MEDICINE

Chemicals Aid Cancer

TWO CHEMICALS derived from the vitamin, folic acid, are proving effective in fighting cancer and leukemia, the American Pharmaceutical Association was told at its meeting in San Francisco.

Cancer patients have less pain and reduced need for narcotics when treated with pteroyltriglutamic acid, James H. Boothe of the American Cyanamid Company reported.

He said that some cases have been reported in which tumors were arrested by treatment with the chemical. But, he emphasized, further study will be needed to determine its effectiveness as more than a pain-killer.

Another member of the folic acid family has aided several children suffering with leukemia, Coy Waller, also of the American Cyanamid Company, told the meeting.

The chemical, aminopterin, was used to treat leukemia at Children's Hospital in Boston after it had been successfully tested against the disease in animals.

This chemical checks the overproduction of leukemic cells, but it is difficult to use clinically because of undesirable reactions from the toxic compounds.

Science News Letter, August 21, 1948

ARCH A EOLOGY

Iron Age Men's Fashions

➤ MEN'S FASHIONS in Denmark 1,900 years ago did not run to two-pants suits. They called for two coats—and no pants at all.

Such is the indication of two bundled-up garments found with the nude corpse of a man, well preserved in the acid water of a Danish peat bog some time ago. At first taken for blankets, they proved upon careful unwrapping and cleaning to be two skin jackets.

The better one of the two was made from 22 skins of some short-haired animal, so skillfully sewed with fine skin thread that any present-day furrier might be proud to claim it as his handiwork.

It is about 35 inches long in front but shorter in the back, with a 21-inch neckband. One side has two buttonholes, and the opposite edge is equipped with two leather straps sewed around a pair of small wooden plugs. One of these was found crosswise in its buttonhole.

The second garment is in much poorer condition. It is about the same size as the other, but of "pullover" pattern. The material is sheepskin.

By a series of pollen tests, Dr. Alfred Andersen, leading Danish geologist, fixed the date of the find as of the Iron Age, about the beginning of the Christian era.

An ancient carving in the castle built by the Romans at Mainz, Germany, furnishes corroboration of this two-coats, no-pants fashion of that date. It shows chained Teutonic war prisoners wearing nothing but these short jackets.

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ARCHAEOLOGY

Indian Bison Slaughter Site Is Discovered

➤ AN ENORMOUS PILE of bison bones discovered near Heart Butte, N. D., by an archaeological survey party from the Smithsonian Institution in Washington, may be the result of an old Indian method of slaughtering these animals. Archaeologists believe that the Indians, who lived in a rock shelter found near the bone deposit, killed the bison by simply driving a whole herd over a cliff, thus accomplishing in a short time the result of several days' hunting by other methods.

The bison bones and the Indian dwelling site were found by one of the survey parties which are combing the area in an effort to locate evidences of prehistoric Indian activities before they are flooded by dams and reservoirs now under construction. Areas in the states of Nebraska, North and South Dakota, Wyoming, Texas, Oklahoma, Colorado, Washington and Oregon are being covered by the search.

The archaeological rescue work this summer is a cooperative project of the Smithsonian Institution, the National Park Service, the Bureau of Reclamation and the Army Corps of Engineers. Some excavation work is already in progress.

At Medicine Creek, Nebr., an old Indian earth-lodge village has been found which dates back to the days before Columbus. Further excavations are now going on there to discover more about the lives of these early people.

Work in the entire Missouri Basin area is under the direction of Dr. Waldo R. Wedel, while Dr. Philip Drucker has general supervision over the surveys in the Columbia river region in Washington and Oregon. The program as a whole is under the direction of Dr. Frank H. H. Roberts, Jr., associate director of the Smithsonian's Bureau of American Ethnology.

Science News Letter, August 21, 1948

PHARMACOLOGY

Study on Eye Solutions Gains Pharmacist Award

FOR DEVELOPING more satisfactory drug solutions for use in the eye, Harry W. Hind, practicing pharmacist of San Francisco, was awarded the 1948 Ebert Prize by the American Pharmaceutical Association.

Mr. Hind undertook research that aids the pharmacist in preparing drug solutions for use in the eyes. These preparations prove stable over a period of time and nonirritating to the delicate eye tissues. At the same time they have the exact drug action desired by the physician.

The most important drugs used in the eye were classified into five groups. Five "buffer systems" were then recommended for use by pharmacists in compounding prescriptions for these drugs.

Prof. Frank M. Goyan of the University of California College of Pharmacy received honorable mention for his part in the research.

Science News Letter, August 21, 1948

CHEMISTRY

Virus Molecules Line Up To Form a Crystal

See Front Cover

➤ ROW ON ROW, like soldiers on parade, the molecules line up in orderly fashion to form a crystal of tobacco necrosis virus protein. Each little dot is a virus unit, or molecule. Those that are out of order represent virus protein that is not completely crystallized. The photograph, shown on the cover of this week's Science News Letter, taken with the electron microscope using the metal shadowing technic, is among the first photographs ever taken showing molecules. It was taken by Dr. R. W. G. Wyckoff, of the U. S. National Institutes of Health, and shown at the International Congress of Crystallography at Harvard University. Each molecule is a sphere about four ten-thousandths of an inch in diameter. The crystal of the molecules should not be confused with the rodshaped crystals of tobacco mosaic virus protein, another disease of plants.

Science News Letter, August 21, 1948

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