Fig. 2 is the inner side of an under membrane of a front wing.
" 3 is the inner side of an upper membrane of a male hind wing, disclosing the inner side of the black sexual spot.
" 4 is the inner side of an upper membrane of a front wing.
" 5 is the inner side of the lower membrane of a female hind wing.
" 6 shows inner sides of both membranes of a winglet, united at the base. Its exact length is five-eighths of an inch.
" 7 gives a view of a perfect front winglet. The opposite one is incomplete.
" 8 is the under surface of a hind winglet. The opposite one is the upper surface of another. Both imperfect.
" 9–10 are the wings of one butterfly. Length, from base to apex, two inches; width at outer angle, one inch and a quarter.

The membranes at Fig. 1 were separated under water, and the gummy fluid on their inner sides washed off clean. Those at Figs. 2, 3, 4 and 5 were separated without the use of water, the expanding fluid being allowed to dry on, producing the appearance of a thin coat of varnish spread over the whole inner sides of the membranes.

ON THE CLASSIFICATION OF BEES.

BY CHARLES ROBERTSON, CARLINVILLE, ILLINOIS.

During the last winter, in connection with the study of the local bees, I had occasion to write out my views in regard to their classification, basing my observations upon the recent Apidæ catalogue of Della Torre. As the views then arrived at form a fair statement of my present opinions, I venture to offer them in connection with the recent paper of Mr. Ashmead on the classification of the bees.*

In the arrangement of these insects I attach the most importance to the venation, since it is hardly subject to modifications connected with changes of habit, and shows the least tendency to variation. In the lower bees the first submarginal cell is about as long as the second and third together, and its shortening may be regarded as a specialization. In the more highly specialized venation the marginal cell is truncate or has its apex more remote from the border of the wing. In a similar way a small stigma may be regarded as a characteristic of the more highly

*Trans. Am. Ent. Soc., XXIV, 49-100, 1899.