

things are worshipped indiscriminately in each; but Miss Kingsley has shown that in certain schools certain ideas are predominant, and her classification is based on a general survey which can afford to ignore minor inconsistencies. It is interesting to note that, according to Miss Kingsley's observations, the African, to whatever school of fetish he may belong, conceives of a great over-God, who has below him lesser spirits including man. But this fact does not necessarily support Mr. Andrew Lang's recently promulgated theory as to the original purity and elevation of the religious beliefs of primitive races, though Miss Kingsley herself is inclined to identify her own conception of things with that she found current among the peoples she studied. We have merely touched on the principal sections of Miss Kingsley's very interesting work, and have not space to do more than recommend its perusal to all those interested in the religions of the undeveloped races of mankind. The reader will find in it much material of the greatest scientific importance, while its anecdotes and lively style render it one of the most entertaining books of travel and observation that has appeared for many years.

OUR BOOK SHELF.

Catalogue of the Library of the Royal Botanic Gardens, Kew. (London, 1899.)

THE issue of this catalogue fittingly commemorates the development, up to the last year of the nineteenth century, of an adjunct indispensable in the equipment of a centre of botanical research so deservedly famous as the Royal Botanic Gardens at Kew. The many botanists that have enjoyed the access to the library so freely allowed to workers in the Herbarium, and have learned to value the stores of information contained in it, will rejoice to have the catalogue as a guide to render the riches of the library still more accessible than in the past. But not to those alone that can visit Kew Herbarium is it likely to be welcome. Botanists living at a distance that precludes frequent visits to Kew Herbarium will find it most useful for reference as a guide to the literature of botany, and will value it accordingly.

The size of the library may be judged from the fact that a rough calculation shows upwards of 15,000 separate entries of books or papers, besides numerous cross-references. Of course, all sides of botanical research are represented, from the more elementary to the most profound, from the most rigid study of botany as pure science to its practical applications to industries and arts, to folk-lore, and to its manifold links with other fields of study, scientific and literary. Occasionally one meets with a title that at the first glance seems to have little connection with botany, e.g. W. Ridgeway's "The Origin of Metallic Currency and Weight Standards," yet these only serve to show the curious relations of botany to other studies.

The entries are divided into four series, each arranged alphabetically:—(1) General, occupying 683 pages; (2) Travels, 43 pages; (3) Periodicals and Serials, 47 pages; (4) Manuscripts, 15 pages, large octavo.

The catalogue has been prepared by Mr. B. Daydon Jackson, and is marked by the accuracy so characteristic of all his work in botanical bibliography. Despite the peculiar risk of errors in transcribing and printing the titles and necessary details, many of which are in very unfamiliar languages, the freedom from errors is very noteworthy.

An introduction to the volume from the pen of the Director of the Gardens gives a brief account of the

leading facts in the formation of the library, which originated as a public library in 1852, when Miss Bromfield presented to the Gardens the botanical books that had belonged to her deceased brother, Dr. W. A. Bromfield. Sir William Hooker, on his appointment as Director in 1841, had offered to make his large private library and herbarium available for public use if they were suitably accommodated. This was done in a house provided for him as Director until 1852, when they were transferred to the present Herbarium, though still remaining his private property. In 1854 the late George Bentham, F.R.S., very generously gave his large botanical library to the Herbarium, where in subsequent years he long continued those researches by which he so greatly advanced the science of botany. In 1867, after Sir William Hooker's death, the Treasury sanctioned the purchase for the library of those botanical works that had belonged to him and that the library did not possess.

Valuable legacies and gifts have also been received from other sources, and numerous serials are obtained in exchange; and purchases are made with occasional grants from the Bentham Trust. The sum expended from public funds in the formation of the library has been very small in comparison with its value, and has consisted of a small annual subsidy since 1849, supplemented after some years by free binding by the Stationery Office. One important source of constant additions—the gifts of books and separate papers from the authors—is largely the result of the benefits experienced by the botanists that come from far and near to pursue researches at Kew.

The catalogue would become still more valuable to botanists if there could be added a subject-division, even under large sections, of the multitude of titles that it contains. The difficulties of doing so are indeed considerable, but the aid to workers would be very great.

The Larvæ Collector's Guide and Calendar. By J. and W. Davis. Pp. 90. (Dartford: J. and W. Davis.)

THE times of the appearances of the British macrolepidoptera are given in this little book, together with notes on rearing lepidoptera from eggs, larvæ, and pupæ. Young naturalists should find the volume useful in stocking their butterfly cages, and as a guide to the management of insects in the different stages of development.

LETTERS TO THE EDITOR.

[The Editor does not hold himself responsible for opinions expressed by his correspondents. Neither can he undertake to return, or to correspond with the writers of, rejected manuscripts intended for this or any other part of NATURE. No notice is taken of anonymous communications.]

A Lecture Experiment on the Relative Thermal Conductivities of Various Metals.

MOST lecture experiments on the conductivities of metals occupy too much time to be very effective, and in addition are often somewhat uncertain in their action. The following arrangement may be very quickly and simply put together, and by its aid the relative conductivities of a number of metals may be quantitatively determined in an interval of about a minute, the essential parts of the apparatus being capable of projection on a screen.

A piece of brass tube, about 10 cm. in diameter and 20 cm. in length, is closed at one end by means of a brass disc. A number of holes are bored in this disc to receive the extremities of rods of copper, brass, iron, &c., each rod being 2.5 mm. in diameter and about 15 to 20 cm. in length. The rods are soldered in position perpendicular to the disc.

Each rod is provided with a small index, made from a piece of copper wire of about .8 mm. diameter, bent into the form shown in Fig. 1, a small arrow-head of blackened paper or mica being attached by shellac varnish. The rings forming part of each index are wound on a rod *very slightly* larger in diameter than the experimental rods.

To start with, the brass vessel is inverted, an index is slipped