The American Association for the Advancement of Science:

Problems and Progress on the Geologic-seismological Frontier: DR. JAMES B. MACELWANE .......................... 193

Obituary:

James Hartley Ashworth: PROFESSOR E. G. CONKLIN. Recent Deaths and Memorials ................................. 198

Scientific Events:

Commission on Nutrition of the League of Nations; The Natural History Society of Maryland; Professor Ames and Professor Jack of the Arnold Arboretum .................................................. 199

Scientific Notes and News ................................................. 201

Discussion:

Scientific Books:

Insect Enemies of Shade Trees: DR. E. P. FEIT. College Physics: PROFESSOR E. P. T. TYNDALL ............ 207

Reports:
The Third Annual Tri-States Geological Field Conference: DR. A. C. TROWBRIDGE ........................... 209

Special Articles:
The Bar "Gene" a Duplication: DR. CALVIN B. BRIDGES. A New Method for Testing the Sense of Smell and for the Establishment of Olfactory Values of Odorous Substances: DR. CHARLES A. ELSBERG, IRWIN LEVY and EARL D. BREWER ............................................. 210

Scientific Apparatus and Laboratory Methods:

Glass Electrode with Galvanometer Reading: DR. LEONOR MICHAELIS. A Simplified Procedure for the Volumetric Measurement of Serially Sectioned Structures: DR. WILLIAM ETEN .................................................. 213

Science News .............................................................. 6

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.

PROBLEMS AND PROGRESS ON THE GEOLOGICO-SEISMOLOGICAL FRONTIER

By DR. JAMES B. MACELWANE, S.J.

PROFESSOR OF GEOPHYSICS AND DIRECTOR OF THE DEPARTMENT OF GEOPHYSICS OF ST. LOUIS UNIVERSITY

The recent organization by the American Geophysical Union of two cooperative committees of national scope, the Special Committee on the Geophysical and Geological Study of Ocean Basins, under the chairmanship of Professor R. M. Field, and the Special Committee on the Geophysical and Geological Study of Continents, under Professor W. T. Thom, points unmistakably to a growing realization of the convergence and interdependence of geology and geophysics. And what is said of geophysics in general is particularly true of seismology. Hence the speaker thought it would be of interest to this joint meeting of geologists and seismologists to take our stand as it were on an eminence and survey the wide stretch of frontier between the two sciences and attempt to chart the progress of the two converging groups of explorers. There are times when even the formulation of a problem from two different points of view is an advance toward its solution. In any case it is well to take stock of fact and probability, of established theory and working hypotheses and to attempt to locate ourselves with some precision on the map of research.

In the brief compass of an address it is obviously impossible to qualify one's statements adequately; but if some of my statements seem to you so incomplete
Editor's Summary

This copy is for your personal, non-commercial use only.

**Article Tools**
Visit the online version of this article to access the personalization and article tools:
http://science.sciencemag.org/content/83/2148.citation

**Permissions**
Obtain information about reproducing this article:
http://www.sciencemag.org/about/permissions.dtl