PSYCHOLOGY

#### Slogan "Recovery" Acts As Psychological Tonic

"THE SLOGAN 'Recovery' perhaps is chiefly valuable because, when spelled with a capital 'R,' it acts on the popular mind as a kind of psychological tonic, if also as an economic antiseptic," said Dr. Charles A. S. Dwight, of Keuka College, Keuka Park, N. Y., in urging the psychological study of language upon scientists.

"Language grows out of life, and is for the sake of better living," he said. "As such it becomes of supreme import for educators, and a moral cause."

"Youth should be taught to analyze all situations that confront him, to gain increasing insight into the relations of language to life, and to pass a calm judgment on the verbalisms, shibboleths, party-cries, c a t c h y advertisements, 'hokum' and buncombe that may tempt him to embark on losing adventures, or to engage in non-social behavior.

"On the other hand, particularly in times of depression, legitimate appeals may be made to the emotional side of human nature . . . Towards effecting this result well-chosen words, bursts of genuine eloquence, or even certain political gestures may helpfully contribute."

Science News Letter, February 17, 1934

SOCIOLOGY

### Depression Restores Family Physician to Eminence

THE ECONOMIC depression has done much to restore the general practitioner of medicine, the old-time family physician, to his former eminent position, Dr. Dean Lewis, professor of surgery at the Johns Hopkins Medical School and president of the American Medical Association, has found. Dr. Lewis discussed the present status of the family physician at the Annual Congress on Medical Education, Licensure and Hospitals held in Chicago.

While the medical profession has been studying the problem of too many specialists within its ranks, the depression seems to have contributed a good bit toward relieving the situation, in Dr. Lewis' opinion. He said that the general practitioner has actually fared better during the depression than the specialist. This is because many persons have now learned that they can be treated satisfactorily in their own homes

by their family physicians.

To encourage the restoration of the general practitioner, conditions of life in small communities must be made more attractive, Dr. Lewis said. In addition, young physicians must be trained while in the medical schools to use laboratory procedures independently so that they will not be dependent on equipment and consultants which can only be found in large centers.

Another important factor in restoring the general practitioner to his rightful place in the medical scheme is the problem of continuing his education after he has finished medical school. Dr. Lewis suggested that a systematic plan be worked out that will take medical advances directly to the physician practicing on what might be called "marginal lands." Such physicians should have contact with a hospital, he added.

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ASTRONOMY

# Astronomers Use Ancient Light

A LL PRESENT astronomers or those who will study the far-flung universe during the next 2,000 to 3,000 years will have only light that is already within the Milky Way to aid them.

So immense is the universe, Dr. Harlow Shapley, director of Harvard Observatory, explained at New York University delivering the annual Arthur lecture on "Time," that even light speeding 186,000 miles per second travels only a very short distance, astronomically speaking, in what seem to be long periods of time from the human standpoint.

Within the next year Harvard telescopes will make a thousand photographs of external galaxies, so distant that it takes light a million years to travel from them to earth. The photographs will be made by the "flux of energy" or light that is already far this side of our nearest star.

The rotation of the earth completely dominates the concept of time here on earth, Dr. Shapley explained. If the earth had no moon, kept the same face always toward the sun like the planet Mercury, had its axis perpendicular to its orbit, then, Dr. Shapley explained, we would not have days, or months, or seasons. We would be practically unconscious of years. On such a slightly rearranged planet the philosophy of time would be unrecognizable.

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ARCHAEOLOG

#### Two Goddesses Found Hidden in Vault

BOSTON'S celebrated little ivory figure of a goddess from ancient Crete must share honors with two sister deities suddenly discovered in Baltimore. For years, while the "Boston goddess" has been feted as the only treasure of its kind in this country, the Walters Art Gallery of Baltimore has unknowingly had two of the extremely rare ivory figures locked in a vault.

Trustees inspecting the vault found two old boxes marked "Great care. Not to be opened except by H. W." The writing and initials were those of the late Henry Walters who bequeathed his art collections to the city.

Each box contained an ivory statuette, one six inches tall, the other about nine and decorated in gold. The goddesses are dressed in the very "modern" styles of ancient Crete, which so astonished archaeologists when ruins of Crete were first explored. A full, fitted skirt and a tall hat are features of the costume.

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BOTAN

# Flower-Pruning Evens Out Biennial Apple Crops

BIENNIAL cropping in apple trees—the production of too heavy a crop every other year, with short crops in the years between—can be discouraged by the proper application of the method called "pre-thinning," A. C. McCormick, of Husum, Wash., has reported to the American Pomological Society.

Pre-thinning, Mr. McCormick said. consists in removing about three-fourths of the blossom clusters at blooming time or very shortly thereafter. This conserves the energy of the tree at the most critical period of fruit and bud formation. The tree is then able to convert this conserved energy into fruit buds which would otherwise be wasted on the production of surplus fruit.

