

PHARMACOLOGY

Warns That Aspirin Is Potentially Dangerous

WARNING against the indiscriminate use of acetylsalicylic acid, or aspirin as it is commonly called, was issued by the American Medical Association (*Journal American Medical Association*, March 23).

Aspirin is potentially a dangerous drug, is the verdict of the association's council on pharmacy and chemistry, which investigates new remedies as they come on the market and also the claims made by manufacturers for both new and old remedies.

If aspirin is to be used as a home remedy it should first be prescribed by the family doctor whose knowledge of the individual's personal characteristics can alone make its unqualified use safe and advisable, the medical association says. Both direct and indirect harm can result from its use. The advertising claims of one of the leading manufacturers of aspirin were characterized as misleading.

Science News Letter, March 30, 1935

ARCHAEOLOGY

Prehistoric Puerto Rico Had "Crab Culture"

PREHISTORIC Indians in Puerto Rico who ate so many crabs that masses of cast-off crab claws are their cultural trade-mark have been discovered by Froelich G. Rainey of the Peabody Museum of Yale University.

The crab eaters are the oldest known inhabitants of the island, Mr. Rainey concludes. Their painted pottery, stone tools, and shell spoons were found buried in masses of crab claws.

In his report of the discovery to the National Academy of Sciences, Mr. Rainey states he found the new type of prehistoric culture while excavating a large kitchen midden near Ponce on the south coast of Puerto Rico. This refuse pile itself was typical of what well known prehistoric Indians of the region threw into their trash. The mound consisted of oyster shells, clam, scallop and snail shells mixed with ashes and charcoal from fires, broken pottery and discarded implements. Trenching beneath this, the archaeologist made his discovery of a new type of pottery, of far better fabrication than the crude ware of the shell-heap people. And with this red and white painted pot-

tery were other clues to a distinctive and older type of life, all mixed in disintegrated crab claws.

"At least two and possibly three cultural horizons can now be defined in Puerto Rico," Mr. Rainey announced. The crab culture was followed by the well known Arawak Indian culture, and that perhaps by a relatively recent phase to which he has discovered several clues. Extensive work in the island's interior, however, will be necessary if this late phase of Puerto Rico's aboriginal history is cleared up.

Mr. Rainey's excavations were part of the Scientific Survey of Puerto Rico organized by the New York Academy of Science. The work was supported by the American Museum of Natural History, Voss Fund, and Peabody Museum of Yale.

Science News Letter, March 30, 1935

CLIMATOLOGY

Dust Storms May Continue Late

See Front Cover

DUST STORMS may continue deeper into the spring, and may blow up even in summer, if the Western drought area continues unwatered. There is a strip of territory, stretching from the western Dakotas southward to the Texas Panhandle, that has been practically without rain for several years. Due partly to this deadly drought, partly to ill-advised plowing up of the age-old grass cover in the war-time wheat-boom days, the soil is all dust, ready for any wind.

The present season—late March and early April—is the normal time for strong wind storms. They have been blowing in the West for ages; and dwellers on the Plains have long since got used to occasional dust storms. The winds are not becoming stronger, the Weather Bureau emphasizes; there is just more dust for them to pick up. It is this overloading of the upper air with fine dust that has made it possible for dust storms to reach the East.

The dust itself is not abnormal, the meteorologists say; only it is so new to Easterners that it gives them the "jitters," while Westerners quite literally grit their teeth and accept it as a commonplace seasonal plague.

The photograph of the dust storm approaching the Lincoln Memorial in Washington, shown on the front cover was taken by John Hugh O'Neill, Science Service photographer.

Science News Letter, March 30, 1935

IN SCIENCE

ORNITHOLOGY

Racketeering Hawk Robs Yellowstone Owl

"**M**USCLING in" is not unknown among birds of prey. Ranger-Naturalist H. B. Mills of Yellowstone National Park tells this tale of a hawk, an owl and a mouse:

"The course of the owl over the wet meadow was suddenly cut short by a quick dive into the grass. A marsh hawk, unseen heretofore, came at the owl full speed ahead, knocked it from its position and searched in the grass where the owl had struck. Neither bird caught anything, and in a moment they were both on the wing again.

"The owl, not greatly nonplussed, struck into the grass again in a few minutes. The hawk was again on him, and this time with more success. The owl had caught a meadow mouse, and the hawk ate it for him, or more truly, a part of it, for we frightened him away before he was through."

Science News Letter, March 30, 1935

ENTOMOLOGY

Nicotine Insecticide Applied in Vapor

MAN'S insect enemies have a new horror of war awaiting them, in a nicotine vaporizer invented by three scientists of the University of California Citrus Experiment Station at Riverside, Calif., Dr. Ralph H. Smith, Henry U. Meyer and Charles O. Persing. Instead of applying nicotine sulfate as a spray, in the customary manner, it first atomizes the poison fluid and then applies heat to evaporate it. (*Science*, March 22)

The deadly vapor is conducted directly into the foliage of insect-afflicted plants, where it proves to be much more efficient than the nicotine sprays at present in common use. If desired, the heat can be left out, and the nicotine mixture applied in the atomized form.

