

PALEONTOLOGY

Find Man-Like Ape

► **DISCOVERY** of a very ancient jawbone of a giant ape in a mountain cave in Kwangsi Province, South China, throws new light on a form of life that lay between ape and man on the evolutionary scale.

A Chinese paleontologist, Dr. Pei Wen-Chung of the Laboratory of Vertebrate Paleontology, Academia Sinica, reports the find in the *American Anthropologist* (Oct.).

The huge jaw bone is between 400,000 and 600,000 years old, Dr. Pei reports. It belongs, he says, to the ancient form of life called variously Gigantopithecus, or giant ape, and Gigantanthropus, or giant man. The creature had been known previously only from a small collection of tremendous teeth originally found in a Chinese chemist's shop where they were sold as "dragon teeth" with supposed magical properties.

The newly found fossil bones were also thought to be dragon bones by the peasant who unearthed them while digging for mineral fertilizer.

But when he filled two baskets with the fossils and carried them to a purchasing station, he discovered that a new law forbids the sale of dragon bones. He was persuaded to send the bones to the government Cultural Bureau in Liuchow. There the jaw was identified as belonging to Gigantanthropus.

Other fossil bones were found with the jaw in the lower part of a six-foot hard deposit on the floor of a cave on a steep 270-

foot mountain cliff. There were bones of deer, boar, tapir, stegodon and rhinoceros, animals known to have lived in China in the Middle Pleistocene Age, some 400,000 to 600,000 years ago.

The jaw, Dr. Pei concludes, is definitely of an ape, not a man. It settles the old scientific controversy of whether to call it "giant ape" or "giant man."

Wear on the teeth show "the animal had a mixed diet of meat and vegetables, quite different from that of modern apes which live on fruit." The animal, he also judges, must have been an old female ape.

However, he reports, "this anthropoid was closer to man than any other ape yet discovered. It is estimated to have had a height of some 12 feet."

No objects that the giant ape could possibly have used as tools were found in the mountain cave. This, combined with the fact that animal bones found there were from either very old or very young animals, indicates the giant ape was a very poor hunter.

It probably died out, Dr. Pei indicates, because its low hunting ability was unable to provide food for its gigantic body.

The giant ape could not have been an ancestor of the much more developed Peking Man who lived about the same time in the less favorable environment of the north of China.

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PROJECT STRATOSCOPE—Shown here before launching the especially designed telescope and camera mechanism are some of the scientists associated with the project, including its director, Dr. Martin Schwarzschild, at the left.

ASTRONOMY

Take Photographs of Sun From 81,000 Feet Up

► **HISTORY-MAKING** photographs of the sun, the first to be taken above most of the earth's atmosphere, have been made.

The Office of Naval Research, which sponsors Project Stratoscope, launched the giant Skyhook balloon Wednesday, Sept. 25. Within an hour and one-half it rose to 81,000 feet above Minneapolis, Minn. The unmanned balloon carried a powerful, especially designed 12-inch telescope, a light-sensitive pointing mechanism, and a motion picture camera. (See SNL, Sept. 7, p. 147.)

The telescope was designed and built by Perkin-Elmer Corporation, Norwalk, Conn. It has a 12-inch aperture f.8 quartz mirror. The Newtonian secondary quartz mirror is mounted on a swinging arm so that it remained in the sun's image only long enough to obtain a photographic exposure.

The mirror rotates once per second, thus "cooling" about 98% of the time. The primary image was transferred from the secondary mirror to the film plane by a relay lens working at a magnification of 25, giving the system an effective focal length of 200 feet.

The relay lens was moved continuously, taking 20 positions every 20 seconds, to compensate for changes in the focal length caused by solar heating.

The parachute bearing the precision camera and high power telescope was recovered when it landed about eight miles west of Athens, Wisc.

Science News Letter, October 5, 1957

PUBLIC HEALTH

Save Drugs in Flu Flight

► **THE NATION'S** doctors have been advised to save antibiotics and sulfa drugs for patients with complications and not use them to treat Asian influenza.

The advice came from the American Medical Association in the form of a report by its Council on Drugs and in an accompanying editorial.

In the report, requested by the A.M.A.'s special committee on influenza, the Council points out that there is a similarity between this year's movement of the disease and that of 1918, which was frequently followed by pneumonia and its complications.

The report includes the following suggestions that "should guide the physician relative to the prophylaxis and treatment of secondary bacterial infection in patients suffering from influenza."

1. Since sulfonamides and antibiotics have no therapeutic effect on the viruses of influenza, their use in the primary treatment of influenza would be contrary to good medical practice.

2. These drugs should not be used in treating persons already suffering from the flu in the hope of preventing bacterial infection. The prime reason for this recommendation is to prevent the development of disease-producing strains of microorganisms that would be resistant to the drugs. And

secondly, to prevent the patient from becoming sensitive to drugs. The possible exceptions to this, the Council says, are pregnant women, debilitated infants and older individuals; patients who are being treated for bacterial infections who develop flu; and patients suffering from chronic, nonallergic respiratory tract disease.

3. All patients ill with influenza in whom it has been demonstrated that secondary bacterial infections have developed should be treated with a sulfa drug or antibiotic.

The A.M.A. editorial adds that actually very little can be done to treat influenza itself. The best treatment, which may help prevent complications, is bedrest, sufficient fluids and agents to reduce fever.

Science News Letter, October 5, 1957

TECHNOLOGY

British Atomic Power Center Planned

See Front Cover

► **GREAT BRITAIN** has announced that work has started on an atomic energy power station with an output of 500,000 kilowatts. A model of the station at Hinkley Point, Somerset, England, is shown on the cover of this week's **SCIENCE NEWS LETTER**.