

necessity of nationalization of India's power resources, to the usefulness of research institutes on power, plant industry, and to the creation of national councils of industrial and scientific research. His radical views and straightforward criticisms have not rendered him a *persona grata* either with the British officials who constitute the Central Government or with the Congress, but they are gradually finding acceptance with the public.

Mr. T. A. Joyce, O.B.E.

THE approaching retirement, to take effect early in August, is announced of Thomas Athol Joyce, deputy keeper in charge of the Sub-Department of Ethnography of the British Museum (Bloomsbury). Mr. Joyce was educated at Dulwich and Hertford College, Oxford. He was appointed in 1902 to the staff of the British Museum in the Department of British and Medieval Antiquities and Ethnography, of which Mr. (later Sir) Charles Hercules Read was then keeper. Mr. Joyce during the Great War was attached to the War Office on the General Staff (Intelligence), attaining the honorary rank of captain, and being awarded the O.B.E. in 1918. In 1921, he was appointed deputy keeper of his department, and on its re-organization was placed in charge of the Sub-Department of Ethnography in 1932. In his departmental work, he had specialized in the ethnography of the peoples of Africa and the antiquities of America. His three books on the archaeology of South America, Mexico and Central America, appearing between 1912 and 1916, in which the evidence available up to that time was analysed critically, secured his position as an authority among scholars in both the Old World and the New. Consequently Mr. Joyce was inevitably chosen to lead the expeditions sent by the British Museum to British Honduras in 1925 and succeeding years up to 1931, to excavate the ruined Mayan cities of that region. In addition to a large number of contributions to the publications of learned societies and the more serious of the journals devoted to the arts, such as the *Connoisseur*, Mr. Joyce was the author, in collaboration with Mr. E. Torday, of "Les Bushongo" (1910), of a valuable little book on Mayan Art (1927), and of the official guide to the ethnographical collections of the British Museum (1910). He held office as honorary secretary of the Royal Anthropological Institute in 1903-13, for two terms as vice-president, and as president (1931-33), and was president of the Anthropological Section of the British Association in 1934.

Memorial to Dr. W. J. S. Lockyer

ON July 16, at the Norman Lockyer Observatory, Sidmouth, a memorial was unveiled to the late Dr. W. J. S. Lockyer, who was director of the Observatory, in succession to his father, Sir Norman Lockyer, from 1920 until his death in 1936. The unveiling was performed by Sir Francis McClean, a personal friend of Dr. Lockyer, well acquainted with the latter's manifold activities, such as photography and aeronautics in addition to his astronomical work.

Sir Robert Mond took the chair, and a speech was also made by Sir Richard Gregory who, after paying tribute to Dr. Lockyer's memory, spoke about the foundation and present position of the Observatory. The memorial (subscribed for by friends of the late director) consists first of a panel with a portrait of Dr. Lockyer in the centre surrounded by smaller portraits of those friends who have assisted in the administration and organization of the Observatory during his term of office. Beneath this panel is a cabinet containing Sir Norman Lockyer's insignia and other records of his life and work. As the subscriptions were more than sufficient to supply these two articles the balance was put towards the new 'Oxford' recording microphotometer (mentioned in NATURE of July 16, p. 108), which thus forms a part of the memorial, very suitably recognizing Lockyer's astronomical work at the Observatory. Half the cost of the microphotometer is being met by Sir Robert Mond and the other half by subscriptions to the memorial and from Observatory funds. The instrument is now completed and installed, so that the Observatory's equipment for measuring spectra is now brought up to the level of the principal observatories in Great Britain and other countries.

Record Non-Stop Formation Flight

LEAVING Cranwell at 4.15 a.m. on Thursday, July 7, four Vickers Wellesley aircraft, fitted with 'Bristol' Pegasus engines and Rotol constant-speed airscrews, flew non-stop for 32 hours. They arrived at Ismailia, Egypt, next day at 12.10 p.m., having covered a distance of 4,300 miles at an average ground-speed of 135 m.p.h. This achievement, which was part of the development work of the Long-Range Unit of the Royal Air Force, is the longest non-stop formation flight ever accomplished. A flight of this nature is an extreme test of the absolute reliability of the engines. The Pegasus engines employed were the medium-supercharged type, specially developed for economy of fuel consumption. They have to be capable of running continuously on very weak mixtures, which increases the flame temperatures in the cylinders, so that the pistons, valves, plugs, etc., are subjected to abnormally high thermal stresses. The average height during the flight was about 10,000 feet, which sets up a difficult combination of high engine gas temperatures and low air density on one hand, and operation at very low power in a cold atmosphere on the other. It is a tribute to the design, manufacture, and maintenance of these engines that they stood up to the exacting conditions of this flight, giving a continuous performance of more than a thousand horse-power for little more than a thousand pounds weight.

