given in the second part of the Syst. Lep. Hild., published April 19, 1900. It is probable that but for these publications the new Catalogue would have begun with the Nymphalidæ.

A discussion of the homology of the second radial branch in the Pierids with reduced radius follows the author's expressed preference for the amended Redtenbacher-Comstock system of notation for the veins. According to Spuler, the second radial branch in *Pieris* should be notated 2 + 3, but a fusion of these branches is not demonstrated in the pupal wing. Grote's theory of the movement of the radial branches is, that they pass off by the tip of the wing. This is true especially for 2 to 5. Now, in *Pieris* the second radial remains in its original generalized position, near R1, above the cell. It does not seem probable that R3 could ever move backwards to fuse with R2. The reduced radius of *Pieris* receives compensatory mechananical support through the advance here of the first median branch from below. In the Nymphalids, where the radius is never reduced and remains in a generalized five-branched condition, the upward movement of the median branches is stayed.

The paper closes with a brief summary of the fossil remains of Lepidoptera published. These remains, though too few to be decisive, favour the author's view, as to the butterflies, that the Nymphalids and Hesperians represent older groups of the line to which they belong. The nearer relation between the two has been made evident by the author's discovery of the "long fork" in *Charaxes* (c. f. Proc. Am. Phil. Soc., 1898, 39), which indicates the way in which a wing of the Hesperid type may have passed into one of the type of wing shown by the brush-footed butterflies. A resemblance is shown also in the generalized radius and the consequent unwillingness of the median branches to leave the cross-vein. All these observations tend to support a mechanical source for the changes in the neuration.

The author considers the Lepidoptera to be a relatively younger branch of the insects. The possible conclusion to be drawn from their fossil remains is, that from Tineid-like forms existing in the middle period of the earth's history there was a rapid development in the Tertiaries, where we meet with butterflies already quite like the Nymphalids and Skippers of the present day. The meagreness of the material precludes the formation of any final opinion.—*Communicated.*

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