

capacity in the individual: thus Vilmorin³⁷ raised from a peculiarly coloured balsam some seedlings, which all resembled their parent; but of these seedlings some failed to transmit the new character, whilst others transmitted it to all their descendants during several successive generations. So again with a variety of the rose, two plants alone out of six were found by Vilmorin to be capable of transmitting the desired character; numerous analogous cases could be given.

The weeping or pendulous growth of trees is strongly inherited in some cases, and, without any assignable reason, feebly in other cases. I have selected this character as an instance of capricious inheritance, because it is certainly not proper to the parent-species, and because, both sexes being borne on the same tree, both tend to transmit the same character. Even supposing that there may have been in some instances crossing with adjoining trees of the same species, it is not probable that all the seedlings would have been thus affected. At Moccas Court there is a famous weeping oak; many of its branches "are 30 feet long, and no thicker in any part of this length than a common rope:" this tree transmits its weeping character, in a greater or less degree, to all its seedlings; some of the young oaks being so flexible that they have to be supported by props; others not showing the weeping tendency till about twenty years old.³⁸ Mr. Rivers fertilized, as he informs me, the flowers of a new Belgian weeping thorn (*Crataegus oxyacantha*) with pollen from a crimson not-weeping variety, and three young trees, "now six or seven years old, show a decided tendency to be pendulous, but as yet are not so much so as the mother-plant." According to Mr. MacNab,³⁹ seedlings from a magnificent weeping birch (*Betula alba*), in the Botanic Garden at Edinburgh, grew for the first ten or fifteen years upright, but then all became weepers like their parent. A peach with pendulous branches, like those of the weeping willow, has been found capable of propagation by seed.⁴⁰ Lastly, a weeping or rather a prostrate yew (*Taxus baccata*) was found in a hedge in Shropshire; it was a male, but one branch bore female flowers, and produced berries; these, being sown, produced seventeen trees all of which had exactly the same peculiar habit with the parent-tree.⁴¹

These facts, it might have been thought, would have been sufficient

³⁷ Verlot, 'La Product. des Variétés,' 1865, p. 32.

³⁸ Loudon's 'Gard. Mag.,' vol. xii., 1836, p. 368.

³⁹ Verlot, 'La Product. des Variétés,' 1865, p. 94.

⁴⁰ Bronn's 'Geschichte der Natur,' v. ii. s. 121. Mr. Meehan makes a

similar statement in 'Proc. Nat. of Philadelphia,' 1872, p. 235.

⁴¹ Rev. W. A. Leighton, 'Flora of Shropshire,' p. 497; and Charlesworth's 'Mag. of Nat. Hist.,' vol. i., 1837, p. 30. I possess prostrate trees produced from these seeds.