Gazella to the gazelles before it is attempted to be used for the gemsbucks.

Of course the name *Gazella* would remain with the gazelles if Pallas applied it to them before it was applied to the gemsbucks, but if a suggestive passage in an older author makes it "advisable to affix the name" in advance of any formal nomenclatorial application, why need we hesitate longer to restore the classical names from Pliny, Virgil, Theophrastus, Aristotle, Homer, Solomon or Moses?

Such improvements may not appear to lie exactly in the direction of those that the International Commission was expected to supply, but why object to one good thing because we do not get another? It is evident from these proposals for "fixation by fiat" that the results reached by the International Commission through the "Code of Nomenclature" will not command the unqualified approval of the interested public. The underlying reason may be that the Code is not based on consistent principles, but incorporates certain imperfect ideas that happened to be current when the work was undertaken. The general substitution of the method of types for the method of concepts was then only beginning and the fundamental nature of this reform was not appreciated. In particular, there was a failure to see that the custom of determining the application of generic names through elimination was inconsistent with the method of types.[1]

As soon as we admit that a name must relate to a type, and agree to treat this relation as inviolate, there are no problems to be solved by elimination. It is this that renders the method of types so superior to the method of concepts as a means of securing permanence in nomenclature. The application of a generic name is fixed as soon as the type species is determined, and does not depend upon the action of later writers. The historical names remain in their original places instead of being transferred to other groups, as often results from elimination. The attempt to combine two methods that were essentially inconsistent developed so many complications that a court of experts seemed to be necessary, and the Commission was established. But now the "plenary power authority" relieves the Commission from the task of applying its own rules and allows names to be adopted or rejected as may appear "advisable."

Another advantage conferred by the method of types is the right to exclude generic names that were not applied to binomial type species. In our specific nomenclature we confine ourselves to binomial species, and there is the same propriety in refusing to admit generic names that did not have binomial species as types. Many of the well-known names that now figure in lists of *nomina conservanda* have been placed in jeopardy only by ill-considered revivals of obscure, abortive names that would have been left in oblivion if this simple requirement had been observed. With a code drawn in better accord with the method of types, which is now in use by nearly all systematists, there would be less need of "plenary power authority" and "fixation by fiat."

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[1] Cook, O. F., "Terms Relating to Generic Types," *The American Naturalist*, 48: 308, May, 1914.

MUSEUMS OF SOUNDS

IF museums of sights, why not museums of sounds? The curator of that hot bed of new and improved varieties of museum ideas, the Children's Museum, in Brooklyn, New York, reminded me that a large number of the children who visited it were unable to get away from the crowded city during vacation, and stated that she thought a victor-victrola, installed in the museum with samples of the best music would be appreciated by these children and do them good. Some museum authorities might think this quite improper, and not at all dignified; although as a matter of fact some of our leading scientific museums do have study collections of phonograph records of Indian music; but in the way of public exhibitions a children's museum can freely do things which only a brave and radical scien-

tific museum or natural-history museum dare attempt, for a children's museum is for children rather than for nature or art.

Free organ recitals are given twice a week at the Museum of Science and Art in Glasgow, and these recitals have had a direct effect in increasing the sale of good music in competition with poor music. The *Bulletin of the John Herron Art Institute* in Indianapolis announces a musical program for Sunday afternoons in January. There may be other museums of science or art that have undertaken something similar.

There might be other kinds of museums than those in which people get benefit only through their eyes. Most of us have four other senses, hearing, feeling, tasting and smelling. I am not sure that I would as yet advocate a museum of odors, but a museum of sound might be not only interesting, but valuable. It might start with a victor-victrola. The records might include not only samples of the best music of the world by the world's great artists, but samples of the music of various kinds of instruments, of various kinds of mankind, as for instance, of the Negro, the Eskimo and the Chinaman, and of great oratory. On the other hand, there might be records for the city dweller who has never had a chance to hear such things as the lowing kine, the rattle of the rattlesnake, the yelp of the coyote, the songs of birds, rare or otherwise, the hum of a swarm of bees, the roar of the waves, the jingle of the chains of a wagon freight train, and the creak of ox carts. Bird songs are probably of as much interest to museum visitors as bird skins. Such a museum would probably be as attractive to the average citizen as a flower-garden or an art museum is to the European immigrants, who throng our great museums on Sundays and holidays to the noticeable shame of the lack of appreciation of many of the American born, who prefer a different recreation. It would be a great boon to some humble lovers of music to have a chance to hear, free of charge, examples of classical and the best modern music.

HARLAN I. SMITH

SCIENTIFIC BOOKS

The Quaternary Ice Age. By W. B. WRIGHT, member of the Geological Survey of Ireland. Illustrated. London and New York, Macmillan and Company. 1914. Pp. xxiv and 464. Price $5.00.

The volume is opened by brief discussions (46 pp.) of glaciers and ice sheets and the glacial drift. Then follow in succession the glacial and associated features of the British Isles (56 pp.), the glaciation of the Alps (31 pp.), of northern Europe (25 pp.) and of North America (15 pp.), attention being given in each case to centers of ice dispersion and to general characteristics of the drift with more or less attention to relative amounts of weathering and erosion. The lakes of the great basin of the western United States are given a chapter of 23 pages. Then follow discussions of the loess (24 pp.), of the Quaternary Mammals (30 pp.), and of Quaternary Man (42 pp.). Two chapters, 33 pages, deal with theories of the Ice Age, and the insufficiency of any and all is declared. Four chapters, 101 pages, are devoted to the late Quaternary oscillations of level (interpreted in the light of the isostatic theory) in Fenno-Scania, in the British Isles, and in North America. Following this and concluding the work are brief remarks on post-Glacial changes of climate in northwest Europe, on attempts at correlation of glacial drifts in the several fields, on the cause of loess deposition, on coincidence of present and preglacial sea level, and on low sea level during the Glacial Period with its effect on the Mediterranean and Straits of Gibraltar. The press work is good and the photographic illustrations excellent.

The author states in the preface that this volume was written because there is no general work in English to guide the geologist to the glacial literature and give him a grasp of the leading features of the subject. Yet no bibliography of the literature is appended and in only a few cases is full reference made to other writers. The author has seen, as yet, insufficient evidence in his study of the drifts