

## THE NAMING OF NEW SPECIES

TO THE EDITOR OF SCIENCE: The volume of *Proceedings* of the United States National Museum for 1908 has just come to hand with its usual wealth of zoological literature, much of which is naturally of a systematic character. As I have looked through the various articles, and have noted the large number of new species described, I have been struck by the very considerable proportion of names given "in honor of" somebody, or derived from a geographical or geological locality. In other words, the percentage of specific names which are in any sense descriptive or suggestive to a fellow-worker in the same group, is very small, and I am therefore moved to call the attention of systematic zoologists (including, of course, the paleontologists) to what seems to me a very unfortunate tendency among us. The naming of an animal "in honor of" some one has much to recommend it from the personal point of view, if we agree not to debate the question whether it *is* an honor to have a parasitic worm, a skunk or some other unlovable creature named in one's honor. But from the scientific point of view, the custom of using personal names for the designation of particular animals has little to commend it, except possibly where the name of some preeminently great master of a field may be perpetuated in connection with the group upon which he worked; something may be said in favor of *darwini* as the name of a cirriped. The use of names derived from localities or geological horizons has more to recommend it, for such names may be, and often are, suggestive and distinctive. But they are very apt to be shown, by further advances of knowledge, to be not only inapplicable, but oftentimes misleading, and they should only be used where there is little chance for blunders. It seems to me a great pity that we can not return to the original idea for a specific name, that it should be in some sense descriptive. Of course it must be admitted that many names of this class are very misleading, but that fact should only make us more careful in the selection of the names we give. Many zoologists do not real-

ize what the situation really is and I therefore wish to give an analysis of the papers in the volume of *Proceedings* before me.

There are 30 articles in which new species are described, 24 of which deal wholly with recent, and 6 with fossil, species. In the thirty articles 223 new names are proposed for species, besides a number of varieties and subspecies which I have left out of the account. Of the 223 names, 130, or 58 per cent., are in some degree descriptive; 47, or 21 per cent., are names of persons; 45, or nearly 21 per cent., are locality names, and 1 is of doubtful significance.

Of course the 130 names are not all equally descriptive, some are very doubtfully so. The 45 locality names include names derived from geological horizons. The 47 names of persons include 40 individuals, one of whom is honored (?) no less than three times. When it is realized that this honor (?) is sometimes actually asked for, directly or indirectly, it may be seen how very dubious it is. Of the forty individuals, I can count but nine whose scientific attainments can fairly be said to warrant their being chosen; others, of course, would differ from me in the count, but I think no one would find twenty.

Among the thirty papers, some are notably free from the evils I am pointing out. Mr. A. H. Clark's papers on Crinoids include 29 names, of which at least 86 per cent. are descriptive (the derivation of *komachi* is beyond me, so I have not called it descriptive) and Mr. William Warren's paper on geometrid moths includes 34 names of which 94 per cent. are descriptive. Deducting these papers, we find that of 160 names, 73, or less than 46 per cent., are descriptive; 43, or 27 per cent., are personal, and 44, or more than 27 per cent., are locality names.

But Professor Nutting's report on Hawaiian Alcyonaria includes 38 names, of which nearly 77 per cent. are descriptive (8 are personal), and if we deduct these names, we find that of the remaining 122 names, 44, or only 36 per cent., are descriptive; 35, or 28½ per cent., are personal, and 43, or 35½ per cent., are locality names.

Examination of the remaining papers reveals the fact that the paleontological writers pay the least attention to descriptive names, for in their six papers, we find that of 59 proposed specific names 5, or less than 10 per cent., are descriptive; 23, or 38 per cent., are personal, and 31, or over 52 per cent., are locality names.

It would be uncharitable, if it were not quite uncalled for, to suggest either of the two most obvious reasons why an author, particularly a young or inexperienced writer, selects personal or locality names for his new species. But I can not avoid the feeling that these reasons occur to our fellow workers in the other fields of zoology, and may have something to do with the feeling, which it is often said they hold, that we systematists are engaged in a lower grade of work than that with which they are occupied.

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THE 6-INCH TRANSIT CIRCLE OF THE U. S. NAVAL  
OBSERVATORY

TO THE EDITOR OF SCIENCE: The following paragraph, which is an essential feature of a paper read by me before Section A, American Association for the Advancement of Science, in Baltimore on December 28, 1908, has been omitted from the abstract of that paper printed in SCIENCE for January 22, p. 154:

"It having been found that the instrument had suffered some damage from gradual deterioration during the five years that it had been out of use, the axis tube and circles and various other parts were sent to Warner & Swasey for repairs with a view to put the instrument in condition to do the fundamental work for which it was originally intended. This work is now nearly finished and the axis and some other parts of the instrument have been returned to the observatory. The pivots have been reground with great care, and elaborate tests have shown them to be very regular in shape and so nearly equal in size that the difference is inappreciable. It is

hoped that the remaining parts of the instrument will be returned to us in a few days, in which case measures will be taken immediately to mount the instrument and commence the work of investigation and observation."

MILTON UPDEGRAFF

SCIENTIFIC BOOKS

*Resultats du voyage du S. Y. Belgica en 1897, 1898, 1899, sous the commandement de A. de Gerlache de Gomery.* Rapports Scientifiques. *Oceanography*, par HENRYK ARCTOWSKI et HUGH ROBERT MILL, 1908. *Physique du Globe*, mesures pendulaires, par G. LECOINTE, 1907. *Zoologie: Turbellarien*, von LUDWIG BÖHMIG, 1908. *Scaphopoden*, von L. PLATE, 1908. *Pennatuliden*, von HECTOR F. E. JUNGENSEN, 1907. *Cirripedia*, by P. P. C. HOEK, 1907. *Geologie: Glaciers*, par HENRYK ARCTOWSKI, 1908.

The reports of the *Belgica* expedition continue to appear, each adding to our knowledge of the Antarctic, its conditions or its fauna. The numbers of which the titles are summarized above are not less interesting than those which preceded them. Space permits but a brief account of their contents.

The soundings and serial temperatures of the sea water taken by the *Belgica* were the first in that region to be observed and corrected by the most modern instruments and methods. Two conclusions are of especial interest. The observations showed that the deeper waters of the Atlantic and Pacific are practically separated by submarine ridges which, extending from the southern end of the American continent to the Antarctic lands, present a barrier to the free circulation of the waters in question. Secondly, it is proved that the surface water of the sea is cooled by the low Antarctic air-temperatures and by floating and melting ice, below which is a warmer stratum which reaches its maximum temperature two or three hundred fathoms below the surface, after which the temperature gradually diminishes until the bottom of the sea is reached. The persistency of the warmer stratum indicates the slowness of changes due to convection, and the existence of currents.