

Robin. His voice and form are familiar from Hudson's Bay to the Gulf of Mexico, from Nova Scotia to British Columbia. Need I describe him? Is there one here who has not looked admiringly upon his prim brown coat and glowing red vest, who has not heard his welcome chuckle in spring when the ground has still been covered, here and there, with snow, who has not laughed at his battles with the worms amongst the green grass and golden dandelions, who has not enjoyed the saucy cock of his finely rounded head, and who has not watched him rushing merrily through a sea of apple blossoms, the very personification of rollicking happiness and bustling mirth? In garden, or field or wood, he is equally at home, ever active, jovial and contented. His very song says "Cheer up." In spring he is welcome as the flowers; in summer he gives life to the dulllest landscape; in fall he remains with us until the hard frost and falling flakes give him peremptory notice to quit. We may well call him an old friend. The same bird returns to the same locality for years, building in the same tree, and often renewing the same nest. I am convinced of this from personal observations. Four years ago, a robin with an injured wing made his summer home in my garden, and has annually returned, and I feel pretty confident that I shall renew his acquaintance before the end of March, if he has escaped the thousand accidents to which Robin life is subject. The Robin is a friend in another sense. He is the most determined grub destroyer we have. The quantity and number of insects consumed by his family in the breeding season is something astonishing, and to a non-observer statements upon this point are hard to believe. But his utility in this respect is capable of easy proof, and I would ask every farmer or orchardist who sets down the bird as a mere fruit eater, and regards him from that point only, to

watch a pair closely during the coming season, and then balance accounts between fruit eaten and fruit preserved from the ravages of grub and caterpillar and give our feathered friend the benefit of the result, in increased cure and less unanimity. Prof. Treadwell, of Cambridge University, Mass., determined to satisfy himself upon this point, and for this purpose took two young robins from their nest, intending to bring them up by hand. Each weighed twenty-five pennyweights, and they were both plump and strong. The first night he gave three worms to each of them. Next day he increased the quantity to ten each, but feared that he was overfeeding them, and so on the third day decreased the supply to eight. One sickened, grew feeble, and died. The Professor opened it, and found the bird entirely empty and wisely concluded that it had died from want of food. He gave an increased number of worms to the surviving bird, allowing it on the fourth day fifteen worms, on the fifth twenty-four, on the sixth twenty-five, on the seventh thirty, and on the eighth thirty-one. This number seemed insufficient as the bird was losing plumpness and weight. He therefore added a supply of raw meat, sand and gravel. On the eleventh day he gave forty worms, weighing twenty pennyweights, but the bird still fell off, and it was not until the fourteenth day, when the young Robin ate sixty-eight worms, or thirty-five pennyweights, that he began to increase in weight. The length of these worms, laid end to end, was about fourteen feet, or ten times the length of the intestines of the bird. The little devourer ate forty-one per cent more than his own weight in twenty-four hours. At the same rate, how many worms would a pair of robins require for a nest of young ones during a summer's day? Two hundred and fifty daily, or, better still, their equivalent in the shape of insects or their larvæ. As the Professor calculates, this would need a worm,