

tinguished from true ova, as was first shown by Sir J. Lubbock, and is now admitted by Siebold. So, again, the germ-balls in the larvæ of *Cecidomyia* are said by Leuckart⁹ to be formed within the ovarium, but they do not require to be fertilised. It should also be observed that in sexual generation, the ovules and the male element have equal power of transmitting every single character possessed by either parent to their offspring. We see this clearly when hybrids are paired *inter se*, for the characters of both grandparents often appear in the progeny, either perfectly or by segments. It is an error to suppose that the male transmits certain characters and the female other characters; although no doubt, from unknown causes, one sex sometimes has a much stronger power of transmission than the other.

It has, however, been maintained by some authors that a bud differs essentially from a fertilised germ, in always reproducing the perfect character of the parent-stock; whilst fertilised germs give birth to variable beings. But there is no such broad distinction as this. In the eleventh chapter numerous cases were advanced showing that buds occasionally grow into plants having quite new characters; and the varieties thus produced can be propagated for a length of time by buds, and occasionally by seed. Nevertheless, it must be admitted that beings produced sexually are much more liable to vary than those produced asexually; and of this fact a partial explanation will hereafter be attempted. The variability in both cases is determined by the same general causes, and is governed by the same laws. Hence new varieties arising from buds cannot be distinguished from those arising from seed. Although bud-varieties usually retain their character during successive bud-generations, yet they occasionally revert, even after a long series of bud-generations, to their former character. This tendency to reversion in buds, is one of the most remarkable of the several points of agreement between the offspring from bud and seminal reproduction.

But there is one difference between organisms produced

⁹ 'On the Asexual Reproduction of *Cecidomyide Larvæ*,' translated in

'Annals and Mag. of Nat. Hist., March, 1866, pp. 167, 171.