

obtained by means of birdlime; and this is evidently the way in which these birds are captured in the neighbourhood of Chuquisaca.

That the Humming-Bird is not altogether denied the power of song, we learn from the notices respecting its vocalization by various authors; but as this is a point upon which I cannot speak from personal observation, I shall take the liberty of quoting from those who have written on the subject. To begin with the remarks of my friend Mr. W. C. L. Martin:—

“It is not to the most beautiful birds that the voice of melody is given. The Mocking-Bird, the Nightingale, and the Thrush are but plainly attired; and it would appear that if Nature be lavish in one respect, she is parsimonious in another. On the Humming-Birds she has bestowed the gift of beauty: she has created them winged gems—she has chased their plumage with burnished metals or overspread it with laminae of topaz and emerald—she has strained, so to speak, at every variety of effect—she has revelled in an infinitude of modifications, whether we look at the hue or the development of the feathering. We can scarcely, then, expect that, to such an external perfection, the gift of song will be also added; and, indeed, when we reflect upon the structure of the tongue, of the os hyoides which supports its base, and of the mechanism by which it is rendered capable of protrusion, remembering that the os hyoides is connected with the larynx, we cannot in reason suppose that these birds can be eminent as songsters. Nevertheless it would appear that some species at least utter, while perched, a sort of querulous warble.

“The ordinary cry of the Humming-Birds is sharp and shrill, generally uttered on the wing, and frequently reiterated by the males during their combats with each other. It is principally, says Lesson, in passing from one place to another, that their cry, which he likens to the syllables *tère-tère*, articulated with more or less force, is excited. Most frequently, he says, they are completely dumb; and he adds that he has passed whole hours in observing them in the forests of Brazil without having heard the slightest sound proceed from their throats.”

Mr. Gosse, in his ‘Birds of Jamaica,’ speaking of a species which he calls the Vervain Humming-Bird (the *Mellisuga minima* of this work), says, “The present is the only Humming-Bird that I am acquainted with that has a real song. Soon after sunrise, in the spring months, it is fond of sitting on the topmost branch of a mango or orange-tree, where it warbles in a very weak, but very sweet tone, a continuous melody for ten minutes at a time; it has little variety. The others only utter a pertinacious chirping.”

It will be expected that some remarks should now be made with regard to the luminous character of certain parts of the plumage of these charming birds—a point which has engaged the attention of many naturalists and physiologists, but of which I believe no very satisfactory solution has yet been attained. “A few days since,” says Mr. Martin, “we were examining a Humming-Bird, the gorget of which was an intense emerald-green; but on changing the light (that is, altering its angle of incidence), the emerald was changed into velvet-black. Audebert considered this changeableness to be due to the organization of the feathers, and to the manner in which the luminous rays are reflected on falling upon them: and of this, we think, there can be little doubt; for each feather, when minutely inspected, exhibits myriads of little facets so disposed as to present so many angles to the incidence of light, which will be diversely reflected according to the position of the feather, and in some positions not reflected in any sensible degree, and thus emerald may become a velvet-black.