materially to the evidence that the deposits in the two regions were cotemporaneous, a fact hitherto suggested only by the common occurrence of the genus *Edaphosaurus* (*Naosaurus*).

It has been shown by me[4] that North America was probably isolated from the Old World in Permo-Carboniferous time, at least for such forms as the Amphibia, and the suggestion arises of the great antiquity of the embolomerous type permitting such a distribution, a suggestion borne out by Moodie's find of an embolomerous form, *Spondylerpeton spinatum,* in the Mazon Creek beds of Illinois.

Further work suggested by the facts here stated is in progress. E. C. Case

A SIMPLE METHOD OF INDICATING GEOGRAPHICAL DISTRIBUTION

In a recent number of Science a method of showing geographical distribution is suggested.[1] All who have to work with these problems will agree that political boundaries are unsatisfactory in such work, and also that the system of geographic coordinates (parallels and meridians) is often too exact for the information in hand, and, moreover, does not give a very clear idea of the location to most readers. Although there are obvious disadvantages in the use of rectangular areas such as those suggested, it is probable that their advantages are even greater.

A modification of the boundaries suggested seems desirable from the point of view of uniformity among the sciences. After thorough discussion at several international geographic congresses the government surveys have undertaken the preparation of an international map of the world on a scale of 1 to 1,000,000. The quadrangle adopted for this map seems nearly if not quite as well suited for showing distribution as that suggested recently. If this quadrangle can be adopted there will be a single system of areas for the topographic map of the world and for the purpose of stating distribution, and this has the great advantage of simplicity. There is the further advantage that the statement of the location in the new system will show directly what topographic sheets will give the actual physical environment of the species under discussion.

The quadrangle of the international map is 4 degrees of latitude by 6 degrees of longitude; these quadrangles are designated by a system of letters beginning at the equator and numbers beginning at longitude 180°. The surface of the earth is divided into zones bounded by parallels of latitude, each zone is 4 degrees wide and extends around the earth. Zone *A* extends from the equator to latitude 4°, zone *B* from latitude 4° to latitude 8°, and so on; there are separate sets of zones north and south of the equator, that north of the equator designated by the word "north" and that south of the equator by the word "south." There are also north polar and south polar sheets, each circular and 4 degrees in diameter. The quadrangles of each zone are numbered from longitude 180° eastward around the earth. Thus the two sheets of the international map already published for the United States are *Boston,* North K 19 (latitude 40° to 44° N., longitude 72° to 78° W.) and *San Francisco,* North J 10 (latitude 36° to 40° N., longitude 120° to 126° W.).

The only disadvantage of the international map quadrangle, when compared with the "merospheres" suggested by Adams, is their somewhat smaller size. This is slight when compared with the gain in uniformity secured by the use of the quadrangle already adopted for mapping the world. It is to be hoped that any system of dividing the surface of the earth into quadrangles will in the future be based on the international map.

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Washington, D. C.,
September 22, 1915

NEW JERSEY CETACEA

Apropos of Mr. Fowler's note in the August 13, 1915, issue of Science, I wish to add another New Jersey record for the dolphin, *Delphinus delphis;* early in May of this year I found a dead specimen on the beach at Sea

[4] Publication 207, Carnegie Institution.

[1] Adams, J., "A Simple Method of Indicating Geographical Distribution," Science, N. S., Vol. 42, pp. 366–68, September 17, 1915.