

beach, it loses its characteristic bladders, and becomes short and narrow of frond. The thick brown tufts of *Fucus canaliculatus*, which in the lower and middle reaches of the Lake of Stennis I found heaped up in great abundance along the shores, also rises high on rocky beaches, — so high in some instances, that during neap-tides it remains uncovered by the water for days together. If, as is not uncommon, there be an escape of land springs along the beach, there may be found, where the fresh water oozes out through the sand and gravel, an upper terminal zone of the confervæ, chiefly of a green color, mixed with the ribbon-like green laver, (*Ulva latissima*), the purplish-brown laver, (*Porphyra lacinata*), and still more largely with the green silky Enteromorpha, (*E. compressa*)* And then, decidedly within the line of the storm-beaches of winter, — not unfrequently in low sheltered bays, such as the Bay of Udale or of Nigg, where the ripple of every higher flood washes, — we may find the vegetation of the land — represented by the sentinels and picquets of its outposts — coming down, as if to meet with the higher-growing plants of the sea. In salt marshes the two vegetations may be seen, if I may so express myself, *dovetailed* together at their edges, — at least one species of club-rush (*Scirpus maritimus*) and the common salt-wort and glasswort (*Salsola kali* and *Salicornia procumbens*) encroaching so far upon the sea as to mingle with a thinly-

* “Dr. Neill mentions,” says the Rev. Mr. Landsborough, in his complete and very interesting “History of British Sea-Weeds,” “that on our shores algæ generally occupy zones in the following order, beginning from deep water: — *F. Filum*; *F. esculentus* and *bulbosus*, *F. digitatus*, *saccharinus*, and *loreus*; *F. serratus* and *crispius*; *F. nodosus* and *vesiculosus*; *F. canaliculatus*; and, last of all, *F. pygmæus*; which is satisfied if it be within reach of the spray.”