domestic animals in Uganda, and on more than one occasion nipped an epidemic in the bud, thus earning, if they had known it, the gratitude of the animals themselves."

Of no less interest was his account of "muhinyo," a fever among the Uganda natives, which had been mistaken, by clinical observation, for diverse other fevers. The Sleeping Sickness Commission, by animal experimentation, proved it to be, practically, Malta fever, and further proved that the germs of muhinyo were present in some of the goats from an infected district. The evidence thus appears complete that the fever, like Malta fever, might be transmitted in the goat's milk.

Finally, Sir David Bruce spoke of the discovery that the common sand-fly is capable of transmitting simple continued fever. Here the experiments were made on volunteers in the cause of science. "The study of the habits of the sand-fly is being pursued with energy, and I hope that within a short time simple continued fever will have disappeared as completely from Malta as Malta fever has done." Of the completeness of the disappearance of Malta fever from our army in Malta, since the goat's milk was prohibited, the following figures are proof:—in 1905 there were 643 cases; in 1906, 147; in 1907, 11; in 1908, 5; in 1909, 1; and in 1910, thus far, 0.

We hope that the Research Defence Society will see to it that such a record of the experimental study of diseases shall not be allowed to drop out of the public mind.

METEORIC FIREBALL OF JUNE 1.

ONE of those brilliant meteors which often appear in the twilight of our midsummer skies was seen on Wednesday, June 1, at 9.40 p.m. The atmosphere was fairly clear, and the object formed a fine spectacle to many persons in the southern counties of England. Excellent descriptions of the apparent path it traversed have come in from various places, including Coventry, Bristol, Cheshunt (Herts), and Ealing, Sydenham, and Herne Hill, London.

The meteor was much more brilliant than Jupiter, and as it sailed slowly along it apparently changed its colour from electric blue to gold, and threw off a short trail of reddish sparks. Viewed from the metropolis, the observed flight was a descending one from west to north-west, and the whole trajectory occupied about four seconds.

There is no doubt that the meteor was directed from a radiant near Antares, in Scorpio, which has furnished many June fireballs in past years. Its height was from about 62 to 48 miles, and the path of some 100 miles, traversed at a velocity of about 25 miles per second. First visibly appearing over a point near Chippenham, it passed to north-west, crossing the Severn, and disappearing south of Montgomery, in Wales. Other reports will doubtless come to hand, and enable this result to be tested, but it cannot be far wrong. The fireball supplies further corroboration of the activity of the Scorpoid shower, and of the almost unique brilliancy of its meteors. There was a fireball seen in Scotland by several observers on May 24, at 11h., and this had a height of about 70 to 44 miles over the sea north of Ireland. This object also was directed straight from the radiant in Scorpio.

W. F. DENNING

INTERNATIONAL CONGRESS ON TROPICAL AGRICULTURE AND COLONIAL DEVELOPMENT.

A NOTE on the organisation of this congress was published in *NATURE* of April 7, and it is only necessary to say now that the congress was arranged by the International Association of Colonial Agriculture, with the assistance of the Belgian Society for the Study of Tropical Agriculture. British contributions to the congress were provided for by a British committee, including agricultural and forestry officials throughout the Empire, and of which Prof. Wyndham Dunstan, F.R.S., was president, and Dr. T. A. Henry secretary.

The congress met from May 20 to May 23 in the Palais de Congrès of the Brussels Exhibition. The date of the

first meeting coincided with the funeral of the late King, so that the president, Colonel Thys, merely declared the congress open, and the meeting was adjourned as a mark of respect to the memory of His late Majesty.

The work of the congress was divided into three sections, (1) dealing with agriculture and forestry; (2) with animal industries; and (3) with labour, transport, and trade. Altogether nearly 200 reports and papers were presented to the congress, and of these more than one-third were submitted through the British committee. It is only possible to refer briefly to a few of the more important matters discussed.

In July, 1909, the International Association appointed "General-Reporters" to collect information on various subjects connected with tropical agriculture, and to present reports on them to the congress, and the reading and discussion of these reports occupied much of the time devoted to sectional meetings.

Prof. Dunstan submitted a general report on the practical results of cotton cultivation in various countries, with observations on the scientific and economic causes of its success or failure. He pointed out that the successful development of cotton cultivation in West Africa and other suitable territories in the future will depend on the establishment of a variety of cotton suited to the country and to the requirements of manufacturers, and that this can best be achieved by persistent scientific work carried on by Government. The position of cotton cultivation in the United States, Egypt, India, and other producing countries was then reviewed. Prof. Dunstan also presented special reports from countries in which cotton cultivation is carried on commercially or experimentally, each of these recounting the difficulties met with and the experimental work in progress in the area considered. These reports were contributed by authorities on cotton cultivation in each of the countries dealt with.

A similar inquiry on the rubber plants of tropical countries resulted in the presentation of a number of reports, each of which dealt with the rubber plants, native or introduced, of the country considered, the methods of obtaining rubber therefrom, and, in most cases, the improvements needed in native methods of preparation. Reports from the following countries were submitted:—Belgian Congo (MM. Kindt, Pynaert, and Ghislain), French West Africa (M. Yves Henry), British West Africa (Mr. H. Brown), British East Africa (Mr. A. C. Macdonald), German African colonies (Dr. Warburg), Java and Sumatra (Prof. Berkhout), Mexico (Señor Flores), Brazil (Señor Argolo), &c. Special papers were also contributed by Dr. Heim (Rational study of rubber plants) and Prof. Carmody (New method of preparing Castilleja rubber).

Other inquiries undertaken were the place of botanic gardens in agricultural research in the tropics, and legislation against the spread of insect pests and fungoid diseases; but comparatively little progress was made with these, though special reports in connection with the first-named were submitted by M. Capus for Indo-China, and by Profs. A. Engler and G. Volkens, of Berlin.

Apart from these reports, many papers were submitted on more general subjects. Mr. A. E. Humphries read a useful paper on the wheat requirements of the United Kingdom, in which he outlined the characters which millers in this country seek in imported wheat. Mr. I. B. Pole-Evans described the results of investigations undertaken in the Transvaal with a view to the development of rust-resistant cereals, and Mr. Guthrie, of New South Wales, submitted two papers, one describing chemical investigations in connection with the production of improved wheats and the other giving an account of the work of the late W. J. Farrer, who initiated wheat-breeding work in New South Wales. Only two papers on tobacco were submitted, one by Mr. Odum, of Rhodesia, describing the cultivation of bright pipe tobacco, and the other by Drs. Henry and Auld on the burning quality of tobacco, in which they pointed out that defective burning quality is one of the first difficulties met with in growing tobacco in a new country, and showed, as the result of numerous analyses of tobacco ash, that good burning depends on the nature and quantity of mineral constituents in the leaf, and