

species, a spirillum from the stomach of the dog.—**Gabriel Bertrand**, M. and **Mme. Rosenblatt**: Increase in the activity of the sucrase of *Aspergillus* in presence of various acids.—**Pierre Gérard**: The amount of potassium and sodium in the different organs of the dog.

## CALCUTTA.

**Asiatic Society of Bengal**, March 6.—**G. R. Kaye**: Mediæval references to "Indian mathematics." This paper gives numerous references to so-called "Indian mathematics," &c., by Western mediæval authors—Arabic and European. Mahommed Vin Musa, Avicenna, Masûdi, "Omar-al-Khayyâm," Leonardo Fibonacci, John of Holywood, Jordanus Saxo, Maximus Planudes, and many others have often been quoted as expositors of Hindu mathematics, and many of them actually themselves designate their arithmetic and the arithmetical notation they use as "Indian." But the "Indian" arithmetic they exhibit has practically nothing in common with the Hindu mathematical works of Aryabhata, Brahmagupta, Bhâskara, &c., and the "Indian" symbols they show are all of Arabic forms. We have, then, to choose between the exotic and the indigenous or orthodox Hindu exposition. The present author prefers to accept the Hindu works as really representative, and rejects the Western evidence where it does not agree with the Hindu evidence.—**W. Kirkpatrick**: Primitive exogamy and the caste system. The *Sirki Wâlds*, or the reed-mat folk, "he that lives under a mat," are an aggregate of tribes of a Gipsy character distributed over the United Provinces. There are numerous branches of this nomadic race. The fact that none of these branches intermarry only points to their being endogamous sections of one original family. Each endogamous section is subdivided up into exogamous septa of occupational, ethnic, eponymous, and totemic origin. All these casteless people are gradually coming under the influence of the caste system. Caste in India, in whatever direction its evolution, is dominated by the *Jus Connubii*. The constant creation of separate connubial groups in modern Hinduism has its origin in the instinct which taught man to seek his bride from another camp, which goes back to marriage by capture, which is exogamy in its most primitive form.

## BOOKS RECEIVED.

A Manual of Structural Botany. By Prof. H. H. Rusby. Pp. viii+248. (London: J. and A. Churchill.) 10s. 6d. net.

Bericht über die Tätigkeit des Königlich Preussischen Meteorologischen Instituts in Jahre 1911. Pp. 190. (Berlin: Behrend and Co.) 6 marks.

Handwörterbuch der Naturwissenschaften. Edited by E. Korschelt and others. Fünfte Lief. Pp. 161-320. Vierte Lief. Pp. 321-480. (Jena: G. Fischer.) Each 2.50 marks.

Handbuch der Morphologie der Wirbellosen Tiere. Edited by A. Lang. Zweiter Band, Erste Lief. (Jena: G. Fischer.)

The Kingdom of Man. By Sir E. Ray Lankester. New edition. Pp. x+114. (London: Watts and Co.) 6d.

A Geological Excursion Handbook for the Bristol District. By Prof. S. H. Reynolds. Pp. 224. (Bristol: J. W. Arrowsmith, Ltd.) 3s. 6d. net.

Wahrscheinlichkeitsrechnung. By O. Meissner. Pp. iv+64. (Leipzig and Berlin: B. G. Teubner.)

The Science of Hygiene. By W. C. C. Pakes. New edition, revised by Dr. A. T. Nankivell. Pp. xi+164. (London: Methuen and Co., Ltd.) 5s. net.

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Elements of Hydrostatics. By G. W. Parker. Pp. viii+150. (London: Longmans and Co.) 2s. 6d.

Der Mythus von der Sintflut. By G. Gerland. Pp. v+124. (Bonn: A. Marcus and E. Weber.) 3 marks.

Junior Heat. By Dr. J. Satterly. Pp. viii+184. (London: W. B. Clive.) 2s.

On the Physiology of the Semicircular Canals and their Relation to Sea-sickness. By Dr. J. Byrne. Pp. ix+569. (New York: J. T. Dougherty; London: H. K. Lewis.) 12s. 6d. net.

Einführung in die höhere Mathematik für Studierende und zum Selbststudium. By Prof. H. von Mangoldt. Zweiter Band. Pp. xi+566. (Leipzig: S. Hirzel.) 14.40 marks.

## DIARY OF SOCIETIES.

THURSDAY, APRIL 11.

MATHEMATICAL SOCIETY, at 5.30.—An Application of the Theory of Integral Equations to the Equation  $\sqrt{u+k^2u}=0$ : H. S. Carslaw.—On Mersenne's Numbers: A. Cunningham.

FRIDAY, APRIL 12.

ROYAL ASTRONOMICAL SOCIETY, at 5.  
MALACOLOGICAL SOCIETY, at 8.—The Genus *Dosinia* and its Subdivisions: A. J. Jukes-Browne, F.R.S.—On the Generic Name to be applied to the *Venus islandica*, Linn.: E. A. Smith.—Note on *Lapparia Parki*: H. Suter.—Characters of Three New Species of Fresh-water Shells from Uruguay; New Species of Limicolaria from British East Africa: H. B. Preston.

INSTITUTION OF CIVIL ENGINEERS, at 8.—Exminster Sewage-disposal Works: H. G. Hoskings.

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