Gustave Eiffel. Col. Lindbergh stated that it has been decided to offer his machine, *Spirit of St. Louis*, to the Smithsonian Institution to be added to the collection of aeroplanes of historic interest that it possesses.

THE annual report of the Rockefeller Foundation for 1926 has recently been issued. During that year the Foundation expended 9,741,474 dollars on medical research and the prevention of disease in all parts of the world. The activities of the Foundation are reviewed by the president, Dr. George E. Vincent, in this report, which is illustrated with relevant maps, charts, and photographs.

IN connexion with the work of the Colorimetry Section of the U.S. Bureau of Standards and the report of the Colorimetry Committee of the Optical Society of America, Mr. Irwin G. Priest is desirous of compiling a bibliography of papers and books having a direct bearing on colorimetry, spectrophotometry, and colour specifications. It is expected that this bibliography will ultimately be published in the *Journal of the Optical Society*. He will be glad if authors who have contributed to this subject will send him check lists of their papers, giving titles and complete journal references. Reprints will also be of service and will be gratefully received. Mr. Priest's address is Bureau of Standards, Washington, D.C.

MESSRS. Gurney and Jackson will publish shortly "A Popular Handbook of Indian Birds," by H. Whistler, illustrated by many coloured and black-and-white plates and text figures by H. Grönvold.

THE latest catalogue (No. 503) of Messrs. Francis Edwards, Ltd., 83 High Street, Marylebone, W.1, although mainly of a general character, contains sections devoted to geography and travel, botany and gardening, entomology, folklore, and natural history. It should therefore be of interest to readers of NATURE.

APPLICATIONS are invited for the following appointments on or before the dates mentioned:—An assistant lecturer in agricultural chemistry at the East Anglian Institute of Agriculture, Chelmsford—The Clerk of the Essex County Council, Shire Hall, Chelmsford (Jan. 9). A science master for physics and chemistry at the Longton High School—The Director of Education, Town Hall, Hanley, Stoke-on-Trent (Jan. 21). A reader in chemistry at Bedford College for Women—The Academic Registrar, University of London, South Kensington, S.W.7 (Feb. 17). A rubber technologist to take charge of the rubber section of a government laboratory—The Commandant, Experimental Station, Porton, Wilts. A lecturer in biology at the Saffron Walden Training College for Women Teachers—The Principal, Training College for Women Teachers, Saffron Walden.

Our Astronomical Column.

THE SPECTRUM OF THE COMET PONS-WINNECKE.—Two papers on this subject have recently appeared. Dr. G. Shajn (*Mon. Not. Roy. Ast. Soc.*, Supp.) gives diagrams showing the changes in the relative strength of different bands. At the end of May the band at λ388 was the brightest, those at λ405 and λ469 being in order of lessening brightness. The first band remained stationary for a week and then got decidedly fainter; while the other two brightened, that at λ469 being the brightest at the end of June. The continuous spectrum was not visible at the end of May, but gradually grew in strength after this. There was more increase of light visually than photographically, implying a change of colour from blue to yellow.

Lowell Obs. Bull. No. 86 contains a discussion by V. M. Slipher of spectrograms obtained on June 20 and 23. The continuous spectrum was then strong and showed the solar absorption lines, indicating that the nucleus was shining by reflected sunlight. The Swan spectrum was weak; there were strong cyanogen bands at λ3883 and λ4216, but the strongest bands were an unidentified series between λ3993 and λ4075. The spray of light towards the sun was the most emissive region.

This paper, like that of M. Baldet recently noticed in this column, directs attention to the remarkably small size of the stellar nucleus. The estimate at the Lowell Observatory gave a linear diameter of two or three miles, that of M. Baldet being less than a mile.

MEASURES OF DOUBLE STARS.—Prof. G. van Biesbroeck, in addition to his cometary work, undertakes a large amount of double-star observation with the 40-inch refractor at Yerkes Observatory. Vol. 5, part 1, of its *Publications* contains his measures of some 3000 stars, the majority of which are stars the duplicity of which was discovered by Prof. Hussey about the beginning of the century. The old and new measures are compared, and wherever sensible change appears an estimate is made of the hypothetical parallax, both on the assumption of a uniform mass double that of the sun, and also from the Eddington curve connecting mass with absolute magnitude. He also discusses the errors of published orbits and deduces many new ones.

One of the stars is the long-period variable X Ophiuchi, which has an unchanging 8·9 mag. companion at a distance of $\frac{1}{4}''$. Its hypothetical parallax is 0″·007, in good agreement with Adams's spectroscopic value 0″·005 from the unchanging component, the type of which is K0. It is noted that the trigonometrical measures published by van Maanen and Gringrich are probably affected by the apparent shift of the combined star-image due to the change in light. There is a new orbit given for λ Ophiuchi, rejecting the W. Herschel observations, which appear to be affected by some error. The period comes out as 150 years. The same period is suggested for 37 Pegasi, the orbit of which is turned edgewise to us. There are numerous observations of 70 Ophiuchi; Prof. van Biesbroeck thinks that the evidence for an unseen companion is not convincing.

THE SCHWASSMANN-WACHMANN NOVA.—The Harvard storehouse of plates has once again proved of great service in tracing the behaviour of this Nova before its discovery. Miss Cannon publishes the following details in *Harvard Announcement Card*, No. 37. It was invisible (less than mag. 15) in plates of previous years; it first appears on Sept. 11 last, mag. 11·7; it rose to a maximum of 6·0 on Sept. 30; it had fallen to 7·4 on Oct. 16, to 8·4 on Oct. 29, to 9·4 on Nov. 19. Its spectrum was photographed with the 24-inch reflector on Nov. 20; the hydrogen lines were bright, the line at 4640 being five times as bright as Hβ.