Do You Know?

Of the 96 *chemical elements* known to man, some 35 to 44 are used in most of today's automobiles.

Sodium phytate, a corn chemical, promises to be useful as a water softener, and in rustproofing and textile conditioning.

Infra-red light is used successfully to heat and dry pine tree cones to obtain the seed; it accomplishes in four hours what formerly required two days.

Ramie is a crop with a promising future in America; when its gum is removed, its fiber makes durable fabrics, and its dehydrated leaves make an excellent cattle feed.

ASTRONOMY

Two Faint Stars Found To Increase in Brightness

➤ TWO faint stars recently have been found to suddenly increase in brightness, according to reports received at Harvard College Observatory.

Dr. B. S. Whitney of the University of Oklahoma reported that photographic plates he made June 2 and 3 show a tenth magnitude star not visible several years ago. Its right ascension is 19 hours, 47.3 minutes; its declination is plus 36 degrees, 11 minutes. This discovery was confirmed by observations at Harvard's Oak Ridge Station.

The International Astronomical Union reports information from Moscow of the discovery of a ninth magnitude nova one degree south of Beta Serpentis. Thus "new star," far too faint to be seen without a telescope, is in the constellation of the serpent, now high in the southeast.

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promoters on mosquito eggs was investigated by Albert Abel-Malek, in the laboratories of the Ohio State University. He used very dilute solutions of three of them: indole acetic, naphthalene acetic and indole butyric acids, as well as an infusion of bluegrass stems in water, and finally pure distilled water containing nothing else whatever.

The mosquito eggs hatched well on the three chemical solutions and the grass infusion, but the control eggs on absolutely pure water failed to turn out a single wiggler.

Mr. Abel-Malek presents a detailed report of his experiments in the *Annals of the Entomological Society of America* (March).

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PSYCHIATRY

Our Mental "Aching Back"

Author draws on his war experiences for suggestions, which he believes, will help us meet our aching back problems in civilian life.

➤ "OH, my aching back," GI Joe's favorite and most symbolic slang phrase during the war, applies to the whole world now and will for some time to come.

So declares Dr. William C. Menninger, general secretary of the Menninger Foundation and chief consultant in neuropsychiatry to the Surgeon General of the Army, 1943-1946.

A kind of prescription for warding off "the aching back" in these days of heavy world and personal burdens and stresses is to be found in Dr. Menninger's new book *Psychiatry in a Troubled World* (Macmillan). Dr. Menninger refers to the mental and emotional troubles, rather than a physical backache.

Drawing on his war experiences with the millions of "Joe's and Mary's from Brooklyn and Kokomo" who made up our huge war machine, he gives nine factors which helped the Joe's and Mary's stay normal in spite of war's stress and strain. These same nine, he believes, will help each of us meet our aching back problems in civilian life. They are:

1. Recognition of the existence of a struggle between the personality and the environment.
2. A job with a purpose.
3. Teamwork. Working with a group helps the worker as well as the group, is good for mental health.
4. Leadership. This works both ways, too. Most of us have to work under someone, but most of us also are leaders at times, either as parents, teachers, foremen or presidents of clubs.
5. Intellectual growth, getting new ideas, learning new things.
6. Promotion, for the individual and for the family, the neighborhood, the city, the state and the nation.
7. Recreation.
8. Religion. Like most psychiatrists Dr. Menninger believes there is no antagonism between religion and psychiatry.
9. New awareness of emotional conflicts, of the occurrence of "operational fatigue" in civilian as well as military life.

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PHOTOGRAPHY

Gage Radioactive Elements In Rocks with Photography

➤ ESTIMATION of the amount of atomic energy elements, uranium and thorium, in rocks may be done in the future by photography.

Dr. J. H. J. Poole, and J. W. Bremner of Trinity College, Dublin, have placed special nuclear research photographic plates in contact with flat surfaces of rocks cut with a diamond saw and left them there for one to three weeks. Stars with two to five rays appear in the photographs caused by the alpha particles or the hearts of helium atoms that are given off from the radioactive elements.

Distribution of radioactive elements in rocks is shown to be very sporadic, especially in coarse grained rocks like granites, they declared in a report to *Nature* (June 5).

The photographic method was originally suggested two years ago by Mme. Irene Curie-Joliot, Nobelist herself and daughter of the Curies who discovered radium.

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