GENERAL SCIENCE

## GI Collectors Benefit U. S. National Museum

➤ SOUVENIR-HUNTING, the mark of American GIs everywhere, sometimes serves a more serious and permanent purpose than just collecting miscellaneous trophies wherewith to impress the girlfriend and the folks back home. At the annual meeting of the Smithsonian Institution's board of regents in Washington, D. C., Dr. Alexander Wetmore, secretary of the Institution, reported on substantial and valuable additions that have been made to the scientific collections of the National Museum by members of the armed forces serving overseas, especially in Asia and the Pacific area.

Some of the small mammal specimens sent in from the Indo-Pacific region are of species hitherto unrepresented in the Museum. A collection of nearly 600 birds came from Panama, 500 from Ceylon and about 100 from the Admiralty islands. Most important of the year's insect accessions was the large amount of mosquito material received from various units of the Army and Navy.

Among the Museum's wartime acquisitions in the field of cultural anthropology was a large model of an outrigger canoe from Tarawa and a royal Hawaiian cape made of red, yellow and black feathers. Gen. H. H. Arnold deposited on loan an Arab costume presented to him by the King of Saudi Arabia.

Outstanding among new engineering exhibits will be the first jet-propelled airplane built and successfully flown in the United States.

Dr. Wetmore announced the initiation of plans for the celebration of the hundredth anniversary of the Smithsonian Institution, which will be held next autumn.

*Science News Letter, February 2, 1946*

LANGUAGE

## New Book Bridges Gap Between English and Aleut

➤ A NEW BOOK, titled *The Aleut Language,* which bridges the gap between English and the language spoken by the native of the Aleutian islands, has been published under sponsorship of the Department of the Interior. It contains a grammar and an English-Aleut vocabulary. The familiar Roman alphabet is used, but markings of some of the letters required the casting of a certain amount of special type.

Although newly published, the book is in some respects old. First work leading to its appearance was done between 1820 and 1830 by Ivan Veniaminov, a scholarly Russian priest. The rest of the work was carried out by the late Richard Henry Geoghegan, noted Irish linguist and philologist, and Miss Fredericka I. Martin of New York, who inherited Mr. Geoghegan's mass of source material upon his death in 1943, and who edited the final text.

*Science News Letter, February 2, 1946*

AERONAUTICS

## Guggenheim Medal Awarded Dr. T. P. Wright

➤ THE DANIEL Guggenheim medal for 1945, and also an Honorary Fellowship in the Institute of the Aeronautical Sciences, were presented by the institute on Jan. 28 to Dr. T. P. Wright, U. S. Administrator of Civil Aeronautics.

The medal is awarded him for outstanding contributions to the development of civil and military aircraft and for notable achievement in assuring the success of the wartime aircraft production program. The fellowship is regarded as one of the highest honors the institute confers on persons of preeminence in aeronautics.

*Science News Letter, February 2, 1946*

CHEMISTRY

## Process for Extracting Dandelion Rubber

➤ ALTHOUGH the end of the war has reduced the likelihood of our needing to rely on home-raised rubber-yielding plants, patent 2,393,035 has been granted to two U. S. Department of Agriculture scientists, R. E. Eskew and P. W. Edwards, at the Eastern Regional Research Laboratory in Philadelphia, on a simplified method of extracting rubber from the roots of the Russian dandelions, koksaghyz and tau-saghyz. The roots are first leached of their carbohydrates with hot water, then mill-crushed to a pulp or slurry, in which the rubber particles agglomerate into relatively large masses. The slurry is then diluted and screened, and the rubber and adhering skins remaining on the screens are scrubbed with water. The resulting slurry is then dispersed in water and the floating rubber removed while the debris sinks.

Rights in the patent are assigned royalty-free to the government.

*Science News Letter, February 2, 1946*

# IN SCIEN

BIOCHEMISTRY

## Vitamins from Manure Seen as Possibility

➤ CHICKENS scratching on a manure pile may not be the most fastidious eaters in the world, but at least they have found out how to stay healthy, results of experiments at the Colorado A and M College indicate. Chicks fed on a normal ration did not grow as rapidly or mature as soon as those fed on a similar ration to which 10% of dried manure was added.

Biochemists at the college are now engaged in a comprehensive research program to find out what vitamins, hormones and other "trace substances" important to the health of farm animals may be in the wastes from their own bodies. It has already been discovered that the manure of pregnant cows contains a high concentration of male sex hormone.

*Science News Letter, February 2, 1946*

AERONAUTICS

## B-29 Superfortress Beats Endurance Record

➤ WHAT IS believed to be an endurance record for stratosphere flight by an airplane was made recently by a B-29 Superfortress that remained at an altitude of over 40,000 feet for three hours and 38 minutes. Announcement of this record was made by the Army Air Technical Service Command at Wright Field, Ohio.

The Superfortress used was especially equipped as a pressurized flying laboratory, and scientists aboard accumulated much data which will be of use to aviation engineers in designing high-flying planes, and which are to be made available to the aircraft manufacturing industry as a whole.

The record was made in conjunction with high-altitude flights being conducted by the Boeing Aircraft Company and the Air Technical Command to test various types of equipment for future stratosphere bombers. Previously a B-17 was used in these tests. The B-29 was substituted because it offers better operational conditions, and can be pressurized and heated to withstand the stratosphere.

