News of Science

Suprasternal Ossicles

Over the years, the supposed anatomical peculiarities of man among the primates, such as the extensor pollicis brevis and peroneus tertius muscles, the genial tubercles, the styloid process, and the appearance of cervical ribs, have disappeared one by one. For some of these spurious human distinctions have been found in other living primates, sometimes as unusual occurrences, sometimes in moderate frequency. Now another once-supposed human peculiarity, the presence of suprasternal ossicles, has been found to be more widespread in the order Primates than was once thought.

Ossicles located at the upper border of the manubrium at the sides of the interclavicular notch are not normal structures in man, but they are by no means rare. Cobb [J. Anat. 71, 245 (1937)], who regarded such ossicles as rudimentary homologs of the epicoracoids of the primitive vertebrate shoulder girdle, found them in 6.8 percent of 544 adult white Americans and in 2.2 percent of 466 adult American Negroes. He did not find a single ossicle, however, in the great-ape series of 61 gorillas, 38 chimpanzees, and eight orang-utans that he examined. Following Cobb's comprehensive study, the general belief seems to have prevailed that man was the only primate in which such ossicles had been found.

There seems little doubt, however, according to data gathered by Cobb from the literature, that ossa suprasternalia or their definite homologs had already been noted in several other primate genera, namely, a great ape (orangutan), an Old World monkey (Cercocebus), a New World monkey (Alouatta), and the tarsier. In 1944, Schultz [Am. J. Phys. Anthropol. n.s. 2, 1 (1944)] recorded the presence of separate suprasternal ossicles in two (=0.7 percent) of the gibbons that he examined. Recently, the occurrence of similar ossicles has been reported by G. T. Ashley [Nature 176, 608 (24 Sept. 1955)] in one chimpanzee (of 101 studied) and one gorilla (of 110 studied), and by D. V. Davies [Nature 176, 1130 (10 Dec. 1955)] in a lorisine lemur (Perodicticus).

Thus, distinct ossa suprasternalia, or their homologs, have now been found in representatives of all the living suborders of Primates, namely, in Lemuroidea, Tarsioidea, and Pithecoidea. For the last suborder, moreover, their presence has been recorded in all of the major groups—New World monkeys, Old World monkeys, anthropoid apes, and man. The seeming rarity of these ossicles in primates, as with cervical ribs, can probably be attributed to the fact that, being small, they can easily be lost during preparation of a skeleton.—W.L.S., JR.

G.E. Gas Turbine Division

On 9 Feb. the General Electric Company conducted a special tour of its Aircraft Gas Turbine Division in Evendale, Ohio, for industrialists and civil and military authorities. The division, which is headed by J. S. Parker, is valued at \$100 million dollars. The visitors were shown the company's new \$650,000 building, probably the first building in American industry especially designed to house computing equipment. By June, the second of two IBM 704 machines will have been installed. The IBM 704 has an 8192-word "memory"; it can execute 70 percent of its internal operations at the rate of 41,700 per second, and can make about 10,000 arithmetical operations a second while automatically keeping track of the decimal point.

Although more than half of the company's present investment in the division is exclusively in research, development, and test facilities, a \$20 million supersonic test unit is being planned and is expected to be completed in 1958. In announcing the new facility, Parker stated that it would be able to "simulate the same conditions a large jet engine would encounter flying at 2300 miles per hour, or three and a half times the speed of sound at 60,000 feet."

At present the Aircraft Gas Turbine Division develops aircraft propulsion systems, including turbojet engines, rocket motors, new types of gas turbine engines, combinations of these power plants, and other units. The division is also conducting basic research in highenergy fuels, metals, and scores of other subjects pertinent to its business. Some 2000 technical people are engaged in this work. Parker pointed out that the new J79 engine is one of the division's major developments. Since 1948, G.E. has produced 30,000 turbojet engines; many more thousands have been produced by other manufacturers from the company's basic designs.

WHO and Nuclear Energy

The executive board of the World Health Organization has unanimously endorsed a comprehensive program of research and study for protection against the effects of nuclear radiation. Included will be studies under WHO auspices on the effect of radiation on human heredity, the protection of health against radiation, the standardization of radiation units and radiation doses to encourage the adoption of uniform codes of practice, and the improvement of pharmaceutical standards for radioisotopes for medical use.

This action was one of the principal decisions taken by the board in the course of its seventeenth session, which concluded on 2 Feb. at Geneva. The recommendations of the board will be submitted to the next World Health Assembly, which is scheduled to open in Geneva on 8 May.

WHO work in the nuclear field, according to the plan approved by the board, will also include the training of health personnel, the provision of fellowships and training facilities for a study of the problem of radioactive waste disposal, and the collection and distribution of information on the medical problems of nuclear energy and on the medical uses of radioisotopes.

News Briefs

The Atomic Energy Commission has opened a document room where records relating to the licensing program administered by the commission's Division of Civilian Application may be examined. The document room is located in the AEC building at 1717 H St. NW, Washington, D.C. Except for classified material and material for which "business confidential" treatment has been asked, the document room file will contain records of license and access permit applications and issuances, comments from interested persons on proposed regulations, and records of licensing hearings.

• Harold E. Edgerton of Massachusetts Institute of Technology has developed an undersea camera capable of with-