the village disclosed a charred fragment of human bone—the first bone of any kind to be found at the site. This and other unidentifiable bone fragments, found in an extensive ash bed, constitute possible evidence of cremation.

In light of his discoveries and the dates assigned by radioactivity measurements to several specific articles, Ford believes that the Poverty Point culture may represent the earliest southward movement of people of the Hopewell culture.

Artifacts recovered by Ford's group show that the prehistoric inhabitants of the village had begun to make clay pottery as well as utensils of copper and soapstone. They used hematite bolas and fashioned jewelry out of quartz and jasper. Because many of the raw materials used in these artifacts do not occur naturally in Louisiana, their presence is considered to be evidence that the villagers traded with people of other regions.

The use of bird effigies, both in earth mounds and on vessels and ornaments, is not uncommon in "American Neolithic" cultures, Ford said. Bird effigies seem to have had religious significance and to have figured in ceremonies and cures. However, the giant bird represented in the large mound at Poverty Point appears to be flying due north, while the bird of the smaller mound is headed due west. The directions, in each case, are within a single degree of the true direction. The knowledge of astronomy implied, together with the geometric design of the villages, indicates a greater familiarity with the rudiments of science than has been heretofore attributed to aboriginal Americans.

News Briefs

■ The following research projects were reported in the 6 Aug. issue of *Nature*.

The chromosomes of palms have been almost impossible to study because of their habit of clumping. A. K. Sharma and S. K. Sarkar of the University of Calcutta have now found that excellent fixation and spreading of these refractory chromosomes may be obtained by treating the root-tip cells with aesculine, an alkaloid obtained from the horse-chestnut. None of the chemical agents satisfactory with other plants has served to do this.

J. Langridge of the University of Adelaide reports that he has obtained a biochemical mutation in one of the flowering plants, the cruciferous *Arabidopsis thaliana*. By developing a method for growing it in aseptic culture, he obtained after x-ray treatment a mutant type that is unable to synthesize thiamine (vitamin B_1).

A recent study of the polyhedral virus, which causes a blood disease in the cranefly, *Tipula paludosa*, reveals that the multiplication of the virus takes place inside the nuclei of the blood cells. Kenneth M. Smith, of the Virus Research Unit, Cambridge, England, has published electron micrographs which show that the rod-shaped virus particles form in the nucleus, that each becomes surrounded by a vesicle, and that these vesicles collect into an aggregate inside the nuclear membrane. Then the vesicles appear to contract, and eventually a polyhedral crystal of the virus is extruded into the cytoplasm.

B. P. Wiesner and J. Yudkin of the University of London have tested the effects of a variety of antimitotic agents upon the fertility of mice. One of these agents, podophyllin, regularly interrupts pregnancy when administered 3 days or more after the time of mating. No resistance to the drug seems to be built up, and full fertility returns when the drug is no longer administered, at least after 3 interrupted pregnancies had occurred. The drug was not effective when administered immediately after mating. It produced no noticeable side-effects. —B.G.

■ An expedition of the Academy of Natural Sciences of Philadelphia left for Peru on 10 Sept. to make a study of the aquatic life of the Amazon. The two sites to be studied are Iquitos and Tingo Maria. Ruth Patrick, curator of limnology, heads the expedition group, which consists of Matthew H. Hohn, algologist; Selwyn S. Roback, entomologist; Frederick A. Aldrich, invertebrate zoologist; Yvonne Swabey, chemist; John Cairns, Jr., protozoologist; Charles C. G. Chaplin, associate in the academy's fish department; and Josephine deN. Henry, associate in the photography department.

The expedition is supported by the Catherwood Foundation of Bryn Mawr, Pa., of which Cummins Catherwood is president. This foundation sponsored a preliminary visit to the Amazon headwaters in June, when Patrick, Hohn, and H. Radclyffe Roberts, director of the academy, selected the survey sites.

The purpose of the expedition is to determine whether or not there is a greater diversity and a greater abundance of aquatic life in tropical streams than in similar ones in the temperate zone.

Two methods of study will be used. In one a group of scientists will collect the various groups of aquatic life in selected sections of the river; identify their species, and correlate them as to numbers and kinds with findings in similar temperate-zone rivers. The second method will employ the Catherwood diatometer, an instrument containing laboratory slides that is floated in streams to collect diatoms. The structure of the population of diatoms will be compared with populations in similar temperate-zone rivers.

■ The Army is cutting back on its privately contracted bacteriological and chemical warefare research at Camp Detrick, near Frederick, Md. A $2,750,000 annual contract with the Ralph M. Parsons Co. of Los Angeles was terminated in August. The firm is said to have employed 450 persons at Detrick.

■ The Tennessee Valley Authority has announced a 5-year extension of its fertilizer research and testing contracts with agricultural experiment stations in eight states. Included are the seven Tennessee Valley states of Alabama, Georgia, Mississippi, Tennessee, Virginia, North Carolina and Kentucky, and the State of Washington.

■ The Norwegian Meteorological Institute is expanding its radio meteorographic station on Bear Island and establishing a new station at Isfjord in Spitzbergen as part of a plan to improve weather forecasting in the arctic regions. Norway also operates meteorological stations at Jan Mayen and Hopen in the Arctic.

Scientists in the News

E. DAHL-IVERSEN, professor of surgery at the University of Copenhagen, Denmark, will deliver this year's Charles H. Mayo memorial lectures at Northwestern University medical school. On 26 Oct. he will discuss the functions of the endocrine organs during the postoperative period.

Dahl-Iversen, well-known for his surgical work in the field of endocrine glands, is also chief of surgical services of the University Surgical Clinic at Rigshospitalet, Copenhagen. He is to be awarded an honorary fellowship in the American College of Surgeons at its annual clinical congress which meets in Chicago, 31 Oct.–4 Nov.

HENRY H. BABCOCK, former superintendent of the Butler Hospital in Providence, R.I., has been appointed to the staff of the department of hygiene at Harvard University. Butler Hospital, a 111-year-old institution for the mentally ill, was forced to close because of mounting operating deficits.

EDWARD F. HAMMEL of the University of California's Los Alamos Scientific Laboratory has been selected as the recipient of the American Chemical Society's California Section award for