

panied our Indians upon a fishing expedition. Salmon are taken in vast quantities, principally with the seine. The country we were now in abounded with aquatic and land birds, such as swans, wild geese, brant, ducks of almost every description, pelicans, herons, gulls, snipes, curlews, eagles, vultures, crows, ravens, magpies, woodpeckers, pigeons, partridges, pheasants, and grouse, and a great variety of what Tiburina call—"the finches of the grove." The principal quadrupeds that had been seen by the Indians were the stag, fallow-deer, hart, black and grizzly bear, antelope, ahsahita or bighorn, beaver, otter, musk-rat, fox, wolf, panther, the latter extremely rare. The only domestic animals were horses and dogs. According to the settler's account, the grizzly bear is the only really formidable quadruped. He is the favourite theme of the hunters of the far west, who describe him as equal in size to a common cow, and of prodigious strength. He makes battle, if assailed,—and often, if pressed by hunger, is the assailant. If wounded, he becomes furious, and will pursue the hunter. His speed exceeds that of a man, but is inferior to that of a horse. In attacking, he rears himself on his hind legs, and springs the length of his body. Woe to horse or rider that come within the sweep of his terrific claws, which are sometimes eight inches in length. At the period I am treating of, the grizzly bear had (like some of the broken tribes of the prairies) gradually fallen back before his enemies, and was only to be found in the upland regions, in rugged fastnesses like those of the Black Hills and the Rocky Mountains. Here he lurks in caverns, or holes which he has dugged in the sides of hills, or under the trunks and roots of fallen trees. Like the common bear, he is fond of fruits, and masts, and roots, the latter of which he will dig up with his fore claws. He will attack and conquer the lordly buffalo.

THE AMERICAN LOCUST.

A remarkably interesting pamphlet has been recently published in Baltimore by Dr. Nathaniel Potter, on the subject of the Locust, that object of popular dread, but which, as it appears, is one of the least noxious of living creatures. It is to be regretted that the subject is treated so briefly, because the Locust has been a problem to naturalists which they have never been able to solve satisfactorily, with all the pains which they have yet been able to bestow upon it. The main difficulty, hitherto, in investigating the nature and habits of these insects, has arisen from the length of time elapsing between their successive flights, and the profound obscurity of their abodes in the interim; this seemed to put an air of mystery over them, and when this was added to the name of "locust," the idea was quickly taken up that they were pestilential prognostics as well as positive evils. Circumstances have enabled Dr. Potter to make important observations, and he finds

that the term "locust" does not strictly apply to the insect, as it possesses some properties only in common with the locust of the East, together with some that belong to the grasshopper, and others, which are the most interesting in the economy of the animal, which are peculiar to itself. The insect here noticed, is strictly a native of America; it swarms once in seventeen years, and the successive swarms always inigrate to the same places. Of their food the following brief but clear description will inform readers sufficiently. The author says—"They seek nourishment that is always present and ready prepared for the instruments through which they are to receive it. *The exhalation from vegetable barks* forms their entire subsistence. * * * The Antennæ are bristle shaped, standing between the eyes and the rostrum or beak which furnishes the avenue through which the nourishment is conveyed. It is in this sense only that the locust can be said to have a mouth. There are *three exquisitely fine hairs* appended to the extreme points, by which, through highly magnifying power, we see them distinctly feeding on the dewy exhalation of vegetable barks. * * * The exquisite tenuity of the exhalation from these is such, that the imagination can scarcely paint, and never could dream of without the finest (magnifying) glasses." From all this it is evident that the insect is altogether harmless to vegetation.

Dr. Potter closes his interesting pamphlet with the following remarks:—

"We must devote a few words to popular credulity, which has circulated so many marvellous and idle tales of the venomous character of this poor, defenceless insect. The very organism of the locust refutes them all. It has no jaws, teeth, sting, or any other instrument by which it can injure or annoy the most diminutive insect—no weapon, offensive or defensive. It cannot defend itself against an ant or a fly."—*N. Y. Albion.*

CUNNING OF BIRDS.—When the swallows and other small birds are congregated for their annual emigration, the instant a hawk makes its appearance they troop after him, apparently exposing themselves to unnecessary danger,—but, in reality, with the design of perplexing and distracting *their enemy by their numbers*: their perpetual changes of direction, and their uniform endeavours to rise above him, prove this to be the case. Indeed, he is usually in such cases completely out-manœuvred and baffled, being unable to fix upon a single victim, and after exerting all his address, he is often compelled to relinquish the pursuit.

Birds have amazing power of musical expression—as the lark, the canary bird, the nightingale, and the American mocking-bird or thrush. The pewee or lapwing of England yields musical tones, through the percussion of the air by its wings in flight, and when it stoops near the