

A LAS, alas, most of the pretty white foxgloves we planted out by the boggy hollow just below the tennislawn have come to nothing! The heather and bracken of the moor have outgrown them and throttled them. They made a hard fight

for life, in their petty Thermopylæ one or two of them, indeed, are still battling with inexhaustible courage against the countless hordes of sturdy natives that choke and overshadow them; but die they must in the end, unless I step in betimes as earthly providence to thin out the furze and enrich the niggard soil for the struggling strangers. They remind me of the Pilgrim Fathers in Massachusetts. Foxgloves, you know, cannot compete with ling or Scotch heather on its native They are denizens of a deeper and richer mould, growing generally on fat wayside banks or in the ditches by hedgerows - always the wealthiest and most luxuriantly manured of any wild places, because there birds perch, and wild animals take refuge, and snails and beetles die, and robins perish, that hedgerow weeds may batten on their decaying The hedge, in point of fact, is bodies. the main shelter and asvlum for beasties great and small in our workyday England. There the hedgehog skulks, and the fieldmouse hides, and the sparrow builds her nest, and the slow-worm suns himself; there the rabbit burrows, and the cuckoo

sits mocking, and the dormouse dreams, and the lizard lies in wait for the dancing midges. All the waste richness of the field finds its rest at last by the roots of the whitethorn, to reappear in due time as red campion and herb-robert, as faint-scented may and tall military spikes

of purple foxglove.

But when you sow or transplant these lush herbs of the hedgerow on to the bare and open heath, they come into competition at once with other and far hardier upland bushes. The plants of the moor are indeed unlike such pampered odalisques of the deep banks and rich lowlands. Stern children of the heights, their stems are hard and wiry, their leaves small and dry; their flowers feel like tisque-paper; their growing shoots have none of that luxuriant tenderness, that translucent delicacy, which characterises the long sprays of hedgerow dogrose and hedgerow bramble. All is arid and parsimonious, as in some Highland cottage. Our daintily bred foxgloves, decayed gentlewomen, stunted and dwarfed in that inhospitable soil, can scarce find nutriment in the thirsty sand to send up a feeble parody of their purple spikes; in long droughts they droop and fail for lack of a drop of water. You must make a deep pocket of garden mould in the midst of the heath if you want them to thrive; and even then, unless you keep constantly cutting down the heather and gorse about them, they are overtopped and outlived by the native vegetation.

To dwellers in towns, that mere phrase, "the struggle for life among plants" seems a quaint exaggeration. They cannot believe that creatures so rooted and so



GROWING GENERALLY ON FAT WAYSIDE BANKS.

passive as plants can struggle at all for anything. The pitched battles of the animals they can understand, be cause they can see the kestrel swooping

down upon the linnet, the weasel scenting the spoor of the rabbit to his burrow. But the pitched battle of the plants sounds to them but a violent metaphor, a poetical trick of language, a notion falsely pressed into the service of the naturalist by some mistaken analogy. In reality, those few of us who have fully read ourselves into the confidence and intimacy of the beautiful green things know well that nowhere on earth is the struggle for life so real, so intense, so continuous, so merciless as among the herbs and Every weed in flowers. the meadows, every creeper in the woodland, is battling for its own hand each day and all day long against a crushing competition. It is battling for food and drink, for air and sunlight, for a place to stand in, for a right to existence. Its rivals around are striving hard with their roots to deprive it of its fair share of water and of manure; are striving hard with their leaves to forestall it in access to carbonic acid and sunshine; are striving hard with their flowers to entice away the friendly bee and the fertilising beetle; are striving hard with their winged or protected seeds to anticipate the vacant

spots on which it fain would cast its own feeble offspring. A struggle for the Hinterland goes on without ceasing. The very fact that plants can hardly move at all from the spot where they grow makes the competition in the end all the fiercer. They are perpetually intriguing among stones and crannies to insinuate their roots here, and to get beforehand on their rivals with their seedlings there; they fight for drops of water after summer showers like the victims shut up in the Black Hole of Calcutta; they spread their leaves close in rosettes along the ground, so as to monopolise space and kill down competition; they press upward toward the sun so as to catch the first glance of the bountiful rays, and to grasp before their neighbours at every floating speck of carbonic acid.

This is no poetic fancy. It is sober and literal biological truth. The green fields around us are one vast field of battle. And you can realise it at once if you only think what we mean by a flower-garden. We want to induce peonies and hollyhocks and geraniums and roses to smile around our houses, and what do we do for them? We "make a bed," as we say; in other words, we begin by clearing away all the stouter and better-adapted native competitors. Go, dock and thistle; go, grass and nettle! We will have pansies here, and sweet-peas, and gilly-flowers! So we root them all up, turn and break the stiff clods, put in rich leaf-mould, manure it from the farmyard, and plant at measured distances the components of our nosegay. Tall white garden lilies take the place of knotweed; the larkspur mocks the sky where the dandelion spread before its golden constellations. Yet even so, we have not permanently secured our end. Original sin reappears as ragwort and hawkweed. Every day or two we must go round, and "weed the beds" as we say; the very familiarity of phrase and act

blinds our minds to the truth that what we are really doing is to limit the struggle, to check the competition. We pull up here a shepherd's-purse and there a chickweed, that the Iceland poppies may have room to raise their black-capped buds, and that the groundsel may not steal all the light and air from our shrinking nemophilas. Relax your care for a week or two, and what then do you find? The goosefoots and couch-grasses have lived down the mignonette; the russet docks are overshadowing your white Japanese anem-Abandon the garden for a year, and the native vegetation has avenged itself on the intruders in a war of The thistles have cut off extermination. the lilies-of-the-valley as Israel cut off the Canaanites; not a spike remains of your sky-blue monkshood before the purple standard of the victorious burdocks. Here and there, it is true, some hardy perennial, some stout iris or sweet-william, armed with its sword-shaped foliage, will continue the unequal strife for a miserable year or two of guerrilla warfare, like Hereward Wake in the Isle of Ely; but sooner or later the stronger will win, and your garden will become a mere nursery of weeds, whose flying thistle-down will invade and usurp the neighbouring meadows.

Plants, in point of fact, have more needs than animals; therefore, perforce, they struggle harder. The beasts require but food and drink; the herbs require from the soil water and nitrogenous matter for their roots; they require from the air, carbon, which is their true solid food, for their leaves; they need sunlight, which is the motive power, for their growth and assimilation, insects to fertilise them, birds or breezes to disperse their seeds. For all these they struggle ceaselessly among themselves; and the struggle is all the deadlier because it is carried on at such very close quarters.