of the International Polar Year 1932–33. In order that an idea of the probable number of purchasers may be gained, and that matters may be so arranged that the publication shall be developed into a permanent institution, the Deutsche Seewarte, Hamburg, would be glad to hear in advance from anyone who is likely to place orders for the new charts, and is prepared to submit sample charts and supply any information required. The cost of publication has to be covered by the sale of the charts, and the enterprise therefore depends for its success upon there being a sufficient number of purchasers to keep the price of the individual charts reasonably low.

University and Educational Intelligence

CAMBRIDGE.—Dr. H. R. Hulme, of Gonville and Caius College, has been elected to an Isaac Newton studentship, and W. E. Candler, of Trinity College, and R. H. Stoy, of Gonville and Caius College, have been elected to additional Isaac Newton studentships tenable for one year.

Oxford.—The electors to the Hope professorship of zoology propose shortly to proceed to the election of a successor to Prof. E. B. Poulton, who has resigned as from January 1, 1933. The resignation of Prof. Poulton, who has held the chair for forty years in succession to the first Hope professor, the late J. O. Westwood, is greatly regretted. It is understood, however, that he intends still to carry on in the Hope Department those researches which have had such fruitful results, especially in the field of insect bionomics.

Wales.—It is stated in the annual report of the Council of University College, Swansea, that the capital deficit of the College has now been extinguished. There is urgent need for a new library, and the Council has decided to raise funds for the provision of a permanent building. It is proposed to issue private appeals for this purpose. The College has established a metallurgical research council to conduct investigations into problems which concern the chief industries of the region.

A STUDY of the place of physical education and hygiene in the curricula of teacher-training institutions has been published as Bulletin No. 10 of 1932 of the United States Office of Education. It is increasingly recognised that the effectiveness of teaching is dependent on the physical health of both teacher and taught, and in about half of the States teacher-training institutions are required by law to include physical education in their general curricula. In some of the States all applicants for teaching positions are required by the State boards of education to present credentials in physical education and health education. In West Virginia physical education is given a prominent place in all types of certifi-The report cates granted by training colleges. directs attention to the fact that a successful programme of health education and physical education is not easily organised or measured in terms of clock hours of instruction or semester hours of credit and that nearly all training colleges provide opportunities for additional physical activities other than those prescribed, including 'hikes', week-end excursions and camping expeditions.

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Calendar of Geographical Exploration

Nov. 13, 1876.-Doughty's Wanderings in Arabia

Charles M. Doughty started from Muzeyrib on his two years of wandering in Arabia. His "Arabia Deserta" has been described by D. G. Hogarth as the "Georgic of the Desert"; he characterised surely, sensitively and for all time the immemorial tribal life of the steppe and desert. He wandered as the poorest of the poor among the Bedawin tribes and faithfully and in minutest detail recorded their life and that of the oasis towns. He had been fired with ambition to visit Arabia when wandering in 1875 in the country beyond Jordan. Refusing even to pretend to forswear his faith, he openly travelled as a Christian and, though often persecuted, yet achieved his aim and attained the last station on the pilgrim route to Mecca. His unique journey resulted in contributions to geographical knowledge and to literature; it also gained for him a great reputation with Semitic scholars for the copies and drawings of the Nabathaean and Himyaritic scripts which he obtained.

Nov. 14, 1770.—Sources of the Blue Nile

James Bruce reached the source of the Blue Nile. In June 1768 he arrived at Alexandria, thence he visited Thebes and crossed the desert to Kosseir. He sailed to Jidda and after a stay in Arabia re-crossed the Red Sea, landed at Massawa and finally reached Gondar, the capital of Abyssinia. There his medical skill procured him the support of the Queen Mother, a very useful ally during his troubled stay in Abyssinia. On October 28, 1770, he left Gondar and, from the top of a gently rising hill on which was the church of St. Michael of Geesh, viewed the sources of the Blue Nile. On his return to Gondar political difficulties detained him until December 1771, but then he was allowed to return by Sennar to Nubia. In the Nubian Desert, sand storms and thirst so oppressed the party that the notes and observations of his journeys were discarded, though fortunately Bruce later recovered them. He reached Cairo in January 1773. Bruce was disappointed that the source of the Blue Nile was not considered, as he himself considered it to be, the real source of the Nile. Moreover, the source of the Blue Nile had been previously visited by the Jesuits. Thus the importance of his journey was rather that he re-discovered these regions and in so doing attracted the attention of his generation to African exploration. The five volumes in which he gave his experiences remain a vivid picture of travel in these regions and give much information about the geography, history and social customs of Abyssinia.

Nov. 14, 1805.—Finding a Route Across the Rockies

Capts. M. Lewis and W. Clarke reached the mouth of the Columbia River. They had left the Missouri in May 1804, wintered with the Mandan Indians, resumed the journey up the Missouri, crossed the Rockies and reached the Columbia River, where they wintered. In March 1806 the party divided, Lewis going via the Lolo Pass and thence carrying out certain explorations, while Clarke proceeded to the Yellowstone at its nearest approach to the three forks of the Missouri. They met again on the Missouri and reached St. Louis in September, 1806. The outward journey was calculated at 4134 miles, and Lewis's shorter return journey at 3555 miles from the mouth of the Missouri to the Pacific. They had been