action of an undying universal law which places before them two alternatives, — progress or death!

But to return to the practical question, whether the national museum is a fit place for the present deposit of unique collections of perishable objects, we may say, that, while the future of the museum seems to be assured, we have no sufficient historical ground for belief, that it will reach stability without serious lapses; and that until it supports a competent salaried chief of its entomological department, with at least one paid assistant, it stands in no position to invite the donation, or to warrant the purchase, of a single valuable collection of such perishable objects as insects. That the time will come when it is properly equipped, we cannot doubt; that it should reach it through the sacrifice of Mr. Riley's, or of any other choice collection, would be a burning shame: this is the immediate risk.

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 voice of serpents.

Prof. C. H. Hitchcock's note in No. 104 brings to mind a fact noted in my laboratory, which may be of interest to herpetologists. In the autumn of 1883 a friend brought to me two magnificent living specimens of the common prairie bull snake, Pituophis Sayi. I gave them the freedom of my lecture-room, and they soon made themselves perfectly at home.

One day, while working with a large induction-coil, I bethought me of my snakes, and caught the larger (his length was about five feet), and passed a powerful charge of electricity through his spinal column. As the circuit was broken and made, I was much surprised to hear a faint though perfectly distinct cry from his snakeship. My notes made at the time speak of this sound as similar to the voice of a young puppy.

During a period of a month or more, this experiment was repeated with one or the other of these serpents, and always with this cry of pain or anger.

H. H. Nicholson.

University of Nebraska, Feb. 18.

The collection of insects in the national museum.

In reference to my remarks on the above-named subject, your explanation, that you meant 'the perpetual care of valuable collections' (p. 25), meets my criticism; and there would be no need to recur to the subject, were it not for Professor Fernald's communication on the same page. He there says, "The national museum has appointed an honorary curator, but it might as well be without one as to have one whose entire time is occupied elsewhere." Professor Fernald speaks here without knowledge, and under misapprehension of the facts. The honorary curatorship of insects is not 'worse than useless,' and the curator's time is not wholly 'occupied elsewhere.'

The organic law (Revised statutes, § 5586; Statutes forty-fifth congress, third session, chap. 182, p. 394) authorizes the director of the national museum to claim any collections made by other departments of the government. The national museum has a substantial fire-proof building, and a stable administration. The department of agriculture has a tinder-box, and the administration shares the uncertain influence of politics. Yet connected with the practical entomological work of the department of agriculture, there is much museum work proper; and since 1881, with the approval of the commissioner of agriculture, I have, as U. S. entomologist, looked upon material accumulated for the latter institution as belonging to the former, and have freely given my own time, and that of my assistants when necessary, to the entomological work devolving on the curator of said national museum. The two positions are naturally linked.

I am familiar with most of the insect-collections of the country, and believe, that, during the past three years, more original material has been collected expressly for the national museum, and more has been mounted for it, than for any other institution, not excepting the Agassiz museum at Cambridge, with its excellent insect department under Dr. Hagen; while, including the collection of the department of agriculture, and my own (which is deposited in the museum, and will be donated whenever such donation is justified), there has been by far more biographic work done for it than for any other museum. Even in the Micro-lepidoptera, it is probably next in extent to that of Professor Fernald. The care of museum material is of a twofold nature. The preservation of valuable type-collections requires vigilance, but little labor. The less labor, in some instances, bestowed upon them, the better; at least, so I thought last summer in witnessing the overhauling and re-labelling of Grote's collection in the British museum. The preservation and classification of original material, on the contrary, requires brains, time, and means.

The future and perpetual care of an entomological museum cannot be absolutely guaranteed without endowment; but appropriation to a government institution, though depending on the annual action of congress, is probably the next best security. Hence I agree with all *Science* has said as to the need of proper and substantial provision for such future care of the insect department of the museum. Washington is fast becoming the chief natural-history centre of the country; and the national museum is making rapid strides toward justifying its name, and offers, on the whole, as secure a repository for collections as any other institution. I speak of the museum as it is to-day, and not as it has been. The misapprehension indicated, whether an outgrowth of the amount of natural-history material that has gone to rack and ruin here in the past in other departments as well as in entomology, or a result of present rivalry, is certainly not justified to-day.

Professor Fernald truly remarks that "many museum officials have very little appreciation of the vast amount of labor, care, skill, and knowledge required" to properly manage a large and varied insect-collection. Things are too often valued by their size, and the pygmy bugs have not outgrown popular