Catocala, the European are fewer in number and comparatively better marked and distinct, standing farther apart from each other. The hardening process by which each species becomes more isolated in time, seems to have reached a more final stage with the European species of *Catocala*, etc. I have orginally compared the European *C. fraxini*, with the North-American *C. relicta*. I found differences in size and color between the two "representative" species, on the whole so slight as to warrant the belief that the two were derived from a common ancestral stock. We must seek for this ancestral stock in the tertiary, when its range probably extended over Northern or British America, and Siberia. A character which is distinctive of the present European species, is the dull blue median band of the secondaries. Now, I found, and first recorded the fact, that, in certain examples of the American form which has the band white, a faint blue edging to the band was found. This was a reversion to the original color in all probability. The tendency of color to become brighter and lighter in America, owing probably to atmospheric or climatic conditions, is thereby exemplified. The specimens of *C. relicta*, which have the forewings dusky, are also probably instances of this reversion. A form belonging to this group of the genus has been also described from California. It is doubtful, as yet, whether this can be considered a distinct species. The variation of the North-American forms has led to the publication of a number of names which, in some instances at least, are not properly founded. This "hardening into species" seems to be a natural process by which we may conceive the forms to become gradually more peculiar, different from their surrounding allies. At length the time may arrive when they disappear by extirpation, having given rise themselves to other species, through variation, their species-offspring surviving them.

From a classificatory point of view, the genus *Catocala* can hardly be held as "typical" of the *Noctuæ fasciatæ*, the more geometriform group of the family. Rather is *Pheocyma (Homoptera)* to be thus considered; the wings are unicolorous, and the darker rivulous markings extend over both pairs, while the secondaries are more or less exposed in repose. In *Catocala* they are hidden, and Lederer sees no necessity for any sub-family division. Probably the terms are to be used strictly for the convenience of students. The tibiæ are often spinose in these wide-winged genera, and this character, not unusual in the family, the *Catocalinæ* have in com-