

in the Elmenteita district. According to a dispatch in the *Times* of May 4, Mr. Leakey considers the Elmenteita type to be even more primitive than that discovered at Nakuru in December last. In particular the nose is narrower, some individuals having a nasal index of 44. As a race they were tall, and differ markedly from the existing peoples of Kenya.

THE council of the Institution of Civil Engineers has made the following awards in respect of papers read and discussed at the ordinary meetings during the session 1926-27: Telford Gold Medals to Mr. I. J. Jones (London) and Mr. T. B. Hunter (London); a Watt Gold Medal to Mr. Gerald Curry (London); and a George Stephenson Gold Medal to Mr. A. L. Bell (Malta); Telford Premiums to Mr. A. W. Stonebridge (Bombay), Mr. P. R. Roberts (Barrow-in-Furness), Mr. A. C. Anderson (London), and Mr. George Ellison (London); a Manby Premium to Prof. Douglas Hay (Sheffield); and a Trevithick Premium to Mr. Powys Davies (India).

THE Paris correspondent of the *Times* announces that Baron Edmond de Rothschild, who has already done great service to scientific research in France by creating the Rothschild Foundation, has made another gift of 30,000,000 francs to the foundation for the purpose of endowing an institute for physical and chemical research as applied to biology. The work of the institute is to be conducted by a committee consisting of Profs. Jean Perrin, Job, and André of Paris, and M. Pierre Girard.

APPLICATIONS are invited for the following appointments, on or before the dates mentioned:—A junior assistant hydrographic surveyor under the Port of London Authority—The Staff Manager, Port of London Authority, Trinity Square, E.C.3 (May 18). A lecturer in pharmacology and therapeutics at St.

Bartholomew's Medical College—The Dean of the College, St. Bartholomew's Hospital, E.C.1 (May 20). A junior scientific assistant for Admiralty Research—The Secretary of the Admiralty (C.E. Branch), Whitehall, S.W.1 (May 21). A full-time lecturer in chemistry at the Polytechnic, Regent Street—The Director of Education, The Polytechnic, 309 Regent Street, W.1 (May 23). A full-time teacher of geography at the City of London College—The Secretary, City of London College, White Street, E.C.2 (May 27). An assistant lecturer in physiology in the University of Birmingham—The Secretary of the University (June 1). A professor of zoology at King's College, London—The Academic Registrar, University of London, South Kensington, S.W.7 (June 2). A part-time research organiser under the Research Fund Committee of the Institute of Brewing—The Secretary, The Institute of Brewing, Brewers' Hall, Addle Street, E.C.2 (June 3). A full-time lecturer in electrical engineering at the Borough Polytechnic Institute—The Principal, Borough Polytechnic Institute, Borough Road, S.E.1. An assistant master for electrical engineering at the Rugby Technical School—P. I. Kitchen, 61 Clifton Road, Rugby. A graduate to teach botany at the Erith Technical College—The Principal, Technical College, Erith Road, Belvedere. A full-time mistress for mathematics and science at the Girls' Trade School of the Borough Polytechnic Institute—The Principal, Borough Polytechnic Institute, Borough Road, S.E.1. A part-time mistress for hygiene, physiology, health, and science subjects at the Borough Polytechnic Institute—The Principal, Borough Polytechnic Institute, Borough Road, S.E.1.

ERRATA.—In NATURE of April 30, p. 629, col. 1, line 29, for "Haustein" read "Hanstein," and line 47, for "Sonèges" read "Souèges."

### Our Astronomical Column.

GLOBULAR CLUSTERS AND SPIRAL NEBULÆ.—An article by Mr. A. R. Hinks in the *Nineteenth Century* for May gives a vivid account of the great enlargement of our conception of the size of the visible cosmos that has resulted from the work of Hale, Shapley, and Hubble at the great American observatories. The various stages in the deduction of the absolute magnitudes of the Cepheids are lucidly described; but one point in the proof, the practically perfect transparency of the celestial spaces, seems to need fuller treatment than is given in the article. The shortest proof appears to be the simultaneity of phase in light of different colours, whereas their speeds would be different in an absorbing medium.

Mr. Hinks was the first to detect the asymmetrical arrangement of the globular clusters: they lie in one hemisphere of the sky, with its pole in the galaxy. Further, their number is limited to about ninety, and no increase in optical power seems to add to it, so that they belong to a rather special class of objects, the curious grouping of which is still unexplained and merits further study.

Brief allusion is made in the article to Prof. Hubble's recent paper in the *Astrophysical Journal*, in which he assigns a distance of 140,000,000 light years to the smallest visible spiral nebulae. Representing the distance of  $\alpha$  Centauri as one inch, these objects would be 550 miles away. Some verses by G. M. Minchin appeared in NATURE, April 14, 1898, p. 564. One verse ran:

"For, the rays that reach me here  
May have left your photosphere  
Ere the fight of Waterloo—  
Ere the pterodactyl flew!"

The last line was probably intended as a bold exaggeration, but Hubble's result would make it literally true.

ASTROPHYSICS IN RUSSIA.—The State Astrophysical Institute of Russia is publishing *Trudy* (Memoirs), the first volume of which appeared in 1922, the second in 1923, and two parts of the current third volume in 1925 and 1926, respectively. The contents of the published volumes are very varied, both theoretical papers and those elucidating various practical points of astrophysics being well represented. To the former category belong papers by V. A. Kostizyn on masses of stars and on equilibrium of radiation in stars; those by V. G. Fesenkov on the evolution of the solar system, on cosmic refraction, on the structure of the atmosphere from photometric observations, and others. Some of the practical papers deal with the technique of stellar photography in particular cases; B. V. Numerov describes a new method of determination of orbits and of calculation of ephemerids; E. K. Epik writes on photometric properties of air and of clouds (with an explanation of variations in the brightness of Venus). The latest volume contains a catalogue of equatorial components of velocities of 1470 stars.