

geographical range comprises at least portions of both the old and new worlds, and upon this account may be regarded with more than ordinary interest. In some of the quotations to be given presently it will be seen that this insect is rare in Britain, and highly prized by collectors. It appears to be common in Canada. The following figure and description will perhaps enable the reader, who is not already acquainted with the species to recognize it.

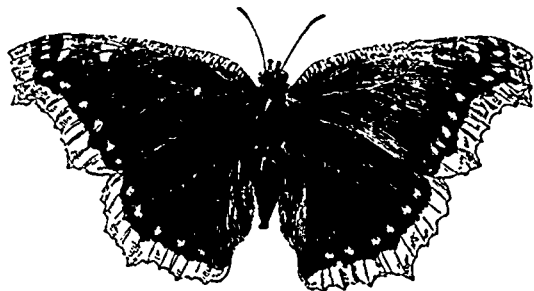


Fig. 1.

Fig. 1.—The Camberwell Beauty (*Vanessa Antiopa*.) Taken on the Mountain of Montreal, 24th April, 1857. (1)

**Description.**—The general colour of the upper side of the wings of this species is a deep chocolate brown, but with the hind and side margins ornamented with a cream coloured border. Between the cream-colour and the chocolate there is a second border consisting of a band of velvet black with a number of violet-blue spots. On the front margin of the anterior wing there are two yellowish spots on the outer half. The under sides of the wings are dark brown with some curved lines of black. There is also a small yellow spot near the middle of each wing on the under side, and two others on the border. It is, further, to be observed, that the white border on the upper side is sprinkled with minute black spots, and that there are some similar small spots, but of yellow on the front part of the wing in addition to the two large ones mentioned.

This species lives through the winter, and no doubt those I saw on the mountain had not long since left their hibernating retreats. The caterpillar is black with a series of red spots on the back, and with each articulation of the body armed with tufts of spines. It feeds upon the leaves of the poplar and willow, and according to some authors, on those of the elm. In a paper read before the Cleveland Academy of Natural Sciences, in 1854, by Prof. Kirtland, "On the Diurnal Lepidoptera of Northern and Middle Ohio," it is stated that "*Vanessa Antiopa*—though a species introduced from Europe, has become very common. It often in its perfect state survives over the winter, and may be seen flying during the first days of spring. The larva, which often feeds on the foliage of the Lombardy poplar, excited strong prejudice some years since against such trees, from an erroneous belief that their tenant was venomous like Cleopatra's asp."

This caterpillar goes into the chrysalis state in July, and shortly after the new brood of butterflies may be seen flying about. It is said that there is a second brood of caterpillars, and the butterflies from them, on the approach of cold weather, retire into winter quarters, and come out again in the next spring.

The chrysalis is of a grey colour dappled with black, shaped something like the body and head of a grasshopper, without the wings and legs. It has a double row of spines on its ventral side, and is suspended by the small end to the under side of a rail, branch of a tree, or other convenient support.

It is said this species has been introduced into America from Europe, and perhaps entomologists are in possession of knowledge sufficient to enable them to decide a question of this kind. Upon this point I can give no opinion, but, on referring to several works, I find that in England it is there a rare species. The following extracts, taken from the Zoologist, 1846, will shew how it is prized by the entomologists of that country.

**Occurrence of *Vanessa Antiopa* at York.**—A specimen of this rare British butterfly was brought to me alive this day, which was caught in a garden in the suburbs of this city; it and two others were flying in company with the red admired (*Vanessa Atalanta*). The captor was unsuccessful with the others, he being only provided with a rhubarb leaf, with which he knocked the one down, that is now in my possession.—Robert Cook, Colliergate, York."

**Occurrence of *Vanessa Antiopa* near Epping.**—A female specimen of this insect was captured here on the 12th instant, and another seen. A fine female was also taken about the same time near Yaxley.—Harry Doubleday; Epping, September 20th, 1846."

**"Occurrence of *Vanessa Antiopa* at Winchester.**—On Friday, September 4th, I had the pleasure of taking a fine female specimen of this rare and beautiful insect, near some willows, I have seen three others near the same spot.—John T. Rogers; North Walls, Winchester."

