

east of Moline. These specimens are, if possible, fresher than those taken July twenty-third. This species would, therefore, seem to be three brooded in this latitude. There are also certain marked differences in coloration, which may or may not be distinguishing characteristics of seasonal varieties. The spring form, as it is represented by the single specimen referred to, is distinguished by the absence of any indication of the sub-marginal row of spots or points on the underside of the wings or any trace of orange, except the two spots on the upper surface of the hind wings; the rose pink ray extending outwards from the body on the hind wings is present. The summer form, as it is represented by the six individuals in my collection, is marked as follows:—The sub-marginal row of spots on the under surface of the wings are none of them pink; those in the interspaces of the first and second, and second and third ediman veinlets, being black, the others brown; the pink stripe on the under side of the hind wings is entirely wanting, and there is on the upper surface of the hind wings a sub-marginal area of orange, bright or faint, which sometimes extends from the marginal black band nearly to the orange discal spot. There is also in all of these specimens a clearly defined oblong raised patch of scales of peculiar form extending along the upper side of the sub-costal vein of the hind wing, from the costal vein to the branching of the first sub-costal veinlet. These scales seem to stand on end, and although I have not satisfied myself of the fact, I think it is probably that these scale-like bodies, are excrescences on the true scales. This patch of scales seems to be confined to the males. It varies in colour from yellow to reddish-orange. When it is yellow it is concolorous with the adjacent surface, and not conspicuous, although the raised margin of the outer edge is always very distinct on a closer examination. In the single specimen of mine in which this area is reddish-orange, it is scarcely less conspicuous than the "dog's head" when the anterior wings are pulled forward far enough to expose it. Since it is present in all the males and absent in all the females I have collected, I take for granted it is a sexual mark. If this character has been described before, I have no knowledge of the description, though it seems strange that it should have been overlooked. Its presence would support Mr. Strecker and others in removing the species from *Colias*. In the fall form, as represented by the three specimens taken September sixteenth, the brown spots on the under sides of the wings are replaced by pink; the two black spots between the first and second, and second and third median veinlets, remaining unchanged; the