can only be made from the tissues themselves.

The recent investigations of Professor Chittenden must be taken into consideration, where it was demonstrated that strength and body equilibrium could be secured by cutting down very materially the nitrogenous part of the ration. Some of these experiments were continued over a long period of time, and showed that strength even increased with the notable diminution of the nitrogenous elements consumed. This is all interesting, but probably not convincing. If we, for the sake of argument, assume that the theory of evolution is a correct one, then we must admit that man to a certain degree is a creature of his environment. Experience shows that when the human animal is allowed to choose his ration with reasonable facility to get what he wants he eats a certain weight of food in which there is a certain proportion of nitrogen, which it may be said for a man of 150 pounds is not far from 18 grams per day. What would be the effect upon the human animal of cutting this nitrogen out by one third or one half in the course of a few generations or of a few thousand or hundreds of thousands of years? It would, perhaps, change in a very marked degree the human animal. That change might be possibly for the better, but certainly it would not represent the animal himself as he is to-day.

I have just read in the newspapers, which are not always the most reliable purveyors of scientific information, that the recruiting officers in the German Empire have found very few young men in a certain locality suitable for military service, and the inference is that the high price of meat has probably excluded it from the ordinary diet of the peasant, so that the children of the peasants are not receiving the amount of meat food, and presumably of nitrogenous material, which they formerly were able to get. This report, of course, is not worthy of being considered from a scientific point of view, but it shows at least an indication of the trend of thought in this matter.

The best nourished nations, as a rule, are foremost in literature, science and arts, and, according to numbers, in physical power.

Those who treat of diet from an economic, as well as scientific point of view, should be very conservative in advocating any change in rations which would lead to a minimum diet naturally chosen or to a reduction of the proportion of nitrogen to the other constitutents therein.

R. L. FARIS,
Secretary

DISCUSSION AND CORRESPONDENCE

A PROTEST ON BEHALF OF THE SYSTEMATIC ZOOLOGIST AND THE BIBLIOGRAPHER

A PAPER recently come to hand on the Nearctic Hemerobiidæ, *Transactions of the American Entomological Society,* XXXII., pp. 21–52, furnishes an opportunity for a criticism that is not intended for the author in particular, but as a protest against a particular kind of carelessness that we meet with too frequently in present zoological literature. On page 40 of that paper is described what appears to be a new genus, and is so indicated by the abbreviation 'n. gen.' placed after the name. No other reference to the use of the name is indicated. Any bibliographer or future worker would be very justifiably led into the error of dating this genus, and of the several others in the paper which are all treated in the same way, from December, 1905, the date of the paper. But on turning to page 46, we are told in a brief appended note that Dr. Needham has in July, 1905, described this genus under another name. It is then explained that the author published the name of this genus, as well as of the others published in the paper under discussion, in connection with the name of a described species, as early as November, 1904, and that therefore Dr. Needham's name is a synonym. I find no fault with this conclusion, but why I ask, and I demand it in the name of the systematist and of the bibliographer, does he not indicate the date from which the genus originates in the early part of his paper? Why does he indicate as a new genus that which from the standpoint of nomenclature he has described a year earlier?

Take another instance. Dr. Ashmead in

his classification of the Ichneumonoidea published a few years ago has described genus after genus designating manuscript species as types and connecting no known species with them. Dr. Ashmead doubtless intended to describe these species. But he has never done so, and we learn with profound regret that his health is such that he never will be able to do so. Now what is going to be the status of these genera? There will be those who, interpreting strictly the laws of priority, will ignore them absolutely, on the ground that they are *nomena nuda*. There will be others who will attempt to assign them to this place or that, but no one will ever know what their author intended, unless some one, with this purpose in view, laboriously works over the collections on which Dr. Ashmead has based his names. Even then no agreement will be reached among future students as to what is to be done with these genera, which number no less than forty-eight, and like those of Forster they will remain for years a source of confusion, error and instability in our nomenclature.

Instances might be multiplied, but these will suffice, for I do not intend them as personal criticisms, rather merely as remonstrances against a too prevalent carelessness on a very important subject. In a day when the difficulties of the application of the laws of nomenclature, and the increasing confusion in zoological nomenclature are being continually brought home to us on every hand, are such practises on the part of those who are certainly by no means amateurs in systematic zoology to be condoned?

J. Chester Bradley
University of California,
April 24, 1907

Science and Poetry—A Protest

The advisability of correlating literature and science in the schools was at one time a much-debated educational question. The writer has heard seriously advocated before a State Science Teachers' Association the advantage of always having the zoology class read 'The Chambered Nautilus' when studying the Mollusca, though assent was withheld by the same speaker from the proposition to have the members of every English literature class dissect a nautilus when studying Holmes's poem. That there is nothing poetical in the bare facts of nature, and that nothing is really interesting unless invested with poetry or fancy, are two ideas that can never, it seems, appear erroneous, except to one who has studied nature at first hand.

Sugar-coating the supposed pills of scientific fact in nature-study literature and teaching has been baneful enough, but when articles in reputable magazines, intended for mature minds, poeticize science to the verge of misrepresentation, it is difficult to know whether to blame the author the more, or regretfully to decide that, after all, the general public is still unable to appreciate natural facts as nature presents them.

A series of three articles in *Harper's Monthly Magazine* for December, 1906, and February and March, 1907, entitled 'The Intelligence of the Flowers,' by Maurice Maeterlinck, have been the inspiration of the protest.

To say that no flower is 'wholly devoid of wisdom'; that, in order to deprive a flower of reason and will, 'we must needs resort to very obscure hypotheses'; that it is in the vegetable world that 'impatience, the revolt against destiny, are the most vehement and stubborn'; and that the pollination of the eel-grass is 'a tragic episode,' may be most excellent poetry, and enhance the literary value of an article; may, indeed, for aught we know, be the necessary conclusions of a poet, but to read such statements in cold print congeals the blood of any botanist.

Still we might shiver in charity if interpretations only, and not facts, were open to question. We are told, for example, that the tip of the young stem of a seedling laurel tree, because the seed germinated on a perpendicular rock-wall, 'instead of rising towards the sky, bent down over the gulf,' notwithstanding its geotropism.

We learn that dodder 'voluntarily abandons its roots,' and that it will avoid other species and, 'go some distance, if necessary, in search of the stem of hemp, hop, lucerne or flax.'

In the second article we learn, for the first