of very uncommon occurrence, in which two flowers are combined into one from their origin, owing to their buds having been adjacent. I can now distinctly recall examples in two or three species of Iris, and in at least three species of Oenothera, my cultivation at one period of numerous species of those genera affording me the opportunity of observing the anomalies to which they are liable. I had various instances of circles of five in the monster Iris and of seven in the Oenothera—one instance of four in the Iris in a single circle and one of only three, the exterior circles having five, and the tube showing sufficient marks of the union. In the Oenotheras observed, which embraced several species, there were uniformly seven parts in each circle, that is, seven sepals, seven petals, fourteen stamens and seven carpels. I gave some account of these monstrosities to the Linnæan Society in 1839, and it has since occurred to me that they establish a law respecting the combination of circles of growing parts, which may explain the tendency to the number five in Dicotyledonous plants, since, when growth is carried on from a single cotyledon, we find the number three in the circles, and where there are two cotyledons we might expect the circle to be double, but the fact of the loss of at least one part in combinations of two circles on the same plane shows why the number five takes the place of six. The liability of the natural numbers, five in Dicotyledonous and three in Monocotyledonous, to be reduced by mere pressure or by irregularity, is obvious from what has been already said. We find by observation that the number of parts in the successive circles of the flower is usually equal, but that the inner circle, being exposed to greater pressure, is apt to have fewer than the others—three and two carpels being very common in Dicotyledonous plants. In some structures the numbers in the different circles do not at all correspond, but this, which is characteristic of particular families, is less common, and its origin is one of the most obscure and dubious points in the theory of the flower. When parts are absent either from pressure or irregularity, we must remember that the fact is due to a special cause of abortion, not to the total absence of the part from the structure, and consequently that circumstances may occur from more abundant or equally distributed nourishment, which may in anomalous examples restore the missing part. Such examples are, indeed, almost needed to confirm our judgment as to the causes of the ordinary absence of these parts, and have therefore great interest for the philosophical botanist. In the natural family of the Onagraceæ, to which the genera Fuchsia