group to a receptive site on the antibody may be prevented by an inert substance which gets in the way. The presence of such receptor sites on antibody molecules usually makes no difference to the protein, detectable by ordinary means: the adsorbing sites of a globulin acting as an antibody appear different from those by which it is bound when acting as an antigen. Combination of antigen and antibody is usually followed by a secondary reaction, such as precipitation, agglutination, etc. The principal constituent of antigen-antibody precipitates is protein derived from the antiserum. In the case of sensitised particulate antigens, it appears that the antibody globulin coats the particles, conferring new properties upon the complex which are very similar to those of proteins denatured, for example, by heat.

Dr. Marrack's review describes in great detail the features of the second stage of the antigen-antibody reaction and concludes with a brief discussion of the theories of the production of antibodies, including Ehrlich's side-chain theory, with which, he concludes, the developments of immunology appear to be in agreement.

The First Rhodesian Meteorite

SOUTHERN RHODESIAN GOVERNMENT'S GIFT TO THE BRITISH MUSEUM

IT was announced in the *Times* of May 25 that the first Rhodesian meteorite had been presented to the British Museum by the Government of Southern Rhodesia. The stone, weighing 48 lb. 11 oz. (22 kgm.), has since been received, and it is now on exhibition in the Central Hall of the Natural History Museum at South Kensington. It fell at 12.45 p.m. on March 7, 1934, in the Mangwendi Native Reserve, 40 miles east of Salisbury. A brilliant meteor (fireball) was seen, and three loud detonations followed by a rushing noise were heard, the detonations being heard over a radius of 50 miles. The natives said "the sun came rushing from the sky and buried itself in the earth", and they called the stone "Miminimini" meaning "something to make you gape". In its fall, it broke off the branches of a tree and made a hole 3 ft. across and 18 in. deep in stony ground. The stone itself was broken and fractured by the fall. In addition to the main mass, several small pieces were recovered, and the weight of the whole must have been about 60 lb. But this could have been only a fraction of the original weight when the stone entered the earth's atmosphere at a height of about 100 miles. Travelling with an initial velocity of 20–40 miles a second, the intense heat developed by the resistance of the air melted and dissipated material from the surface, causing a rapid diminution in size of the stone and in its velocity.

Fortunately, the stone was secured soon after its fall by the officers of the Geological Survey of Southern Rhodesia, and in the Survey Laboratories at Salisbury it has been submitted to a detailed and complete chemical and petrographical investigation. It consists mainly of stony matter with small proportions of metallic nickel-iron (3·17 per cent) and iron sulphide (troilite, 4·98 per cent). The stony portion consists of olivine, enstatite and felspar, forming a compacted mass of minute broken fragments with curious rounded grains (chondrules). Such a structure is not met with in terrestrial rocks, and its mode of origin is still an unsolved problem. Various types of meteoric stones and irons are known. The new Rhodesian stone is very similar in structure and composition to those which fell as a shower at Soko-Banja in Serbia on October 13, 1877.

While meteoric irons weighing several tons are occasionally found, meteoric stones are invariably much smaller. A large mass of more friable stony matter entering the earth's atmosphere is broken up by the air resistance and falls as a shower of smaller stones; for example, at Pultusk in Poland on January 30, 1868, there was a shower of about a hundred thousand stones. The largest single stone in the British Museum collection weighs 133½ lb.; it fell at Parnallee in Madras on February 28, 1857. The largest mass of meteoric iron in the collection is one weighing 3½ tons, which was found at Cranbourne near Melbourne in 1854.

The first meteoritic specimen to be deposited in the British Museum was a fragment of the famous Pallas iron from Siberia, which was presented in 1776 by the Imperial Academy of Sciences of St. Petersburg; and fragments of one from Argentina were presented by the Royal Society in 1778. Since then, the collection of meteorites has steadily grown, and it is now the most representative collection in the world for the study of these mysterious extra-terrestrial bodies, about which much has yet to be learnt. The new Rhodesian meteorite is the fifth largest stone in the collection, to which it is a very valuable addition. Thanks are due to the Director of the Geological Survey and to the High Commissioner and the Prime Minister of Southern Rhodesia, on whose recommendation this generous donation of a unique specimen was made.

University and Educational Intelligence

THE following awards by the Institution of Naval Architects have recently been made: 1851 Exhibition Commissioners post graduate scholarship in naval architecture, 1934 (£250 per annum for two years), to Mr. Leonard Redshaw, of the University of Liverpool; Elgar scholarship in naval architecture, 1934 (£130 per annum for four years), at the University of Glasgow, to Mr. W. Ainsworth Jameson, of Messrs. William Denny and Brothers, Dumbarton; Earl of Durham prize to Mr. R. A. J. Truscott, of H.M. Dockyard, Devonport.

GERMAN educational reforms are being watched with close attention in the United States. Evidences of this appear in the pages of recent numbers of *School and Society*. In the issue of May 5 is a criticism by Prof. I. L. Kandel, Teachers' College, Colombia University, entitled: "The New German Nationalism and Education". This article alleges that the Nazi regime has set out deliberately to destroy that new education of republican Germany which was beginning to be a model for the world, and that the cult of hatred and revenge is fostered with unprecedented venom and barbarism. A week later appeared under the heading "Science and Education in Nazi Germany" an account of how the *Zeitschrift für Mathematischen und Naturwissenschaftlichen Unterricht* supports enthusiastically the purposes of the *Fuhrer*. There is a very definite preoccupation with military preparedness on the part of several writers of recent mathematical and physical articles in the *Zeitschrift*, and biologists' contributions have emphasised *Volkerbiologie* and *Rassenkunde* as corner-stones of the new German education.