'Round-the-World' Flight in Northern Latitude

Mr. Howard Hughes, with Messrs. Connor and Thurlow, navigators, Stoddart, radio operator, and Lund, engineer, landed at New York on July 14, at 7.37 B.S.T. after having flown a circuit of the earth in the northern hemisphere, well above latitude

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40° N., following a course: New York—Paris—Moscow — Omsk — Yakutsk (Siberia) — Fairbanks (Alaska)—Minneapolis—New York. They covered a distance of 14,874 miles in 3 days 19 hours 17 minutes. Their actual flying time was 71 hours 4 minutes at an average speed of 209 miles an hour. They followed a somewhat similar route to that taken by the late Wiley Post, the American aviator, who established a record of 7 days 18 hours 49 minutes for a flight of 15,250 miles in 1933. Their machine was a Lockheed '14' monoplane, powered by two 875 horse-power Wright 'Cyclone' engines with Hamilton constant speed airscrews. Normally this type is a 14-seater air liner carrying 12 passengers and 2 crew. While this is a meritorious performance, having been completed in only seven stages, it is not a record for long-distance non-stop flight. The longest 'hop' was New York—Paris, a distance of 3,641 miles.

SUCH a performance pays tribute principally to the technical improvements that have added to the reliability of the engines, and the rapid strides that have been made recently in the methods of, and aids to, aerial navigation. It is significant of the development of this side of aviation that even in the less developed parts of Siberia, there were sufficient aerodromes and radio organization to allow of a choice of landing grounds after being given reports upon their condition while flying towards them. The extra carrying capacity consequent upon developments in aerodynamic knowledge plays its part in allowing various aids to flying and navigating to be carried, and also making it possible to have cabin accommodation sufficiently large for the crew to move about and to carry out their duties without undue strain. In one instance, in Siberia, during this flight it is reported that they even had room to carry an extra supply of more than 500 lb. of oil, as it was reported that the particular grade that the engines needed would not be available at the next stop. It is interesting to note that the engines used on this flight are of the same type as those fitted to the Lockheed aircraft recently ordered by the British Government.

'Aryans' in Italy

NATIONALIST doctrine in Italy hitherto has had the appearance of avoiding pronouncement upon theories of race. It has relied rather on fostering the totalitarian spirit upon imperial tradition with a consequent orientation to archæological research, for which the learned world is duly grateful to the personal interest of the Duce. Now, however, it is said to be time that the Italians frankly professed themselves to be "racist". A group of university professors, it is reported (*The Times*, July 15), working under the auspices of the Ministry of Popular Culture, has drawn up a pronouncement, appearing in the *Giornale d'Italia* of July 14, in which is stated what is to be regarded henceforth as the orthodox view of racial doctrine as applied to Italy. This statement has the merit that it recognizes that the idea of race is a purely biological concept, with which

history, language and religion have nothing to do. It claims that the present population of Italy is in its majority Aryan, few elements of the pre-Aryan races remaining, and no immigration of populations capable of influencing the racial physiognomy of the nation having taken place since the Lombardic invasion. The forty-four million of inhabitants of Italy to-day, it is maintained, are for the most part descended from families which have been established there for at least a thousand years. While this may be conceded, but only so far as it goes, the inference that the Italian race—a term which in itself begs the question—can thus be regarded as a pure race is perhaps less readily to be accepted. The corollary that racism in Italy ought to be "essentially Italian with an Aryan-Nordic direction" is a hard saying, only partially intelligible, especially in view of the repudiation of linguistic evidence, in the light of the evident desire to dissociate the Italians from other members of the Mediterranean racial group by emphasizing its purely European characteristics as marking it off from all extra-European races. This view would ignore or deny any trace of kinship between the Mediterranean strain in the Italian and that in the peoples of North Africa, Arabia, and Palestine. This would seem to require a somewhat drastic re-interpretation of the facts.

The Deutsche Orient-Gesellschaft

A NOTICE from the Deutsche Orient-Gesellschaft, of which the following is a translation, has reached its members, including British subjects and honorary members. "To the Members of the German Orient-Society. To ensure the continuance of the German Orient Society, the Executive Committee must, in accordance with Paragraph 8 Section d of the Constitution, give those members who rank as Jews in the sense of the Nuremberg Laws, to understand that they must announce their resignation from the German Orient Society within 14 days." The notice is signed by Dr. F. Schmidt-Ott (vice-president) and Dr. W. Andrae (secretary) of the Society. Though the Society has been compelled by the policy of the Government to take this step of asking Jews to resign, the wording of the announcement is altogether unworthy of a scientific body and is particularly unpardonable when sent to members who are not Germans.

THE Deutsche Orient-Gesellschaft was formed in 1898, mainly under the inspiration of Prof. Friedrich Delitzsch, a Jew in the sense of the Nuremberg laws. The main aims of the Society were to excavate ancient sites and survey ancient monuments in the Near East and Egypt. Three great sites in Iraq have been carefully examined over a long series of years—Babylon, Ashur and Uruk—and many other smaller sites sounded. In Egypt, excellent work was done at el Amarna and on the sepulchral monument of Sahu-Re. Surveys of Ukhaidhir, the ancient synagogues of Palestine and Islamic monuments in India were perhaps the most important contribution to these subjects. Regular "Mitteilungen" kept sub-