scattered and sorely-diminished fucus, - that bladderless variety of the Fucus vesiculosus to which I have already referred, and which may be detected in such localities, shooting forthits minute brown fronds from the pebbles. On rocky coasts, where springs of fresh water come trickling down along the fissures of the precipices, the observer may see a variety of Rhodomenia palmata — the fresh-water dulse of the Moray Frith — creeping upwards from the lower limits of production, till just where the common gray balanus ceases to grow. And there, short and thick, and of a bleached yellow hue, it ceases also; but one of the commoner marine confervæ, - the Conferva arcta, blent with a dwarfed Enteromorpha, - commencing a very little below where the dulse ends, and taking its place, clothes over the runnels with its covering of green for several feet higher: in some cases, where it is frequently washed by the upward dash of the waves, it rises above even the flood-line; and in some crevice of the rock beside it, often as low as its upper edge, we may detect stunted tufts of the sea-pink or of the scurvygrass. But while there is thus a vegetation intermediate in place between the land and the sea, we find, as if it had been selected purposely to confound the transmutation theory. that it is in no degree intermediate in character. For, while it is chiefly marine weeds of the lower division of the confervæ that creep upwards from the sea to meet the vegetation of the land, it is chiefly terrestrial plants of the higher division of the dicotyledons that creep downwards from the land to meet the vegetation of the sea. The salt-worts, the glass-worts, the arenaria, the thrift, and the scurvy-grass, are all dicotyledonous plants. Nature draws a deeply-marked line of division where the requirements of the transmutative hypothesis would demand the nicely graduated softness of a