



Fig. 72. Fig. 72 is larger than either of the preceding. It has thirteen black spots on a brick red ground.

THE CONVERGENT LADY-BIRD (*Hippodamia convergens*, Guen.)—Fig. 73 is of a deep orange red colour, marked with black and white. It has, according to Mr. Riley, been of immense benefit in checking the ravages of the potato beetle. Its larva is blue, orange and black in colour, and in its pupal or inactive state it is of the exact colour of the larva of the Colorado beetle, and is doubtless quite often mistaken for that larva and ruthlessly destroyed. We see, therefore, that it is necessary to exercise some little discrimination, and not to destroy both friends and foes in one fell swoop. *a* shows the larva, *b* the pupa suspended by the tail from a stalk, and *c* the perfect beetle.



Fig. 74.

THE FIFTEEN-SPOTTED MYSIA (*Mysia*, 15 *punctata*, Oliv.)—Fig. 74. As this insect was discovered by us, attaching the Colorado larvæ, it may be of some interest to our readers to give a short sketch of its procedure, especially as all the Lady-birds already de-

scribed act in a similar manner in their attacks on the eggs and larvæ. It was sometime during the latter part of July, 1871, while wandering about the outskirts of a large potato patch, and examining the damage caused by the Colorado beetle, that we found on the vines the larva of a beetle belonging to the family of the Lady-birds. The insect was new to us, and, although there were no larvæ of the Colorado beetle in the immediate vicinity, yet we were in hope that we had discovered a new enemy of our abominable pest. To test the question more at leisure, we took our welcome treasure home, and placed it in a box, wherein were numerous specimens of Colorado larvæ in all stages, from the diabolical-looking little monster just hatched from the egg, to the full-grown, fat, and repulsive larva, dragging its bloated body slowly about in search of some convenient place in which to undergo the transformation into the pupal state. The box was roomy, and covered with a glass top, so that we had ample opportunities of observing what took place. After a little preliminary tour of observation, the Lady-bird caught sight of a small Colorado, and immediately commenced a fierce attack upon the unhappy little victim, seizing it in the powerful jaws, with which Dame Nature has provided most of these creatures, and, in the course of a very few minutes, sucking the juices completely out, and leaving only the dry and blackened-looking skin as a ghastly monument of its victory. It then commenced its attacks, after a short interval, on a full-grown specimen which, however, had strong objections to being devoured alive, and struggled viciously with its enemy, which was not nearly so large, although, of course, much more active. Its efforts at resistance were vain, and after the Lady-bird larva had got its jaws firmly fixed in its victim's broad and capacious back, the struggle soon ceased, and it became a question of the capacity of the Lady-bird to contain all the juices that were in the body of its corpulent victim. Nearly an hour was occupied in this little operation, and when it was over, our friend retired to rest on its laurels and digest its enormous meal at its leisure. For several days we watched, at different times, a repetition of the same thing, and the Lady-bird must have consumed some eight or nine Colorado larvæ. We regret that we neglected to make any description of this larva, and being called away from home just at this time, we found, on our return, that the larva had gone into the pupal state, and a few days afterwards the perfect beetle emerged, and proved to be a very light coloured specimen of *Mysia 15 punctata*, Olive., fig. 74. This beetle, as may be seen from the engraving, varies much in its perfect form, so much so, indeed, that a careless or unskilled observer would never imagine that these four insects belonged to one and the same species. The drawing is from the clever pencil of Mr. C. V. Riley. *a* shews the larva attacking a Colorado beetle larva, *b* the pupa, and *d*, *e*, *f*, *g* the various forms of the perfect beetle varying in colour from very light grey to deep chestnut brown.

Fig. 73.



Fig. 75. Colors—Black w pery dots Colorado pot



Fig. 76. Color—Dull bl rostrum or be



Fig. 77. true cannibal,



Fig. 78. of its general a



Fig. 79. tempted to take moreover has a beak raised hori of the ground. attacking, and