

back, can be watched through the microscope. A number of specimens were seen to be provided with a pouch immediately behind the limbs. These were females. This pouch is continually swayed about from side to side, and contains opaque, globular eggs. From these eggs minute creatures, like small mites, emerge in the nauplius or larval condition. As the shallow pools inhabited by these creatures are liable to dry up, the eggs which drop to the bottom possess amazing vitality. They can endure heat and dryness for long periods; but the young hatch out immediately the ponds are filled by a rainfall. I have reason to know this, for the pond from which I obtained the Phyllopods in 1893 was, soon after, dried up. I waited patiently for a year and again visited the spot, but could obtain none. The pond was dried up, and if any Phyllopods had hatched out they had wholly disappeared. On Good Friday, this year, I went to the place and found the water cold and icy, so that there were few forms of life visible, and no sign of the beautiful creatures I was looking for. Eight days later, however, I went again. It was evening and the water was warm. They had now appeared in abundance, and were swimming about in shoals, like tiny minnows. They dart away when startled just as a fish does, but soon tire and are readily captured. Several visits to the pond enabled me to take a great number, sufficient for purposes of study; but the pond soon dried up, and no more were to be had. They glide about in a vessel of water and are never for a moment still. If noticed closely, they are seen to swim back downward with the numerous feet turned towards the surface of the water. No creatures could be imagined more active, delicate and graceful in their movements. Their structure and peculiar habits of life and development are of the highest interest, and they appear to be extremely local in their occurrence.

A closely related species is *Artemia* the Brine Shrimp which lives in saline waters such as Great Salt Lake. Packard tells us that a Russian naturalist found by experiment that it was possible to convert the Brine Shrimp *Artemia* into the fresh-water *Branchipus* by reducing the salty character of the water. This experiment has been much questioned, and it must be granted that such an alleged conversion of one species into another is astonishing. At any rate Phyllopods in their habits and breeding are unquestionably most remarkable creatures.

In conclusion I wish to express my indebtedness to Professor Prince Dominion Commissioner of Fisheries, for suggestions in making these notes upon this interesting crustacean.