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LETTERS TO THE EDITOR.

*** Correspondents are requested to be as brief as possible. The writer's name is in all cases required as proof of good faith.*

The editor will be glad to publish any queries consonant with the character of the journal.

On request, twenty copies of the number containing his communication will be furnished free to any correspondent.

The Threatened Abandonment of the National Zoölogical Gardens.

A LITTLE over a year ago it was the source of the very greatest gratification to American science that the bill before Congress had passed, and a liberal initial appropriation had been made to establish a national zoölogical garden at the seat of the general government at Washington. Outside of strictly scientific circles, thousands upon thousands of earnest sympathizers all over the country likewise rejoiced in the success of the movement. The great mass of intelligent and cultured people of this nation felt a secret satisfaction when the broad project took on shape and became a living fact. Thoughtful men, wise and far-reaching minds, felt it to be one of the best indices of our national growth, culture, and civilization; for we well know that the nations of the world most distinguished for such characters invariably support such institutions, as they do, indeed, great libraries, galleries of art, and the museums.

To-day it is with deep concern that the intelligent well-wishers — and their name is legion in America — regard the miserable wrangle that is now being enacted in Congress over this entire matter, — an ill-directed debate, that, as it proceeds, daily enhances the danger of defeating the entire measure, undoing all the good that has been done. Nor is this feeling of concern confined to this country; for science the world over deplores the present state of affairs just as much as we do, for there is a broad freemasonry among those who have at heart the progress of learning, the aims of general education, and the advancement of any step that promotes a truer civilization.

But, upon my word, I am almost constrained to believe sometimes that the *personnel* of this government of ours really believes that we have arrived at such a high pitch of civilization in the United States that we are above all such matters: in fact, we are living in an atmosphere far above such questions as the maintenance of public libraries, zoölogical gardens, national universities, or museums.

Viewed from this point, it is a delightful thing to contemplate the marvellous rapidity with which our present-day civilization is advancing. To touch upon a few practical points in the question now under consideration, the writer is moved to say, and I believe I voice the opinions of many other scientists beside myself, that the greatest praise was due to Mr. W. H. Hornaday and Senator Beck for their unflagging energy in carrying through Congress the bill to establish our National Zoölogical Gardens; that the people of the District of Columbia, and of Washington in particular, lent their most hearty aid in the premises, as would any other honest and patriotic American city in the same place, and now it is an outrage to expect her to support any part of what purports to be a purely national enterprise; that the Rock Creek Park is one thing, and the National Zoölogical Garden is another; that, as highly important as an astro-physical laboratory is, and notwithstanding the evident demand for such an institution, it surely has nothing to do with a zoölogical garden, any more than the moon has to do with the beard on the chin of a buffalo; that the time has most assuredly arrived for this country to establish, support, and maintain a complete, extensive, and properly conducted national zoölogical gardens at the seat of her general government, — gardens that can at least rival those of Regent's Park in London, or the superb ones maintained at Amsterdam; and assuredly nothing less, or none at all. My views upon the conduction of such establishments, together with their aims and uses, have already been published in *The Popular Science Monthly* of New York (April, 1889), and those views were very fully republished in *The Evening Star* of Washington, D.C.: so it is quite unnecessary to touch upon that part of the subject again in the present connection.

R. W. SHUFELDT.

Takoma, D.C., Feb. 26.

A Water-Beetle.

LATELY I kept for a few days for inspection that very beautiful insect a water-beetle. The specimen was large and splendidly colored, gold-banded, and displaying brilliant iris hues on its legs. I placed it in a glass jar of water. On the surface of the water some leaves were laid. On one side of the jar, at the bottom, was pasted a square of paper, and to the shelter of this the beetle often retired. It seemed to take the greatest delight in darting, swimming, and diving, rising from the bottom of the jar to the top of the water by long, vigorous strokes of its hind-legs. Then joining its second pair of legs before it, like a swimmer's hands, and stretching the hind pair out nearly together, it would dive to the bottom. It slept hanging head downward under the leaves, with the tip of the body above the water to secure air.

It showed the pleasure of a child in "blowing bubbles." Rising to the surface, it would put the tip of its body above the water, part the elytra, and take in air; then, closing its case, it would dive to the bottom, stand on its head, emit the air-bubble by bubble until it was exhausted, and come up for a new supply. It seemed to need the daily renewal of the water in the jar. When it was hungry, or the water was not fresh enough, it became dull and sulky, and hid behind the paper. After the beetle had fasted twenty-four hours, I laid on the top of the water a wasp, a mosquito, a blue-bottle fly, and a common fly, all dead. The beetle, being at the bottom of the jar, did not seem to see or smell these insects. Rising presently, he came up against the mosquito, seized the body in his jaws, and sucked it dry with one pull. He then found the blue-bottle, carried it down to the shelter of the paper, trussed it neatly, cutting off the wings, legs, and head, and letting them float to the surface. He then held the body in his hands, or short front-feet, pressed to his jaws, and sucked it dry. After this he rose to the surface, found the other fly, and served it in the same fashion. Next he found the wasp, a large one. Carrying this below, as he had the flies, he clipped off the wings and legs, but took the precaution to suck the head and thorax before turning them adrift. He also grasped the body in his hands, pressed the part that had been cut from the thorax to his mouth, and, holding it exactly as if drinking out of a bottle, he drained it dry.

I found that he could eat all the time, except when he was asleep or playing, and his activity was in proportion to the quantity of his food. Cooked meat he would none of. Raw beef he did not greatly like, but raw veal he prized even above wasps and