**"Capture of *Vanessa Antiopa* near Stowmarket.**—Entomologists will be pleased to hear that they have now an opportunity of witnessing in a fine and perfect state, a specimen of the splendid butterfly, '*Vanessa Antiopa*'—Camberwell Beauty. A pair of this fine species were caught on Wednesday last, in the grounds of the Vicarage, Stowmarket, which, from their rare appearance, are rendered exceedingly interesting and remarkable, their visits here appear to be at very remote and uncertain periods, for until four or five years previous to 1819, a few were caught in Suffolk, and one was taken in the following spring, which had lived through the winter; since that period it has not been seen in England. Those caught at Stowmarket were found on the mulberry-tree, near the Vicarage House, planted by Milton, during his residence with the Rev. Dr. Young, the then Vicar, and who was tutor to the immortal poet, and no doubt the wide spreading branches of this celebrated tree attracted the notice of the butterflies in their search after food. We have been informed that Dr. Probart captured one of these beautiful insects in his garden one day last week.—Ipswich Paper."

From the above extracts it will be seen that this insect, which is quite common in Canada, is regarded as an object of the greatest interest in Britain. The English specimens have the border pure white, and ours, although unquestionably the same species, is, therefore, one of those instances in which a difference of several thousands of miles in the geographical range of a species is marked by a change sufficient perhaps to classify it as a permanent variety, but not to authorise a distinct, specific appellation. It is wonderful that so delicate a thing as a butterfly should be so widely distributed, and yet, another of our species, "The Painted Lady," *Cynthia Caudui*, occurs in England, France, the Brazils, Africa, Iowa, and New South Wales. (2) The "Red Admiral," *Vanessa Atalanta*, above mentioned, is another British butterfly which abounds in this country, and there are many others of which, it is to be hoped, some practical entomologist will volunteer to give an account in this Journal.

3. **The Isabella Tiger Moth.** (*Arctia Isabella*.)—Another interesting little object was the caterpillar of the Isabella tiger moth, easily recognised by its warm furry jacket, and by the peculiar distribution of the colours of its body, black at both ends, and red in the middle. When touched, it suddenly rolls itself up into a round ball, and remains motionless until the danger is past. Without understanding the wonderful-transformations of insect life, who could fancy that this little mass of fur, in shape like a lady's boa, is destined in a few days to become a beautifully painted moth, no longer creeping on the ground on 16 short legs; but soaring through the air upon four delicate scale covered wings. Yet nothing is more true than this, that every caterpillar begins life as real *bona fide* caterpillar and ends it, provided the ordinary course of nature is not interrupted by some accident, as a winged insect. This moth is described by Professor Emmons in his work upon the insects of New York, as having the "thorax tawny and brownish: abdomen tawny, deeper colour beneath, and marked with three rows of black spots, about six or seven in each row, running on the back and middle of the sides. Forewings tawny, and marked with a few black scattering spots; hind wings nearly transparent, slightly tawny, and marked with six tawny spots; legs black or dark brown."

Professor Emmons says that the caterpillar feeds "upon sundry kinds of herbs;" but he does not inform us when it goes into the chrysalis state, or when the moth makes its appearance, and as I am unacquainted with the subject, I cannot, I am sorry to say, give any further information upon this point.

The caterpillar of the Isabella tiger-moth, although itself a most harmless little creature, is often made the victim of other insects. In a former number some account was given of the ichneumon flies, and of their mode of providing for their young, by depositing their eggs in the bodies of the larvæ of the wheat midge. All caterpillars are more or less subject to the same scourges. In the valuable little work published, Dr. Fitch, "On the noxious, beneficial and other insects, of the State of New York," the following interesting paragraph occurs.

"The knowledge and skill which these ichneumon and other parasitic hymenoptera often shew in their proceedings are truly wonderful. Every person will recollect the larva of the Isabella tiger-moth, (*Arctia Isabella*), the large caterpillar with stiff even-john hairs of a tan color, and black at each end of his body, which crawls about our yards, and often enters our dwellings, and will probably have observed the fact that if, when crawling, he is rudely touched, he suddenly stops and doubles himself together for a