bran a nitrogenous base, which they call *oryzanine,* which proves to be a specific for the cure of the disease. Pigeons, chickens, mice and dogs, which would die in a few days or weeks with symptoms of starvation and nerve inflammation if fed on polished rice alone, remained in health when small amounts of oryzanine were added to the diet, as little as 0.3 gram per day being required for an average-sized dog. The bran of other grains and most vegetables were found to contain oryzanine, or at least a substance with similar therapeutic action, while milk, eggs, fish and meat showed little or none, although the alcoholic extract of fresh meat had some beneficial effects on dogs. The authors state that the experience of the Japanese in regulating the dietary of their navy, for instance, confirms in every way the results of these studies, in that beri-beri was stamped out only when foods rich in oryzanine were introduced, and feel justified in concluding that this substance is an absolute necessity for the maintenance of the health, not only of the lower animals, but also of the human race.

Many inferences might be drawn from these results. They show, for instance, the reason why graham bread is more desirable than white, which has been urged by diet reformers for many years, yet has been repeatedly questioned by scientists because no definite reason could be given and because actual experiment showed the white flour product to possess the greater digestibility. They suggest, indeed, that certain nervous troubles, which afflict the civilized races in general and the United States in particular, may have as at least a contributing cause the extensive use of grains from which the bran has been removed. But most interesting of all they show that the apparent inferior power of the Japanese and other eastern races to resist such diseases as beri-beri has nothing whatever to do with their low-protein diet as such, but is caused by their following the dictates of fashion and making use of bran-free, polished rice, as their staple article of diet.

The evident inferiority of the races inhabiting India, which enables a mere handful of British soldiers to keep them under control, is very often referred to as evidence of the inadequacy of the vegetarian—essentially low-protein—dietary made use of by these peoples, as a matter of religious observance. The recent survey by the Rockefeller Sanitary Commission has shown, however, that from 60 to 80 per cent. of the inhabitants of that country are infected with the hookworm. And as the degenerating influence of this parasite on both the physical and intellectual development of its victims is now so well known that further discussion of it is unnecessary, it would appear that we have herein sufficient explanation of the status of these races, without being obliged to assume that their diet is faulty.

With two of the supposedly most typical illustrations of the unfavorable results of a deficiency of protein in the dietary thus explained away, we are surely justified in inquiring, is there any evidence whatever that a low-protein diet ever causes or aids in the production of racial inferiority?

EDGAR T. WHERRY

SOUTH BETHLEHEM, PA.

A RULING THAT IS AGAINST THE RULES

IN the "Opinions rendered by the International Commission on zoological nomenclature"[1] *Opinion 11* (p. 17) reads as follows:

> The "Table des genres avec l'indication de l'espèce qui leur sert de type" in Latreille's (1810) "considerations générales," should be accepted as designation of types of the genera in question (Art. 30).

The matter concerns the meaning of the word *type,* as used by Latreille. Some authors hold that Latreille could not have used it in the modern sense of *genotype,* simply because that particular meaning was entirely unknown at this time. This view surely is supported by common sense.

But admitting that there was cause for con-

[1] Smithsonian Inst. Publ. 1938, July, 1910.

tention, and that the case was not fully covered by the regular international rules on nomenclature, it is clear that it might be settled in one of two ways: either by making a special ruling with regard to it, or by inserting a paragraph in the general set of rules, which would cover it.

Both ways have been used: the first is the ruling given in opinion 11; the other is the second paragraph in Art. 30, II. (*g*), in the "International Rules of Zoological Nomenclature," as published in the Proceedings of the Seventh International Zoological Congress, 1912, p. 46. This says:

> The meaning of the expression "select the type" is to be rigidly construed. Mention of a species as an illustration or example of a genus does not constitute a selection of a type.

Every one familiar with the case knows that this paragraph was added to the rules with the special purpose of disposing of the doubt as to the meaning of Latreille's word *type*. At any rate, I know of no other case where it might be applied.

The two decisions are contrary to each other. The ruling made in opinion 11 accepts Latreille's "types" as genotypes in the modern sense. The paragraph under Art. 30, quoted above, forbids it to accept them as genotypes. For there is not the slightest question that Latreille meant the word *type* in the sense of illustration or example, for the other sense did not exist at that time. The argument (opinion 11, p. 18) that the use of the definite article (l'espècè) indicates that it was meant in the latter sense, is simply preposterous, since by substituting "une espècè" for "l'espècè" the sense of the sentence would not be changed at all.

It is much to be regretted that such an absurd situation has been created. Of course, this might be excused, since the opinion 11 was published two years ahead (in 1910), while the amendment to Art. 30 of the rules did not appear in print till 1912. Yet it might have been expected, for obvious reasons, that the latter should have been known to all members of the International Commission on nomenclature as early as 1907.

Of course the paragraph of the regular rules should prevail. But in order to remove all doubt in the minds of zoologists not familiar with the facts, and in order to avoid that the rulings of the commission might become a farce, one of the next "opinions" to be published should reverse opinion 11. But whether it is expressly repealed or not, opinion 11 can not stand any more, and zoologists not conforming to it should not be criticized for it.

A. E. Ortmann

Carnegie Museum,
Pittsburgh, Pa.

SCIENTIFIC BOOKS

The Omaha Tribe. By Alice C. Fletcher, holder of the Thaw fellowship, Peabody Museum, Harvard University, and Francis La Flesche, a member of the Omaha tribe. Twenty-seventh Annual Report of the Bureau of American Ethnology, 1905–06. Washington, Government Printing Office. 1911. Pp. 672, plates 65, Figs. 132.

The most obvious thing about this monograph is the authors' well-nigh complete neglect of the work of their predecessors. It is their avowed purpose (p. 30) to borrow nothing from other observers and to present "only original material gathered directly from the native people." Apart from any considerations of historical justice, this principle is unjustifiable from the standpoint of the student. A work so ambitious will naturally be regarded by almost every reader as definitive, as embodying everything that is known concerning the ancient life of the Omaha and as taking cognizance of all additional and contradictory testimony. In both hopes he will be disappointed. There are subjects on which other observers have collected information not furnished by Miss Fletcher and Mr. La Flesche. The parent-in-law taboo, for instance, is treated more fully in Say's notes[1] and in J. O. Dorsey's classical work[2] than in the brief

[1] In James's "Account of an Expedition from Pittsburgh to the Rocky Mountains" (London, 1823), I., pp. 232–234.

[2] "Omaha Sociology," Third Ann. Rept. Bur. Eth., pp. 262–263.