

## BIOLOGY

**Struggle to Gain Support For Biological Abstracts**

**A** VIGOROUS struggle is in progress to keep alive *Biological Abstracts*, the publication that for eleven years has summarized and brought into reference form the contents of hundreds of journals in the biological sciences the world over.

A group of younger biologists, headed by Prof. George W. Hunter III, of Wesleyan University, Middletown, Conn., are making, as a duty to science, an attempt at creating sufficient financial support to allow *Biological Abstracts* to continue during 1938 and 1939.

Of a minimum of \$43,000 necessary to publish during 1938, somewhat less than \$21,000 in subscriptions was in hand at the last report. A plan was devised whereby libraries of scientific institutions would pay for subscriptions according to the number of biologists in the institutions, the subscriptions ranging from \$25 for those having up to three biologists to \$200 for those with over 51 biologists. This met some opposition among librarians.

Prof. Hunter and Dr. J. E. Flynn, new editor of *Biological Abstracts*, are urging upon their fellow biologists the fact that it will be easier and cheaper to strengthen an activity than to resurrect a dead one at a later date.

*Biological Abstracts* has had the financial support of the Rockefeller Foundation in past years, and its offices are located in the University of Pennsylvania.

*Science News Letter, April 2, 1938*

## ARCHAEOLOGY

**Music Was Advanced Art In World's Oldest Cities**

**M**USIC was an amazingly advanced art in the world's oldest cities in the valley of the Tigris-Euphrates.

Five or six thousand years ago, Sumerian shepherds piped pleasing melodies. So we infer from archaic pictures in which the shepherd's dog sits listening attentively to his master's voice.

Sumerians at royal banquets were entertained by professional singers. Proof is a picture unearthed at Ur of the Chaldees, dating from about 2700 B.C. At the end of a row of diners stands a harpist, and with him a lady singer, her hands clasped before her chest in true operatic manner.

Most important of all, Sumerians had music at religious rites. Trained choirs

sang hymns. Psalmists chanted petitions. String orchestras and ritual drums accompanied the voices.

To take account of new evidence unearthed in Near Eastern ruins, Dr. Francis W. Galpin, Canon Emeritus of Chelmsford Cathedral, has completed a volume on "The Music of the Sumerians, Babylonians, and Assyrians."

He even finds in music a clue to the origin of the Sumerians.

One theory "put forth with insistence," he says, would have the Sumerians coming to Mesopotamia from Abyssinia and Somaliland. But their music argues against an African origin, for they did not bring Egypt's early musical instruments. Instead, their chief ritual instruments were harp, drum, and flute, all Asiatic.

The lyre in primitive form was probably already known in Mesopotamia when the Sumerians arrived. Lyre and timbrel were characteristic of Semitic music, and some Semites were in the land.

The blowing horn used in Sumerian magic rites came from uplands of Asia, perhaps brought by Sumerians themselves.

Altogether, their music upholds the theory most widely accepted—that the clever Sumerians came from hill country east or northeast of Mesopotamia when they established themselves for 3,000 years of occupation in the valley of the two rivers.

*Science News Letter, April 2, 1938*

## GEOLOGY

**Volcano Under Glacier Gives off Fluorine**

**F**LUORINE gas, super-corrosive vapor that dissolves even glass, given off in quantities by Iceland's subglacial volcano, sickens sheep and humans in its vicinity, reports Dr. H. Vigneron (*Nature*.) Lesions of the membranes of the nose and mouth are caused by the gases, he states.

Acting like a giant calorimeter, or device for measuring the heat given off by a fire, Vatnajokull, the crater under the ice, supplies geologists with a rather accurate measure of the energy of a volcanic eruption. From the amount of ice melted away from the Icelandic glacier, they can tell quite closely the amount of heat given out by the volcano. To date, this eruption has melted several cubic miles of ice. Now, it is becoming quiescent, but another eruption is expected in about 1945-50, judging from the past behavior of the crater.

*Science News Letter, April 2, 1938*

**IN SCIENCE**

## ANTHROPOLOGY

**Do You Outgrow Your Hats? Science Wants to Know**

**Y**OU needn't be ashamed if your head grows too big for your hat. It's no sign of a swelled head. Instead, it means your brain is still growing.

But whether most people do get brainier in this way, in adult life, is something Dr. Ales Hrdlicka, anthropologist of the Smithsonian Institution, would like to know. Dr. Hrdlicka has asked that any one who has any significant record or observation of his, or her, hat sizes in adult life send reports to him.

Dr. Hrdlicka would particularly like reports from women, and from men who are business men, bankers, writers, and other types, non-scientific.

His first call for information on head growth during adult life has brought in 20 answers. Nearly all have come from scientists. Some say specifically they had to buy bigger hats after years of exceptional mental exertion.

Dr. Hrdlicka has some evidence that women who do highly intellectual work may have larger heads, contrary to the usual female head type which is smaller than the male.

The anthropologist does not find that the bigger the brain the brighter the mind. He does find that, generally speaking, a group of brain workers have larger heads than a group of laborers.

*Science News Letter, April 2, 1938*

## ENGINEERING

**Flood Control Studied At Cornell University**

**F**LOOD control is being made the subject of intensive study at Cornell University in collaboration with the U. S. Army Engineer Corps.

