

building wickiups on the riverbanks where he fished, and by wearing clothing made of animal skins. He had invented improved tools and weapons of stone, which no ape ever did or thought of. He had made the most important discovery of all human history, lowbrow though he was: he had learned the use of fire.

All honor to Homo Neanderthalensis! He was no beauty to look at—decidedly not as handsome as his artist cousin of Crô-Magnon who came along later and supplanted him. He had a queer-shaped head, with a queer-shaped brain inside. But such talents as he had, he used in a tough spot, and he had the gumption to found the fortunes of the whole human race, right in the middle of the world's worst depression!

Science News Letter, July 8, 1933

ARCHAEOLOGY

24-Foot Weeping Idol Unearthed in Andes

A WEEPING stone giant 24 feet tall has been discovered at prehistoric ruins in the highlands of the South American Andes. Three big stone tears are carved on the giant's cheeks. Discovery of the enormous statue, pronounced unique in size, is reported by Wendell C. Bennett, anthropologist of the American Museum of Natural History.

While he was digging at the famous ruins of Tiahuanaco, near Lake Titicaca, Mr. Bennett struck stone, and uncovered the statue lying flat on its back. Prehistoric Indians who carved the idol gave it a head band with plumes, cloth trousers in a polka dot design, and a wide, decorated belt. The hands are held before the chest and the left hand holds a cup.

When the great figure stood erect and looked tearfully down on the little humans who made it, it was in the center of a small temple.

Mr. Bennett estimates that the stone weighs 18 tons. Indians of this part of South America had extraordinary skill and ant-like tenacity which enabled them to handle enormous stones and to make them into gates, statues, and monumental walls.

Science News Letter, July 8, 1933

A diamond needle sharpened to one-tenth of one-thousandth of an inch is used by engineers at the University of Michigan to test the smoothness of polished steel.

GENERAL SCIENCE

Economy Axe Falls Heavy On U. S. Bureau of Standards

THE "ECONOMY" axe has fallen hard on the scientific research work of the Government which has been conducted at the National Bureau of Standards. A loss of 380 persons, separated or furloughed for an indefinite period, from a total staff of only 974 is made necessary by new reductions in funds. This means a personnel cut of 39 per cent.

Drastic reductions in important and profitable research programs will be necessitated by this slash in personnel. The complete elimination of other projects appears to be inevitable.

Industry in the United States will be affected by the loss of 80 of the Bureau's personnel in the divisions working on commercial standards, including the divisions of building and housing, simplified practice, and trade standards. Another large group of 35 goes from the division which has been

doing aeronautic research under funds transferred from the aeronautics branch of the Department of Commerce.

Two of the research projects which will have to be completely abandoned are the study of photographic emulsions and the production of levulose sugar from artichokes.

Officials of the Bureau hope that it may be possible to obtain, from the appropriation for public works projects, funds to take care of the tests of materials that the Bureau will be expected to make in connection with the enormous public works program now being begun. In this case it may be possible to restore some of the furloughed employees.

Otherwise the Bureau of Standards will be faced with greatly increased volume of routine work to be handled by only 60 per cent. of their present personnel.

Science News Letter, July 8, 1933

CHEMISTRY

Heavy-Weight Hydrogen Great Scoop for America

"A GREAT scoop for America." The discovery of the heavy-weight hydrogen isotope, twin to the ordinary light kind of this basic element, was characterized in these words by Dr. F. W. Aston, British Nobel prize chemist and one of the leading foreign guests of the Century of Progress meeting of the American Association for the Advancement of Science.

Intensive studies of heavy water made from the double-weight hydrogen are being made in five or six American laboratories. Dr. Aston is meeting chemists and physicists engaged in these researches and discussing results.

Since Dr. Aston was the discoverer of the first isotope of a non-radioactive element, his praise of the discovery and exploration of the heavy isotope of hydrogen is authoritative. In a Science Service interview he also expressed admiration for the production of water

nine-hundredths heavier than ordinary water, which has been achieved at the University of California.

In 66 non-radioactive chemical elements which Dr. Aston, his collaborators at Cambridge and others have investigated, 191 isotopes have been found. This means that where scientists fifteen years ago thought one element "grew" nearly three are now known.

It is still proper to say there are 92 elements, or 93 if it is desired to consider the neutron as an element. But science now knows that there are varieties of each element, called isotopes. In the radioactive elements there are many more isotopes not included in this count.

The discovery of the mass two isotope of hydrogen by a group of scientists of Columbia University and the U. S. Bureau of Standards, praised by Dr. Aston, is the latest and most spectacular isotope discovery.

Science News Letter, July 8, 1933