

of Louisiana, of which Arkansas was once a part, always pronounced it *saw*, there would nevertheless be no authority whatever for the curt and abbreviated *sass* which is generally given. The word is an attempt upon the part of the first French missionaries of Marquette's time to phonetically spell in French the name of a tribe of Indians, and no Frenchman would ever pronounce the combination of letters in the manner taught by the New Englanders. The final *s* was and is silent, and the *a* has the nasal *aw* so common in many Frenchmen's speech. As for the old comparativists, who, regardless of the inconsistency of English spelling, always inquire, "if Arkansas is Arkansaw, why is not Kansas, Kansaw," they may be glad to learn that Kansas was Kansaw, and early Anglo-American travellers so pronounced it, and even attempted to spell it phonetically in English, as can be seen in the report of Lieutenant Long's expedition to the Rocky Mountains, 1819-1821, where the word is spelled *Konza* — the nearest combination of English letters that can approach the true French sound.

But Arkansas is not the only French geographic term that has been sacrificed to the attempt of New England lexicographers to create in that region a standard pronunciation of the English. The word *chien*, for instance, which was originally applied to the Indians from their system of police, I believe, and meant literally the 'Dog Indians,' now graces the rivers, counties, cities, and mountains of our maps as Cheyenne, — the most plausible illustration of a Yankee phonetic-pronunciation of a French-spelled word.

'Arkansaw' may be difficult to say, and may fall heavily upon our ears, but it is proper all the same, and the sooner 'Arkansas' is abolished the better for out consistency. ROBT. T. HILL.

U. S. National Museum, Aug. 20.

Diagnosis of a New Species of Thrush (*Turdus celænops* sp. nov.) from Japan.

Diagnosis. — Back 'mummy-brown' (*Ridgway's Nomenclature of Colors*, pl. iii. Fig. 10); breast and flanks rufous tawny, unspotted; under wing-coverts gray; tail-feathers without white terminal spots; no light stripes about the eyes; second primary shorter than fifth. Adult male with head and neck black. Wing about 120 millimetres.

Type. — United States National Museum, No. 111,665.

Habitat. — 'The Seven Islands,' Idzu, Japan.

During a recent visit to 'The Seven Islands,' south of the Bay of Tokio, Mr. M. Namiye, of the Educational Museum, Tokio, among other interesting species, collected the thrush described above. Although nearest related to *T. chrysolaus*, the male of the new species is easily distinguished from all the forms belonging to the same group by the intensely black color of the head, neck, outer portion of wing, and tail. The female resembles more that of *T. chrysolaus*, but the back is browner, the tawny of the breast and flanks is deeper and more rufous, and the first (tenth, or rudimentary) primary is longer.

I am under great obligations to the authorities of the Tokio Educational Museum for the privilege of describing this interesting novelty. LEONHARD STEJNEGER.

Smithson. Inst., Washington, D.C., Aug. 18.

Audubon's Grave.

THE letter from Mr. D. S. Martin, in *Science* of Aug. 5, interested me very much, as it undoubtedly did every American naturalist; and there is probably no appeal that could be addressed to the naturalists of this country which would meet with a more liberal response than for the means to erect a fitting monument to Audubon.

But this appeal calls up another question in my mind, and, if at this distance I be correctly informed from what I have seen in the press columns, is not the great cathedral, which is to cost some ten millions of money and to be erected in New York City, on such a footing that there seems but little doubt that the structure will eventually be completed? And, further, if I read the words of Bishop Potter aright, is not the edifice when finished to be the 'Westminster Abbey' of the United States? Surely it would seem that the time has arrived when we should be able to point to some grand monument and say, within those walls repose the remains of America's great and honored dead. Such far-reaching projects

when perfected ever tend to nationalize us, and to-day, as we are all aware, the ashes of the truly great men, men who have built up America's science, art, letters, and every calling which goes to make a nation great, are in many instances so obscurely rested, that I wren it would test the memory of the best of us to recall the spots where we have placed them.

Why not deposit the remains of our great naturalist, Audubon, in some perfectly secure vault for a few years longer, and then remove them to their final resting place, to their crypt in the great Abbey which is to be built, and then will every naturalist in the United States proudly come forward with his share towards closing the entrance of such a tomb with a fitting monument.

R. W. SHUFELDT.

Fort Wingate, N.Mex., Aug. 12.

Increasing Danger of Tape-Worm.

IN the Texas grazing region, from which has sprung, within the last two decades, the entire stock of range cattle of the western states and territories, the beef tape-worm is a most common occurrence. In fact, I do not believe I exaggerate when I say that at least every fifth person is afflicted. The cause of this is that on open ranges the eggs of tape-worm are most easily and widely distributed, and hence the cattle more frequently become infested with cysts. Stall-fed cattle, on the other hand, where the water is usually less subject to contamination, and the food cleaner, are only seldom infected, and hence tape-worm was not so prevalent in regions where the latter were used.

In the last few years, however, the shipment of range-cattle, by means of refrigerator cars, has become the chief beef supply of the East, and the danger and frequency of tape-worm greatly increased. Of course, no one should stop the use of well-cooked meat on this account, but rare and half-cooked meats can easily be avoided.

R. T. H.

Applied Optics.

WE are indebted to Prof. R. S. Heath of Birmingham, England, for a good book in our language, that at last gives us a theory, the Gaussian, that can be used in the discussion of lenses as we find them in telescopes. Heretofore, so far as I know, English writers have treated the imaginary case of lenses infinitely thin, and in practice have spoken in a vague manner of an optical centre. For a correct theory, one was obliged to recur to the memoir of Gauss, or to some of the German discussions of it.

In Mr. Heath's bibliography of this subject I find no reference to the writings of Biot, to which Mr. G. W. Hill called my attention some time ago. In his 'Astronomie Physique,' Biot devotes 540 pages to optical instruments, and he is so voluminous that it would require some patience to be sure of what he has done. I have the impression that he came near anticipating Gauss. Biot's first volume was published in 1841. Gauss read his memoir in December, 1840, but it was not published until 1843. ASAPH HALL.

Washington, Aug. 20.

Queries.

14. AN EXPULSION OF SPARROWS. — A curious thing happened here a week ago to-day. About four o'clock in the afternoon, a flock of birds — hundreds apparently — flew in circles round and round our house and garden, never settling. This continued for nearly an hour without a sound. Meantime our saucy sparrows disappeared, and have not yet returned. Our trees, which at dawn and twilight resounded with their chattering, are now silent and deserted. I had an opportunity the next morning of seeing closely one of the army of extirpation, — probably a deserter, for he was the only one left. I would describe the bird as about the size of the sparrow, very slender, with full black eye, dark mouse-color, with a light, almost white, breast. This morning for the first time since their expulsion came three or four of our native sparrows, but none of the foreign residents. I am curious to know if this happened any where else. My place being large, I could not see if my neighbors were visited likewise. W. A. G.

New Brighton, S.I., Aug. 18.