SCIENCE

VOL. 88 FRIDAY, JULY 29, 1938 No. 2274

The Ottawa Meeting of the American Association for the Advancement of Science: Edited by DR. F. R. MOULTON 87
Ottawa was Host 87
Some Statistical Information 88
General Sessions 88
Symposia 89
Business Items 91
Scientific Sessions 93
Physics (B) 93
Chemistry (C) 93
Astronomy (D) and Royal Astronomical Society of Canada 93
Geology and Geography (E) and the Geological Society of America 93
Zoological Sciences (F) and Affiliated Societies 94
Botanical Sciences (G) and Affiliated Societies 94
Ecological Society of America and Genetics Society of America 96
Anthropology (H) 96
Psychology (I) 96
Social and Economic Sciences (K) and the American Statistical Association 97
Historical and Philological Sciences (L) 97
Engineering (M) and Institute of Aeronautical Sciences 98
Medical Sciences (N) and Subsection on Pharmacy 98
Agriculture (O) and Affiliated Societies 99
Education (Q) 100
Obituary:
Frank Lamson-Scribner: DR. A. F. WOODS. *Recent Deaths and Memorials* 101
Scientific Events:
Upper-air Soundings; The New Laboratory of Chemical Engineering at the Case School of Applied Science; The Fifth International Congress for Applied Mechanics; Infantile Paralysis Foundation 102
Scientific Notes and News 105
Discussion:
Chemical Control of Starfish: DR. VICTOR L. LOOSANOFF and JAMES B. ENGLE. *Preparation of l-Glyceric Aldehyde:* DR. ERICH BAER and PROFESSOR HERMANN O. L. FISCHER. *Direction of Solution Flow and the Formation of Minerals:* DR. W. H. NEWHOUSE 107
Scientific Books:
Science in the South: DR. CHARLES A. KOFOID 109
Special Articles:
Yellow Fever Virus in Jungle Mosquitoes: DRS. R. C. SHANNON, LORING WHITMAN and MARIO FRANCA. *The Treatment of Spontaneous Tumors in Dogs by the Injection of Heptyl Aldehyde:* PROFESSOR LEONELL C. STRONG and LEON F. WHITNEY. *Relationship between Mean Sea Level and Sand Movements:* EUGENE C. LAFOND 110
Scientific Apparatus and Laboratory Methods:
A Substitute for Cargile Membrane in the Construction of Brodie Bellows: J. R. DI PALMA and DR. J. RAYMOND JOHNSON. *A Simple Feeding Device for Culex Pipiens in Avian Malaria Studies:* HARRY BECKMAN 113
Science News 8

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 OTTAWA MEETING OF THE AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE

Edited by Dr. F. R. MOULTON

PERMANENT SECRETARY

OTTAWA WAS HOST

As was anticipated, the arrangements for the meeting at Ottawa from June 27 to July 2, inclusive, were excellent. Efficient local committees provided for every requirement from finances and meeting places to boy scouts to serve as messengers. There was a fine combination of attention to business details, preparation for scientific sessions, provision for social diversions and a warm spirit of hospitality to visitors. Moreover, the weather was perfect. Ottawa, the capital city of Canada, was indeed host to the association, and those who attended the meeting will long remember it as a delightful occasion.

That the association is American in the broad sense of the word could not be better illustrated than it was at Ottawa. The meeting was not international; it was simply American. The science was not Canadian or United Statesian; it was just science, even though the subject was some geological or biological problem of one or the other of the countries. There was no fine balancing of chairmanships and positions on committees as there is in meetings colored by political considerations. Science was the order of business, and it was conducted in the spirit of perfect harmony and good fellowship.

And why shouldn't a meeting of the association be

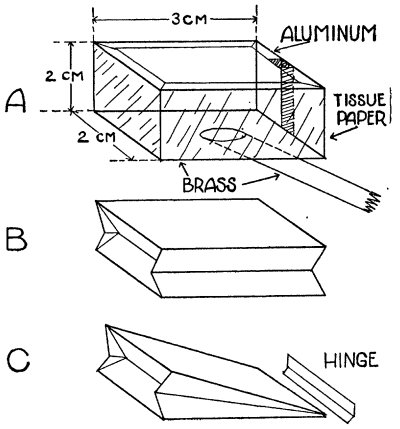

FIG. 1

with the base and a membrane hinge is cemented on (C). A writing lever (not shown in the illustration) is attached to the top surface. The bellows is now made ready for use by smearing generously a layer of paraffin oil on the membrane, thus not only sealing any microscopic holes, but rendering it more flexible.

