without expense to the central office, since the sales are estimated to fully cover all cost of manufacture. The only matter unprovided for is that of preparing the Record for the printer, and this is already so far provided for that if America can contribute $500.00, the beginning of the work with the year 1896 can be assured.

Your committee, having examined the matter in detail, would, therefore, report that they regard the plan as one worthy the fullest support of the American scientific world. They recommend it as worthy of financial support and would urge all publishers and publishing institutions to send all periodicals and other works (or in the case of books at least the correct title and a summary of contents prepared by the author) promptly to the central bureau. They would finally recommend the appointment of a permanent committee of ten to coöperate with similar committees in other countries in forwarding the movement.

(Signed) SAMUEL H. SCUDDER,
H. P. BOWDITCH,
HENRY F. OSBORN,
E. A. ANDREWS,
J. S. KINGSLEY,
Committee.

Since the above report was drawn up substantial progress has been made. The funds desired from America have been obtained: $250 from the Elizabeth Thompson Fund, $250 from the American Association for the Advancement of Science and $50 from the American Society of Microscopists. Arrangements have been concluded for the publication of a '*Bibliographica Zoölogica*,' as a continuation of the 'Litterateur' of the Zoölogischer Anzeiger, and a '*Bibliographica Anatomica*,' to contain the morphological articles. The price of the Bibliographica Zoölogica will be 15 Marks yearly. It will be published by Engelmann, of Leipzig. The price of the Anatomica has not been settled. Cards containing the titles will be issued at from $2.00 to $3.00 a thousand, according to the number taken. Arrangements are now in progress for the inclusion of physiology in the plan, and steps have already been taken looking to the later incorporation of botanical literature.

CURRENT NOTES ON PHYSIOGRAPHY (XVIII.).

MACKINDER ON ENGLISH GEOGRAPHY.

THE address to the geographical section of the British Association last summer by Mackinder, reader in geography at Oxford, reviews the progress of the science in general, with especial reference to its advance in Germany. The still low position of geographical instruction in England is lamented, in contrast with its promotion on the Continent. There "some of the professors, as Richthofen, of Berlin, and Penck, of Vienna, have worked mainly at geomorphology; others, such as Krümmel, of Kiel, at oceanography; others, again, such as Ratzel, of Leipzig, at anthropography; while Wagner, of Göttingen, has been conspicuous in cartography, and Kirchhoff, of Halle, and Lehman, of Münster, in questions of method." In England, on the other hand, while an historical or classical student listens to a dozen different teachers at Oxford or Cambridge, a single lecturer at each university is charged with all geography. This wide subject has no appreciable position in degree examinations; there are no examinations at all for the post of secondary teacher, nor is there anywhere in the land anything really comparable to the German geographical institutes that form so important a part of the geographical equipment in certain universities.

The recognition of Mackinder's work in his election to preside over the geographical section of the Association is, however, an indication that even Englishmen are beginning to recognize that geographers, both explorers and teachers, need serious and

systematic training. In commenting on the proceedings of the geographical section, *Nature* says (October 3): "The characteristic of the meeting was the exceptionally scientific value of the papers, which dealt less with exploration than with research."

MOUNTAINS AND LOWLANDS OF GREECE.

PHILIPPSON continues his studies of classic ground (Reisen und Forschungen in Nord-Griechenland, Zeitschr. Gesell. f. Erdk., Berlin, xxx, 1895, 135–225; geol. and topogr. maps), telling of his journey along bad roads over half-barren mountain ridges, where the slopes are washed by intermittent torrents which carry gravel down to the valleys and bays. Settlements are chiefly found on the alluvial plains thus formed. Near the mountain foot the plains are stony and barren; further toward the sea the detritus is finer and fertile. This note suggests a reference, even if somewhat belated, to Philippson's work on Peloponnesus (Berlin, Friedländer, 1892, 643 p., geol. and hypsom. maps). The most striking physiographic features of Greece are there summarized; a varied relief of apparently confused changes from short ridges to deep depressions, from steep gorges to basin-like plains. This confusion results from the occurrence of complex zones of faulting in a previously folded mountain structure, producing a very diversified system of divides and water courses. There is no culminating range; no dominating divide, no extended valley trough; but, on the other hand, there is a large number of individual areas, not hermetically separated, but yet sharply divided (453–455). Many of the striking relations between form and history are pointed out. Geological structure, topography and climate are discussed with much care. The extraordinarily irregular coast, along which the sea penetrates far into the land, is due to a general depression of the region. The prevalence of 'potamogenous'—river-formed—coast lines is shown to be dependent on the protected character of the shore, into whose quiet waters the steep torrents wash the waste from the mountains, building the land out into the sea.

W. M. DAVIS.

HARVARD UNIVERSITY.

SCIENTIFIC NOTES AND NEWS.

HARVARD COLLEGE OBSERVATORY.

IT is announced by Prof. E. C. Pickering that for some years the need has been felt at the Harvard College Observatory of some means of making a more prompt announcement of the results of its work. It is proposed, therefore, to issue a series of circulars, as required, to announce any matters of interest, such as discoveries made, the results of recent observations, new plans of work, and gifts or bequests. It is not proposed to give these circulars a wide distribution, but rather to use them as a means of bringing new facts to the attention of the editors of astronomical and other periodicals, and thus secure the immediate publication of such portions as would be of interest to the readers of these periodicals. The distribution will be made without charge to such persons as will be likely to use the results.

THE first of these circulars, issued on October 30th, is on 'A New Star in Carina.' From an examination of the Draper Memorial photographs taken at the Ariquipa Station of the Observatory, Mrs. Fleming has discovered that a new star appeared in the constellation Carina in the spring of 1895. A photograph, B 13027, taken on April 14, 1895, with an exposure of 60 minutes, shows a peculiar spectrum in which the hydrogen lines Hβ, Hγ, Hδ, Hε and Hζ are bright, and the last four of these are accompanied by dark lines of slightly shorter wave-length. A conspicuous dark line also appears about midway between Hγ and Hδ. A comparison of the spectrum of this star