

is oblong, rounded at the ends, and very firm, capable of resisting considerable pressure, and in all those examined, with the leaves of one or other species of *Prunus* firmly attached. Its weight is about eleven grains. This insect bears considerable resemblance to the *Saturnia Mylitta* of India, one of those species which are there cultivated for their silk, and which goes there by the name of Tusseh silk. The natives are unable to rear these in confinement, and trust to the eggs of wild individuals for their annual supply of caterpillars. We may probably have the same difficulty with the Canadian species. The writer, during the last summer, raised a female, which, soon after leaving the cocoon, began laying unimpregnated eggs. He procured a male, which he placed in the same box, but, though left together for three or four days, no connection took place. Whether the female was exhausted before the introduction of the male (though it still continued to lay a few eggs), or whether, like the Indian species, they will not breed in confinement, requires further experiment. The silk of this species is of a lighter colour than either of the two following, not very much darker than that of the *Bombyx Mori*.

The *Saturnia Cecropia* is another of the silk-spinning moths. This is the largest of the Canadian Lepidoptera, and in fact is inferior in size to but few of the family. It varies from six to seven inches in width. Its head is red, with a white collar between it and the thorax, which, with the abdomen, is red. The latter is marked with white transverse lines; the ground colour of the wings is greyish brown; the base of the anterior pair same colour as the thorax, bounded anteriorly by a whitish band; disk oblong, rusty brown, with a kidney-shaped white spot margined with black; beyond this, a brown wavy band bordered with black, the rest of the wing shading down to light brown, with indented black line. Near the tip is a black spot, with a crescentic line of light blue; the colour of the posterior wing the same; the oblong disk larger, and marked with the same white spot. The ferruginous band is broader, bordered with white, before which is a transverse row of black spots, and a black transverse line. The caterpillar is green, with several projecting points, which, as well as the head and legs, are yellow. On each segment are two small blue spots. It does not confine itself to one species of plant for food. Abbot says it feeds on the wild American plum (*Prunus Pennsylvanica*). Here the apple seems its favourite food. It also feeds on a species of *Spirea*, common on the borders of swamps. The writer has taken a cocoon from a common garden plum, and from a bitter nut (*Carya Amara*); but finding an occasional cocoon on a tree is not a proof that on that tree the insect has fed, for the caterpillar will crawl some distance occasionally for a convenient situation. An individual which, for the ease of observation, was fed on one of the above mentioned low shrubby *Spireas*, when about to change into the pupa, ascended a maple ten or fifteen feet from the plant on which it was nourished. The cocoon is firmly attached to the under side of a twig. It is three inches in length, and of a brown colour. The outer layer is coarse and strong; the inner finer. It weighs about seventeen grains.

Saturnia Promethea is much more common than the preceding two. The male insect is of a dark, chocolate brown, nearly black. The margins of both wings are light brown, with a deeply indented wavy black line. Near the apex of the anterior wing is a black spot, with a semicircular blue margin on the posterior wing. Within the black line are several black spots. The female differs very much from the male, so much so as to be hardly recognizable as the same insect. The wings are not falcate, but rounded; the whole body of a reddish brown; the colour of both wings is the same; the interior half is a dark brown, the remainder much lighter, with minute black specks, looking as if powdered, and a

dark buff margin. On the anterior wing is an angular white spot. The spot on the apex like that in the male. On the posterior wing is a lunated white mark; on the hinder margin a wavy line, within which are reddish brown spots.

Peale describes the caterpillar as of a delicate green, with yellow feet. Each segment of the body, except the posterior, is marked with six blue spots, from which arise small black tubercles. In the second and third segments however, the two central tubercles are replaced by club-like projections of a third of an inch in length, and of a bright coral-red colour. The last segment is furnished with but few tubercles, the central one of which is of the same clavate form as those on the anterior segments, but of a yellow colour. When about to change into the pupa state, it selects a leaf, the sides of which it draws together by means of its silk, which it continues over the petiole to the branch, round which it firmly fastens it. Within the leaf it then spins its cocoon, and retires for the winter, during which time the leaf and its footstalk wither, and are carried away by the blast, leaving the cocoon hanging by its peduncle, and, to a casual glance, looking like a withered leaf. On tearing off the outer layer which originally lined the leaf, and which is very strong, an oblong cocoon remains, about the size of that of the silk-worm, of a dark brown colour, and very firm. The perfect insect appears in June. This insect seems as indifferent in the choice of its food as the last species. Abbot figures it on the *Halesia Tetraltera*. It feeds on the spice-wood (*Laurus Benzoin*), the sassafras (*Laurus Sassafras*), and the common wild cherry. In this part of Canada the last is the favourite food.

Another species, the *Saturnia Luna*, the most beautiful, though not the largest of our native Saturniæ, judging by analogy, would also furnish silk; but from its rarity, none of its cocoons have come under observation.

Of the insects above mentioned, their usefulness will probably be in the order of their enumeration. The *Saturnia Polyphemus*, though rarer, spins a considerable quantity of silk, and will be most easily unwound. The *Saturnia Cecropia*, although the largest and more frequent, at least in this locality, has coarse silk, which will probably require to be torn in shreds and carded as cotton or wool. *Saturnia Promethea* is by far the most common, but will probably be the most difficult to use, the cocoon being very firmly glued together.

Remarks on some Coincidences between the Primitive
Antiquities of the Old and New World.

By Professor Wilson, LL.D. University College, Toronto.

In introducing this subject to the members of the Canadian Institute, Professor Wilson observed:—

It is well known to the students of antiquities, in so far as such relics of the past are valuable to us for the purposes of historical illustration, that the archaeologists of Europe have of late years devoted much of their study to those remains which pertain to epochs older than the classic ages, and to areas lying beyond the ancient limits of Greece and Rome. In this study of the primitive antiquities of Europe, Scandinavian and British archaeologists have taken the foremost place, and the result has been the disclosure of traces, throughout the North of Europe and the British Isles, of the extremely rude and primitive arts and sepulchral rites of a people occupying these areas long prior