen mosquitoes caused death on the eleventh day, while the bite of four mosquitoes from the same lot produced no obvious signs of illness. However, the surviving animal was later shown to be immune when inoculated with a large dose of known living virus. The study is being extended to include other hosts and vectors.

The virus of lymphocytic choriomeningitis in guinea pigs dying following the bite of infected mosquitoes was identified by means of a specific immunity test. The virus was neutralized by known immune guinea pig and immune monkey serum. The latter was from a monkey which survived the epizootic mentioned above and was found by Dr. J. E. Smadel, of the Rockefeller Institute, to contain both complement-fixing and neutralizing antibodies against a known strain of lymphocytic choriomeningitis virus.

L. T. COGGESHALL

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NEW YORK

INCREASED GLYCURONATE EXCRETION FOLLOWING ADMINISTRATION OF SULFAPYRIDINE[1]

IN the course of the isolation of urinary excretion products of sulfapyridine,[2] a urine concentrate containing a diazotizable substance in concentrations considerably above the solubility of sulfapyridine or its acetyl derivative was obtained. This suggested, among other things, that the drug might be excreted in part as a sulfate or a glycuronate. Concurrent with isolation studies, we have followed the glycuronate[3] excretion in two normal males on a carefully controlled diet after the administration of a single dose of five (5) grams of sulfapyridine. A pneumonia patient was similarly studied. In each case, the glycuronate output was markedly increased during the first twenty-four hours and fell to normal within two to four days. The glycuronate concentrations paralleled the urine levels of sulfapyridine.

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[1] These studies received financial support from New York University (Littauer Pneumonia Research Fund), from the Metropolitan Life Insurance Company, and from the gifts of Mr. Bernard M. Baruch, Mr. Bernard M. Baruch, Jr., Miss Belle N. Baruch and Mrs. H. Robert Samstag.

[2] H. D. Ratish, J. G. M. Bullowa, J. B. Ames and J. V. Scudi, *Jour. Biol. Chem.*, 128: 279, 1939.

[3] G. B. Maughan, K. A. Evelyn and J. S. L. Browne, *ibid.*, 126: 567, 1938.

BOOKS RECEIVED

BAER, F. I. and others, Editors. *Magnes Anniversary Book; Contributions by Members of the Academic Staff of the Hebrew University.* About 500 pages. Illustrated. Hebrew University Press, Jerusalem.

CLARK, WALTER. *Photography by Infrared; Its Principles and Applications.* Pp. xi + 397. 103 figures. Wiley. $5.00.

CLYNE, R. W., Editor. *Engineering Opportunities.* Pp. xxv + 397. Illustrated. Appleton-Century. $3.00.

HASKINS, CARYL P. *Of Ants and Men.* Pp. vii + 244. Illustrated. Prentice-Hall. $2.75.

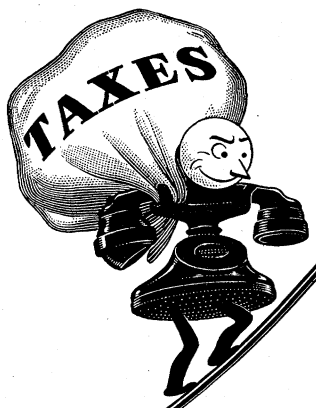
The Hebrew University, Jerusalem; Its History and Development. Pp. ix + 135. Illustrated. American Friends of the Hebrew University, New York.

KARELITZ, G. B., J. ORMONDROYD and J. M. GARRELTS. *Problems in Mechanics; Based on the Original Collection of I. V. Mestchersky.* Pp. ix + 271. Illustrated. Macmillan. $2.50.

MORRISON, A. CRESSY. *Man in a Chemical World; the Service of Chemical Industry.* Pp. xi + 292. Illustrated. Scribner's. $3.00.

SKILLING, WILLIAM T. and ROBERT S. RICHARDSON. *Astronomy.* Pp. xi + 579. 248 figures. Holt. $3.00.

VERRILL, A. HYATT. *Wonder Plants and Plant Wonders.* Pp. xiii + 296. Illustrated. Appleton-Century. $3.00.



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Fact is, a considerable part of the money you pay us for telephone service goes right out in taxes.

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Equal to $9.50 per telephone in the Bell System

Equal to $7.54 per share of A. T. & T. common stock

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