

News and Views.

Calendar of Geographical Exploration.

THE century in which we live, young as it is, has yet been remarkable for its achievements in exploration. Both poles have been reached, much of the previously unconquered Sahara has been explored, surveys have been carried out in the north polar basin, in the antarctic regions, and in north-east Siberia, where a new range of mountains is known, but not yet marked on our maps. Attempts have been made to scale the heights of Everest. Expeditions such as those organised by Sven Hedin, Sir Aurel Stein, and R. Chapman Andrews in Central Asia, and by L. S. B. Leakey in East Africa, have contributed rich stores of geographical, geological, and archæological knowledge of these regions. In spite of the accumulated experience of centuries and the increasing mastery over the elements which modern science is bringing to mankind, explorers still face situations which call for courage and sacrifice. Men like Oates and Amundsen have continued the tradition of heroism, and their names are added to the long list of pioneers who have willingly sacrificed their lives for others.

INEVITABLY, the character of exploration is changing from the extensive to the intensive. Regional survey in its widest sense, including a study of geology, past and present climates, flora and fauna, and human cultures, is rousing interest in the popular, as in the scientific, mind throughout the world. Scientific regional survey is specially developed in modern Russia and has proved of economic importance in the opening up of the apatite district of the Khibinsk tundra and in the discovery of naphtha-bearing beds in the Urals. The revival of interest in geography in the British Isles is evidenced by its recent inclusion as a separate subject of study in British universities. Our calendar for 1932 will record some outstanding events in the history of exploration. Appropriately enough, the first entries (p. 33) include the names of Scott, Shackleton, and Hassanein Bey, whose work, both from the point of view of science and from that of heroism and endurance, shows our century taking its place in the best traditions of exploration.

Geological Exploration of the Andes.

PROF. J. W. GREGORY is leaving England on Jan. 4 with an expedition to investigate some little-known parts of the coastal cordillera of southern Peru and their relations to the Andes and to the recent extension of South America into the Pacific. It is hoped to examine especially the structure of the part of the Peruvian coast that trends from north-west to south-east, and the geology of the desert belt between that coast and the western front of the Andes. A geological section is also to be prepared across the little-known belt between Ica and the Urubamba valley. The earth-movements and volcanic epochs of the Andes appear to have significant correspondence in date with the main stages in the formation of the Great Rift valley that were discovered in its exploration by Prof. Gregory thirty-

nine years ago. The expedition will descend from the Andean plateau down one of the head streams of the Amazon, and may return to England across Brazil. Miss McKinnon Wood will accompany the expedition especially to collect fossils. Mr. A. V. Coverley Price will join the expedition at Lima. The work will be helped during parts of the journey by Mr. M. A. Tarnawiecki and Señor Don Alberto Calderon.

Old London Bridge.

THE Exhibition commemorating the centenary of the demolition of old London Bridge, which was opened on Nov. 5 in Regis House, close to the northern end of London Bridge, is to remain open until Jan. 24. The display has been organised by the Rev. H. J. Fynes-Clinton, rector of St. Magnus the Martyr, to raise funds for the restoration of Wren's tower and spire, and many societies and individuals have sent exhibits to it. The series of engravings, water-colours, and prints of the old bridge at various periods of its existence, with and without the houses upon it, and with the new bridge being erected close to it, are of very great interest to students of the history of London, while the two splendid models by Mr. J. B. Thorp are alone worth the trouble of a journey to the spot. The first of these is a 25-ft. model of the old bridge as it was about thirty years before the Great Fire. At the Southwark end are the water-wheels for corn grinding, while at the City end are the water-wheels erected in 1582 by the Dutchman, Peter Morice, for working the pumps which supplied water from the river to certain parts of the City. Mr. Thorp's other large model shows a London street with the Lord Mayor's show passing along it in 1616. Lectures are given on these models at short intervals. While these exhibits are perhaps of general interest, there are others which will appeal to the historian, the antiquary, and the engineer.

Early Cloth Fulling.

AT a meeting of the Newwomen Society held in Prince Henry's Room, Fleet Street, on Dec. 16, Mr. E. Kilburn Scott read a paper on early cloth fulling and its machinery. Though it has remained for modern science to explain what happens to woollen threads when cloth is treated with moisture, heat, and pressure, the process of fulling, which involves the use of all three, goes back to very early days. There are references to fullers in both the Old and New Testaments, in the city of Pompeii can be seen pictures of the various processes of the fuller's craft and a fullery complete with its basins, cisterns, and compartments, and no one knows when machinery was first introduced which superseded the use of the hands or the feet in fulling. The object of fulling is to fill the interstices of the cloth as woven, to add to its appearance, its strength, and its 'feel', and the coarser the cloth the greater amount of fulling required. Cloth to-day is either treated in fulling stocks, in which are incorporated stamps which are worked somewhat in the same manner as tilt hammers,