Science News Letter, March 30, 1935

E FIELDS

AERONAUTICS

Stratosphere Balloon Now Under Construction

CONSTRUCTION of the new Soviet stratosphere balloon "Osoviakhim-2" is progressing rapidly. While its crew of three men are yet unnamed, plans call for a period of parachute jumping for the fortunate appointees as training for the flight.

The gondola of the balloon is being made from rustproof steel with welded joints. The gas bag will be fabricated from high grade rubberized muslin sewn together.

The crew of three will consist of a commander, in charge of ground operations and gondola discipline; a pilot for navigating the balloon; and a scientist for taking observations and operation of scientific instruments.

Science News Letter, March 30, 1935

FORESTRY

Britain Has Problem Of Vanishing Trees

BRTAIN, no less than America, is faced with the problem of tree destruction, without sufficient replantings to offset it. The problem is the more severe there, in that the limited area of the islands does not afford any great but remote reservoirs of primeval forest to be tapped at the expense of a long haul when the forests closer to market have been wiped out, as has been the case on this continent.

In the British science journal, *Nature*, (Feb. 9) the seriousness of the situation is commented upon editorially, and also in a communication from Alexander L. Howard, of London. One important factor that has accelerated the destruction of British woodlands is the post-war economic pressure that has resulted in the break-up of many of the large landed estates, and in the relative impoverishment of many of those still left intact. The magnificent hardwood growths that have been the glory of rural England are being turned into cash-yielding lumber as fast as possible.

Replanting is either neglected wholly or carried on with faster-growing softwood species that promise returns within a human lifetime but are not so valuable, tree for tree, as the beech, ash, walnut and other types they replace.

Mr. Howard states that he first began to call attention to this menace to Britain's famous and beautiful hardwood forests ten years ago. So far, however, he seems to have been as one crying in a vanishing wilderness, for the cutting still goes on.

A similar situation obtained in the Irish Free State until 1928, when a new Forestry Act imposed such drastic restrictions that now a landowner is not permitted to cut down a tree on his own land without official permit. It is granted, Mr. Howard states, only with the stipulation that replacement plantings be made at once.

Commenting editorially, *Nature* remarks, "In Great Britain similar restrictions, however well-meaning, might prove difficult and costly to apply in practice; better results would probably be achieved, at less cost, by a policy which would give landowners more encouragement to maintain the beauty of their estates as their forebears did . . . There is great need for educating the British public to respect trees and woodlands, which suffer from acts of vandalism unheard of in those European countries in which the 'tree sense' or 'forest conscience' is more fully developed."

Science News Letter, March 30, 1935

PHYSIOLOGY

Hard-of-Hearing Can Enjoy Talkies

MANY hard-of-hearing persons to whom the cinema was a great boon in the days of silent pictures will be able to enjoy the talkies in a new Chicago theater.

Every seat in this theater will be equipped with a hearing device which is said to enable the majority of the deafened to "hear through their bones." It is not an ear-phone but an object the size of a domino attached to a lorgnette handle. Held against any bone of face or head, it transmits sound waves or vibrations along the bones instead of the usual channels.

Because every seat will have one of these devices, there will be no segregation of the hard-of-hearing from patrons who have sound hearing.

Science News Letter, March 30, 1935

ASTRONOMY

Will Wager Sun Shines For Billion Years More

HOW long will the sun keep on shining in the sky? Dr. Donald H. Menzel of Harvard College Observatory is willing to wager \$10,000 against one cent of anyone's money that it will shine for another billion years—if he can hold the stakes!

Describing the durability of the sun, Dr. Menzel pointed out it should last for five hundred sextillion years (5, with 23 ciphers after it) but that there is a chance it will explode within the lifetime of men on earth. He added:

"So confident am I that the sun will continue to shine with sufficient stability to support life for at least a billion years, that I am willing to wager on it—and give reasonable odds—say one cent to ten thousand dollars. If you want me to increase the time to ten billion years, the odds will have to be lower. The only condition to the wager is that I be allowed to hold the stakes."

Discussing the temperatures of the sun's surface, Dr. Menzel said that while the sun appears to be on fire it is not burning in the ordinary sense.

"The sun," he declared, "is too hot to burn. If we could convey to the sun great quantities of the ordinary products of combustion: carbon dioxide, smoke and water vapor we should see these materials 'unburn' before our eyes. The carbon dioxide would break up into gaseous carbon and gaseous oxygen. Then, if we could separate these two substances, and transport them back to earth, we should be able to heat our houses next winter with the coal we burned last winter!"

All the materials found in the sun's vaporous atmosphere exist as separate elements. It is too hot for them to form compounds. So large is the sun, also, that the quantity of the various elements merely in its atmosphere are enormous.

"If the silver just of the solar atmosphere," said Dr. Menzel illustrating his point, "could be extracted and brought back to earth, rare as that element is, it would form a ball more than a quarter of a mile in diameter. It would weigh almost a billion tons and its value would be inconceivable."

Dr. Menzel reported these solar facts in an address for Science Service over a nation-wide hook-up of the Columbia Broadcasting System.

Science News Letter, March 30, 1935