Special attention is being focussed on the situation in southern New York and northern Pennsylvania, where disastrous floods occurred in 1935 and 1936. A model of the Chenango valley through Binghamton, where the damage was greatest, has been built and has yielded data of importance for use in new control works. (*Science*, Mar. 11)

*Science News Letter, April 2, 1938*

# E FIELDS

## AVIATION

### Patents Holes-in-Wing To Cut Plane Landing Speed

**A**N INGENIOUS suction method for simultaneously slowing the landing speed of a high speed plane and increasing the lift of its wings is revealed in a patent granted to Major Alexander P. de Seversky, New York designer of high performance military aircraft.

Ports placed near the leading edge of the wing connect with suction ports on the under side of the wing toward the rear. Suction thus created simultaneously slows the ship and cuts turbulence on the upper side of the wing, the inventor explains, thus increasing lift.

Slowing by one means or another the extremely high landing speeds of military aircraft is a problem of growing severity and interest to aircraft designers, it will be recalled.

*Science News Letter, April 2, 1938*

## PUBLIC HEALTH

### Next War Will Find U. S. Lacking in Health Officers

**T**HE next war will find the United States hard put to it to protect its fighting men from disease. This is the opinion of the editor of the *American Journal of Public Health* (March).

The difficulty is that there are not enough qualified sanitarians, trained in disease prevention, among the reserve officers who would be called up in time of war.

The number of officers in the Sanitary Corps Reserve is 422, War Department figures show. Of these, only about 100 are qualified sanitarians, says the health journal.

"While the medical officers of the regular army are familiar with sanitary procedures, those of the reserve corps are, in general, practitioners of curative and not preventive medicine," the editor comments. "Much of the responsibility for sanitary measures during mobilization and combat will, therefore, devolve upon the members of the relatively small Sanitary Corps."

When the next war comes, a vast army of young men, all more or less suscep-

tible to various diseases, will be assembled suddenly in hastily prepared camps. Protecting these men from disease will be an acute problem in public health, it is pointed out. An expert and extensive sanitary organization will be needed at once to insure adequate supplies of pure water, proper disposal of sewage and waste, elimination of insect carriers of disease, supervision of hygiene of housing and ventilation, safety of food supplies and control of other matters of environmental sanitation.

*Science News Letter, April 2, 1938*

## GEOLOGY

### Nation's Oil Storehouse Is Silt of Vanished Sea

**S**ILTS of a sea that is no more, sea foods of the age of dinosaurs, and the earth movements that made this ancient ocean into our western plains, were described to the American Association of Petroleum Geologists by a group of members of the U. S. Geological Survey.

Eighty million years have passed since the great Cretaceous sea of the central part of North America dried up, and its floor slowly rose to become the high plains and Rocky Mountains. From the Mexican border to the Canadian border and beyond, evidences of this great sea are found. The story of the changes leading to its vanishment, and the relation of the former sea to present oil deposits, was told by Drs. L. W. Stephenson and J. B. Reeside, Jr.

Similar rocks, found in the southeastern United States, also of importance to the oil industry, were described by Dr. C. W. Cooke and W. H. Monroe, of the U. S. Geological Survey. A small part of this area, the Jackson Gas Field, of Mississippi, was described jointly by Mr. Monroe and H. N. Toler, Oil and Gas Supervisor of Mississippi.

Earlier rocks, underlying the ancient sea silts, were described by Dr. Philip B. King, whose studies of these Permian oil-producing beds were made in the course of his work with the U. S. Geological Survey.

Rock structures, resulting from slow earth movements, and creating the traps in which oil accumulates, were described to the oil geologists by Dr. N. H. Darton, who, although retired from active duty in the U. S. Geological Survey, keeps on working. He was elected to honorary membership in the American Association of Petroleum Geologists in recognition of his long years of active work in geology.

*Science News Letter, April 2, 1938*

## ARCHAEOLOGY

### Iliad Not in Nutshell; It's an Old Roman Mistake

**E**VEN if Roman author Pliny did say it, there never was a copy of Homer's Iliad in a nutshell.

For centuries, scholars have puzzled over this ancient astonishing statement, but Dr. Henry A. Sanders, University of Michigan's Latin professor, has cleared up the mystery.

Pliny was wrong, declares Prof. Sanders in the Michigan Alumnus Quarterly Review. Pliny read Cicero's statement about a copy of the Iliad "bound in nut," and he leaped to the conclusion that this was an extremely tiny book.

The Latin word "nux", however, means either nut or tree, explains Prof. Sanders, as we would say "of walnut," or "of chestnut." Cicero was really describing a copy of the Iliad bound in wood, and it was important because it was one of the first literary works bound in book form.

"If any one wished to write the 15,693 verses of the Iliad on the tiniest paper," says Dr. Sanders, "and with all modern instruments including our powerful magnifying glasses, so as to enclose it in a nutshell, he would have to use a cocoanut, and not any of the nuts known to ancient Italy."

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## CHEMISTRY

### Young Yale Chemist Wins \$1,000 Award

**T**WENTY important scientific papers at the age of 30 is the record of Dr. Abraham White, assistant professor of physiological chemistry at Yale University, which has won for him the \$1,000 Eli Lilly Award in chemistry.

A bronze medal and the \$1,000 check of the Eli Lilly and Company Award in Biological Chemistry will be presented to Dr. White at the meeting of the Society in Dallas, April 18 to 21.

Dr. White has specialized in the chemistry of proteins and his most recent work is the isolation of a crystalline protein of "high lactogenic activity" from the anterior pituitary gland. He has also studied the metabolism of sulfur in the body and the roles of the chemical groups in insulin.

The Lilly award was established in 1935, to run five years, and seeks to bring recognition to outstanding young chemists.

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