with surrounding circumstances so as to suggest the direction.

While the cases in which Mr. Scott was not critical enough in his work may be distinguished and passed over by the scientist, they may do a great deal of harm in another way -they offer a bad example to amateur observers. And the very excellence of part of Mr. Scott's work may become deleterious by increasing the influence of these bad exam-In reading the interesting nature books which are so numerous nowadays, it is a bitter disappointment to find, in one author after another, statements which are made without a secure foundation, and which therefore throw a shadow of doubt on all the assertions of that It will be truly deplorable if this sort of thing is to be encouraged by a specialist in ornithology in one of our universities. We expect that such a man will do much toward correcting the popular error, and will never contribute to it.

WALLACE CRAIG.

Hull Zoological Laboratory, March 4, 1902.

A GEOGRAPHICAL SOCIETY OF AMERICA.

Professor Russell's plan of a general geographic society (Science, January 31, 1901) is timely and deserves the careful attention of all the friends of geography in America. It is the very thing that is needed to unify the widespread interest which is daily waxing stronger in this country. A multitude of schools ask for a better presentation of geography, and urgent demands are made for teachers in the special fields of physiography and commercial geography. The universities have been slow in providing the training, and earnest teachers, making every effort to widen their margins and to increase their efficiency, have had great difficulty in finding the published material which will keep them in touch with what progress the specialists are making. Even the specialists have been slow to enroll themselves as geographers; their primary allegiance has been with the geologists, economists, botanists and the like. The field of general geography has never had adequate recognition by the very masters who have done most of the constructive work giving the general science body and impulse in this country.

It will mean much therefore if all this great headless body of earnest workers in the common field be given a head and a local habitation and a name. And if then all those persons of superior training and abilities be organized into a society having at heart the welfare of geography in the New World, its status and dignity; a warm interest in the furtherance of exploration, survey and charting of lesser known regions; the making of adequate monographs of restricted areas or topics and the publication of this high class work under conditions calculated to insure scientific and literary value; and if then with a right association of interests consequent wide distribution of published records be assured, we shall indeed have taken a long stride in advance toward a healthy establishment of geography, as a coherent body of interests, on the high plane it occupies in some of the countries abroad.

Such an organization as Professor Russell suggests will make all this growth possible. It is a far-sighted plan, too, to make the association wide enough to include both Americas. For if we include Mexico and the rest of Middle America we could have no good reason for barring the remoter parts of Latin America. There is a growing bond of interest between the various parts of the New World, a bond which every added year will strengthen more and more. It will be a wise plan to help this movement in every way; and here is an opportunity to create a common interest in a great subject in the whole of the western world.

To insure the high quality and standing of the Society, there is no doubt the qualification suggested by Professor Davis (Science, February 21, 1902) is essential. Let us have the first move made with care, and standards set so high that the dignity and authority of the Society will be at once established, and membership an honor and a privilege to be worked for. To this end the suggestion of Mr. J. Stanford Brown (Science, March 14, 1902) is pertinent, that is, let us have two classes of membership, one the active, voting members, who, by the way, may be called 'fellows,' and

the other, the associate, or corresponding members.

The dues may be so assessed as to assure the quality of the publication, and the form of association with local societies may be so arranged that a slight addition to the local dues will make the local member an associate of the general society, and permit him to receive its publications at a reduced rate.

If the monthly magazine be kept at the high standard which we wish to see, it will be possible to have a salaried editor with training such as to assure the success of the magazine, and if the high standard be maintained, it will not seriously interfere with the local journals. There will be an audience for each quality.

As to the title, perhaps it will be permissible to make a different arrangement of the words which are necessary to properly describe the Society—for instance, the Geographical Society of America. But whatever the title, the idea is right, and the time is ripe, and if Professors Russell and Davis will take the lead, we shall yet have a general society in working order in time to welcome the International Congress in 1904.

J. PAUL GOODE.

University of Pennsylvania.

THE WORD 'ECOLOGY.'

To the Editor of Science: It is a good example of the well-known fact that the dictionaries—even the best of them—do not quite keep up with the progress of the language, which Mr. White has found in his search for the word 'ecology' (Science, March 28, p. 511). In its older form—ecology-this word occurs in the 'Century' and 'Standard' and no doubt in the other diction-The word was formally aries referred to. brought to the attention of American botanists in the Madison Botanical Congress, held in Madison, Wis., August 23 and 24, 1893, where the anglicized spelling was recommended and adopted. This action was in accordance with the well-known usage which drops the o in similar words, as in economy (instead of the older economy), ecumenical (ecumenical), edema (adema), etc. The word ecology has been in quite general use in the botanical

world for the past eight years, and in its older form it has been known in certain German biological works for at least a quarter of a century. It appears indeed that Ernst Haeckel first used the word, in his 'Generelle Morphologie,' as long ago as 1866.

CHARLES E. BESSEY.

Lincoln Nebr., March 31, 1902.

It is stated by a correspondent in a recent issue of Science that the word 'ecology' is not in the dictionaries. The word 'ecology' will, however, be found, so spelled in accordance with its etymology. It is only after words become universally known that these diphthongs are dropped, e. g., paleontology, but we still have æsthetics, archæology, etc. I took pains, however, to have 'ecology' put in the Supplement to Webster; with a cross reference to 'ecology.'

TO THE EDITOR OF SCIENCE: In the issue of Science for March 28, you ask for information respecting the word ecology. Under the guise of ecology, it is in quite common use among biologists, and is in fact used by many as a substitute for biology or rather a special phase of it. For example, what is called by many the biology of insects is called by others the ecology or ecology. Œcology and ecological can be found in any recent dictionary; ecology and ecological are the same words with the substitution of e for α in accordance with analogy exemplified by economy, economical, etc., which were formerly spelled economy, The words in their new œconomical, etc. guise will appear in the supplement to the 'Standard Dictionary.' THEO. GILL.

Cosmos Club, March 28, 1902.

To the Editor of Science: In reply to your inquiry in Science of March 28 (page 511) concerning the word ecology, it is to be said that the word occurs in the 'Century Dictionary,' but spelled ecology. It was coined by Haeckel in 1866 (in his 'Generelle Morphologie der Organismen'), but has come into general use only within the past few years. In Germany it is still spelled Ekologie, but in