News and Views

An Extra-galactic Star Cluster

It is reported by the New York correspondent of The Times that Dr. Harlow Shapley has announced the discovery of a great cluster of stars in the southern constellation Sculptor. The discovery was accidental, the cluster being photographed with the 60-inch reflector at the Harvard Southern Station at Mazelspoort, near Bloemfontein, South Africa, on a very clear night with a highly sensitive plate. If the median absolute magnitude of the stars photographed be assumed to be -1.5, the apparent magnitude being about +18, it follows that the distance of the cluster is about 250,000 light-years. This places it well beyond the limits of our galactic system, the distance being more than double that of the Magellanic Clouds, and adds another to the known systems that are relatively near to our galactic system. The angular diameter of the cluster is greater than 1° and the linear diameter is estimated to be about 6,500 light-years, which indicates a size comparable with the Small Magellanic Cloud. The cluster is oval-shaped, unlike the clusters in our galactic system, which are globular. It is stated that there are about 10,000 stars in the cluster between the brightest stars and the dimmest that have yet been counted. The Magellanic Clouds are rich in stars of very high luminosity. The Sculptor cluster would undoubtedly have been discovered earlier, if it had contained such stars. It is probable that, when further photographs are available, Cepheid variables will be discovered in it and the study of their light variations will enable a more accurate determination of the distance of the cluster to be made.

Bequests for Research in Marine Biology

MR. EDWARD THOMAS BROWNE, a governor of the Marine Biological Association, who died on December 10, 1937, was for many years the leading authority in Great Britain on medusæ and other cœlenterates. Under his will, a number of valuable bequests are made to different bodies for the benefit of scientific research. The residue of his estate, estimated to amount to some £50,000, goes to the Royal Society to form a fund for the promotion of marine expeditions or individual research on marine biology. In addition, £6,725, together with scientific books, instruments and apparatus, are left to the Marine Biological Association for special purposes in connexion with the Plymouth Laboratory, £15,000 to Queen's College, Oxford, for a research fellowship and a scholarship in biology, and £5,000 to University College, London, for a postgraduate research studentship in zoology, in memory of his wife. After graduating at Oxford, Mr. Browne took up the serious study of zoology under the late Prof. W. F. R. Weldon at University College, London, in 1891, and remained at the College as a research worker until 1909. His

summers were spent at different marine laboratories. Port Erin, Plymouth, Millport and at other places suitable for his work, including Valencia, Falmouth and the Scilly Isles. A monograph on the British medusæ is nearly completed, and provision is made in his will for its publication. He examined and reported on the medusæ from many foreign collections, especially from expeditions, including those from the Maldive and Laccadive Archipelago, the Gulf of Manaar, the Indian Ocean, the Suez Canal, the Scottish Antarctic Expedition, the British National Antarctic Expedition, the Falkland Islands, Norway and Spitsbergen. Browne was a very thorough and careful worker, with a complete knowledge of the literature of the groups in which he specialized. He gave great assistance both financially and, as a member of their respective councils, in the administration of the scientific societies in which he was interested, including the Royal Microscopical Society and the Quekett Club.

Soviet Awards for North Polar Expedition

On p. 629 of this issue we print an account of the preliminary scientific results obtained by the Russian men of science who occupied the drifting north polar station. The Riga correspondent of The Times states that the following awards have been made to members of the expedition: M. Ivan Papanin, already a 'Hero of the Soviet Union' and a member of the Order of Lenin, has received the second class of that order and a present of 30,000 roubles, and has been appointed first deputy chief of arctic navigation (of which Prof. Otto Schmidt is chief). MM. Krenkel, Shirshoff and Fedoroff have been decorated with the Order of Lenin, awarded the title of 'Hero of the Soviet Union', and also received 30,000 roubles each. The captains of the Taimyr, Murman and Murmanets, and M. Ostaltseff, who conducted the relief expedition on board the Taimyr, and the airman, M. Vlasoff, have been decorated with the Order of Lenin and received 10,000 roubles each; and 118 others who took part in organizing the expedition to the North Pole and the rescue of the ice-floe party have been awarded various other decorations and sums of money.

Bronze Age Cairns in Glamorganshire

Two cairns of the bronze age, adjoining the village of Coity, near Bridgend, Glamorganshire, excavated by Sir Cyril Fox, director of the National Museum of Wales, and Lady Fox have made notable additions to the records of British archæology. The Simondston Cairn affords evidence of the earliest known use of coal as fuel in the British Isles. In the second, the Pond Cairn, was found a pit containing the remains of vegetation and grains of wheat and barley, believed to be the first food grains of the bronze age