

pressure steam engines. In 1804 the authorities at Philadelphia commissioned him to construct a steam dredging machine which, because it could propel itself on land and in the water, Evans called the *Orukter Amphibolos*. Evans died, a disappointed man, in 1819. Before his death he destroyed a lot of drawings, and with them probably was lost the sketches of his dredger, the details of which to-day are very imperfectly known.

A Vitamin A Concentrate of High Blue Value

IN *Science* of March 16, p. 255, Prof. H. N. Holmes, in association with H. Cassidy, E. Hartzler and R. Manly, reports the preparation of a concentrate of vitamin A having a blue value of 144,000, that is, 14,400 times greater than the blue value of an average good medicinal cod liver oil. The starting material was the non-saponifiable fraction of halibut liver oil. This was chilled in methyl alcohol solution, to freeze out cholesterol, etc., filtered cold under nitrogen, transferred to pentane by addition of water, dried over anhydrous sodium sulphate and then, in pentane solution, cooled to about -70°C . with the aid of carbon dioxide snow mixed with alcohol and again filtered, with careful exclusion of oxygen. The cold pentane solution was next filtered through a Tswett column of very specially prepared carbon and washed completely through with pure pentane. The product obtained was a pale yellow viscous oil; different preparations showed blue values ranging from 105,000 to 144,000. The authors have not yet had time to analyse their concentrate or determine its molecular weight, spectral absorption bands, extinction coefficient or biological potency. Further reports of their work will be awaited with interest.

Recent Acquisitions at the Natural History Museum

AMONGST recent accessions to the Zoological Department of the British Museum (Natural History) is a valuable collection of mammals, including a large series of duikers and some specimens of the giant forest hog, which has been received from Mr. G. Foster, assistant game warden of Uganda. A small collection of important Russian mammals, which has been received in exchange from the Moscow Museum, contains specimens of *Dipus*, *Spalax*, *Citellus*, *Ochotona*, *Alactagulus*, and *Cricetulus*. As a gift from the trustees of the estate of the late Mrs. Mary Joicey, the Department of Entomology has received the most valuable present of butterflies and moths to reach it since the War. The collection comprises more than 300,000 specimens and includes the types of 3,000, descriptions of which were published in the main in the *Bulletin of the Hill Museum*. During his life-time, the late J. J. Joicey probably did more to stimulate the study of butterflies and moths, especially those of Africa, than any other private individual in Great Britain. The Department of Geology has received the skull of a child, about six years old, of the extinct Neanderthal race, discovered by Miss Garrod in 1926 in a cave near the Devil's Tower, Gibraltar.

In the Department of Mineralogy 474 individual masses of meteoric iron with a total weight of $165\frac{1}{2}$ lb.,

from the meteorite craters at Henbury, Central Australia, have been received by exchange from the Kyancutta Museum, South Australia. The larger masses weigh $46\frac{1}{2}$ lb., $25\frac{1}{2}$ lb. and $24\frac{1}{2}$ lb., the majority are small twisted pieces (meteoric shrapnel) torn from the main masses by the force of the explosions that made the craters. This completes a unique display of 1,000 lb. of material collected from the Henbury craters. Large blocks of long-fibre satin-spar (gypsum) from East Bridgford, Nottinghamshire, have been presented by Mrs. A. Coville. This material is exported to the United States for the fashioning of small fancy articles, which are sold at Niagara Falls, the material being stated to come from under the Falls. This export resulted from an inquiry from the United States made to the Museum about twenty years ago. Mr. W. C. Barton has presented to the Department of Botany about 8,500 sheets of flowering plants. The remainder of his herbarium will be handed over shortly. The present instalment includes the genus *Hieracium* and the families Ranunculaceae to Rosaceae with the exception of the genus *Rosa*, which was presented some years ago, and the genus *Rubus*, on which the donor is specialising in collaboration with the Rev. H. J. Riddesdell. The herbarium includes those of H. J. Riddesdell and Mrs. Foord Kelsey; the first, which is large, is particularly rich in Gloucestershire and South Wales, and the second in Berkshire, plants. The first portion of the lichen herbarium of Mr. D. A. Jones has been purchased. This includes nine hundred British specimens and five hundred European. Many of the British specimens are those on which records are based, and the collection supplements the very extensive Museum collections. Among the purchases is a set of 149 flowering plants from Galapagos Islands collected by H. J. F. Schimpff.

British Polar Year Expedition, 1932-33

THE Symons Lecture of the Royal Meteorological Society was given on March 21 by Mr. J. M. Stagg, who spoke on "The British Polar Year Expedition, Fort Rae, Canada, 1932-33". The activities during the International Polar Year 1932-33 really constituted a jubilee repetition on a more extensive and intensive basis of a co-operative scheme of observational work in meteorological and allied sciences so fruitfully carried out by fifteen countries during the First Polar Year. As in that year, 1882-83, part of Britain's share in the new international effort consisted in equipping and maintaining a station at Fort Rae, a trading outpost of the Hudson's Bay Company on the Great Slave Lake, north-west Canada. The programme of work of the party of six, who remained at Rae from July 1932 until September 1933, consisted primarily in obtaining as complete records as possible of the main elements in meteorology, terrestrial magnetism, aurora and atmospheric electricity; and the proximity of Fort Rae to the zone of maximum auroral frequency around the polar cap made the auroral investigations specially important. Methods of parallactic photography were employed to determine the precise position of the aurora in space. The information brought back will be studied