

then it may point to the young and promising Mayan civilization as having gone east to seek its fortune before the Christian era, from a nondescript western origin among Indians of Mexico.

If, however, the monument and settlement turn out to be fairly late in Mayan history, after all—perhaps with early dates recorded there for some historic purpose that the Indians had in

mind—then it becomes clear that the Mayas had a base of their civilization down in the Vera Cruz region near the twelfth century. It would show that they played a direct hand in the affairs of Olmec and other Indian tribes of southern Mexico, then, even though their late center of power lay far to the northeast in Yucatan in great cities such as Chichen Itza, Uxmal, and Mayapan.

Science News Letter, February 25, 1939

there were hordes of pirates and freebooters who sacked towns and cathedrals. As Norsemen they terrorized Europe. In time they became Scandinavians—today models for Europe in peaceful liberalism and progress.

The Scandinavian has not changed biologically. What happened was due to changes in his environment.

Dr. Myerson advocates a fresher view of the old argument over relative importance of heredity versus environment. They cannot be separated. And rather than speak of heredity, he prefers the term constitution. Environment is continually shaping, directing or damaging, providing use or disuse of qualities in body and mind. No good to be equipped with fingers and mind ready for a great musical career, and no musical instrument ever available. Geniuses, says Dr. Myerson, are made as well as born. In terms of nations, one environment evokes hereditary traits and actions, which other environments would suppress.

Tiny fruitflies in biological experiments strikingly demonstrate the power of environment to bring out hereditary factors. Kept in damp climate, generations of flies develop a peculiar kind of abdomen. In cold laboratories, legs are affected. Returned to normal, progenies of these flies in time are developing normally. In social chaos, or great poverty, the psychiatrist points out, human beings tend to be blighted like the abnormal little flies.

Science News Letter, February 25, 1939

ASTRONOMY

Planet Mars, Symbol of War, Has "Heart" of Iron

In Contrast, Mercury Has Comparatively Low Density; Spectrum Lines Show Many of Earth's Elements in Sun

THE OLD Romans probably never knew it, but when they picked ruddy Mars as the symbol of their god of war they chose one of the planets which has a "heart" of iron.

Best knowledge of astronomy now is that Mars, Venus and the earth have heavy central cores, or hearts, made of dense iron, said Dr. Rupert Wildt of Princeton University Observatory before the symposium on astrophysics sponsored by the American Philosophical Society and Franklin Institute.

In contrast, Mercury, like the moon, is a "rocky" planet, for its density is comparatively low.

The four giant planets—Jupiter, Saturn, Uranus and Neptune—are now thought to contain outer envelopes of some very light material. This light material, Dr. Wildt indicated, probably consists of hydrogen, lightest of elements, in a highly compressed state.

present in the sun in such small amounts that the instruments of science are not yet sensitive enough to detect them. Others give their spectrum lines in the violet colors and would be blocked out by the earth's layer of ozone.

Science News Letter, February 25, 1939

Solar Temperatures

ALMOST inconceivably high temperatures and pressures exist in the interior of stars, Dr. S. Chandrasekhar of Yerkes Observatory of the University of Chicago told the symposium. Using the method known as "integral theorems," it can be calculated that the pressure inside the sun, which is a typical star, amounts to 1,350,000,000 atmospheres. Likewise the temperature at the center of the sun is 7,400,000 degrees.

Science News Letter, February 25, 1939

PSYCHOLOGY

Society Called Powerful In Shaping Individuals

IF a society wishes, it can make its people acquisitive. It can incite them by the thousand or million to become warlike. It can evoke other traits, good or bad.

This tremendous power of environment, and particularly society, to shape human beings, is pointed out by Dr. Abraham Myerson, clinical professor of psychiatry, Harvard Medical School.

History has made experiments, he says, for our guidance. He reminds us that in the eighth, ninth, and tenth centuries

PUBLIC HEALTH

Health Service Tells How To Control Syphilis

"THE cheapest thing any town can do with syphilis is to cure it."

This will probably become the slogan for the newest phase of the government's drive on venereal diseases. It is a statement made by Dr. R. A. Vonderlehr, U. S. Public Health Service, in announcing a new nine-point program for syphilis control in the local community. Details of the program appear in the federal health service publication, *Syphilis and Your Town*.

"People must learn to consult a doctor or clinic," Dr. Vonderlehr declared in telling how to control syphilis. "They must know that drugstore remedies and self-treatment are worthless. They must know that treatment begun early will cure syphilis in nearly every case, while, if left untreated, the patient is likely to develop brain, heart, or nervous system complications."

Science News Letter, February 25, 1939

Sun and Earth Alike

USING the tell-tale "fingerprints" of the elements, the characteristic spectrum lines, scientists have detected in the sun 64 of the chemical elements which are found on the earth, Dr. Charlotte M. Sitterly of Princeton University Observatory said. There is insufficient evidence for ascertaining the presence of nine more and there are 19 so-called "absent" elements.

The missing 19 elements may be absent only because man has yet been unable to find them, Dr. Sitterly declared. Some of the elements may be