des Longitudes. He was twice married, his second wife, whom he married in 1792, being the daughter of the astronomer Lemonnier. To this union Lagrange owed much of the happiness of his later years. At the age of seventy-seven years, in the spring of 1813, he was attacked by fainting fits. On April 8 he had a last conversation with Lacépède, Monge and Chaptal, and two days later he passed away. At his funeral in the Panthéon, orations were delivered by Lacépède, then Chancellor of the Legion of Honour, and Laplace. His life was written by Delambre. In 1877 his statue was placed in the hall of the Bureau des Longitudes, and between 1866 and 1892 his works, edited by Serret and Darboux, were published in fourteen volumes.

Prof. Wilhelm Schmidt

AT the annual meeting of the Royal Meteorological Society on January 15, the Symons Gold Medal was presented to Prof. Wilhelm Schmidt, director of the Zentralanstalt für Meteorologie und Geodynamik at Vienna. In presenting the Medal, the president, Lieut.-Col. E. Gold, said that Prof. Schmidt has written important papers in many branches of meteorology. In 1925 he published his book "Der Massenaustausch in freier Luft und verwandte Erscheinungen" which dealt comprehensively with the mechanics of the exchange of air, especially the part played by turbulence, and did much to open up a new chapter in meteorology. In recent years he has devoted great attention to the new subject of 'micro-climatology', which deals with the finer details of climatology, and is especially important for agriculture. In 1934 he lectured on this subject before the Royal Meteorological Society, choosing as his title "Observations on Local Climatology in Austrian Mountains". He has also carried out detailed investigations on the distribution of temperature in Alpine lakes. In 1935 Prof. Schmidt succeeded the late Prof. A. Wallen as president of the International Commission for Agricultural Meteorology, a subject which he has done much to foster. Prof. Schmidt was unable to be present to receive the Medal in person, and Herr von Blass, of the Austrian Embassy, attended on his behalf.

U.S. Stratosphere Balloon *Explorer II*

THE *National Geographic Magazine* of January contains a graphic account together with many interesting photographs of the stratosphere flight of November 11, 1935, of *Explorer II* piloted by Capts. A. W. Stevens and O. A. Anderson. The height achieved was 72,395 ft., corresponding to a pressure of 29·5 mm. The duration of the flight was 8 hr. 13 min., commencing at 7.01 a.m. Mountain Standard Time from Stratobowl near Rapid City in South Dakota and finishing at 3.14 p.m. 12 miles south of White Lake. The flight was completely successful in all its objectives, and we are promised in a future issue of the magazine a detailed account of the scientific results obtained. Capt. Stevens makes mention of practically all the instruments that were referred to in the previous account given of the balloon in NATURE of June 22, 1935; but omits any reference to the Wilson expansion chamber. We hope that this omission is purely accidental, because it is felt that so much could be learned of cosmic rays from observation of tracks made at these high altitudes.

REMARKABLY little went wrong with the arrangements; the fliers had the same experience as M. Max Cosyns. They were discomfited by the fact that the balloon refused to turn, which resulted in uncomfortable temperature conditions within the gondola. We are told that the thermometer placed within the envelope and viewed by binoculars during the flight of the balloon functioned properly, and proved most valuable in enabling the travellers to estimate exactly how much ballast to retain in order to prevent too precipitate a descent. The higher the internal temperature of the gas—helium in this case—the more is spilled at the top of the flight and the less will be the buoyancy during the descent. Stevens says that for him the most exciting moment during the flight was when at a height of 65,000 ft. the balloon became fully spherical and the central appendix opened giving a full view within the mighty sphere above them. One other point interesting to readers of NATURE is an account of the reality of the inversion of the temperature gradient. Actual data for the external temperature are not yet available, but the interior of the gondola rose from 21° F. at a medium height to 43° F. at the top of the flight. Very diverse air currents were met. At the start, the travel was to the south-east, in rising near the top a little north of east and on the descent first due south and then due north. Doubtless many volumes will be filled when all the data available have been worked up. A remarkable feature of the event was the diversity and number of individuals and of public bodies mentioned by Capt. Stevens as having taken an active part in this great experiment. The whole was a triumph of co-operation.

Mr. Ellsworth's Antarctic Flight

IT was on November 23 last year that Mr. Lincoln Ellsworth and his pilot, Mr. H. H. Kenyon, left Dundee Island off Graham Land in their attempt to reach the Bay of Whales in the Ross Sea in a trans-antarctic flight of more than two thousand miles. Their last radio message was received eight hours after their departure. In the hope that the fliers had succeeded in reaching their destination, the R.R.S. *Discovery II* was diverted from her work to make her way to the Bay of Whales, where she arrived on January 16 and found the two airmen alive and well at the camp known as Little America, where Admiral Byrd had left petrol, stores and huts two years ago. Mr. Ellsworth's own ship *Wyatt Earp* was also making for the Bay of Whales after visiting Charcot Land and other places according to prearranged orders. It appears that the American aeroplane descended twenty miles short of Little America owing to lack of fuel. The men sledged to safety, for the plane carried a small sledge. Their wireless set failed, and