

SCIENCE

VOL. 82

FRIDAY, SEPTEMBER 27, 1935

No. 2126

The Land of Your Possession: DR. ISAIAH BOWMAN 285

Obituary:

Elbert William Rockwood: PROFESSOR J. N. PEARCE. *Recent Deaths* 294

Scientific Events:

The London School of Tropical Medicine; The Enlarged Chemistry Building of the University of California at Los Angeles; The New Arboretum of Cornell University; The Hayden Planetarium of the American Museum of Natural History 295

Scientific Notes and News 297

Discussion:

Vitalism, Irritability and Perpetuum Mobile: PROFESSOR F. H. PIKE. *The Effect of Fluorine in Natural Waters on the Teeth of Small Fish:* DR. ANDREW NEFF. *The Cytology of the Differentiating Spiral Vessel in Ricinus communis:* DR. F. MURRAY SCOTT. *Motion-picture Speed Nomenclature:* MARTIN A. RYAN. *Birch-bark Canoes:* HARLAN I. SMITH 300

Scientific Books:

Biochemistry: PROFESSOR BENJAMIN HARROW. *The Reptiles of China:* PROFESSOR E. R. DUNN 302

Special Articles:

Caffeic Acid in Prunes and its Behavior as a Laxative Principle: E. MRAK, J. FESSLER and C. SMITH. *The Effect of the Performance of Physical Work on Mimosa:* PROFESSOR W. E. BURGE and G. C. WICKWIRE 304

Scientific Apparatus and Laboratory Methods:

A New Microcolorimeter: T. W. PRATT and DR. A. L. TATUM. *An Easy Way to Reduce Electrification of Paraffin Ribbons:* CHARLES WILSON and JOHN S. HOCKADAY 305

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.

THE LAND OF YOUR POSSESSION¹

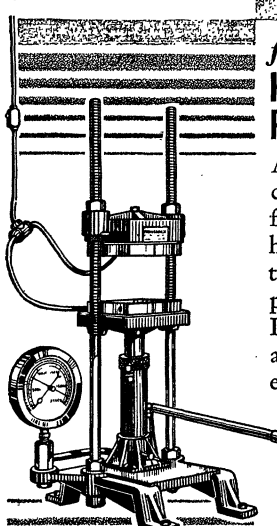
By Dr. ISAIAH BOWMAN

DIRECTOR OF THE AMERICAN GEOGRAPHICAL SOCIETY OF NEW YORK; SINCE JULY 1 PRESIDENT
OF THE JOHNS HOPKINS UNIVERSITY

WHEN we say that "man does not live by bread alone" we imply that bread comes first. Over the greater part of the earth and for at least three fourths of our two billion planetary population the will to eat is the primary urge of "eternally hungry man." "It was farming time, everybody talked about the land," was the way one old-timer summed up his motivations as one of the pioneers of the Middle West during the high tide of migration off the stony hillsides of New England to the flatter acres of the prairie plains. While the historical aspects of land use and land dependence tempt me to make excursions, I yield to the temptation at one point only. The title of my address is taken from Joshua, 1: 15, in recognition of the early land movements recorded in our common book of wisdom.

¹Public lecture before the General Session of the American Association for the Advancement of Science, Minneapolis, Minn., June 26, 1935.

This antiquarian choice is supported by findings in Young's 1,000-page Analytical Concordance, which has about 1,600 citations on land (metaphorical and literal), while the two other main themes of the Bible, love and sin, come off with but 600 and 300 citations, respectively! The "pioneer fringe" was clearly recognized in that far day: "There remaineth yet very much land to be possessed." The migrants had an equally clear purpose: "That ye may live, go in and possess the land." In 1930 a wheat farmer of the High Plains of western Kansas, who had recently migrated from the eastern part of the state, answered my question of purpose as trenchantly as the record runs in Deuteronomy: "I came here, Mister, because I had to live." Cheap land, high-price wheat and the wet-period success of other High Plains farmers had drawn him forward to the degree that high taxes and high interest charges on the older farm had pushed him away.



The CARVER LABORATORY PRESS

for
**HOT or COLD
PRESSING**

Among the standard accessories of this powerful little hydraulic press, hot plates provide for tests where heat and pressure are required—Its other accessories adapt it to many different uses.

*Write for
catalog.*

FRED S. CARVER
Hydraulic Equipment
Est. 1912
341 Hudson St., New York



8-inch
size

“JAGABI” RHEOSTATS

OUR improved type Jagabi Rheostats are appealing especially to those users of fine-adjustment current-regulating devices who are primarily influenced by design, quality of workmanship, ruggedness and performance. There are four sizes and 76 different ratings—carried in stock.

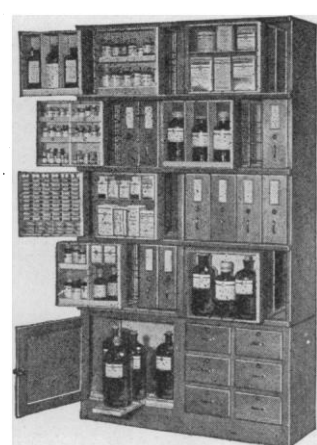
Please write for Catalog 1370-S.

JAMES G. BIDDLE CO.
ELECTRICAL AND SCIENTIFIC INSTRUMENTS
1211-13 ARCH STREET, PHILADELPHIA, PA.

FILE

**Your Supplies and Apparatus
The SCHWARTZ WAY**

**FILES ALL SIZES OF CONTAINERS
From a Small Vial to a Gallon**



*You locate
articles
instantly*

*You find them
in A1 condition*

*You avoid
duplicating*

*Send for complete
Illustrated
catalog, also
Showing entirely
New Type*

**Laboratory Benches and Desks, with net prices
SCHWARTZ SECTIONAL SYSTEM
INDIANAPOLIS, INDIANA**

HELLIGE STAINING JAR

An improved form of Coplin Jar



This jar affords an easier and more convenient insertion and removal of the slides, and has a capacity 60% greater than the Coplin. Originated by Hellige, it is now made available by us at a price far lower than formerly. Most dealers will now supply this Hellige improved type at the same price as the Coplin.



HELLIGE

INCORPORATED
179 EAST 87TH STREET, NEW YORK



Plant and Forest Ecologist

B.Sc. in Agriculture, Master's in Forestry, Ph.D. in Plant Physiology. 20 years' experience research and teaching, including 3½ years' research with Carnegie Institution of Washington. Available at once.

Address F.W.H., Box A, Carmel, Calif.