

Our Astronomical Column.

AN INTERESTING METEORITE.—Vol. lvii. of the Proceedings of the United States National Museum contains an analysis by Mr. G. P. Merrill of a meteorite that was seen to fall at Cumberland Fells, Kentucky, on April 9, 1919. It is stated that if the object had not been seen to fall, its meteoric character would not have been suspected. It is a "meteoric breccia composed of fragments of two quite dissimilar stones." The lighter-coloured portion contained 55 per cent. silica, 39 per cent. magnesia, 3 per cent. ferrous oxide, with traces of some seventeen other compounds. The darker portion, which more closely resembles other analysed meteors, contains 42 per cent. silica, 9 per cent. ferrous oxide, 28 per cent. magnesia, 12 per cent. iron, etc. "Apparently the admixture of the two kinds of fragments took place prior to the evident compression."

The author conjectures that it is evidence of the destruction of some pre-existing planet, but the suggestion seems more reasonable that it is an earth-born meteor expelled in a mighty eruption in long-past ages. Sir Robert Ball was a strong advocate of the terrestrial origin of meteors, and it appears tenable in cases where the relative velocity is not very high. A lunar origin was suggested by Prof. Sampson; this also is preferable to the postulate of some purely hypothetical planet.

THE UNION OBSERVATORY, JOHANNESBURG.—Circular No. 47 of this observatory contains a search for proper motions by the blink method on two plates taken at Paris in 1887 and 1914. The region is R.A. 18h. 35m., N. decl. $31^{\circ} 10'$. The plates have already been measured at Paris, and the region is included in the Greenwich 1910 Catalogue, so the research was intended as a test of the comparative efficiency of the blink method. The result shows that it is undoubtedly the most rapid way of detecting all the displacements, but, of course, the method is purely differential, and absolute motions can be found only by using meridian observations of the reference stars on the plate. In the present case comparison with the Greenwich catalogue shows that the stellar background is moving $3.8''$ per century towards 113° , so that the blink results are referred to an origin moving in this manner. It is found that each of the three methods of examining the region has revealed some motions not shown by the others, so that they all have their use. Mr. Innes gives the following summary of his results:—Two stars moving more than $20''$ per century, eight between $20''$ and $10''$, seven between $10''$ and $8''$, twenty-seven between $8''$ and $6''$, and forty-nine (probably incomplete) below $6''$.

GALACTIC CONDENSATION.—The results of an examination of stellar density at different galactic latitudes, derived from plates taken at Sydney, are given in Circular No. 47 of the Union Observatory, Johannesburg. The plates are fairly complete down to magnitude 15; there are very few of these faintest stars in the regions remote from the galaxy; the galactic condensation of the fainter stars is greater than that deduced at Groningen. Incidentally, Mr. Innes criticises Prof. Eddington's statement in "Stellar Movements" that the depth of the stellar system is about three times as great towards the galaxy as towards its poles, and also that the stellar density in the galactic regions is greater than in the polar ones. Mr. Innes shows that, granting, as he does, the latter statement, the ratio of depths becomes very much less than three to one; in other words, the stellar system is more spherical than previously stated.

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The British Empire Forestry Conference.

THE Forestry Commission, constituted in November, 1919, has not been long in bringing about what promises to be one of the most important events in the history of forestry in the British Empire. We allude to the British Empire Forestry Conference which, with intervals for visits to certain selected forest areas in England and Scotland, held its sittings in London on July 7-22 under the chairmanship of Lord Lovat. The delegates included representatives from the United Kingdom, Australia, Canada, India, Newfoundland, New Zealand, South Africa, the Sudan, and most of the Crown Colonies. The main objects of the conference were to bring together such information as exists at present regarding the forest resources of the Empire, and to devise means of forming a more accurate estimate of these resources and of developing them to the utmost; to focus attention on the necessity for a more rational forest policy in the various parts of the Empire; to bring to light some of the more salient problems connected with technical forestry; and to consider certain important questions relating to forestry education and research.

No more opportune time could have been selected for such a conference. Of the many forcible lessons taught us by the Great War there are few which require to be taken more to heart than the lesson taught us in regard to the maintenance of our timber supplies. The view once held, that the timber resources of the Empire are inexhaustible, is no longer tenable, for we are already faced with a probable world-shortage of timber which will become more and more acute if steps are not taken to prevent reckless waste and to ensure that production keeps pace with exploitation. In the affairs of our Empire the scientific aspect of forestry has been too long relegated to the background, largely owing to misapprehension as to its true aims. For forestry, no less than agriculture, is an industry based on the productive capacity of the land, with this important difference: that whereas agricultural crops are harvested within a year, forest crops may take a century or more to mature. Hence in forestry, far more than in agriculture, the State must take a direct interest in the growing of the crops concerned, for the success of which continuity of management based on scientific principles is the keynote.

Among the most important proposals approved of by the conference was that relating to the formation of an Imperial Forestry Bureau to be located in London. This Bureau, constituted somewhat on the lines of the Imperial Mineral Resources Bureau, would act as a clearing-house of information on all subjects connected with forestry and forest products. It would undertake to collect, co-ordinate, and disseminate information on forest education, research, policy and administration, and the resources, utilisation, consumption, and requirements of timber and other forest products. In this way the Bureau cannot fail to prove a valuable link in forest matters between the various parts of the Empire.

Among the more important specific questions which it is hoped the Bureau will lose no time in taking up are the standardisation of technical terms used in forestry and the correct identification of timbers in commercial use, with the standardisation of their trade names so far as this is possible.

The question of forest research work was fully considered. The conference held that this work, for various reasons, is primarily the concern of the State. Speaking generally, forest research is divisible into two main branches: (1) that dealing with the grow-