These bellows may be made of any volume capacity to fulfil a particular condition of recording. It should be remembered that the more cubical the bellows is made, the more amplitude will be recorded for a certain volume change, and thus it is more sensitive but has less mechanical advantage. A useful proportion is shown in the illustration.

J. R. DI PALMA
J. RAYMOND JOHNSON
DEPARTMENT OF PHYSIOLOGY,
LONG ISLAND COLLEGE OF MEDICINE

A SIMPLE FEEDING DEVICE FOR CULEX PIPIENS IN AVIAN MALARIA STUDIES

THE meticulous and rather laborious procedures required for satisfactory continuance of the mosquito-canary propagation of plasmodia in the laboratory suggest that any simplification of methods should be placed on record. The accompanying rough sketches show a device which has been very helpful in my own work through (1) eliminating the possibility of loss of mosquitoes by the toppling of a lantern globe off a Petri or crystallizing dish, and (2) providing a "bed" in which the bird lies very comfortably, indeed often quietly asleep, while the mosquitoes are feeding. There are, as shown, three simple parts to this device: first, a round flat base cut with shears from light-weight galvanized iron and having four projecting portions turned up at right angles, two of these latter supporting upright hooks of stiff wire soldered against their outer surface; second, a small piece of rubberized cloth with a hole cut in it eccentrically; and, third, a rubber band. Without cloth, the band stretched between the two hooks holds the globe and dish securely together; for blood feeding, the cloth is slipped beneath the strands of the band, the bird is laid between the strands with its bared pectoral region over the hole, and the two sides of the cloth are brought together on top and held in place by a pin.

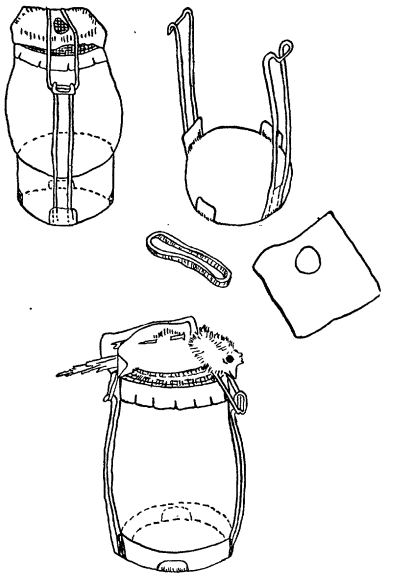

FIG. 1. A simple feeding device for *Culex pipiens* in avian malaria studies.

HARRY BECKMAN
MARQUETTE UNIVERSITY SCHOOL OF MEDICINE

BOOKS RECEIVED

CATTELL, J. MCKEEN and JAQUES CATTELL. *American Men of Science.* A Biographical Directory. 28,000 sketches. Pp. viii + 1,608. The Science Press. $12.00.

COREY, HERBERT. *Submarine; The Autobiography of Simon Lake.* Pp. xiv + 303. Illustrated. Appleton-Century. $3.00.

DESHA, LUCIUS J. and LARKIN H. FARINHOLT. *Experiments in Organic Chemistry.* Pp. xi + 233. 23 figures. McGraw-Hill. $1.75.

EGLOFF, GUSTAV, MARTHA M. DOTY and JANE F. JORDAN. *The Cracking Art in 1937.* Pp. 397. Universal Oil Products Company, Research Laboratories, Chicago.

FULTON, J. F. *Physiology of the Nervous System.* Pp. xv + 675. 94 figures. Oxford University Press. $6.00.

HOGBEN, LANCELOT, Editor. *Political Arithmetic; A Symposium of Population Studies.* Pp. 531. Illustrated. Macmillan. $9.00.

LEET, L. DON. *Practical Seismology and Seismic Prospecting.* Pp. x + 430. 185 figures. Appleton-Century. $6.00.

RASHEVSKY, NICOLAS. *Mathematical Biophysics; Physicomathematical Foundations of Biology.* Pp. xviii + 340. 83 figures. University of Chicago Press. $4.00.

REID, ALBERT C. *Elements of Psychology; An Introduction.* Pp. xix + 409. 94 figures. Prentice-Hall. $2.50.

SCHULTZ, HENRY. *The Theory and Measurement of Demand.* Pp. xxxi + 817. 106 figures. University of Chicago Press. $7.50.

SHEPHERD, GRANT. *The Silver Magnet; Thirty Years in a Mexican Silver Mine.* Pp. 302. Illustrated. Dutton. $3.00.

STILLWELL, CHARLES W. *Crystal Chemistry.* Pp. x + 431. 72 figures. McGraw-Hill. $4.50.

TATE, ALFRED O. *Edison's Open Door; The Life Story of Thomas A. Edison: A Great Individualist.* Pp. 320. Dutton. $3.00.