made sufficient progress in the study of the morphology of the Trochilidae to have detected the error in question. If there be such a person he has not up to the present time communicated the results of his studies to the world.

As soon as the error was clear to me, I immediately made a full series of corrected drawings, which, with additional notes upon the subject, are now in the hands of Dr. Sclater, the editor of the Proceedings of the Zoölogical society.

It pains me far more that the plates of such an elegant publication as the Proceedings of the Zoölogical society is, should be marred, even to the slightest degree, through any error of mine, than I regard how that error may reflect or affect myself. Fortunately, in the present instance it in no way alters the conclusions arrived at, and so far as I am aware there are but few, if any anatomists, who have not at one time or another been equally unfortunate. Even Huxley's famous 'Anatomy of vertebrates' seems to fulfil a useful end, notwithstanding the fact, that this eminent biologist contends on the 322d page of that work, in describing the stomach of a ruminant, and referring to the mucous membrane of the reticulum, says "it is raised up into a great number of folds, which cross one another at right angles, and, in this way, enclose a multitude of hexagonal-sided cells." Still this statement would make no one believe that few people living could render a better description of the digestive apparatus of a ruminant than Professor Huxley.

R. W. SHUFELDT.

Fort Wingate, N. Mex., July 3.

Barometer exposure.

The discussion concerning this subject has thus far had regard mainly to the use of the mercurial barometer and for meteorological purposes. Possibly light may be shed on the general subject by a few observations made in the field with an aneroid. From the nature of its construction it yields more quickly to rapid oscillations of atinospheric pressure. Moreover, field-work presents greater variety of conditions of exposure, and is consequently more suggestive of the controlling circumstance in any anomaly.

The following observations derived from experience, upon the western prairies of the Mississippi valley, may not be without value in this connection.

1. In gusty winds the index of the barometer oscillates very perceptibly to each gust. A variation of .01 of an inch has been observed.

2. In steady wind the barometer reads very differently, according as it is held to the windward or leeward of the body. In a wind which I cannot characterize more definitely than as a stiff breeze, I have noted in such relations a difference of .02 of an inch, the barometer being about three feet above the level surface. When desiring accurate readings in a strong wind, the mean between the windward and leeward readings should be taken, and, if the wind be gusty, the maximum reading in each case.

3. Upon flat-topped buttes I have found the barometer indicating considerably less pressure in the calm just back of the windward edge than in the wind at the edge.

Such buttes offer an inviting field for experimentation on this subject. They are often quite symmetrical, frequently have horizontal strata running through them to serve as convenient planes of reference, and are not infrequently isolated upon an extensive plane.

Attention to barometer exposure is evidently as important to hypsometry as to meteorology.

J. E. TODD.

Tabor college, Tabor, Io., July 3.

A bright meteor.

Last evening at fifteen minutes past eight o'clock a meteor of unusual size was observed. Its apparent size was, by rough estimate, six times that of Venus at its (Venus') brightest; and that, though it was quite near the moon, which was past its first quarter. Its altitude was about 30°, and azimuth perhaps S. 10° W., and its motion downward and eastward at about 50° from the horizon.

Its disappearance was with a slight scattering of fragments, but no explosion was heard.

S. H. BRACKETT.

St. Johnsbury, Vt., July 12.

Inoculation for the prevention of yellow-fever.

It is generally understood among educated people in Rio de Janeiro that all persons are not equally liable to attacks of yellow-fever. I believe I am safe in saying that but few native Brazilians die of it, the greatest number of deaths being among the following: newly arrived foreigners, and especially those who live in the poorer quarters of the city, or who lead dissolute lives, sailors, and persons of a lymphatic temperament. If there is any foundation for these popular theories, might it not be possible for an observant person to inoculate seven thousand individuals from the same or similar localities in Rio de Janeiro without running an average risk or fairly testing the system employed?

The efficacy of Dr. Freire's inoculation against yellow-fever can scarcely be considered as having been put to a fair test, therefore, until something is known of the persons inoculated, their nationality, time of residence in Rio de Janeiro, temperament, occupation, circumstances, and personal habits.

JOHN C. BRANNER.

Indiana university, Bloomington, Ind.

Bird-killing sparrows.

So much has been said of late for and against the English sparrow, that the following note may not be uninteresting as evidence.

Quite recently, upon the Capitol grounds, I observed a sparrow in the act of slowly killing a brown humming-bird. When discovered, it had seized the struggling victim in its talons, and was picking it vigorously about the head. Whenever disturbed, it caught the neck of its fluttering prey in its bill, and, after flying a few feet, alighted, and renewed its bloody work. At first I supposed the victim to be a sphinx moth; but, although every attempt to release the captive was futile, the identity of the humming-bird was unmistakable. Soon the first sparrow was joined by another, and then the scene of murder was carried into a copse beyond the reach of my observation.

To those who attribute the destruction of our American birds entirely to the demand for wings for ladies' hats, as well as to those who deny the quarrelsome habits of the sparrow, this piece of information may be of value.

C. D. WHITE.

National museum.