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# CE FIELDS

ZOOLOGY

#### Albino Deer Believed Returning

GRAND ISLE in Lake Superior, once famous for its white deer herd, again has an albino deer, and residents of the vicinity hope the unique herd is coming back.

For several years none of the white deer were seen. The one sighted this year has led local residents to believe that the albino strain continued through the herd, to crop out again this season in an all-white offspring, and perhaps to presage another white herd.

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INVENTION

### Feeding Mechanism Speeds And Cheapens Engraving

E NGRAVING four different letterheads at one impression, using two kinds of paper stock and printing four different colors at the same time has been made possible by the development of a new feeder for engraving presses. A production of 5,000 letterheads per hour is claimed for the new unit.

Continuous production is made possible by elimination of racking and by special inks which dry under a heat treatment within 20 seconds. The feeder, developed by Arthur J. Rosenthal, was first used in the textile industry, later being adapted to engraving presses to replace human hands. Finger-like contrivances of steel grip the paper as it is fed to the presses from rolls and pull it forward a fixed distance, release it, and return to get another grip. Meanwhile, the presses have made an impression and a knife has cut the letterhead to proper length.

The production unit is used in combination with an 8 by 13 foot Waite inverted press. The steel dies and the press used are standard. The press takes paper from rolls cut to stationery widths, stamps and prints it—making four different impressions at a time—cuts it to size and drops the printed product on a canvas conveyor which takes it through

a heat treatment to insure drying of the special inks used.

Cost of production with the new feeder is only slightly higher than for ordinary printing and is less than half the cost for hand-fed engraving. Production is five times as fast as hand-fed presses, Mr. Rosenthal says, either in single or two-color work. Owing to the rapid-drying inks used, the engraving process is not affected by climatic conditions, static electricity or shrinkage of paper—problems confronting engravers on hand-fed presses. Perfect register on every impression is possible because the entire operation can be completed within a few seconds.

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ARCHAEOLOGY

### Checkered Pyramid To be Restored

NE of the most unusual archaeological structures in America, the checkered pyramid of Tajin, will be restored by Mexican government archaeologists. This beautiful pyramid, in the east coast jungles of Vera Cruz, is checkered with hundreds of niche-like chambers, arranged with great exactness and symmetry. There are 378 of these niches. Whether they were intended for tombs or altars or some entirely unsuspected purpose is not yet learned.

The number seven appears to have had a special significance to the builders. Enrique Juan Palacios, Mexican government archaeologist, in exploring the site noted this frequent use of sevens. Seven stone blocks, set side by side, separate each niche from its neighbor. There are 378 niches, and 63 steps, both multiples of seven.

The pyramid has five superposed, receding layers, but it is believed that there were originally seven "stories" before jungle roots tore away the top. The cornice roofing of each of the pyramid "stories" is made of seven stone-slab layers. No building like Tajin was known in America until 1926 when Mexican archaeologists discovered a ruined city of Yohualichan, in the neighboring state of Puebla, and found structures there with similar niches.

Restoration work at Tajin is expected to uncover data to answer some of the unsolved questions of its construction and use. The pyramid is further noted for its perfect workmanship. It is made of enormous basalt blocks accurately fitted without cement.

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SOCIOLOGY

### Marriage Planning Urged by Sociologist

"NO OTHER human enterprise would have anything like the success marriage has if it were handled so carelessly, so casually, and with so little science."

This is the answer given by Dr. Ernest R. Groves, professor of sociology at the University of North Carolina to the frequent charge that "marriage has gone to smash."

"Monogamic marriage has not gone to smash and can never do so, because evolutionary pressure has brought and supports it," Dr. Groves said in a report to the National Committee for Mental Hygiene. "If there is anything we want, it is one person who fulfills our life; it must be somebody who satisfies that tremendous craving which our whole personality feels."

Scientific advisers on marriage problems, as well as social agencies for promoting the acquaintance of young persons suitable as marriage partners, are recommended by Dr. Groves. He prophesies the development of a profession of such advisers as scientifically trained and reliable as the physician.

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MEDICINI

# American Academy of Tropical Medicine Formed

•HE American Academy of Tropical Medicine was formed by a group of leaders in the field who met for the purpose at the National Academy of Sciences, Washington. President of the new organization is Dr. Theobald Smith, pioneer American disease fighter who is now on the staff of the Princeton, N. J., laboratories of the Rockefeller Institute for Medical Research. Other officers are: treasurer, Prof. W. W. Cort of the Johns Hopkins School of Hygiene and Public Health, and secretary, Dr. Earl B. McKinley. dean of the George Washington University School of Medicine.

Purposes of the Academy are to further the extension of knowledge of tropical medicine, to coordinate the work of American investigators in this field, to function as a central source of information and to receive funds and administer them through grants-in-aid and in support of research.

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