extinct forms, such as the giant *Teratornis*, may indicate some antiquity for the human being, or may indicate comparatively late persistence of birds or mammals now extinct in this region.

5. Measured in terms of years, it is not possible to give a definite estimate of the age of the skeleton from pit ten. It may suffice to state that this person did not live in the period of the low-browed, Neanderthal, Pleistocene man of Europe. It belongs to the distinctly modern stage of evolution. It does not necessarily belong to the present historic period, but can not be considered as having antedated it by many thousands of years. The age of this specimen may perhaps be measured in thousands of years, but probably not in tens of thousands.

6. The study of the remains at pit ten is a problem similar to that presented by the occurrence of an arrowhead found in a comparatively recent asphalt deposit encountered in the University of California excavations of 1912. The arrowhead was found embedded in a deposit somewhat similar to that in pit ten, and the fauna associated with it was in general of Recent aspect.

7. The final summing up of all evidence relative to the antiquity of the Rancho La Brea skeleton will depend on a very detailed and exhaustive study of the typical Pleistocene Rancho La Brea fauna, of the fauna from the later tar deposits like that of pit ten, and of the existing fauna of California. No one of these three factors is, as yet, satisfactorily known. Until they are all known, the last word on this subject can not be written. The significance of this statement may seem larger when reinforced by the remark that the skeletons of a large percentage of our living species have never yet been carefully studied in the way in which this work must be done for use in investigations such as those concerned in this problem.

From whatever point of view this specimen is considered, it is well worth exhaustive scientific investigation.

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UNIVERSITY OF CALIFORNIA,

June 11, 1914

THE 72-INCH REFLECTING TELESCOPE FOR CANADA

SOME eight months ago the Canadian government entered into contracts for the construction of a 72-inch reflecting telescope, with the J. A. Brashear Company for the optical parts and the Warner and Swasey Company for the mounting. This telescope, which will be considerably larger than any in use, will be of the most modern type and will be used principally in the determination of stellar radial velocities. The progressive policy of the Canadian government in the encouragement of scientific research, as evidenced by the order for this magnificent instrument has now been rendered doubly effective by authorizing at a very considerable additional expense, the total outlay being upward of $200,000, its installation in the best astronomical location in the dominion.

Investigations have been in progress for upwards of a year at five places, representative of different climatic conditions in the country. The region around Victoria, B. C., so much excelled all the others, including Ottawa, in the two most important particulars, the "seeing" or steadiness and quality of definition, and the small daily temperature variation, while being at least equal in other qualifications, that it was strongly recommended to the government by the chief astronomer as the site for the telescope. The government of the province of British Columbia, on being approached for help towards the additional cost of location away from Ottawa, generously contributed $10,000 for the purchase of the necessary land and agreed to build a road, which will cost about $20,000, to the chosen site which is at the summit of Saanich Hill, altitude 732 feet, about eight miles north of Victoria.

Immediately on the decision of the dominion government in favor of this site, fifty acres of land were purchased around the summit of the hill, and arrangements were concluded for the construction of the road this fall. This road will be upwards of a mile and a half in length, leading from the main road and the electric railway at the foot of the hill by a 7 per cent. grade to the summit.

Building operations will begin early in 1915 and the dome should be ready for the telescope in the fall of that year. Word has been received that the 72-inch disc for the mirror has been successfully cast and annealed at St. Gobain, and work on its grinding and polishing will shortly be commenced. The design of the mounting, which has many new features, and will undoubtedly be better and more convenient in operation than any hitherto made, is practically completed and construction work on the heavy steel castings required has been begun. It is hoped, therefore, that the telescope will be mounted and ready for operation by the end of next year.

SCIENTIFIC NOTES AND NEWS

A REPLICA of the bust of Louis Pasteur by Dubois has been presented to the American Museum of Natural History for installation in the hall of public health, through the generosity of Dr. Roux, director of the Pasteur Institute in Paris and M. Vallery-Radot, son-in-law of M. Pasteur.

DR. CHARLES W. ELIOT, president emeritus of Harvard University, has been elected a corresponding fellow of the British Academy.

THE Canadian government has appointed Mr. James White to be assistant chairman of the Commission of Conservation, and Dr. C. Gordon Hewitt, dominion entomologist, to be Canadian representative on the permanent committee of the "International Conference for the Global Protection of Nature."

MR. JAMES BARNES, of the Barnes-Kearton expedition, which crossed Central Africa under the auspices of the American Museum, has returned to New York, bringing with him a series of motion-picture films. Mr. Barnes will give an exhibition of these films to the members of the museum in the fall.

THE Royal Institute of Public Health, in pursuance of the terms of a trust which enables it to award annually a gold medal to a public health medical official, at home or abroad, in recognition of conspicuous services rendered to the cause of preventive medicine within the British empire, has conferred the medal for 1914 upon Mr. James Niven, medical officer of health for Manchester.

WE learn from *Nature* that the honorary freedom of Newcastle-on-Tyne was conferred on Hon. Sir C. A. Parsons on July 10 in recognition of his achievements in science, particularly as the inventor of the steam turbine. It had been decided to confer a similar honor on Sir Joseph W. Swan, but he has since died. The symbols of the freedom—a scroll and casket—have, however, been presented to a representative of his family.

SIR JOHN TWEEDY, formerly president of the Royal College of Surgeons of England, has been elected president of the Medical Defence Union, in the room of Dr. Edgar Barnes.

V. I. SAFRO (Cornell, '09), formerly of the U. S. Bureau of Entomology and the Oregon Agricultural College, has been appointed entomologist with the Kentucky Tobacco Product Company, of Louisville, Kentucky.

THE following list of members of the Imperial Transantarctic Expedition is given in *Nature: Weddell Sea Party*—Sir Ernest H. Shackleton, leader of the expedition; Mr. Frank Wild, second in command; Mr. G. Marston, Mr. T. Crean, Captain Orde Lees, Lieutenant F. Dobbs, Lieutenant Courtney Brocklehurst, Mr. J. Wordie, geologist; Mr. R. W. James, physicist and magnetician; Mr. L. H. Hussey, assistant magnetician and meteorologist; Mr. F. Hurley, photographer and kinematographer; Mr. V. Studd, geologist; Lieutenant F. A. Worsley, in navigating command of the *Endurance* on the voyage from London to Buenos Aires and the Weddell Sea, and afterwards to take part in the surveying and exploring of the coast; Mr. Jeffreys, Mr. Hudson and Mr. A. Cheetham. *Ross Sea Party*—Lieutenant Aeneas Mackintosh, leader and meteorologist; Mr. E. Joyce, zoologist; Mr. H. Ninnis; Mr. H. Wild, and Dr. Macklin, surgeon. There only remain two vacancies, and these are to be filled by another doctor and a biologist. The arrangements for the Ross Sea ship *Aurora* are not yet quite