*Science News Letter, February 2, 1946*

# CE FIELDS

BOTANY

## Botanical Classic Now Published for General Use

➤ A GREAT but little-known work on plants, written in the late middle ages and threatened with loss to the world of science by World War II, has now been made generally available for the use of botanists through publication in modern book form. It is the *Herbal* of Rufinus, an Italian monk, who completed the manuscript near the close of the thirteenth century.

The original manuscript is lost, and only one copy, made at least a century after the first writing, survives in the Laurentian Library at Florence—that is, it is still there if mishaps of the late war did not destroy it. A photographic copy was in the hands of a noted student of the history of science, Prof. Lynn Thorndike of Columbia University, before the war. He has edited it, and it has now been published by the University of Chicago Press.

Like all medieval and early modern herbalists, Rufinus concerned himself primarily with the medicinal values of his plants. But unlike other early herbalists, who took it for granted that everyone knew all plants at sight, Rufinus describes his species very exactly—so much so that present-day botanists can tell what plants he was writing about.

One thing stands in the way of easy use of the new Thorndike edition by all American botanists—the text is in the original Latin. However, medieval Latin, while less elegant than the classic language as written by Cicero and Vergil, is also less involved in its grammar. Anyone with a couple of years of high-school Latin should be able to read this book.

*Science News Letter, February 2, 1946*

AERODYNAMICS

## German Supersonic Wind Tunnel Now in America

➤ A GERMAN supersonic wind tunnel for research in aerodynamics will soon be set up and used by the Navy at the Naval Ordnance Laboratory in White Oak, Md. Its parts were received late in 1945, and German scientists and engineers are being brought to this country to assist in its installation and initial operation. It was formerly used at the German Aerodynamic-Ballistic Research Establishment at Kochel, where work in the development of the Nazi V-weapons was carried on.

This wind tunnel is of unusual interest because, according to the Navy, it includes equipment that has never been duplicated outside of Germany. It includes the world's largest interferometer, which measures air density by optical means.

A total of 13 German scientists and engineers, experts in the field of aerodynamics and formerly associated with the Kochel establishment, are being brought to the United States under contract for a limited period. The Navy will furnish them with quarters and meals. Their salaries will be sent to their families in Germany. They will arrive under escort, and will be admitted to the country as disarmed aliens and not as prisoners of war.

*Science News Letter, February 2, 1946*

FISHERIES

## Jap Oyster Invasion Threatens Eastern Coast

➤ WARNING against the dangers of a possible Japanese invasion of the Atlantic seaboard of the United States has been sounded.

No, this isn't February, 1942; it's still February, 1946. The Japs that may get into our seacoast waters if we don't watch out are the big Japanese oysters, already cultivated for commercial purposes on the Pacific coast. They're all right for those waters, for the Pacific coast didn't have any big oysters of its own, until seed oysters were imported from Japan and planted there some years before the war. New shipments of seed oysters are now expected from the same source, to replenish the beds.

However, the U. S. Fish and Wildlife Service warns Eastern oyster "farmers" against setting Japanese oysters in their beds. While the Oriental shellfish is acceptable in lack of a better, it is not the equal of the eastern American oyster in either flavor or appearance. Moreover, it is a veritable weed among oysters, and its prolific growth might drive out the native species; or it might ruin its quality by hybridizing with it.

Finally, Dr. Paul S. Galtsoff of the Service warns, the Japanese oyster drill, a predatory snail that is a deadly enemy of oysters, could easily be introduced into Eastern oyster beds, and if it is the effects will be ruinous.

*Science News Letter, February 2, 1946*

ASTRONOMY

## Gives Direct Position Readings of the Stars

➤ A NAVIGATIONAL apparatus that requires no calculations on the part of the observer, and calls for no use of sextant or other "star-shooter," is the unique offering of Carl J. Crane of Sacramento, Calif., who has received U. S. patent 2,393,310 on his invention.

The device combines the principles of camera obscura and planetarium. It consists essentially of a closed chamber divided horizontally by a sheet of ground glass or other translucent substance. In the middle of the top is a lens combination that catches the images of star groups and projects them on the upper surface of the ground glass. Underneath is an internally lighted small sphere, pierced with pinholes in the positions of the principal fixed stars, and mounted with a set of graduated rings that permit settings for calendar date, chronometer time, etc. The pinhole points of light from the openings in the sphere are projected against the lower surface of the ground glass. When the actual star images from above and the artificial ones from beneath are in exact agreement, the position of ship or plane carrying the instrument can be read off directly on a final graduated circle.

Rights for manufacture and use are assigned royalty-free to the government.

*Science News Letter, February 2, 1946*

AERONAUTICS

## Nylon Hoop Lands Planes on Tiny Islands

➤ NO ISLAND or area on the globe will be too small or remote for air transportation with use of the simple Brodie system for landing planes off the ground. The system, invented by Capt. James H. Brodie, permits small aircraft to land on ships only 300 feet long and on land where only a 500-foot treeless area is accessible.

During the Okinawa campaign liaison planes landed on small ships by hooking onto a nylon hoop suspended from a trolley cable stretched between two booms on the boat. Important reconnaissance, direction of naval fire, evacuation of wounded men, and replenishment of ammunition supplies were thus possible.

Landings may now be made not only on ships but on islands and in rugged areas where regular landing fields are impossible or too costly.

*Science News Letter, February 2, 1946*